

# Data Validation Package

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**July 2010  
Water Sampling at the  
Tuba City, Arizona, Disposal Site**

**January 2011**

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## **Attachment 1—Assessment of Anomalous Data**

Potential Outliers Report  
Anomalous Data Review Checksheet

## **Attachment 2—Data Presentation**

Groundwater Quality Data  
Surface Water Quality Data  
Static Water Level Data  
Time-Concentration Graphs

## **Attachment 3—Sampling and Analysis Work Order**

## **Attachment 4—Trip Report**

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# Sampling Event Summary

**Site:** Tuba City, Arizona, Disposal Site

**Sampling Period:** July 19–22, 2010

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 monitoring 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 2011.

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

Analyte	Standard (mg/L)	Location	Concentration (mg/L)
Arsenic	0.05	1105	0.67
Arsenic	0.05	1106	0.18
Molybdenum	0.1	0262	1.1
Molybdenum	0.1	1105	0.89
Molybdenum	0.1	1129	0.75
Molybdenum	0.1	1132	1.8
Nitrate + Nitrite as Nitrogen	10	0262	190
Nitrate + Nitrite as Nitrogen	10	0263	230
Nitrate + Nitrite as Nitrogen	10	0265	160
Nitrate + Nitrite as Nitrogen	10	0267	310
Nitrate + Nitrite as Nitrogen	10	0268	17
Nitrate + Nitrite as Nitrogen	10	0273	61
Nitrate + Nitrite as Nitrogen	10	0275	260
Nitrate + Nitrite as Nitrogen	10	0279	10
Nitrate + Nitrite as Nitrogen	10	0281	38
Nitrate + Nitrite as Nitrogen	10	0282	35
Nitrate + Nitrite as Nitrogen	10	0286	150

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

Analyte	Standard (mg/L)	Location	Concentration (mg/L)
Nitrate + Nitrite as Nitrogen	10	0287	270
Nitrate + Nitrite as Nitrogen	10	0288	55
Nitrate + Nitrite as Nitrogen	10	0289	53
Nitrate + Nitrite as Nitrogen	10	0290	17
Nitrate + Nitrite as Nitrogen	10	0691	62
Nitrate + Nitrite as Nitrogen	10	0903	11
Nitrate + Nitrite as Nitrogen	10	0906	350
Nitrate + Nitrite as Nitrogen	10	0908	190
Nitrate + Nitrite as Nitrogen	10	0909	160
Nitrate + Nitrite as Nitrogen	10	0912	61
Nitrate + Nitrite as Nitrogen	10	0929	15
Nitrate + Nitrite as Nitrogen	10	0930	13
Nitrate + Nitrite as Nitrogen	10	0934	390
Nitrate + Nitrite as Nitrogen	10	0935	240
Nitrate + Nitrite as Nitrogen	10	0936	200
Nitrate + Nitrite as Nitrogen	10	0938	360
Nitrate + Nitrite as Nitrogen	10	0940	480
Nitrate + Nitrite as Nitrogen	10	0941	250
Nitrate + Nitrite as Nitrogen	10	0942	220
Nitrate + Nitrite as Nitrogen	10	1003	61
Nitrate + Nitrite as Nitrogen	10	1101	69
Nitrate + Nitrite as Nitrogen	10	1102	110
Nitrate + Nitrite as Nitrogen	10	1103	240
Nitrate + Nitrite as Nitrogen	10	1104	110
Nitrate + Nitrite as Nitrogen	10	1105	200
Nitrate + Nitrite as Nitrogen	10	1106	70
Nitrate + Nitrite as Nitrogen	10	1107	230
Nitrate + Nitrite as Nitrogen	10	1108	150
Nitrate + Nitrite as Nitrogen	10	1109	100
Nitrate + Nitrite as Nitrogen	10	1110	47
Nitrate + Nitrite as Nitrogen	10	1111	160
Nitrate + Nitrite as Nitrogen	10	1112	39
Nitrate + Nitrite as Nitrogen	10	1113	26
Nitrate + Nitrite as Nitrogen	10	1114	78
Nitrate + Nitrite as Nitrogen	10	1115	80
Nitrate + Nitrite as Nitrogen	10	1116	52
Nitrate + Nitrite as Nitrogen	10	1117	98
Nitrate + Nitrite as Nitrogen	10	1117	94
Nitrate + Nitrite as Nitrogen	10	1118	150
Nitrate + Nitrite as Nitrogen	10	1118	140
Nitrate + Nitrite as Nitrogen	10	1119	160
Nitrate + Nitrite as Nitrogen	10	1120	39
Nitrate + Nitrite as Nitrogen	10	1120	38
Nitrate + Nitrite as Nitrogen	10	1121	13
Nitrate + Nitrite as Nitrogen	10	1122	44
Nitrate + Nitrite as Nitrogen	10	1123	26

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

Analyte	Standard (mg/L)	Location	Concentration (mg/L)
Nitrate + Nitrite as Nitrogen	10	1124	130
Nitrate + Nitrite as Nitrogen	10	1129	110
Nitrate + Nitrite as Nitrogen	10	1130	100
Nitrate + Nitrite as Nitrogen	10	1132	270
Nitrate + Nitrite as Nitrogen	10	1133	33
Selenium	0.01	0262	0.091
Selenium	0.01	0263	0.043
Selenium	0.01	0267	0.058
Selenium	0.01	0273	0.024
Selenium	0.01	0275	0.031
Selenium	0.01	0286	0.019
Selenium	0.01	0287	0.12
Selenium	0.01	0904	0.013
Selenium	0.01	0906	0.022
Selenium	0.01	0908	0.029
Selenium	0.01	0909	0.054
Selenium	0.01	0934	0.012
Selenium	0.01	0935	0.019
Selenium	0.01	0936	0.017
Selenium	0.01	0938	0.051
Selenium	0.01	0940	0.072
Selenium	0.01	0941	0.099
Selenium	0.01	0942	0.045
Selenium	0.01	1101	0.02
Selenium	0.01	1102	0.022
Selenium	0.01	1103	0.036
Selenium	0.01	1104	0.028
Selenium	0.01	1105	0.066
Selenium	0.01	1106	0.025
Selenium	0.01	1107	0.068
Selenium	0.01	1108	0.038
Selenium	0.01	1109	0.018
Selenium	0.01	1111	0.016
Selenium	0.01	1114	0.011
Selenium	0.01	1115	0.014
Selenium	0.01	1117	0.011
Selenium	0.01	1117	0.011
Selenium	0.01	1118	0.02
Selenium	0.01	1118	0.019
Selenium	0.01	1119	0.03
Selenium	0.01	1120	0.017
Selenium	0.01	1120	0.016
Selenium	0.01	1122	0.025
Selenium	0.01	1123	0.017
Selenium	0.01	1124	0.03
Selenium	0.01	1129	0.065

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

Analyte	Standard (mg/L)	Location	Concentration (mg/L)
Selenium	0.01	1130	0.017
Selenium	0.01	1132	0.14
Selenium	0.01	1133	0.014
Uranium	0.044	0262	1
Uranium	0.044	0263	0.15
Uranium	0.044	0265	0.064
Uranium	0.044	0267	0.072
Uranium	0.044	0273	0.086
Uranium	0.044	0275	0.47
Uranium	0.044	0286	0.15
Uranium	0.044	0287	0.23
Uranium	0.044	0691	0.05
Uranium	0.044	0906	0.81
Uranium	0.044	0908	0.088
Uranium	0.044	0909	0.054
Uranium	0.044	0934	0.18
Uranium	0.044	0935	0.12
Uranium	0.044	0936	0.13
Uranium	0.044	0938	0.45
Uranium	0.044	0940	0.42
Uranium	0.044	0941	0.19
Uranium	0.044	0942	0.53
Uranium	0.044	1101	0.24
Uranium	0.044	1102	0.39
Uranium	0.044	1103	0.47
Uranium	0.044	1104	0.65
Uranium	0.044	1105	2
Uranium	0.044	1106	0.65
Uranium	0.044	1107	0.23
Uranium	0.044	1108	0.57
Uranium	0.044	1109	0.35
Uranium	0.044	1110	0.087
Uranium	0.044	1111	0.26
Uranium	0.044	1112	0.05
Uranium	0.044	1114	0.082
Uranium	0.044	1115	0.098
Uranium	0.044	1118	0.082
Uranium	0.044	1118	0.08
Uranium	0.044	1119	0.37
Uranium	0.044	1120	0.15
Uranium	0.044	1120	0.15
Uranium	0.044	1121	0.083
Uranium	0.044	1122	0.22
Uranium	0.044	1123	0.32
Uranium	0.044	1124	0.3
Uranium	0.044	1129	0.72

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

Analyte	Standard (mg/L)	Location	Concentration (mg/L)
Uranium	0.044	1130	0.14
Uranium	0.044	1132	2.3
Uranium	0.044	1133	0.066

Concentrations are expressed in milligrams per liter (mg/L).

*TB Bartlett*

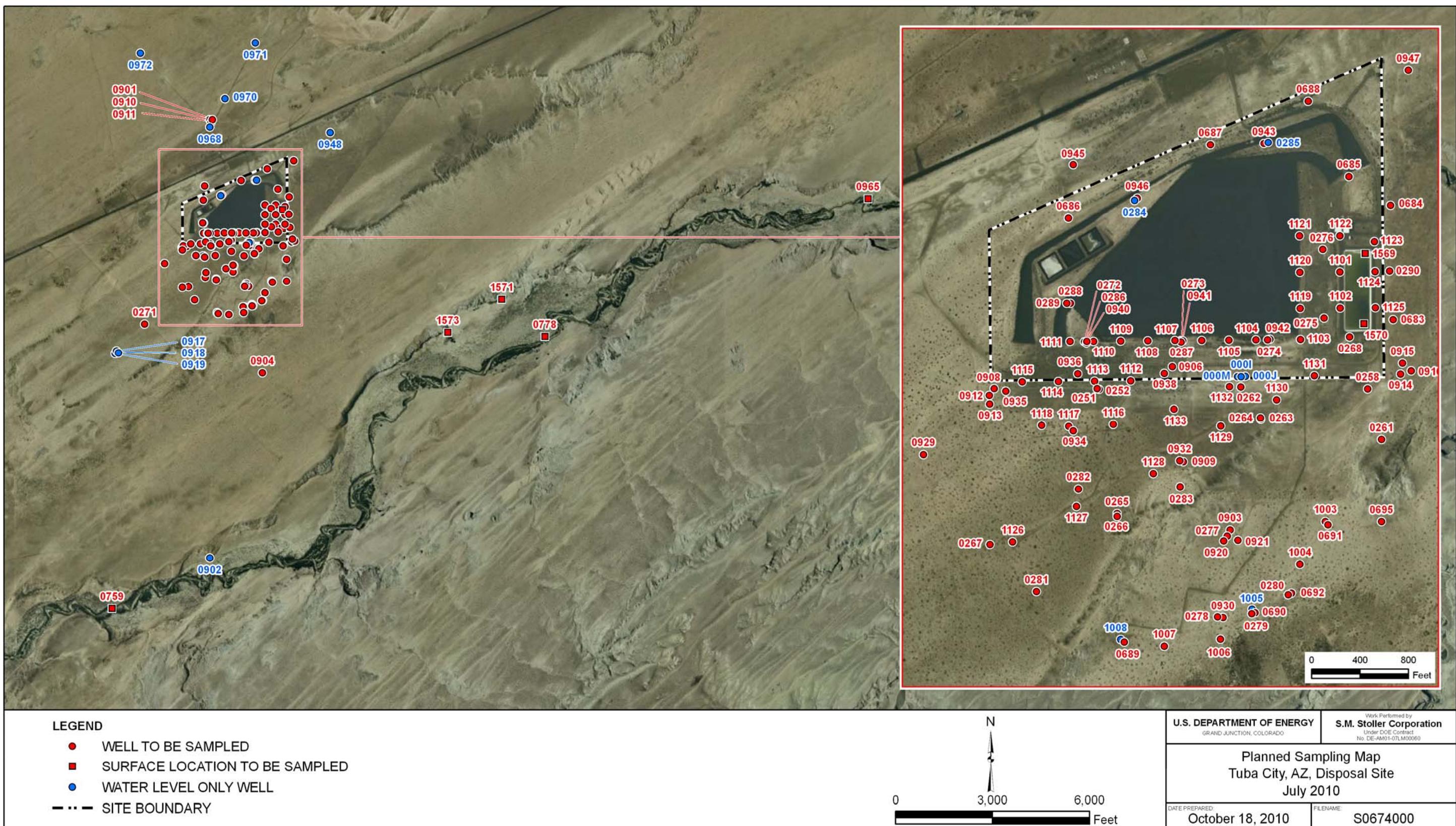
Tim Bartlett

Site Hydrologist, S.M. Stoller Corporation

*1/5/11*

Date

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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

<b>Project</b>	Tuba City, Arizona	<b>Date(s) of Water Sampling</b>	July 19–22, 2010																								
<b>Date(s) of Verification</b>	October 19, 2010	<b>Name of Verifier</b>	Gretchen Baer																								
<table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; text-align: center; padding-bottom: 5px;">Response (Yes, No, NA)</th> <th style="width: 70%; text-align: center; padding-bottom: 5px;">Comments</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding-top: 5px;">Yes</td> <td style="text-align: center; padding-top: 5px;">Work Order Letter dated July 1, 2010.</td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">No</td> <td style="text-align: center; padding-top: 5px;">Well 0283 did not have enough water to sample. Extraction wells 1126, 1127, 1128, and 1131 were not operational. Surface locations 0759, 0778, and 0965 were dry.</td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">Yes</td> <td style="text-align: center; padding-top: 5px;">Pre-trip calibrations were performed on July 16, 2010.</td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">No</td> <td style="text-align: center; padding-top: 5px;">One set of field equipment was not op-checked on July 20, 2010.</td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">No</td> <td style="text-align: center; padding-top: 5px;">One op-check of ORP was slightly below acceptance criteria.</td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">Yes</td> <td style="text-align: center; padding-top: 5px;">Well 0940: No field measurements taken because of limited volume available.</td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">Yes</td> <td style="text-align: center; padding-top: 5px;"></td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">Yes</td> <td style="text-align: center; padding-top: 5px;"></td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">Yes</td> <td style="text-align: center; padding-top: 5px;"></td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">Yes</td> <td style="text-align: center; padding-top: 5px;"></td> </tr> <tr> <td style="text-align: center; padding-top: 5px;">NA</td> <td style="text-align: center; padding-top: 5px;"></td> </tr> </tbody> </table>				Response (Yes, No, NA)	Comments	Yes	Work Order Letter dated July 1, 2010.	No	Well 0283 did not have enough water to sample. Extraction wells 1126, 1127, 1128, and 1131 were not operational. Surface locations 0759, 0778, and 0965 were dry.	Yes	Pre-trip calibrations were performed on July 16, 2010.	No	One set of field equipment was not op-checked on July 20, 2010.	No	One op-check of ORP was slightly below acceptance criteria.	Yes	Well 0940: No field measurements taken because of limited volume available.	Yes		Yes		Yes		Yes		NA	
Response (Yes, No, NA)	Comments																										
Yes	Work Order Letter dated July 1, 2010.																										
No	Well 0283 did not have enough water to sample. Extraction wells 1126, 1127, 1128, and 1131 were not operational. Surface locations 0759, 0778, and 0965 were dry.																										
Yes	Pre-trip calibrations were performed on July 16, 2010.																										
No	One set of field equipment was not op-checked on July 20, 2010.																										
No	One op-check of ORP was slightly below acceptance criteria.																										
Yes	Well 0940: No field measurements taken because of limited volume available.																										
Yes																											
Yes																											
Yes																											
Yes																											
NA																											

1. Is the SAP the primary document directing field procedures?  
List other documents, SOPs, instructions.

2. Were the sampling locations specified in the planning documents sampled?

3. Was a pre-trip calibration conducted as specified in the above-named documents?

4. Was an operational check of the field equipment conducted daily?  
Did the operational checks meet criteria?

5. Were the number and types (alkalinity, temperature, specific conductance, pH, turbidity, DO, ORP) of field measurements taken as specified?

6. Was the category of the well documented?

7. Were the following conditions met when purging a Category I well:  
Was one pump/tubing volume purged prior to sampling?  
Did the water level stabilize prior to sampling?  
Did pH, specific conductance, and turbidity measurements stabilize prior to sampling?  
Was the flow rate less than 500 mL/min?  
If a portable pump was used, was there a 4-hour delay between pump installation and sampling?

## Water Sampling Field Activities Verification Checklist (continued)

	<u>Response (Yes, No, NA)</u>	<u>Comments</u>
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	Six duplicate samples were collected.
10. Were equipment blanks taken at a frequency of one per 20 samples that were collected with nondedicated equipment?	NA	
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 (FDGS) report?	Yes	QC samples are also listed in the 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 (FDGS)?	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	Water levels could not be measured at 0909 (water is below pump) or at 1103 and 1121.

## Laboratory Performance Assessment

### General Information

Requisition No.: 10073213  
Sample Event: July 19–22, 2010  
Site(s): Tuba City, Arizona  
Laboratory: ALS Laboratory Group, Fort Collins, Colorado  
Work Order No.: 1007258  
Analysis: Metals and Inorganics  
Validator: Gretchen Baer  
Review Date: October 19, 2010

This validation was performed according to the *Environmental Procedures Catalog*, (LMS/PRO/S04325, continually updated) “Standard Practice for Validation of Laboratory Data.” 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
1007258-1	0263	Ammonia as N	J	Matrix spike failure
1007258-2	0264	Iron	J	Negative method blank
1007258-2	0264	Manganese	J	Negative method blank
1007258-3	0268	Iron	J	Negative method blank

Table 3 (continued). Data Qualifiers

Sample Number	Location	Analyte	Flag	Reason
1007258-3	0268	Manganese	J	Negative method blank
1007258-4	0273	Iron	J	Negative method blank
1007258-5	0274	Iron	J	Negative method blank
1007258-5	0274	Manganese	J	Negative method blank
1007258-6	0275	Iron	J	Negative method blank
1007258-7	0276	Iron	J	Negative method blank
1007258-8	0278	Manganese	J	Negative method blank
1007258-9	0279	Iron	J	Negative method blank
1007258-10	0280	Iron	J	Negative method blank
1007258-13	0685	Iron	J	Negative method blank
1007258-13	0685	Manganese	J	Negative method blank
1007258-14	0687	Iron	J	Negative method blank
1007258-14	0687	Manganese	J	Negative method blank
1007258-14	0687	Selenium	J	Reporting limit verification failure
1007258-16	0689	Iron	J	Negative method blank
1007258-16	0689	Manganese	J	Negative method blank
1007258-17	0690	Iron	J	Negative method blank
1007258-18	0691	Iron	J	Negative method blank
1007258-20	0695	Iron	J	Negative method blank
1007258-20	0695	Manganese	J	Negative method blank
1007258-22	0921	Iron	J	Negative method blank
1007258-22	0921	Manganese	J	Negative method blank
1007258-23	0930	Iron	J	Negative method blank
1007258-23	0930	Manganese	J	Negative method blank
1007258-24	0934	Iron	J	Negative method blank
1007258-26	0936	Iron	J	Negative method blank
1007258-27	0938	Iron	J	Negative method blank
1007258-28	0941	Iron	J	Negative method blank
1007258-29	0942	Iron	J	Negative method blank
1007258-30	0943	Iron	J	Negative method blank
1007258-30	0943	Selenium	J	Reporting limit verification failure
1007258-31	0946	Iron	J	Negative method blank
1007258-31	0946	Manganese	J	Negative method blank
1007258-32	1003	Iron	J	Negative method blank
1007258-32	1003	Manganese	J	Negative method blank
1007258-33	1004	Iron	J	Negative method blank
1007258-34	1006	Manganese	J	Negative method blank
1007258-37	1102	Iron	J	Negative method blank
1007258-39	1104	Iron	J	Negative method blank
1007258-40	1105	Iron	J	Negative method blank
1007258-41	1106	Iron	J	Negative method blank
1007258-43	1108	Iron	J	Negative method blank
1007258-44	1109	Iron	J	Negative method blank
1007258-45	1110	Iron	J	Negative method blank
1007258-46	1111	Iron	J	Negative method blank
1007258-47	1112	Iron	J	Negative method blank

Table 3 (continued). Data Qualifiers

Sample Number	Location	Analyte	Flag	Reason
1007258-47	1112	Manganese	J	Negative method blank
1007258-48	1113	Iron	J	Negative method blank
1007258-48	1113	Manganese	J	Negative method blank
1007258-51	1116	Iron	J	Negative method blank
1007258-51	1116	Manganese	J	Negative method blank
1007258-53	1118	Iron	J	Negative method blank
1007258-55	1120	Iron	J	Negative method blank
1007258-56	1122	Iron	J	Negative method blank
1007258-58	1124	Iron	J	Negative method blank
1007258-58	1124	Manganese	J	Negative method blank
1007258-58	1124	Manganese	U	Less than 5 times the calibration blank
1007258-59	1125	Manganese	J	Negative method blank
1007258-60	1129	Iron	J	Negative method blank
1007258-60	1129	Manganese	J	Negative method blank
1007258-61	1130	Iron	J	Negative method blank
1007258-62	1132	Iron	J	Negative method blank
1007258-63	1118 Dup (2988)	Iron	J	Negative method blank
1007258-64	1117 Dup (2989)	Iron	J	Negative method blank
1007258-65	1120 Dup (2990)	Iron	J	Negative method blank
1007258-66	0251	Iron	J	Negative method blank
1007258-67	0252	Iron	J	Negative method blank
1007258-68	0258	Iron	J	Negative method blank
1007258-68	0258	Manganese	J	Negative method blank
1007258-69	0261	Iron	J	Negative method blank
1007258-70	0262	Iron	J	Negative method blank
1007258-71	0265	Iron	J	Negative method blank
1007258-72	0266	Iron	J	Negative method blank
1007258-72	0266	Manganese	J	Negative method blank
1007258-73	0267	Iron	J	Negative method blank
1007258-74	0271	Iron	J	Negative method blank
1007258-74	0271	Manganese	J	Negative method blank
1007258-75	0272	Iron	J	Negative method blank
1007258-75	0272	Manganese	J	Negative method blank
1007258-79	0288	Iron	J	Negative method blank
1007258-80	0289	Iron	J	Negative method blank
1007258-81	0290	Iron	J	Negative method blank
1007258-82	0683	Iron	J	Negative method blank
1007258-82	0683	Manganese	J	Negative method blank
1007258-83	0684	Iron	J	Negative method blank
1007258-83	0684	Manganese	J	Negative method blank
1007258-84	0686	Iron	J	Negative method blank
1007258-84	0686	Manganese	J	Negative method blank
1007258-86	0903	Iron	J	Negative method blank
1007258-86	0903	Manganese	J	Negative method blank
1007258-87	0904	Iron	J	Negative method blank
1007258-88	0906	Iron	J	Negative method blank

Table 3 (continued). Data Qualifiers

Sample Number	Location	Analyte	Flag	Reason
1007258-89	0909	Iron	J	Negative method blank
1007258-89	0909	Manganese	J	Negative method blank
1007258-90	0910	Iron	J	Negative method blank
1007258-90	0910	Manganese	J	Negative method blank
1007258-91	0911	Iron	J	Negative method blank
1007258-91	0911	Manganese	J	Negative method blank
1007258-92	0912	Iron	J	Negative method blank
1007258-92	0912	Manganese	J	Negative method blank
1007258-93	0913	Iron	J	Negative method blank
1007258-93	0913	Manganese	J	Negative method blank
1007258-94	0914	Iron	J	Negative method blank
1007258-94	0914	Manganese	J	Negative method blank
1007258-95	0915	Iron	J	Negative method blank
1007258-95	0915	Manganese	J	Negative method blank
1007258-96	0916	Iron	J	Negative method blank
1007258-96	0916	Magnesium	J	Negative method blank
1007258-96	0916	Manganese	J	Negative method blank
1007258-97	0920	Iron	J	Negative method blank
1007258-98	0929	Iron	J	Negative method blank
1007258-98	0929	Manganese	U	Less than 5 times the calibration blank
1007258-99	0932	Iron	J	Negative method blank
1007258-99	0932	Manganese	J	Negative method blank
1007258-100	0940	Iron	J	Negative method blank
1007258-101	0945	Iron	J	Negative method blank
1007258-101	0945	Manganese	J	Negative method blank
1007258-102	0947	Iron	J	Negative method blank
1007258-102	0947	Manganese	J	Negative method blank
1007258-103	1121	Iron	J	Negative method blank
1007258-104	1133	Iron	J	Negative method blank
1007258-107	1571	Iron	J	Negative method blank
1007258-108	1573	Iron	J	Negative method blank
1007258-108	1573	Manganese	U	Less than 5 times the calibration blank
1007258-110	0686 Dup (2987)	Iron	J	Negative method blank
1007258-110	0686 Dup (2987)	Manganese	U	Less than 5 times the calibration blank
1007258-111	0272 Dup (2991)	Iron	J	Negative method blank
1007258-111	0272 Dup (2991)	Manganese	J	Negative method blank
1007258-111	0272 Dup (2991)	Manganese	U	Less than 5 times the calibration blank
All	All	Potassium	J	Multiple serial dilution failures

Sample Shipping/Receiving

ALS Laboratory Group in Fort Collins, Colorado, received 111 samples on July 22 and 24, 2010, accompanied by Chain of Custody forms. Copies of the eight air bills were included in the receiving documentation. The Chain of Custody 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 Chain of Custody forms had no errors or omissions, with the following exceptions. The sample date and/or time for locations 0914 and 0932 differed from what was written on the bottle labels and the sample time for location 1109 differed from what was entered into the field computer. The laboratory used the dates and times on the Chain of Custody for log in, which is acceptable.

#### Preservation and Holding Times

The sample shipments were received intact with temperatures inside the iced coolers at 1.6, 2.4, 2.2, and 3.6 °C, which complies with requirements. All samples were received in the correct container types and had been preserved correctly for the requested analyses, with two exceptions: bottles collected for nitrate and ammonia at 0938 and for metals at 0251 were received unpreserved and were acidified by the laboratory upon receipt. The laboratory noted that the unpreserved aliquots for locations 1569 and 1570 were received with pH values that were 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 5 and 13, 2010, 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 22 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 9-11, 2010, 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 16 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 August 9-11, 2010. Additional calibrations for potassium were performed on August 27 and 30, 2010. The correlation coefficients and intercepts were not provided by the laboratory. Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in 42 verification checks (51 verification checks in total for potassium). 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 (PQL) and all results were within the acceptance range, with the exception of a check for potassium, which was below the acceptance range. All other checks for potassium were acceptable, but were biased low. All potassium results have been qualified for serial dilution failures.

#### *Method SW-846 6020A*

Calibrations for arsenic, molybdenum, selenium, and uranium were performed on August 12 and 17, 2010 using four 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 25 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 PQL 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 PQL 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 3, 2010, 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 24 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 PQLs for all analytes with these exceptions. Some chloride calibration blanks were slightly above the PQLs. All samples associated with these blanks had chloride 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.

For calcium, iron, magnesium, manganese, potassium, and sodium the values of some blank results were negative and the absolute values were greater than the MDLs. Associated 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 (below 75 percent) for some ammonia as N samples. There is no evidence of systematic matrix interference; the sample results associated with the failed spike results are qualified with a “J” flag as estimated values. The MS, MSD, and analytical spike recoveries for potassium at location 0263 were above the acceptance ranges. The affected results are qualified with a “J” flag (estimated). At 124 percent, the spike recovery of potassium at location 0908 exceeded the laboratory’s acceptance criteria, but was within the ±25 percent requirement.

## Laboratory Replicate Analysis

Laboratory replicate analyses are used to determine laboratory precision for each sample matrix. The relative percent difference for replicate results that are greater than 5 times the PQL should be less than 20 percent. For results that are less than the PQL, the range should be no greater than the PQL. The replicate results met these criteria, demonstrating acceptable laboratory precision.

## 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 50 times the PQL for method 6010 or greater than 100 times the PQL for method 6020. All evaluated serial dilution data were acceptable with the following exceptions. The percent difference for all evaluated potassium dilutions were above the acceptance range of 10 percent, which may indicate systematic matrix interference. All potassium results are qualified with a "J" flag (estimated).

### Detection Limits/Dilutions

Samples were diluted in a consistent and acceptable manner when required. 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

A revised EDD file arrived on December 2, 2010, in response to Request for Information #10-2908. The revision included corrections to some wet chemistry results. 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 relative percent difference 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	2.3	2.7	8.2
0252	1.8	2.3	11.3
0258	2.7	2.8	1.3
0261	2.7	2.9	2.5
0262	67.0	71.4	3.2
0263	89.7	92.9	1.7
0264	4.7	4.7	0.0
0265	47.7	47.5	0.2
0266	2.2	2.4	3.2
0267	117.6	115.8	0.8
0268	6.7	7.3	4.5
0271	2.6	2.9	4.8
0272	2.5	2.8	6.7
0273	16.7	16.1	1.8
0274	2.8	3.0	3.4
0275	81.5	83.3	1.1
0276	2.8	2.9	1.9
0277	2.5	2.8	6.0
0278	2.4	2.4	0.2
0279	4.7	4.9	2.5
0280	3.1	3.3	2.8
0281	8.6	9.1	2.8
0282	7.2	7.4	1.2
0286	51.4	52.6	1.1
0287	67.7	68.6	0.7
0288	15.3	16.1	2.7
0289	15.8	16.0	0.6
0290	5.0	5.4	3.4
0683	2.7	2.9	2.5
0684	2.7	8.1	50.4
0685	2.7	2.8	1.7
0686	2.1	3.4	25.2
0687	1.4	2.3	24.5
0688	7.5	8.9	8.7
0689	2.7	2.9	2.4
0691	21.7	20.4	3.1
0692	2.6	2.5	1.9
0695	3.7	3.9	2.6
0901	4.0	4.7	7.9
0903	4.4	4.6	1.9
0904	8.0	9.0	6.0
0906	96.5	89.1	4.0
0908	91.5	84.0	4.3
0909	35.2	35.7	0.7
0910	2.6	2.9	5.3
0911	2.0	2.4	7.4

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

Location	Cations (meq/L)	Anions (meq/L)	Charge Balance (%)
0912	22.2	20.8	3.5
0913	1.9	2.3	10.7
0914	1.3	2.0	21.4
0915	1.2	1.3	2.1
0916	5.3	5.3	0.3
0920	2.4	2.6	3.9
0921	1.9	2.2	5.9
0929	3.6	3.8	2.7
0930	4.4	4.7	2.8
0932	3.3	4.0	9.9
0934	120.1	111.2	3.8
0935	81.8	83.0	0.8
0936	38.2	38.5	0.4
0938	107.6	105.4	1.1
0940	271.4	226.7	9.0
0941	63.8	59.3	3.6
0942	95.9	93.6	1.2
0943	1.4	2.2	21.5
0945	3.3	4.2	11.7
0946	1.7	2.1	10.8
0947	2.7	2.9	4.4
1003	21.3	19.8	3.7
1004	4.4	4.6	2.5
1006	2.2	2.4	2.3
1007	2.4	2.6	4.6
1101	37.5	39.0	1.9
1102	44.1	44.3	0.2
1103	73.5	75.9	1.7
1104	40.9	42.8	2.2
1105	74.5	73.8	0.5
1106	24.6	24.2	0.8
1107	68.0	65.9	1.6
1108	63.2	64.0	0.6
1109	47.8	47.0	0.8
1110	18.5	19.4	2.4
1111	64.1	61.5	2.0
1112	11.6	11.5	0.2
1113	7.2	7.4	1.6
1114	29.6	29.0	1.0
1115	32.9	32.2	1.2
1116	15.2	16.0	2.4
1117	29.4	30.0	1.0
1118	57.0	55.8	1.1
1119	63.7	64.7	0.7
1120	41.3	44.7	3.9
1121	36.9	39.1	2.9
1122	48.3	50.7	2.4

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

<b>Location</b>	<b>Cations (meq/L)</b>	<b>Anions (meq/L)</b>	<b>Charge Balance (%)</b>
1123	63.4	66.6	2.5
1124	57.5	56.5	0.9
1125	3.6	4.3	9.1
1129	34.8	33.8	1.5
1130	31.9	32.2	0.5
1132	89.5	88.1	0.8
1133	9.4	12.6	<b>14.4</b>
1569	5361.3	6369.1	8.6
1570	5357.6	6440.5	9.2
1571	5.1	6.4	<b>11.4</b>
1573	3.7	5.4	<b>18.5</b>

The charge balance value for most locations was less than 10 percent. At 12 locations, the charge balances were above 10 percent; there were no analytical errors identified during the review of the laboratory data. At location 0684, the recorded alkalinity (an anion value) was approximately 3.5 times the historical average. No alkalinity measurement could be taken at location 0940 due to limited sample volume available.

## SAMPLE MANAGEMENT SYSTEM

### General Data Validation Report

RIN: 10073213 Lab Code: PAR Validator: Gretchen Baer Validation Date: 10/18/2010

Project: Tuba City Analysis Type:  Metals  General Chem  Rad  Organics

# of Samples: 111 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
- Detection Limits
- Field/Trip Blanks
- Field Duplicates

All analyses were completed within the applicable holding times.

There are 18 detection limit failures.

There were 6 duplicates evaluated.

SAMPLE MANAGEMENT SYSTEM

Non-Compliance Report: Detection Limits

RIN: 10073213 Lab Code: PAR

Project: Tuba City

Validation Date: 10/18/2010

Ticket	Location	Lab Sample ID	Method Code	Lab Method	Analyte Name	Result	Qualifier	Reported Detection Limit	Required Detection Limit	Units
IIY 703	1569	1007258-105	LMM-01	SW6010	Manganese	300000		5.7	5	UG/L
IIY 703	1569	1007258-105	LMM-01	SW6010	Iron	4100	B	250	100	UG/L
IIY 703	1569	1007258-105	LMM-01	SW6010	Potassium	1800000		5400	5000	UG/L
IIY 703	1569	1007258-105	LMM-02	SW6020	Uranium	5600		0.145	0.1	UG/L
IIY 703	1569	1007258-105	LMM-02	SW6020	Selenium	2300		1.6	0.1	UG/L
IIY 703	1569	1007258-105	LMM-02	SW6020	Arsenic	2100		0.75	0.1	UG/L
IIY 704	1570	1007258-106	LMM-01	SW6010	Iron	4000	B	250	100	UG/L
IIY 704	1570	1007258-106	LMM-01	SW6010	Potassium	1900000		5400	5000	UG/L
IIY 704	1570	1007258-106	LMM-01	SW6010	Manganese	310000		5.7	5	UG/L
IIY 704	1570	1007258-106	LMM-02	SW6020	Uranium	5100		0.145	0.1	UG/L
IIY 704	1570	1007258-106	LMM-02	SW6020	Selenium	2400		1.6	0.1	UG/L
IIY 704	1570	1007258-106	LMM-02	SW6020	Arsenic	2300		0.75	0.1	UG/L
IIY 716	2532	1007258-109	LMM-01	SW6010	Potassium	2000000		5400	5000	UG/L
IIY 716	2532	1007258-109	LMM-01	SW6010	Manganese	320000		5.7	5	UG/L
IIY 716	2532	1007258-109	LMM-01	SW6010	Iron	4400	B	250	100	UG/L
IIY 716	2532	1007258-109	LMM-02	SW6020	Uranium	5100		0.145	0.1	UG/L
IIY 716	2532	1007258-109	LMM-02	SW6020	Selenium	2600		1.6	0.1	UG/L
IIY 716	2532	1007258-109	LMM-02	SW6020	Arsenic	2300		0.75	0.1	UG/L

## SAMPLE MANAGEMENT SYSTEM

## Metals Data Validation Worksheet

RIN: 10073213Lab Code: PARDate Due: 8/19/2010Matrix: WaterSite Code: TUBDate Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION						Method	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
1Arsenic	08/12/2010	-0.0050	1.0000	OK	OK	OK	OK	OK	95.0	105.0	107.0	2.0	107.0	1.0	100.0
1Arsenic	08/12/2010							OK	92.0	103.0	107.0	3.0	104.0	2.0	101.0
1Arsenic	08/12/2010								102.0	104.0	1.0			1.0	88.0
1Arsenic	08/17/2010	-0.0090	1.0000	OK	OK	OK	OK	OK	100.0	97.0	98.0	1.0		2.0	99.0
1Arsenic	08/17/2010							OK	95.0	97.0	97.0	1.0		2.0	103.0
1Arsenic	08/17/2010							OK	95.0	100.0	101.0	0.0			
1Arsenic	08/17/2010							OK	98.0						
1Molybdenum	08/12/2010	-0.0130	1.0000	OK	OK	OK	OK	OK	97.0	104.0	106.0	2.0	102.0	0.0	122.0
1Molybdenum	08/12/2010							OK	96.0	103.0	107.0	3.0	100.0		99.0
1Molybdenum	08/12/2010								100.0	103.0	1.0			3.0	104.0
1Molybdenum	08/17/2010	-0.0080	1.0000	OK	OK	OK	OK	OK	99.0	99.0	100.0	2.0		0.0	102.0
1Molybdenum	08/17/2010							OK	96.0	100.0	99.0	1.0			98.0
1Molybdenum	08/17/2010							OK	95.0	100.0	101.0	0.0			
1Molybdenum	08/17/2010							OK	96.0						
1Selenium	08/12/2010	-0.0400	1.0000	OK	OK	OK	OK	OK	100.0	114.0	117.0	2.0	110.0	4.0	132.0
1Selenium	08/12/2010							OK	99.0	116.0	123.0	5.0	103.0	7.0	84.0
1Selenium	08/12/2010								99.0	101.0	1.0			2.0	89.0

## SAMPLE MANAGEMENT SYSTEM

### Metals Data Validation Worksheet

RIN: 10073213

Lab Code: PAR

Date Due: 8/19/2010

Matrix: Water

Site Code: TUB

Date Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION						Method	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
1Selenium	08/17/2010	-0.0500	1.0000	OK	OK	OK	OK	OK	101.0	99.0	100.0	1.0		2.0	97.0
1Selenium	08/17/2010							OK	98.0	100.0	99.0	0.0		1.0	110.0
1Selenium	08/17/2010							OK	96.0	103.0	105.0	2.0			
1Selenium	08/17/2010							OK	101.0						
1Uranium	08/12/2010	-0.0010	1.0000	OK	OK	OK	OK	OK	102.0			3.0	110.0	3.0	110.0
1Uranium	08/12/2010							OK	97.0			0.0	107.0	2.0	105.0
1Uranium	08/12/2010											2.0		2.0	120.0
1Uranium	08/17/2010	-0.0010	1.0000	OK	OK	OK	OK	OK	98.0	99.0	100.0	1.0		5.0	95.0
1Uranium	08/17/2010							OK	98.0	101.0	101.0	0.0		2.0	125.0
1Uranium	08/17/2010							OK	96.0	99.0	85.0	1.0			
1Uranium	08/17/2010							OK	97.0						
Calcium	08/09/2010			OK	OK	OK	OK	OK	99.0			0.0	105.0	4.0	102.0
Calcium	08/10/2010			OK	OK	OK	OK	OK	96.0	99.0	102.0	1.0	105.0	6.0	101.0
Calcium	08/10/2010							OK	98.0	100.0	87.0	1.0	103.0	6.0	99.0
Calcium	08/10/2010							OK	95.0	96.0	101.0	2.0	101.0	6.0	97.0
Calcium	08/10/2010							OK	95.0			0.0	104.0	1.0	100.0
Calcium	08/10/2010			OK	OK	OK	OK	OK	96.0	114.0	103.0	1.0	105.0	3.0	101.0

**SAMPLE MANAGEMENT SYSTEM****Metals Data Validation Worksheet**RIN: 10073213Lab Code: PARDate Due: 8/19/2010Matrix: WaterSite Code: TUBDate Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION						Method	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
Iron	08/09/2010			OK	OK	OK	OK	OK	96.0	86.0	84.0	2.0	108.0		121.0
Iron	08/10/2010			OK	OK	OK	OK	OK	93.0	96.0	96.0	1.0	105.0		116.0
Iron	08/10/2010							OK	96.0	90.0	91.0	1.0	107.0		117.0
Iron	08/10/2010							OK	95.0	93.0	94.0	1.0	106.0		115.0
Iron	08/10/2010							OK	97.0	90.0	91.0	0.0	109.0		104.0
Iron	08/10/2010			OK	OK	OK	OK	OK	96.0	90.0	89.0	1.0	108.0		103.0
Magnesium	08/09/2010			OK	OK	OK	OK	OK	100.0			1.0	107.0	1.0	102.0
Magnesium	08/10/2010			OK	OK	OK	OK	OK	97.0	99.0	100.0	1.0	105.0	4.0	100.0
Magnesium	08/10/2010							OK	98.0	116.0	109.0	1.0	105.0	2.0	100.0
Magnesium	08/10/2010							OK	99.0	96.0	98.0	1.0	105.0	1.0	99.0
Magnesium	08/10/2010							OK	100.0	101.0	102.0	1.0	107.0	1.0	99.0
Magnesium	08/10/2010			OK	OK	OK	OK	OK	100.0	102.0	101.0	0.0	106.0		99.0
Manganese	08/09/2010			OK	OK	OK	OK	OK	95.0	85.0	83.0	2.0	91.0		107.0
Manganese	08/10/2010			OK	OK	OK	OK	OK	93.0	94.0	94.0	1.0	88.0	7.0	101.0
Manganese	08/10/2010							OK	94.0	90.0	89.0	1.0	89.0	0.0	104.0
Manganese	08/10/2010							OK	95.0	92.0	93.0	1.0	87.0	6.0	102.0
Manganese	08/10/2010							OK	95.0	89.0	90.0	0.0	91.0		98.0

## SAMPLE MANAGEMENT SYSTEM

### Metals Data Validation Worksheet

RIN: 10073213

Lab Code: PAR

Date Due: 8/19/2010

Matrix: Water

Site Code: TUB

Date Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION						Method	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
Manganese	08/10/2010			OK	OK	OK	OK	OK	96.0	90.0	89.0	1.0	90.0		98.0
Potassium	08/09/2010			OK	OK	OK	OK	OK	97.0	130.0	129.0	0.0		26.0	83.0
Potassium	08/10/2010			OK	OK	OK	OK	OK	93.0	124.0	124.0	0.0		37.0	80.0
Potassium	08/10/2010							OK	93.0	114.0	116.0	1.0		52.0	71.0
Potassium	08/10/2010							OK	92.0	113.0	114.0	1.0		55.0	67.0
Potassium	08/10/2010							OK	92.0	99.0	99.0	0.0			77.0
Potassium	08/10/2010			OK	OK	OK	OK	OK	93.0	97.0	98.0	1.0		57.0	76.0
Potassium	08/27/2010			OK	OK	OK	OK			117.0					78.0
Potassium	08/30/2010			OK	OK	OK	OK			136.0					75.0
Silicon	08/09/2010			OK	OK	OK	OK	OK	99.0	100.0	96.0	1.0	92.0	10.0	103.0
Silicon	08/10/2010			OK	OK	OK	OK	OK	97.0	99.0	102.0	1.0	87.0	5.0	89.0
Silicon	08/10/2010							OK	98.0	99.0	99.0	0.0	90.0	3.0	103.0
Silicon	08/10/2010							OK	101.0	97.0	102.0	1.0	90.0	4.0	104.0
Silicon	08/10/2010							OK	102.0	97.0	100.0	1.0	92.0	2.0	98.0
Silicon	08/10/2010			OK	OK	OK	OK	OK	102.0	100.0	101.0	0.0	90.0	1.0	92.0
Sodium	08/09/2010			OK	OK	OK	OK	OK	97.0	106.0	103.0	0.0		1.0	93.0
Sodium	08/10/2010			OK	OK	OK	OK	OK	94.0	96.0	95.0	0.0		7.0	91.0

**SAMPLE MANAGEMENT SYSTEM****Metals Data Validation Worksheet**RIN: 10073213Lab Code: PARDate Due: 8/19/2010Matrix: WaterSite Code: TUBDate Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION						Method	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
Sodium	08/10/2010							OK	94.0			3.0		5.0	85.0
Sodium	08/10/2010							OK	95.0	94.0	95.0	1.0		5.0	84.0
Sodium	08/10/2010							OK	95.0	112.0	108.0	1.0			89.0
Sodium	08/10/2010			OK	OK	OK	OK	OK	95.0	106.0	99.0	2.0			88.0

**SAMPLE MANAGEMENT SYSTEM****Wet Chemistry Data Validation Worksheet**

RIN: 10073213

Lab Code: PAR

Date Due: 8/19/2010

Matrix: Water

Site Code: TUB

Date Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION						Method	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R^2	ICV	CCV	ICB	CCB						
AMMONIA AS N	08/05/2010	-0.020	0.9998	OK	OK	OK	OK	OK	95				
AMMONIA AS N	08/13/2010	-0.010	1.0000	OK	OK	OK	OK	OK	99	54	57	6	
AMMONIA AS N	08/13/2010							OK	98	97	99	2	
AMMONIA AS N	08/13/2010							OK	100	95	97	2	
AMMONIA AS N	08/13/2010							OK	100	89	92	1	
AMMONIA AS N	08/13/2010							OK	100				
CHLORIDE	08/03/2010	0.028	0.9999	OK	OK	OK	OK						
CHLORIDE	08/06/2010							OK	95	102	99	1	
CHLORIDE	08/06/2010								98				
CHLORIDE	08/06/2010							OK	98	100	100	0	
CHLORIDE	08/07/2010								98				
CHLORIDE	08/09/2010							OK	105	105	106	0	
CHLORIDE	08/09/2010							OK	97	100	99	0	
CHLORIDE	08/09/2010								99				
CHLORIDE	08/10/2010							OK	98	99	97	0	

## SAMPLE MANAGEMENT SYSTEM

### Wet Chemistry Data Validation Worksheet

RIN: 10073213

Lab Code: PAR

Date Due: 8/19/2010

Matrix: Water

Site Code: TUB

Date Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION						Method	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R^2	ICV	CCV	ICB	CCB						
CHLORIDE	08/10/2010							OK	97	98			
CHLORIDE	08/10/2010									98			
Nitrate+Nitrite as N	08/09/2010	0.000	0.9998	OK	OK	OK	OK	OK	99	89	87	1	
Nitrate+Nitrite as N	08/09/2010							OK	99				
Nitrate+Nitrite as N	08/10/2010	0.000	0.9997	OK	OK	OK	OK	OK	101	96	85	2	
Nitrate+Nitrite as N	08/10/2010							OK	103	84	80	1	
Nitrate+Nitrite as N	08/11/2010	0.000	0.9998	OK	OK	OK	OK	OK	102				
Nitrate+Nitrite as N	08/11/2010							OK	102				
SULFATE	08/03/2010	0.475	0.9999	OK	OK	OK	OK						
SULFATE	08/06/2010							OK	95	103	100	0	
SULFATE	08/06/2010									98			
SULFATE	08/06/2010							OK	97	91	91	0	
SULFATE	08/07/2010									96			
SULFATE	08/09/2010							OK	100	102	103	0	
SULFATE	08/09/2010							OK	96	105	99	0	

**SAMPLE MANAGEMENT SYSTEM****Wet Chemistry Data Validation Worksheet**

RIN: 10073213

Lab Code: PAR

Date Due: 8/19/2010

Matrix: Water

Site Code: TUB

Date Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION						Method	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R^2	ICV	CCV	ICB	CCB						
SULFATE	08/09/2010								101				
SULFATE	08/10/2010							OK	97	102	102	0	
SULFATE	08/10/2010							OK	96	103			
SULFATE	08/10/2010								102				
TOTAL DISSOLVED SOLIDS	07/26/2010							OK	100			0	
TOTAL DISSOLVED SOLIDS	07/26/2010							OK	105		2		
TOTAL DISSOLVED SOLIDS	07/26/2010										0		
TOTAL DISSOLVED SOLIDS	07/26/2010									1			
TOTAL DISSOLVED SOLIDS	07/27/2010							OK	99		1		
TOTAL DISSOLVED SOLIDS	07/27/2010							OK	102		2		
TOTAL DISSOLVED SOLIDS	07/27/2010									2			
TOTAL DISSOLVED SOLIDS	07/29/2010							OK	99		0		
TOTAL DISSOLVED SOLIDS	07/29/2010							OK	99		0		
TOTAL DISSOLVED SOLIDS	07/29/2010									0			
TOTAL DISSOLVED SOLIDS	07/29/2010									5			

**SAMPLE MANAGEMENT SYSTEM**  
**Wet Chemistry Data Validation Worksheet**

RIN: 10073213

Lab Code: PAR

Date Due: 8/19/2010

Matrix: Water

Site Code: TUB

Date Completed: 9/2/2010

Analyte	Date Analyzed	CALIBRATION					Method	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R^2	ICV	CCV	ICB						
TOTAL DISSOLVED SOLIDS	07/30/2010						Blank	OK	99		0	

## **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, 0936, 0938, 0942, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 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 38 wells were classified as Category II or III: 0251, 0258, 0262, 0263, 0264, 0265, 0266, 0273, 0274, 0277, 0278, 0280, 0281, 0282, 0286, 0287, 0288, 0289, 0290, 0683, 0684, 0689, 0690, 0692, 0906, 0908, 0911, 0912, 0913, 0914, 0915, 0916, 0929, 0934, 0940, 0941, 0945, and 0947.

The sample results for these 39 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. The relative percent difference for duplicate results that are greater than 5 times the PQL should be less than 20 percent. For results that are less than the PQL, the range should be no greater than the PQL. Duplicate samples were collected from locations 0272, 0686, 1117, 1118, 1120, and 1570. The duplicate results met the criteria, demonstrating acceptable overall precision.

**SAMPLE MANAGEMENT SYSTEM**  
**Validation Report: Field Duplicates**

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RIN: 10073213 Lab Code: PAR Project: Tuba City Validation Date: 10/18/2010

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Duplicate: 2532

Sample: 1570

Analyte	Sample				Duplicate				RPD	RER	Units
	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution			
Arsenic	2300		2		2300			2	0		UG/L
Calcium	210000		1		220000			1	4.65		UG/L
CHLORIDE	170000			10000	170000			10000	0		MG/L
Iron	4000	B	1		4400	B		1	9.52		UG/L
Magnesium	2E+07		1		2.1E+07			1	4.88		UG/L
Manganese	310000		1		320000			1	3.17		UG/L
Molybdenum	2300		2		2300			2	0		UG/L
Nitrate+Nitrite as N	14000			10000	13000			10000	7.41		MG/L
Potassium	1900000		1		2000000			1	5.13		UG/L
Selenium	2400		2		2600			2	8.00		UG/L
Sodium	8.4E+07		10		8.6E+07			10	2.35		UG/L
SULFATE	31000			2000	32000			2000	3.17		MG/L
TOTAL DISSOLVED SOLIDS	410000		1		410000			1	0		MG/L
Uranium	5100		2		5100			2	0		UG/L

Duplicate: 2987

Sample: 0686

Analyte	Sample				Duplicate				RPD	RER	Units
	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution			
AMMONIA AS N	0.1	U	1		0.1	U		1			MG/L
Arsenic	7.9		1		8.1			1	2.50		UG/L
Calcium	17000		1		17000			1	0		UG/L
CHLORIDE	4.1		2		4			2	2.47		MG/L
Iron	11	B	1		13	B		1			UG/L
Magnesium	2200		1		2200			1	0		UG/L
Manganese	0.18	B	1		1.1	B		1			UG/L
Molybdenum	0.54		1		0.54			1	0		UG/L
Nitrate+Nitrite as N	1.9		2		1.9			2	0		MG/L
Potassium	780	B	1		730	B		1	6.62		UG/L
Selenium	0.97		1		1			1	3.05		UG/L
Silica	8500		1		8500			1	0		UG/L
Silicon	4000		1		4000			1	0		UG/L
Sodium	23000		1		21000			1	9.09		UG/L
SULFATE	33		2		32			2	3.08		MG/L
TOTAL DISSOLVED SOLIDS	140		1		130			1	7.41		MG/L
Uranium	0.27		1		0.27			1	0		UG/L

**SAMPLE MANAGEMENT SYSTEM**  
**Validation Report: Field Duplicates**

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RIN: 10073213      Lab Code: PAR      Project: Tuba City      Validation Date: 10/18/2010

Duplicate: 2988

Sample: 1118

Analyte	Sample				Duplicate				RPD	RER	Units
	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution			
AMMONIA AS N	14		5		13			5	7.41		MG/L
Arsenic	1.8		1		1.8			1	0		UG/L
Calcium	540000		2		520000			2	3.77		UG/L
CHLORIDE	67		50		59			50	12.70		MG/L
Iron	9.9	U	2		9.9	U		2			UG/L
Magnesium	260000		2		250000			2	3.92		UG/L
Manganese	250		2		250			2	0		UG/L
Molybdenum	0.39		1		0.44			1	12.05		UG/L
Nitrate+Nitrite as N	150		100		140			100	6.90		MG/L
Potassium	12000		2		12000			2	0		UG/L
Selenium	19		1		20			1	5.13		UG/L
Silica	16000		2		16000			2	0		UG/L
Silicon	7400		2		7500			2	1.34		UG/L
Sodium	170000		2		160000			2	6.06		UG/L
SULFATE	1600		50		1600			50	0		MG/L
TOTAL DISSOLVED SOLIDS	3900		1		3900			1	0		MG/L
Uranium	82		1		80			1	2.47		UG/L

Duplicate: 2989

Sample: 1117

Analyte	Sample				Duplicate				RPD	RER	Units
	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution			
AMMONIA AS N	0.1	U	1		0.1	U	1				MG/L
Arsenic	1.4		1		1.3			1	7.41		UG/L
Calcium	330000		1		330000			1	0		UG/L
CHLORIDE	47		20		44			20	6.59		MG/L
Iron	67	B	1		20	B		1			UG/L
Magnesium	110000		1		110000			1	0		UG/L
Manganese	20		1		20			1	0		UG/L
Molybdenum	0.13		1		0.13			1			UG/L
Nitrate+Nitrite as N	98		100		94			50	4.17		MG/L
Potassium	5900		1		5900			1	0		UG/L
Selenium	11		1		11			1	0		UG/L
Silica	15000		1		15000			1	0		UG/L
Silicon	6900		1		7000			1	1.44		UG/L
Sodium	86000		1		85000			1	1.17		UG/L
SULFATE	730		20		720			20	1.38		MG/L
TOTAL DISSOLVED SOLIDS	2100		1		2100			1	0		MG/L

**SAMPLE MANAGEMENT SYSTEM**  
**Validation Report: Field Duplicates**

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RIN: 10073213 Lab Code: PAR Project: Tuba City Validation Date: 10/18/2010

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Duplicate: 2989

Sample: 1117

Sample Duplicate

Analyte	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution	RPD	RER	Units
Uranium	31			1	30			1	3.28		UG/L

Duplicate: 2990

Sample: 1120

Sample Duplicate

Analyte	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution	RPD	RER	Units
AMMONIA AS N	20			5	20			5	0		MG/L
Arsenic	1.6			2	1.6			2	0		UG/L
Calcium	390000			2	390000			2	0		UG/L
CHLORIDE	66			20	61			20	7.87		MG/L
Iron	9.9	U		2	9.9	U		2			UG/L
Magnesium	140000			2	150000			2	6.90		UG/L
Manganese	31000			10	32000			10	3.17		UG/L
Molybdenum	26			2	26			2	0		UG/L
Nitrate+Nitrite as N	39			20	38			20	2.60		MG/L
Potassium	9400			2	9400			2	0		UG/L
Selenium	16			2	17			2	6.06		UG/L
Silica	19000			2	19000			2	0		UG/L
Silicon	9000			2	9000			2	0		UG/L
Sodium	200000			2	200000			2	0		UG/L
SULFATE	1700			20	1700			20	0		MG/L
TOTAL DISSOLVED SOLIDS	3000			1	3000			1	0		MG/L
Uranium	150			2	150			2	0		UG/L

Duplicate: 2991

Sample: 0272

Sample Duplicate

Analyte	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution	RPD	RER	Units
AMMONIA AS N	0.1	U		1	0.1	U		1			MG/L
Arsenic	2			1	1.9			1	5.13		UG/L
Calcium	32000			1	31000			1	3.17		UG/L
CHLORIDE	7.9			2	8.2			2	3.73		MG/L
Iron	4.9	U		1	4.9	U		1			UG/L
Magnesium	6800			1	6800			1	0		UG/L
Manganese	0.11	U		1	0.29	B		1			UG/L
Molybdenum	0.24			1	0.25			1	4.08		UG/L
Nitrate+Nitrite as N	3.6			2	3.6			2	0		MG/L
Potassium	850	B		1	810	B		1	4.82		UG/L
Selenium	1.2			1	1.1			1	8.70		UG/L

# SAMPLE MANAGEMENT SYSTEM

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## Validation Report: Field Duplicates

RIN: 10073213 Lab Code: PAR Project: Tuba City Validation Date: 10/18/2010

Duplicate: 2991

Sample: 0272

Sample

Duplicate

Analyte	Result	Flag	Error	Dilution	Result	Flag	Error	Dilution	RPD	RER	Units
Silica	12000		1		11000		1		8.70		UG/L
Silicon	5400		1		5300		1		1.87		UG/L
Sodium	6200		1		6100		1		1.63		UG/L
SULFATE	12		2		12		2		0		MG/L
TOTAL DISSOLVED SOLIDS	170		1		160		1		6.06		MG/L
Uranium	1.4		1		1.4		1		0		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

1-5-2011  
Date

Data Validation Lead:

Gretchen Baer  
Gretchen Baer

1-5-11  
Date

## **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 the new data that fall outside the historical data range. A determination is also made if the data are normally distributed using the Shapiro-Wilk 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.

Review of the Outliers Report for field parameters indicates that there is a systematic problem with some oxidation-reduction data. The problem was traced to an instrument malfunction affecting two of the instruments used to collect field data. The oxidation-reduction data collected with these instruments are qualified with an "R" flag as rejected. One potentially anomalous field data point for alkalinity is listed on the Anomalous Data Review Checksheet for further review.

Thirty-eight laboratory results were identified as potentially anomalous. Of the 38 results, 35 were identified as potentially anomalous because of the low variability of the historical data or because of downward or upward trending in the data. Three potentially anomalous laboratory results are listed on the Anomalous Data Review Checksheet for further review. The manganese result from location 0938 is also listed. At this time, all data from this sampling event may be treated as validated results.

The ammonia as N result in August 2009 (1.3 mg/L) for location 0938 was listed on the Anomalous Data Review Checksheet for further review in the December 2009 Data Validation Package. Ammonia as N had not been detected at this location previously and was not detected in the sample from the February 2010 sampling event. In this July 2010 sampling event, ammonia as N was once again detected at 0.56 mg/L.

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**Data Validation Outliers Report - Field Parameters Only**

Comparison: All Historical Data

Laboratory: Field Measurements

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier
					Qualifiers		Qualifiers		Qualifiers				
					Result	Lab	Data	Result	Lab	Data	Result	Lab	Data
TUB01	0258	N001	07/21/2010	Turbidity	0.69	FQ	8.83	FQ	0.85	F	12	0	No
TUB01	0262	N001	07/21/2010	Alkalinity, Total (As CaCO3)	642	FQ	449	FQ	144		16	0	Yes
TUB01	0262	N001	07/21/2010	Specific Conductance	4975	FQ	4725	FQ	1102		15	0	No
TUB01	0263	N001	07/20/2010	Alkalinity, Total (As CaCO3)	518	FQ	458		287	FQ	15	0	No
TUB01	0263	N001	07/20/2010	Oxidation Reduction Potential	-74.1	RFQ	233.4	FQ	70.5	FQ	14	0	Yes
TUB01	0263	N001	07/20/2010	Specific Conductance	6223	FQ	5884	FQ	3972	FQ	14	0	No
TUB01	0264	N001	07/20/2010	Oxidation Reduction Potential	-119.4	RFQ	208.4	FQ	56.7	FQ	14	0	Yes
TUB01	0265	N001	07/22/2010	Turbidity	0.77	FQ	7.52	F	0.83	F	14	0	No
TUB01	0271	N001	07/22/2010	Oxidation Reduction Potential	-0.4	RF	225	QF	48		13	0	No
TUB01	0271	N001	07/22/2010	pH	8.27	F	8.2	F	7.58	F	13	0	No
TUB01	0272	N001	07/21/2010	Oxidation Reduction Potential	40.4	RF	216.2	F	102.7	F	11	0	No
TUB01	0273	N001	07/20/2010	Alkalinity, Total (As CaCO3)	185	FQ	174	FQ	126	QF	10	0	No
TUB01	0273	N001	07/20/2010	pH	7	FQ	7.83	FQ	7.14	FQ	11	0	No
TUB01	0273	N001	07/20/2010	Specific Conductance	1451	FQ	1250	FQ	756	QF	11	0	No
TUB01	0274	N001	07/20/2010	pH	7.73	FQ	8.38	FQ	7.78	QF	11	0	No
TUB01	0275	N001	07/20/2010	Specific Conductance	5839	F	5709	F	4880	F	11	0	No
TUB01	0276	N001	07/20/2010	Oxidation Reduction Potential	74.3	RF	256	F	78.3	F	11	0	No
TUB01	0276	N001	07/20/2010	Temperature	21.04	F	19.81	F	13.03	F	11	0	No
TUB01	0277	N001	07/21/2010	Turbidity	5.7	FQ	5.59	F	1.05	FQ	6	0	No
TUB01	0278	N001	07/20/2010	pH	7.81	FQ	7.97	QF	7.83	FQ	6	0	No
TUB01	0279	N001	07/20/2010	Specific Conductance	495	F	480	F	383	F	6	0	No
TUB01	0279	N001	07/20/2010	Turbidity	1.57	F	9.7	F	2.47	F	6	0	No
TUB01	0282	N001	07/22/2010	Turbidity	1.06	FQ	25.2	FQ	1.76	FQ	11	0	No
TUB01	0286	N001	07/20/2010	Oxidation Reduction Potential	-75.2	RFQ	213.9	FQ	126		6	0	Yes
TUB01	0287	N001	07/20/2010	Alkalinity, Total (As CaCO3)	610	FQ	568	FQ	298		6	0	No
TUB01	0287	N001	07/20/2010	Oxidation Reduction	-152.3	RFQ	235.1	FQ	125		6	0	Yes

**Data Validation Outliers Report - Field Parameters Only**

Comparison: All Historical Data

Laboratory: Field Measurements

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier	
					Qualifiers		Qualifiers		Qualifiers		Data Points			
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect		
Potential														
TUB01	0287	N001	07/20/2010	Specific Conductance	5224	FQ	4925	FQ	3447		7	0	No	
TUB01	0287	N001	07/20/2010	Temperature	20.77	FQ	19.91	FQ	14.7	FQ	6	0	No	
TUB01	0287	N001	07/20/2010	Turbidity	7.01	FQ	5.85	FQ	1.24		6	0	No	
TUB01	0288	N001	07/21/2010	Oxidation Reduction Potential	79.2	RFQ	295	FQ	106		6	0	No	
TUB01	0288	N001	07/21/2010	Specific Conductance	1643	FQ	2530		1670	FQ	7	0	No	
TUB01	0288	N001	07/21/2010	Turbidity	7.53	FQ	5.13	FQ	1.81	FQ	6	0	No	
TUB01	0289	N001	07/21/2010	Oxidation Reduction Potential	69	RFQ	264	F	89		6	0	No	
TUB01	0290	N001	07/21/2010	Specific Conductance	561	FQ	467		273	FQ	7	0	No	
TUB01	0683	N001	07/21/2010	pH	8.18	FQ	8.17	F	7.18		15	0	No	
TUB01	0684	N001	07/21/2010	Alkalinity, Total (As CaCO3)	360	FQ	114	L	81	FQ	18	0	Yes	
TUB01	0686	N001	07/21/2010	Alkalinity, Total (As CaCO3)	125	F	110	L	15	F	23	0	No	
TUB01	0686	N001	07/21/2010	Oxidation Reduction Potential	-174.3	RF	235	F	26		17	0	Yes	
TUB01	0686	N001	07/21/2010	pH	8.45	F	8.29	F	7.03		17	0	No	
TUB01	0688	N001	07/20/2010	Alkalinity, Total (As CaCO3)	128	F	118		65	F	24	0	No	
TUB01	0910	N001	07/21/2010	Oxidation Reduction Potential	69	RF	478		113		12	0	No	
TUB01	0910	N001	07/21/2010	Temperature	19.29	F	18.8	F	13	F	21	0	No	
TUB01	0910	N001	07/21/2010	Turbidity	0.54	F	1.87	F	0.86	F	7	0	No	
TUB01	0915	N001	07/21/2010	Alkalinity, Total (As CaCO3)	17	FQ	108	GFJ	20	QF	22	0	No	
TUB01	0916	N001	07/21/2010	Turbidity	0.9	FQ	175	G	0.91	QF	9	0	No	
TUB01	0921	N001	07/20/2010	Temperature	20.53	F	20.5		14	F	26	0	No	
TUB01	0930	N001	07/20/2010	Turbidity	5.21	F	2.33	F	0		23	1	Yes	
TUB01	0932	N001	07/21/2010	Temperature	19.8	F	19.5		14.76	F	27	0	No	
TUB01	0936	N001	07/20/2010	Temperature	24.93		22.6		13.98	FQ	17	0	Yes	
TUB01	0938	N001	07/20/2010	Temperature	28.21		27.74		12.6		16	0	Yes	
TUB01	0943	N001	07/20/2010	Specific Conductance	163		1942	F	223	F	18	0	No	
TUB01	0946	N001	07/20/2010	Oxidation Reduction Potential	-100.6	RF	204.4	F	17.1	F	11	0	Yes	

## Data Validation Outliers Report - Field Parameters Only

Comparison: All Historical Data

Laboratory: Field Measurements

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier	
					Qualifiers		Qualifiers		Qualifiers		Data Points			
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect		
TUB01	0946	N001	07/20/2010	pH	8.41	F	8.32	F	7.2	F	11	0	No	
TUB01	0946	N001	07/20/2010	Specific Conductance	197	F	691	F	228	F	11	0	No	
TUB01	0947	N001	07/21/2010	Temperature	18.49	FQ	18.36	FQ	15.3	F	9	0	No	
TUB01	1003	N001	07/20/2010	Specific Conductance	1810	F	1684	F	422	F	10	0	No	
TUB01	1004	N001	07/20/2010	Temperature	21.93	F	21.16	F	9.48	F	12	0	No	
TUB01	1006	N001	07/20/2010	Oxidation Reduction Potential	113.4	F	245.6	F	134.9	F	10	0	No	
TUB01	1101	N001	07/19/2010	Specific Conductance	2783		4290		2800		16	0	No	
TUB01	1105	N001	07/19/2010	pH	6.41		6.91		6.46		17	0	No	
TUB01	1105	N001	07/19/2010	Specific Conductance	5667		5364		1787		16	0	No	
TUB01	1106	N001	07/19/2010	pH	6.71		7.23		6.8		17	0	No	
TUB01	1107	N001	07/19/2010	Alkalinity, Total (As CaCO3)	598		538		181		23	0	No	
TUB01	1114	N001	07/20/2010	Alkalinity, Total (As CaCO3)	345		324		144		22	0	No	
TUB01	1114	N001	07/20/2010	Specific Conductance	2369		2135		695		16	0	No	
TUB01	1115	N001	07/20/2010	Temperature	20.04		18.3		16.3		17	0	Yes	
TUB01	1116	N001	07/20/2010	pH	7		8.08		7.01		14	0	No	
TUB01	1119	N001	07/20/2010	pH	6.36		6.69		6.38		17	0	No	
TUB01	1123	N001	07/19/2010	pH	6.47		7.36		6.5		16	0	No	
TUB01	1123	N001	07/19/2010	Temperature	26.63		20.68		13.82		16	0	Yes	
TUB01	1123	N001	07/19/2010	Turbidity	9.6		6.57		0		15	0	No	
TUB01	1124	N001	07/19/2010	Alkalinity, Total (As CaCO3)	434		365		177		21	0	No	
TUB01	1124	N001	07/19/2010	Specific Conductance	4046		3645		1287		15	0	No	
TUB01	1125	N001	07/20/2010	Specific Conductance	383		917		439		17	0	No	
TUB01	1125	N001	07/20/2010	Temperature	29.11		20.55		14.9		17	0	No	
TUB01	1129	N001	07/20/2010	Oxidation Reduction Potential	77.7	R	279.5		151		6	0	No	
TUB01	1129	N001	07/20/2010	pH	6.82		7.18		6.87		6	0	No	
TUB01	1129	N001	07/20/2010	Temperature	25.56		24.12		14.04		6	0	No	
TUB01	1130	N001	07/20/2010	Alkalinity, Total (As CaCO3)	249		420		329		6	0	No	

**Data Validation Outliers Report - Field Parameters Only**

Comparison: All Historical Data

Laboratory: Field Measurements

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier	
					Qualifiers		Qualifiers		Qualifiers		Data Points			
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect		
TUB01	1130	N001	07/20/2010	Oxidation Reduction Potential	95.9	R	324		174		6	0	No	
TUB01	1132	N001	07/20/2010	Specific Conductance	6524		6042		1883		6	0	No	
TUB01	1132	N001	07/20/2010	Turbidity	0.65		3.41		0.94	F	6	0	No	
TUB01	1571	N001	07/21/2010	Oxidation Reduction Potential	-191.7	R	219		-184.6		13	0	No	
TUB01	1573	N001	07/21/2010	Oxidation Reduction Potential	-172.6	R	274		9.8		13	0	Yes	

**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

Comparison: All Historical Data

Laboratory: ALS Laboratory Group

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier			
					Qualifiers		Qualifiers		Qualifiers		Data Points					
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect				
TUB01	0251	N001	07/21/2010	Molybdenum	0.00022	FQ	0.003	U	0.00027	B	UFQ	24	18	No		
TUB01	0251	N001	07/21/2010	Potassium	1.5	FQJ	3.1	F	1.6	FQJ	20	0	Yes			
TUB01	0252	N001	07/21/2010	Potassium	1.4	FJ	3.7	F	1.5	FQJ	21	0	No			
TUB01	0258	N001	07/21/2010	Potassium	0.95	B	FQJ	2.2	F	1.1	FQJ	12	0	Yes		
TUB01	0261	N001	07/21/2010	Arsenic	0.0022	F	0.0021	F	0.0017	F	7	0	No			
TUB01	0261	N001	07/21/2010	Molybdenum	0.00046	F	0.0026	B	0.00053	B	UF	8	4	No		
TUB01	0261	N001	07/21/2010	Potassium	0.97	B	FJ	5.4	F	1.65		8	0	No		
TUB01	0261	N001	07/21/2010	Sodium	11	F	16	F	12	F	8	0	No			
TUB01	0262	N001	07/21/2010	Sodium	230	FQ	210	FQ	73.7		14	0	No			
TUB01	0262	N001	07/21/2010	Total Dissolved Solids	5100	FQ	4600	FQ	2000	FQ	14	0	No			
TUB01	0263	N001	07/20/2010	Arsenic	0.0023	FQ	0.0017	FQ	0.00084	F	13	0	Yes			
TUB01	0263	N001	07/20/2010	Magnesium	440	FQ	390	FQ	220	F	14	0	No			
TUB01	0263	N001	07/20/2010	Total Dissolved Solids	6300	FQ	6100	FQ	4200	F	14	0	No			
TUB01	0265	N001	07/22/2010	Arsenic	0.0013	FQ	0.001	F	0.00044	F	14	0	No			
TUB01	0265	N001	07/22/2010	Manganese	0.0038	B	FQ	0.0034	B	F	0.000054	U	F	15	9	No
TUB01	0265	N001	07/22/2010	Molybdenum	0.000047	B	FQ	0.0017	U	F	0.0001	U	F	15	13	No
TUB01	0265	N001	07/22/2010	Selenium	0.0072	FQ	0.0071		0.0036	F	15	0	No			
TUB01	0266	N001	07/22/2010	Potassium	1.5	FQJ	2.9	FQ	1.6	FQJ	14	0	Yes			
TUB01	0267	N001	07/22/2010	Molybdenum	0.00011	F	0.003	U	0.00015	B	F	21	16	No		
TUB01	0267	N001	07/22/2010	Selenium	0.058	F	0.0532	F	0.04	F	21	0	No			
TUB01	0267	N001	07/22/2010	Sodium	410	F	395	F	330	F	18	0	No			
TUB01	0271	N001	07/22/2010	Molybdenum	0.00031	F	0.003	U	0.00032	B	QF	14	10	No		
TUB01	0271	N001	07/22/2010	Potassium	0.99	B	FJ	2.2	E	F	1.65	F	10	0	Yes	
TUB01	0272	N001	07/21/2010	Arsenic	0.002	F	0.0019	F	0.0012	F	13	0	No			
TUB01	0272	N001	07/21/2010	Potassium	0.85	B	FJ	2.2	F	0.92	B	FJ	13	0	No	
TUB01	0272	N002	07/21/2010	Potassium	0.81	B	FJ	2.2	F	0.92	B	FJ	13	0	No	
TUB01	0273	N001	07/20/2010	Calcium	230	FQ	200	FQ	110	FQ	11	0	No			
TUB01	0273	N001	07/20/2010	Chloride	55	FQ	50	FQ	29	QFJ	11	0	No			

### Data Validation Outliers Report - No Field Parameters

Comparison: All Historical Data

Laboratory: ALS Laboratory Group

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier			
					Qualifiers		Qualifiers		Qualifiers		Data Points					
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect				
TUB01	0273	N001	07/20/2010	Magnesium	39	FQ	34	FQ	21	FQ	11	0	No			
TUB01	0273	N001	07/20/2010	Selenium	0.024	FQ	0.021	FQ	0.011	FQ	11	0	No			
TUB01	0273	N001	07/20/2010	Sodium	43	FQ	38	FQ	24	FQ	11	0	No			
TUB01	0273	N001	07/20/2010	Sulfate	310	FQ	250	FQ	120	QFJ	11	0	No			
TUB01	0273	N001	07/20/2010	Total Dissolved Solids	1200	FQ	1000	FQ	510	FQ	11	0	No			
TUB01	0273	N001	07/20/2010	Uranium	0.086	FQ	0.068	FQ	0.028	QF	11	0	No			
TUB01	0274	N001	07/20/2010	Molybdenum	0.00042	FQ	0.0016	UFQ	0.00047	B	QF	11	7	No		
TUB01	0275	N001	07/20/2010	Selenium	0.031	F	0.022	F	0.017	F	11	0	Yes			
TUB01	0275	N001	07/20/2010	Total Dissolved Solids	5800	F	5600	FJ	4500	F	11	0	No			
TUB01	0276	N001	07/20/2010	Iron	0.019	B	FJ	0.014	U	F	0.0016	U	JF	12	12	No
TUB01	0277	N001	07/21/2010	Arsenic	0.00051	FQ	0.0005	FQ	0.0001	F	6	2	No			
TUB01	0277	N001	07/21/2010	Calcium	26	FQ	30	FQ	27	F	6	0	No			
TUB01	0277	N001	07/21/2010	Chloride	9.9	FQ	11	F	10	FQ	6	0	No			
TUB01	0277	N001	07/21/2010	Molybdenum	0.0002	FQ	0.0016	F	0.00045	B	UFQ	6	3	No		
TUB01	0277	N001	07/21/2010	Potassium	1.5	FQJ	3.1		2.4	FQ	6	0	Yes			
TUB01	0278	N001	07/20/2010	Chloride	8.9	FQ	10	FQ	9.1	FQ	6	0	No			
TUB01	0278	N001	07/20/2010	Iron	0.037	B	FQ	0.018	B	UFQ	0.0034	U	QF	6	5	Yes
TUB01	0278	N001	07/20/2010	Potassium	1.9	FQJ	2.9	FQ	2.3	FQ	6	0	No			
TUB01	0279	N001	07/20/2010	Potassium	1.8	FJ	2.7	F	2.1	F	6	0	No			
TUB01	0280	N001	07/20/2010	Arsenic	0.0023	FQ	0.0021	FQ	0.0014	FQ	7	0	No			
TUB01	0280	N001	07/20/2010	Molybdenum	0.00051	FQ	0.0013	UFQ	0.00053	B	UQF	7	5	No		
TUB01	0280	N001	07/20/2010	Potassium	1.4	FQJ	2.2	FQ	1.8	FQ	7	0	Yes			
TUB01	0280	N001	07/20/2010	Uranium	0.0016	FQ	0.0015	FQ	0.0011	FQ	7	0	No			
TUB01	0281	0001	07/22/2010	Potassium	1.5	FQJ	6	FQ	1.6	FQJ	12	0	No			
TUB01	0281	0001	07/22/2010	Sodium	19	FQ	30	FQ	21	FQ	12	0	No			
TUB01	0281	0001	07/22/2010	Total Dissolved Solids	690	FQ	660	FQ	410	FQ	11	0	No			
TUB01	0282	N001	07/22/2010	Iron	0.12	FQ	0.1	FQ	0.0014	U	FQ	11	8	No		
TUB01	0282	N001	07/22/2010	Molybdenum	0.0005	FQ	0.0048	F	0.00058	B	FQ	11	5	No		

## Data Validation Outliers Report - No Field Parameters

Comparison: All Historical Data

Laboratory: ALS Laboratory Group

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier			
					Qualifiers		Qualifiers		Qualifiers		Data Points					
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect				
TUB01	0286	N001	07/20/2010	Ammonia Total as N	2.1	FQ	2	FQ	0.1	U	F	5	3	No		
TUB01	0286	N001	07/20/2010	Arsenic	0.0009	FQ	0.00078	FQ	0.00041	F	5	0	No			
TUB01	0286	N001	07/20/2010	Molybdenum	0.00076	FQ	0.00065	B	UFQ	0.00025	B	UFQ	5	3	No	
TUB01	0287	N001	07/20/2010	Arsenic	0.0017	FQ	0.0015	FQ	0.00093	FQ	5	0	No			
TUB01	0287	N001	07/20/2010	Calcium	920	FQ	900	FQ	650	FQ	5	0	No			
TUB01	0287	N001	07/20/2010	Iron	0.12	FQ	0.046	B	UFQ	0.0026	U	FQ	5	5	Yes	
TUB01	0287	N001	07/20/2010	Molybdenum	0.097	FQ	0.081	FQ	0.023	FQ	5	0	No			
TUB01	0287	N001	07/20/2010	Potassium	9.7	FQJ	9.2	FQ	4.6	B	FQJ	5	0	No		
TUB01	0287	N001	07/20/2010	Selenium	0.12	FQ	0.099	FQ	0.081	FQ	5	0	No			
TUB01	0287	N001	07/20/2010	Sodium	230	FQ	210	FQ	170	FQ	5	0	No			
TUB01	0287	N001	07/20/2010	Total Dissolved Solids	5300	FQ	4400	FQ	3200	FQ	5	0	No			
TUB01	0288	N001	07/21/2010	Arsenic	0.00059	FQ	0.00056	FQ	0.00046	FQJ	5	0	No			
TUB01	0288	N001	07/21/2010	Calcium	200	FQ	330	FQ	230	FQ	5	0	No			
TUB01	0288	N001	07/21/2010	Iron	0.0064	B	FQJ	0.12	FQ	0.0072	U	FQ	5	2	No	
TUB01	0288	N001	07/21/2010	Magnesium	38	FQ	63	FQ	42	FQ	5	0	No			
TUB01	0288	N001	07/21/2010	Manganese	0.0015	B	FQ	0.019	FQ	0.0029	B	UFQ	5	1	No	
TUB01	0288	N001	07/21/2010	Molybdenum	0.000082	B	FQ	0.00033	B	FQ	0.00016	B	UFQ	5	4	No
TUB01	0288	N001	07/21/2010	Nitrate + Nitrite as Nitrogen	55	FQ	110	FQJ	57	FQ	5	0	No			
TUB01	0288	N001	07/21/2010	Sodium	48	FQ	74	FQ	54	FQ	5	0	No			
TUB01	0288	N001	07/21/2010	Sulfate	280	FQ	632		290	FQ	6	0	No			
TUB01	0288	N001	07/21/2010	Uranium	0.012	FQ	0.0342		0.014	FQ	6	0	No			
TUB01	0289	N001	07/21/2010	Molybdenum	0.00032	FQ	0.00099	B	FQJ	0.00043	B	UFQ	5	1	No	
TUB01	0289	N001	07/21/2010	Selenium	0.0036	FQ	0.0034	FQ	0.0024	FQ	5	0	No			
TUB01	0289	N001	07/21/2010	Silicon	7.1	FQ	7	FQ	6.6	FQ	5	0	No			
TUB01	0290	N001	07/21/2010	Calcium	67	FQ	44	FQ	35	FQ	5	0	Yes			
TUB01	0290	N001	07/21/2010	Chloride	23	FQ	20		13	FQ	6	0	No			
TUB01	0290	N001	07/21/2010	Magnesium	11	FQ	7.1	FQ	5.8	FQ	5	0	Yes			
TUB01	0290	N001	07/21/2010	Molybdenum	0.00033	FQ	0.0018	FQJ	0.00053	B	FQJ	5	0	No		

## Data Validation Outliers Report - No Field Parameters

Comparison: All Historical Data

Laboratory: ALS Laboratory Group

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier		
					Qualifiers		Qualifiers		Qualifiers		Data Points				
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect			
TUB01	0290	N001	07/21/2010	Nitrate + Nitrite as Nitrogen	17	FQ	7.3	FQ	3.6	FQ	5	0	Yes		
TUB01	0290	N001	07/21/2010	Selenium	0.0025	FQ	0.0018	FQ	0.0014	E	FQ	5	0	Yes	
TUB01	0290	N001	07/21/2010	Sodium	17	E	FQ	13	FQ	13	FQ	5	0	Yes	
TUB01	0290	N001	07/21/2010	Sulfate	71	FQ	44		19	FQ	6	0	Yes		
TUB01	0290	N001	07/21/2010	Total Dissolved Solids	340	FQ	220	FQ	180	FQ	5	0	Yes		
TUB01	0683	N001	07/21/2010	Potassium	0.96	B	FQJ	5.4	F	1.6	JF	12	0	No	
TUB01	0683	N001	07/21/2010	Total Dissolved Solids	160	FQ	323	L	170	FQ	12	0	No		
TUB01	0684	N001	07/21/2010	Arsenic	0.0029	FQ	0.0028	FQ	0.0024	B	F	9	0	No	
TUB01	0684	N001	07/21/2010	Potassium	0.74	B	FQJ	5.4	FQ	1.38	JFQ	11	0	No	
TUB01	0685	N001	07/20/2010	Arsenic	0.003	F	0.0028	F	0.0024	B	F	9	0	No	
TUB01	0685	N001	07/20/2010	Potassium	1.2	FJ	2.6		1.3	F	11	0	No		
TUB01	0686	N001	07/21/2010	Potassium	0.78	B	FJ	4.2	F	0.885	F	18	0	No	
TUB01	0686	N002	07/21/2010	Potassium	0.73	B	FJ	4.2	F	0.885	F	18	0	No	
TUB01	0686	N002	07/21/2010	Silica	8.5	F	12.3	L	9	F	21	0	No		
TUB01	0686	N001	07/21/2010	Silica	8.5	F	12.3	L	9	F	21	0	No		
TUB01	0686	N001	07/21/2010	Silicon	4	F	5.4	F	4.2	F	9	0	No		
TUB01	0686	N002	07/21/2010	Silicon	4	F	5.4	F	4.2	F	9	0	No		
TUB01	0687	N001	07/20/2010	Sulfate	17	F	388		18.8	F	21	0	No		
TUB01	0688	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	6.7	F	12	FJ	7.3	F	7	0	No		
TUB01	0689	N001	07/20/2010	Arsenic	0.0021	FQ	0.002	F	0.0016	B	F	11	0	No	
TUB01	0689	N001	07/20/2010	Potassium	1.3	FQJ	2.3	F	1.36	E	JF	15	0	No	
TUB01	0690	N001	07/20/2010	Molybdenum	0.00025	FQ	0.0043	B	UL	0.0004	B	FQ	19	11	No
TUB01	0690	N001	07/20/2010	Potassium	2.2	FQJ	3.3	FQ	2.4	QF	16	0	No		
TUB01	0691	N001	07/20/2010	Molybdenum	0.000056	B	F	0.003	U	0.00023	B	F	25	19	No
TUB01	0691	N001	07/20/2010	Total Dissolved Solids	3200	F	1680	F	370	FQJ	21	0	No		
TUB01	0692	N001	07/20/2010	Arsenic	0.0075	FQ	0.0073	FQ	0.0026	B	FQ	11	0	No	
TUB01	0692	N001	07/20/2010	Magnesium	6.5	FQ	7.93	L	6.68	L	15	0	No		
TUB01	0692	N001	07/20/2010	Molybdenum	0.000078	B	FQ	0.003	U	0.00043	B	FQ	18	10	Yes

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					Result	Qualifiers	Lab	Data	Result	Qualifiers	Lab	Data	N			
TUB01	0692	N001	07/20/2010	Sodium	12	FQ	21.2		L	13	FQ	15	0	No		
TUB01	0695	N001	07/20/2010	Arsenic	0.0017	F	0.0016		F	0.0014	B	F	9	0	No	
TUB01	0695	N001	07/20/2010	Potassium	1.8	FJ	2.7		F	1.88	F	12	0	No		
TUB01	0901	N001	07/21/2010	Magnesium	8.3	F	8.1		F	5.2		33	0	No		
TUB01	0901	N001	07/21/2010	Potassium	0.92	B	FJ	2.1	F	0.95		33	0	No		
TUB01	0903	N001	07/21/2010	Potassium	1.2	FJ	3		F	1.22		32	0	No		
TUB01	0910	N001	07/21/2010	Potassium	0.57	B	FJ	2		0.83	F	19	0	Yes		
TUB01	0911	N001	07/21/2010	Potassium	0.88	B	FQJ	5.6	GF	1.7	FQ	13	0	No		
TUB01	0912	N001	07/22/2010	Molybdenum	0.00016	FQ	0.02			0.00018	B	FQ	37	32	No	
TUB01	0913	N001	07/22/2010	Potassium	0.92	B	FQJ	2.9	F	1.7	F	24	0	No		
TUB01	0913	N001	07/22/2010	Sodium	6.8	FQ	9.57			6.9	FQ	24	0	No		
TUB01	0914	N001	07/22/2010	Magnesium	0.19	B	FQ	7.98	F	0.2	B	FQ	31	0	No	
TUB01	0914	N001	07/22/2010	Uranium	0.000006	B	FQ	0.011	F	0.000014	B	UFQ	33	8	No	
TUB01	0915	N001	07/21/2010	Potassium	1.4	FQJ	4.58	GFJ	1.92			21	0	No		
TUB01	0915	N001	07/21/2010	Sodium	12	FQ	21.8	G	13	FQ	21	0	No			
TUB01	0915	N001	07/21/2010	Uranium	0.000009	B	FQ	0.0018	GF	0.0000099	B	UFQ	22	10	No	
TUB01	0916	N001	07/21/2010	Silicon	5.9	FQ	9.1	FQ	6.6	FQG	5	0	No			
TUB01	0920	N001	07/21/2010	Potassium	1	FJ	2.5	F	1.69	F	25	0	No			
TUB01	0921	N001	07/20/2010	Potassium	4.6	FJ	7.71			5.47		25	0	Yes		
TUB01	0932	N001	07/21/2010	Potassium	1.2	FJ	3.9	F	1.3	FJ	26	0	No			
TUB01	0934	N001	07/20/2010	Molybdenum	0.00014	B	FQ	0.01	U	F	0.00016	B	J	29	24	No
TUB01	0935	N001	07/20/2010	Ammonia Total as N	63		98			69		10	0	No		
TUB01	0935	N001	07/20/2010	Iron	0.051	B	0.044	B	UF	0.00097	B	U	30	26	No	
TUB01	0936	N001	07/20/2010	Ammonia Total as N	3.1		19			6.7	FQ	5	0	No		
TUB01	0936	N001	07/20/2010	Calcium	380		920	FQ	490			15	0	No		
TUB01	0936	N001	07/20/2010	Chloride	64		261	F	100			15	1	No		
TUB01	0936	N001	07/20/2010	Magnesium	190		1770			530		15	0	No		
TUB01	0936	N001	07/20/2010	Manganese	1.3		23.1			4.5	F	16	0	No		

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Site Code	Location Code	Sample ID	Sample Date	Analyte	Current		Historical Maximum		Historical Minimum		Number of Data Points		Statistical Outlier	
					Qualifiers		Qualifiers		Qualifiers		Data Points			
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect		
TUB01	0936	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	200		550		FQ	290	5	0	No	
TUB01	0936	N001	07/20/2010	Potassium	7.2	J	31.2		12.8	QF	15	0	No	
TUB01	0936	N001	07/20/2010	Selenium	0.017		0.188	N	J	0.018	F	19	0	No
TUB01	0936	N001	07/20/2010	Sodium	73		360	QF	120		15	0	No	
TUB01	0936	N001	07/20/2010	Sulfate	710		5400		1600		18	0	No	
TUB01	0936	N001	07/20/2010	Total Dissolved Solids	2900		13300		5200		15	0	No	
TUB01	0936	N001	07/20/2010	Uranium	0.13		0.606	QF	0.2		18	0	No	
TUB01	0938	N001	07/20/2010	Arsenic	0.0016		0.0015		0.00087		10	0	No	
TUB01	0938	N001	07/20/2010	Calcium	970		960	FQ	490		17	0	No	
TUB01	0938	N001	07/20/2010	Magnesium	530		472		150	F	17	0	No	
TUB01	0938	N001	07/20/2010	Manganese	0.74		0.12	FQ	0.0092	B	F	16	0	No
TUB01	0938	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	360		260	FQ	130	J	10	0	No	
TUB01	0938	N001	07/20/2010	Potassium	15	J	11	FQ	5.34		17	0	Yes	
TUB01	0938	N001	07/20/2010	Sodium	350		249		120		17	0	No	
TUB01	0938	N001	07/20/2010	Sulfate	2800		2300	FQ	950	F	17	0	No	
TUB01	0938	N001	07/20/2010	Total Dissolved Solids	7600		6650		2700	F	17	0	No	
TUB01	0940	N001	07/21/2010	Magnesium	2800	FQ	2590	F	1140	F	14	0	No	
TUB01	0940	N001	07/21/2010	Manganese	26	FQ	64.8	F	39.6	L	15	0	Yes	
TUB01	0941	N001	07/20/2010	Calcium	930	FQ	820	FQ	122	F	27	0	No	
TUB01	0941	N001	07/20/2010	Selenium	0.099	FQ	0.098	FQ	0.0182	L	32	0	No	
TUB01	0941	N001	07/20/2010	Total Dissolved Solids	4900	FQ	4400	FQ	755		26	0	No	
TUB01	0942	N001	07/20/2010	Magnesium	410		755	F	420		29	0	No	
TUB01	0942	N001	07/20/2010	Manganese	2.9		4.5		2.96		30	0	No	
TUB01	0943	N001	07/20/2010	Arsenic	0.0044		0.0031	F	0.00078	F	14	0	No	
TUB01	0943	N001	07/20/2010	Calcium	11		300	F	18	F	18	0	No	
TUB01	0943	N001	07/20/2010	Chloride	2		100	F	3.7	F	18	1	No	
TUB01	0943	N001	07/20/2010	Magnesium	2.4		61	F	3.8	F	18	0	No	
TUB01	0943	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	2.3		75	F	3.6	F	9	0	No	

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					Qualifiers		Qualifiers		Qualifiers		Data Points					
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect				
TUB01	0943	N001	07/20/2010	Potassium	0.61	B	J	7.2	F	1.45	18	0	No			
TUB01	0943	N001	07/20/2010	Selenium	0.00035		J	0.01	F	0.00076	F	22	3	No		
TUB01	0943	N001	07/20/2010	Sodium	15			89	F	16	F	18	0	No		
TUB01	0943	N001	07/20/2010	Sulfate	26			620	F	26.2		21	0	No		
TUB01	0943	N001	07/20/2010	Total Dissolved Solids	110			1600	F	130	FJ	18	0	No		
TUB01	0945	N001	07/21/2010	Arsenic	0.0022		FQ	0.0021	FQ	0.00087	B	QF	10	0	No	
TUB01	0945	N001	07/21/2010	Potassium	1		FQJ	3.6	FQ	1.48	F	19	0	No		
TUB01	0946	N001	07/20/2010	Calcium	14	F		165	F	18	F	12	0	No		
TUB01	0946	N001	07/20/2010	Chloride	4.4	F		173	F	5.3	F	12	0	No		
TUB01	0946	N001	07/20/2010	Magnesium	2.4	F		27.6	F	3.2	F	12	0	No		
TUB01	0946	N001	07/20/2010	Molybdenum	0.00049		F	0.012	F	0.00057	B	UF	12	5	No	
TUB01	0946	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	2.3	F		8.1	FJ	2.4	FJ	8	0	No		
TUB01	0946	N001	07/20/2010	Potassium	0.34	B	FJ	2.7	E	JF	1.2	F	12	0	No	
TUB01	0946	N001	07/20/2010	Selenium	0.00063	F		0.0175	F	0.00083		F	12	0	No	
TUB01	0946	N001	07/20/2010	Sulfate	25	F		191	F	36	FJ	12	0	No		
TUB01	0946	N001	07/20/2010	Total Dissolved Solids	110	F		1320	F	160	F	12	0	No		
TUB01	0947	N001	07/21/2010	Molybdenum	0.00044		FQ	0.01	U	F	0.00048	B	UFQ	9	6	No
TUB01	0947	N001	07/21/2010	Potassium	0.68	B	FQJ	2.1	F	1.4	FQJ	8	0	Yes		
TUB01	1003	N001	07/20/2010	Calcium	320	F		300	F	58	F	10	0	No		
TUB01	1003	N001	07/20/2010	Molybdenum	0.00017	F		0.0018	U	F	0.00021	B	UF	10	10	No
TUB01	1003	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	61	F		53	FJ	8.3	F	6	0	No		
TUB01	1003	N001	07/20/2010	Total Dissolved Solids	1600	F		1500	F	290	F	10	0	No		
TUB01	1003	N001	07/20/2010	Uranium	0.038	F		0.037	F	0.0021	F	10	0	No		
TUB01	1004	N001	07/20/2010	Arsenic	0.0029		F	0.0028	F	0.002	F	12	0	No		
TUB01	1004	N001	07/20/2010	Iron	0.11	F		0.028	B	UF	0.0034	U	F	13	9	Yes
TUB01	1004	N001	07/20/2010	Potassium	0.9	B	FJ	2.2			0.99	B	F	13	0	No
TUB01	1006	N001	07/20/2010	Calcium	25	F		28	F	25.2	F	10	0	No		
TUB01	1006	N001	07/20/2010	Potassium	1.5	FJ		2.9		2.1	E	JF	10	0	No	

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					Qualifiers		Qualifiers		Qualifiers		Data Points				
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect			
TUB01	1007	N001	07/20/2010	Arsenic	0.0023	F	0.002	B	F	0.00044	F	9	0	No	
TUB01	1007	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	3.1	F	4.6	FJ	3.2	F	6	0	No		
TUB01	1101	N001	07/19/2010	Arsenic	0.0016		0.0013	F	0.00074	J	11	0	No		
TUB01	1101	N001	07/19/2010	Nitrate + Nitrite as Nitrogen	69		160	J	72		7	0	No		
TUB01	1102	N001	07/19/2010	Ammonia Total as N	0.5		2.8	F	0.87		6	0	No		
TUB01	1102	N001	07/19/2010	Arsenic	0.0017		0.0014		0.00088		11	0	No		
TUB01	1102	N001	07/19/2010	Molybdenum	0.00016	U	0.003	U	0.00022	B	18	13	No		
TUB01	1103	N001	07/20/2010	Arsenic	0.0052		0.0014		0.00071	J	10	0	Yes		
TUB01	1103	N001	07/20/2010	Iron	5.5		1.14		0.0017	B	U	17	8	Yes	
TUB01	1103	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	240		230		130	J	6	0	No		
TUB01	1104	N001	07/19/2010	Ammonia Total as N	19		37	F	22		5	0	No		
TUB01	1104	N001	07/19/2010	Arsenic	0.0022		0.0019	F	0.0011	J	9	0	No		
TUB01	1104	N001	07/19/2010	Magnesium	130		310		140		12	0	No		
TUB01	1104	N001	07/19/2010	Nitrate + Nitrite as Nitrogen	110		170	F	120		5	0	No		
TUB01	1106	N001	07/19/2010	Arsenic	0.18		1.11		0.23		11	0	No		
TUB01	1106	N001	07/19/2010	Molybdenum	0.088		1.41		0.16		18	0	No		
TUB01	1107	N001	07/19/2010	Ammonia Total as N	0.59		0.1	U	F	0.1	U	F	7	7	Yes
TUB01	1107	N001	07/19/2010	Arsenic	0.0027		0.002		0.0011	B	12	0	No		
TUB01	1107	N001	07/19/2010	Calcium	840		797		158		15	0	No		
TUB01	1107	N001	07/19/2010	Magnesium	150		145		29		15	0	No		
TUB01	1107	N001	07/19/2010	Manganese	0.13		0.0637		0.0023	B	19	1	No		
TUB01	1107	N001	07/19/2010	Nitrate + Nitrite as Nitrogen	230		75	N	J	45		7	0	Yes	
TUB01	1107	N001	07/19/2010	Potassium	9.3	J	6.65		2.32		15	0	No		
TUB01	1107	N001	07/19/2010	Silicon	7.6		6.3		5.5		8	0	Yes		
TUB01	1107	N001	07/19/2010	Sulfate	1600		1440		217		20	0	No		
TUB01	1107	N001	07/19/2010	Uranium	0.23		0.129		0.034		20	0	No		
TUB01	1108	N001	07/19/2010	Magnesium	210		669		220		14	0	No		
TUB01	1109	N001	07/19/2010	Ammonia Total as N	17		14		3.9		7	0	No		

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					Qualifiers		Qualifiers		Qualifiers		Data Points			
					Lab	Data	Lab	Data	Lab	Data	N	N Below Detect		
TUB01	1111	N001	07/19/2010	Ammonia Total as N	21		10		2.7		6	0	No	
TUB01	1111	N001	07/19/2010	Calcium	700		500		248		13	0	Yes	
TUB01	1111	N001	07/19/2010	Chloride	90		85.5		32.5		14	0	No	
TUB01	1111	N001	07/19/2010	Molybdenum	0.000064	U	0.003	U	0.00011	B	17	14	No	
TUB01	1111	N001	07/19/2010	Nitrate + Nitrite as Nitrogen	160		130	J	84		6	0	No	
TUB01	1111	N001	07/19/2010	Potassium	15	J	14.5		4.62		13	0	Yes	
TUB01	1111	N001	07/19/2010	Silicon	8.1		7.7		6.6		7	0	No	
TUB01	1112	N001	07/20/2010	Molybdenum	0.00023		0.003	U	0.00027	B	U	17	14	No
TUB01	1112	N001	07/20/2010	Potassium	2.1	J	6.89	L	2.18		13	0	No	
TUB01	1114	N001	07/20/2010	Calcium	410		380		106		12	0	No	
TUB01	1114	N001	07/20/2010	Chloride	41		39		17.1		13	0	No	
TUB01	1114	N001	07/20/2010	Selenium	0.011		0.0087		0.0023	B		16	0	No
TUB01	1114	N001	07/20/2010	Sodium	67		66		16.2		12	0	No	
TUB01	1114	N001	07/20/2010	Sulfate	740		680	J	137		17	0	No	
TUB01	1115	N001	07/20/2010	Molybdenum	0.00016		0.003	U	0.0002	B		17	13	No
TUB01	1116	N001	07/20/2010	Molybdenum	0.00012		0.003	U	0.00015	B	U	14	13	No
TUB01	1116	N001	07/20/2010	Selenium	0.0036		0.0033		0.0016	B		14	0	No
TUB01	1117	N001	07/20/2010	Iron	0.067	B	0.028	B	0.0018	B		17	13	Yes
TUB01	1117	N001	07/20/2010	Manganese	0.02		0.019		0.0001	U		17	7	No
TUB01	1117	N002	07/20/2010	Manganese	0.02		0.019		0.0001	U		17	7	No
TUB01	1117	N001	07/20/2010	Molybdenum	0.00013		0.003	U	0.00014	B	U	17	15	No
TUB01	1117	N002	07/20/2010	Molybdenum	0.00013		0.003	U	0.00014	B	U	17	15	No
TUB01	1117	N001	07/20/2010	Silicon	6.9		8.2	F	7			6	0	No
TUB01	1118	N001	07/20/2010	Ammonia Total as N	14		13	J	3.8	F	5	0	No	
TUB01	1118	N001	07/20/2010	Chloride	67		61	F	26.1		12	0	No	
TUB01	1118	N002	07/20/2010	Selenium	0.02		0.019		0.0028	B		15	0	No
TUB01	1119	N001	07/20/2010	Iron	0.22		0.151		0.0008	U		19	14	No
TUB01	1120	N002	07/20/2010	Chloride	61		197		68		16	0	No	

### Data Validation Outliers Report - No Field Parameters

Comparison: All Historical Data

Laboratory: ALS Laboratory Group

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Result	Current Qualifiers		Historical Maximum Qualifiers		Historical Minimum Qualifiers		Number of Data Points		Statistical Outlier	
						Lab	Data	Lab	Data	Lab	Data	N	N Below Detect		
TUB01	1120	N001	07/20/2010	Chloride	66			197		68		16	0	No	
TUB01	1120	N002	07/20/2010	Nitrate + Nitrite as Nitrogen	38			110	F	47		8	0	No	
TUB01	1120	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	39			110	F	47		8	0	No	
TUB01	1120	N002	07/20/2010	Selenium	0.017			0.0697		0.019		19	0	No	
TUB01	1120	N001	07/20/2010	Selenium	0.016			0.0697		0.019		19	0	No	
TUB01	1120	N001	07/20/2010	Sodium	200			669		210		15	0	No	
TUB01	1120	N002	07/20/2010	Sodium	200			669		210		15	0	No	
TUB01	1120	N002	07/20/2010	Uranium	0.15			1.64		0.17		20	0	No	
TUB01	1120	N001	07/20/2010	Uranium	0.15			1.64		0.17		20	0	No	
TUB01	1121	N001	07/21/2010	Nitrate + Nitrite as Nitrogen	13			88		14		6	0	No	
TUB01	1121	N001	07/21/2010	Selenium	0.0041			0.0527		0.005		20	0	No	
TUB01	1122	N001	07/19/2010	Uranium	0.22			1.14		0.263		16	0	No	
TUB01	1123	N001	07/19/2010	Ammonia Total as N	21			8.5		0.1	U	F	5	4	No
TUB01	1123	N001	07/19/2010	Arsenic	0.0028			0.0026		0.00098	B		9	0	No
TUB01	1123	N001	07/19/2010	Chloride	160			139		19	J	13	0	No	
TUB01	1123	N001	07/19/2010	Iron	1.2			0.38		0.0024	B	U	16	13	Yes
TUB01	1123	N001	07/19/2010	Magnesium	260			174		20		13	0	No	
TUB01	1123	N001	07/19/2010	Manganese	0.098			0.0251		0.00006	B	U	16	5	No
TUB01	1123	N001	07/19/2010	Potassium	19	J	16			2.1		13	0	Yes	
TUB01	1123	N001	07/19/2010	Silica	18			17.6		12		16	0	No	
TUB01	1123	N001	07/19/2010	Silicon	8.4			7.3		5.8		6	0	No	
TUB01	1123	N001	07/19/2010	Sodium	380			374		36		13	0	No	
TUB01	1123	N001	07/19/2010	Sulfate	2500			1940		160	J	17	0	No	
TUB01	1124	N001	07/19/2010	Calcium	740			576		230		11	0	No	
TUB01	1124	N001	07/19/2010	Chloride	110			107		38	J	11	0	No	
TUB01	1124	N001	07/19/2010	Magnesium	110			95		37		11	0	No	
TUB01	1124	N001	07/19/2010	Selenium	0.03			0.022		0.0061		17	0	Yes	
TUB01	1124	N001	07/19/2010	Sodium	260			170		46		11	0	Yes	

### Data Validation Outliers Report - No Field Parameters

Comparison: All Historical Data

Laboratory: ALS Laboratory Group

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Result	Current Qualifiers		Historical Maximum Qualifiers		Historical Minimum Qualifiers		Number of Data Points		Statistical Outlier		
						Lab	Data	Lab	Data	Lab	Data	N	N Below Detect			
TUB01	1124	N001	07/19/2010	Sulfate	1700			1200		J	320		J	17	0	No
TUB01	1124	N001	07/19/2010	Total Dissolved Solids	4000			3000		J	1100		J	11	0	No
TUB01	1124	N001	07/19/2010	Uranium	0.3			0.2			0.051			17	0	Yes
TUB01	1125	N001	07/20/2010	Arsenic	0.0027			0.0025			0.0013	B		10	0	No
TUB01	1125	N001	07/20/2010	Calcium	45			133			58			13	0	No
TUB01	1125	N001	07/20/2010	Iron	0.17			0.12			0.002	B	U	17	15	No
TUB01	1125	N001	07/20/2010	Magnesium	9.3			22.9			10.1			13	0	No
TUB01	1125	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	7.1			17		J	9.7		J	6	0	No
TUB01	1125	N001	07/20/2010	Potassium	1.1	J		2.8			1.97			13	0	Yes
TUB01	1125	N001	07/20/2010	Silicon	5.4			6.7			5.5	F		7	0	No
TUB01	1125	N001	07/20/2010	Sodium	13			25.7			15			13	0	No
TUB01	1125	N001	07/20/2010	Sulfate	42			595			66			18	0	No
TUB01	1125	N001	07/20/2010	Total Dissolved Solids	260			2520			310		J	13	0	No
TUB01	1129	N001	07/20/2010	Arsenic	0.0017			0.0015			0.001	F		5	0	No
TUB01	1129	N001	07/20/2010	Molybdenum	0.75			0.74			0.45	F		5	0	No
TUB01	1129	N001	07/20/2010	Potassium	4.9	J	7.1		F	5.6				5	0	No
TUB01	1129	N001	07/20/2010	Selenium	0.065			0.064	F	0.057				5	0	No
TUB01	1130	N001	07/20/2010	Arsenic	0.0016			0.0014			0.00093			5	0	No
TUB01	1130	N001	07/20/2010	Calcium	370			810			590			5	0	No
TUB01	1130	N001	07/20/2010	Chloride	69			170			99	F		6	0	No
TUB01	1130	N001	07/20/2010	Magnesium	95			240			170	F		5	0	No
TUB01	1130	N001	07/20/2010	Manganese	0.083			0.22			0.11	F		5	0	No
TUB01	1130	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	100			280	N	J	160	F		5	0	No
TUB01	1130	N001	07/20/2010	Potassium	6.2	E	J	18			11	F		5	0	No
TUB01	1130	N001	07/20/2010	Selenium	0.017			0.03			0.023	F		5	0	No
TUB01	1130	N001	07/20/2010	Silica	14			18			15	F		5	0	No
TUB01	1130	N001	07/20/2010	Silicon	6.5			8.3			7.1	F		5	0	No
TUB01	1130	N001	07/20/2010	Sodium	120			260			150	F		5	0	No

## Data Validation Outliers Report - No Field Parameters

Comparison: All Historical Data

Laboratory: ALS Laboratory Group

RIN: 10073213

Report Date: 12/22/2010

Site Code	Location Code	Sample ID	Sample Date	Analyte	Result	Current Qualifiers		Historical Maximum Qualifiers		Historical Minimum Qualifiers		Number of Data Points		Statistical Outlier	
						Lab	Data	Lab	Data	Lab	Data	N	N Below Detect		
TUB01	1130	N001	07/20/2010	Sulfate	870			2000	N	J	1200	F	6	0	No
TUB01	1130	N001	07/20/2010	Total Dissolved Solids	2300			5000		J	3300	F	5	0	No
TUB01	1130	N001	07/20/2010	Uranium	0.14			0.28			0.2	F	6	0	No
TUB01	1132	N001	07/20/2010	Magnesium	310			200		F	67		5	0	No
TUB01	1132	N001	07/20/2010	Molybdenum	1.8			1.5			0.25		5	0	No
TUB01	1132	N001	07/20/2010	Nitrate + Nitrite as Nitrogen	270			260		F	73		5	0	No
TUB01	1132	N001	07/20/2010	Selenium	0.14			0.13		F	0.03		5	0	No
TUB01	1132	N001	07/20/2010	Silicon	6.5			7.3		F	6.6		5	0	No
TUB01	1132	N001	07/20/2010	Sodium	410			310		F	68		5	0	No
TUB01	1132	N001	07/20/2010	Sulfate	2600			2100		F	570		6	0	No
TUB01	1132	N001	07/20/2010	Total Dissolved Solids	6600			5700		F	1700		5	0	No
TUB01	1132	N001	07/20/2010	Uranium	2.3			1.7		F	0.37		6	0	No
TUB01	1133	N001	07/21/2010	Chloride	120			74			27		5	0	No
TUB01	1571	0001	07/21/2010	Chloride	40			57.6			41		10	0	No
TUB01	1571	0001	07/21/2010	Sodium	58			109			64		10	0	No
TUB01	1571	0001	07/21/2010	Total Dissolved Solids	370			502			380		10	0	No
TUB01	1571	0001	07/21/2010	Uranium	0.0033			0.0079		J	0.0037		14	0	No
TUB01	1573	N001	07/21/2010	Chloride	29			28			23		11	0	No
TUB01	1573	N001	07/21/2010	Nitrate + Nitrite as Nitrogen	0.51			1.2			0.61		6	0	No
TUB01	1573	N001	07/21/2010	Potassium	0.73	B	J	3.1			1.35		11	0	No

### 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 Gretchen R Baer 1-5-11  
Signature Date

Gretchen Baer

Signature

1-5-11

Site Hydrologist: Tim Bartlett Signature 12/5/11 Date 12/5/11

Tim Bartlett

Signature

Date

Date of Review: October 19, 2010

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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: 12/22/2010

Location: 0251 WELL

Parameter	Units	Sample ID	Date	Depth Range (BLS)	(Ft)	Result	Qualifiers	Lab	Detection Limit	Uncertainty
							Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010 N001	200 -	300	93	FQ	#			
Ammonia Total as N	mg/L	07/21/2010 N001	200 -	300	0.1	U	FQ	#	0.1	
Arsenic	mg/L	07/21/2010 N001	200 -	300	0.0022	FQ	#	0.000015		
Calcium	mg/L	07/21/2010 N001	200 -	300	29	FQ	#	0.012		
Chloride	mg/L	07/21/2010 N001	200 -	300	6.7	FQ	#	0.4		
Iron	mg/L	07/21/2010 N001	200 -	300	0.0049	U	FQJ	#	0.0049	
Magnesium	mg/L	07/21/2010 N001	200 -	300	6.1	FQ	#	0.013		
Manganese	mg/L	07/21/2010 N001	200 -	300	0.0021	B	FQ	#	0.00011	
Molybdenum	mg/L	07/21/2010 N001	200 -	300	0.00022	FQ	#	0.000032		
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010 N001	200 -	300	4	FQ	#	0.05		
Oxidation Reduction Potential	mV	07/21/2010 N001	200 -	300	106.2	RFQ	#			
pH	s.u.	07/21/2010 N001	200 -	300	7.78	FQ	#			
Potassium	mg/L	07/21/2010 N001	200 -	300	1.5	FQJ	#	0.11		
Selenium	mg/L	07/21/2010 N001	200 -	300	0.00091	FQ	#	0.000032		
Silica	mg/L	07/21/2010 N001	200 -	300	11	FQ	#	0.0095		
Silicon	mg/L	07/21/2010 N001	200 -	300	4.9	FQ	#	0.0044		
Sodium	mg/L	07/21/2010 N001	200 -	300	5.8	FQ	#	0.0066		
Specific Conductance	umhos/cm	07/21/2010 N001	200 -	300	234	FQ	#			
Sulfate	mg/L	07/21/2010 N001	200 -	300	15	FQ	#	1		
Temperature	C	07/21/2010 N001	200 -	300	18.27	FQ	#			
Total Dissolved Solids	mg/L	07/21/2010 N001	200 -	300	150	FQ	#	20		
Turbidity	NTU	07/21/2010 N001	200 -	300	1.56	FQ	#			
Uranium	mg/L	07/21/2010 N001	200 -	300	0.0018	FQ	#	0.0000029		

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0252 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	400	-	500	90	F	#	
Ammonia Total as N	mg/L	07/21/2010	N001	400	-	500	0.1	U	F	# 0.1
Arsenic	mg/L	07/21/2010	N001	400	-	500	0.0023	F	#	0.000015
Calcium	mg/L	07/21/2010	N001	400	-	500	20	F	#	0.012
Chloride	mg/L	07/21/2010	N001	400	-	500	4.8	F	#	0.4
Iron	mg/L	07/21/2010	N001	400	-	500	0.022	B	FJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	400	-	500	4	F	#	0.013
Manganese	mg/L	07/21/2010	N001	400	-	500	0.0043	B	F	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	400	-	500	0.00016	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	400	-	500	2.3	F	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	400	-	500	103.1	RF	#	
pH	s.u.	07/21/2010	N001	400	-	500	8.07	F	#	
Potassium	mg/L	07/21/2010	N001	400	-	500	1.4	FJ	#	0.11
Selenium	mg/L	07/21/2010	N001	400	-	500	0.00071	F	#	0.000032
Silica	mg/L	07/21/2010	N001	400	-	500	10	F	#	0.0095
Silicon	mg/L	07/21/2010	N001	400	-	500	4.7	F	#	0.0044
Sodium	mg/L	07/21/2010	N001	400	-	500	9.7	F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	400	-	500	193	F	#	
Sulfate	mg/L	07/21/2010	N001	400	-	500	7.1	F	#	1
Temperature	C	07/21/2010	N001	400	-	500	19.21	F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	400	-	500	110	F	#	20
Turbidity	NTU	07/21/2010	N001	400	-	500	1.39	F	#	
Uranium	mg/L	07/21/2010	N001	400	-	500	0.0019	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0258 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	159	- 199	90	FQ	#		
Ammonia Total as N	mg/L	07/21/2010	N001	159	- 199	0.1	U	FQ	#	0.1
Arsenic	mg/L	07/21/2010	N001	159	- 199	0.0024	FQ	#	0.000015	
Calcium	mg/L	07/21/2010	N001	159	- 199	32	FQ	#	0.012	
Chloride	mg/L	07/21/2010	N001	159	- 199	12	FQ	#	0.4	
Iron	mg/L	07/21/2010	N001	159	- 199	0.0049	U	FQJ	#	0.0049
Magnesium	mg/L	07/21/2010	N001	159	- 199	7	FQ	#	0.013	
Manganese	mg/L	07/21/2010	N001	159	- 199	0.00011	U	FQJ	#	0.00011
Molybdenum	mg/L	07/21/2010	N001	159	- 199	0.00044	FQ	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	159	- 199	3.3	FQ	#	0.02	
Oxidation Reduction Potential	mV	07/21/2010	N001	159	- 199	123.1	FQ	#		
pH	s.u.	07/21/2010	N001	159	- 199	7.97	FQ	#		
Potassium	mg/L	07/21/2010	N001	159	- 199	0.95	B	FQJ	#	0.11
Selenium	mg/L	07/21/2010	N001	159	- 199	0.0017	FQ	#	0.000032	
Silica	mg/L	07/21/2010	N001	159	- 199	12	FQ	#	0.0095	
Silicon	mg/L	07/21/2010	N001	159	- 199	5.7	FQ	#	0.0044	
Sodium	mg/L	07/21/2010	N001	159	- 199	11	FQ	#	0.0066	
Specific Conductance	umhos/cm	07/21/2010	N001	159	- 199	296	FQ	#		
Sulfate	mg/L	07/21/2010	N001	159	- 199	18	FQ	#	1	
Temperature	C	07/21/2010	N001	159	- 199	18.35	FQ	#		
Total Dissolved Solids	mg/L	07/21/2010	N001	159	- 199	170	FQ	#	20	
Turbidity	NTU	07/21/2010	N001	159	- 199	0.69	FQ	#		
Uranium	mg/L	07/21/2010	N001	159	- 199	0.0013	FQ	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0261 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	160	- 200	95	F	#		
Ammonia Total as N	mg/L	07/21/2010	N001	160	- 200	0.1	U	F	#	0.1
Arsenic	mg/L	07/21/2010	N001	160	- 200	0.0022		F	#	0.000015
Calcium	mg/L	07/21/2010	N001	160	- 200	32		F	#	0.012
Chloride	mg/L	07/21/2010	N001	160	- 200	13		F	#	0.4
Iron	mg/L	07/21/2010	N001	160	- 200	0.0049	U	FJ	#	0.0049
Magnesium	mg/L	07/21/2010	N001	160	- 200	7.7		F	#	0.013
Manganese	mg/L	07/21/2010	N001	160	- 200	0.001	B	F	#	0.00011
Molybdenum	mg/L	07/21/2010	N001	160	- 200	0.00046		F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	160	- 200	3.3		F	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	160	- 200	118.2		F	#	
pH	s.u.	07/21/2010	N001	160	- 200	7.97		F	#	
Potassium	mg/L	07/21/2010	N001	160	- 200	0.97	B	FJ	#	0.11
Selenium	mg/L	07/21/2010	N001	160	- 200	0.0017		F	#	0.000032
Silica	mg/L	07/21/2010	N001	160	- 200	13		F	#	0.0095
Silicon	mg/L	07/21/2010	N001	160	- 200	6		F	#	0.0044
Sodium	mg/L	07/21/2010	N001	160	- 200	11		F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	160	- 200	299		F	#	
Sulfate	mg/L	07/21/2010	N001	160	- 200	18		F	#	1
Temperature	C	07/21/2010	N001	160	- 200	19.71		F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	160	- 200	190		F	#	20
Turbidity	NTU	07/21/2010	N001	160	- 200	2.23		F	#	
Uranium	mg/L	07/21/2010	N001	160	- 200	0.0013		F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0262 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty	
			ID				Data	QA			
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	60	-	100	642	FQ	#		
Ammonia Total as N	mg/L	07/21/2010	N001	60	-	100	2.1	FQ	#	0.1	
Arsenic	mg/L	07/21/2010	N001	60	-	100	0.0018	FQ	#	0.000074	
Calcium	mg/L	07/21/2010	N001	60	-	100	870	FQ	#	0.024	
Chloride	mg/L	07/21/2010	N001	60	-	100	120	FQ	#	10	
Iron	mg/L	07/21/2010	N001	60	-	100	0.0099	U	FQJ	#	0.0099
Magnesium	mg/L	07/21/2010	N001	60	-	100	160	FQ	#	0.026	
Manganese	mg/L	07/21/2010	N001	60	-	100	0.013	FQ	#	0.00023	
Molybdenum	mg/L	07/21/2010	N001	60	-	100	1.1	FQ	#	0.00064	
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	60	-	100	190	FQ	#	1	
Oxidation Reduction Potential	mV	07/21/2010	N001	60	-	100	154	FQ	#		
pH	s.u.	07/21/2010	N001	60	-	100	6.67	FQ	#		
Potassium	mg/L	07/21/2010	N001	60	-	100	8.8	FQJ	#	0.22	
Selenium	mg/L	07/21/2010	N001	60	-	100	0.091	FQ	#	0.00065	
Silica	mg/L	07/21/2010	N001	60	-	100	18	FQ	#	0.019	
Silicon	mg/L	07/21/2010	N001	60	-	100	8.6	FQ	#	0.0089	
Sodium	mg/L	07/21/2010	N001	60	-	100	230	FQ	#	0.013	
Specific Conductance	umhos/cm	07/21/2010	N001	60	-	100	4975	FQ	#		
Sulfate	mg/L	07/21/2010	N001	60	-	100	2000	FQ	#	25	
Temperature	C	07/21/2010	N001	60	-	100	18.4	FQ	#		
Total Dissolved Solids	mg/L	07/21/2010	N001	60	-	100	5100	FQ	#	80	
Turbidity	NTU	07/21/2010	N001	60	-	100	1.46	FQ	#		
Uranium	mg/L	07/21/2010	N001	60	-	100	1	FQ	#	0.000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0263 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	60	-	100	518	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	60	-	100	0.1	UN	FQJ	# 0.1
Arsenic	mg/L	07/20/2010	N001	60	-	100	0.0023	FQ	#	0.00003
Calcium	mg/L	07/20/2010	N001	60	-	100	850	FQ	#	0.06
Chloride	mg/L	07/20/2010	N001	60	-	100	130	FQ	#	10
Iron	mg/L	07/20/2010	N001	60	-	100	0.089	B	FQ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	60	-	100	440	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	60	-	100	0.0027	B	FQ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	60	-	100	0.016	FQ	#	0.000064
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	60	-	100	230	FQ	#	2
Oxidation Reduction Potential	mV	07/20/2010	N001	60	-	100	-74.1	RFQ	#	
pH	s.u.	07/20/2010	N001	60	-	100	6.67	FQ	#	
Potassium	mg/L	07/20/2010	N001	60	-	100	10	EN	FQJ	# 0.11
Selenium	mg/L	07/20/2010	N001	60	-	100	0.043	FQ	#	0.000065
Silica	mg/L	07/20/2010	N001	60	-	100	15	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	60	-	100	7.1	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	60	-	100	250	FQ	#	0.033
Specific Conductance	umhos/cm	07/20/2010	N001	60	-	100	6223	FQ	#	
Sulfate	mg/L	07/20/2010	N001	60	-	100	3000	FQ	#	25
Temperature	C	07/20/2010	N001	60	-	100	19.78	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	60	-	100	6300	FQ	#	80
Turbidity	NTU	07/20/2010	N001	60	-	100	4.14	FQ	#	
Uranium	mg/L	07/20/2010	N001	60	-	100	0.15	FQ	#	0.0000058

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0264 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	160	- 200	115	FQ	#		
Ammonia Total as N	mg/L	07/20/2010	N001	160	- 200	0.1	U	FQ	#	0.1
Arsenic	mg/L	07/20/2010	N001	160	- 200	0.0022	FQ	#	0.000015	
Calcium	mg/L	07/20/2010	N001	160	- 200	60	FQ	#	0.012	
Chloride	mg/L	07/20/2010	N001	160	- 200	14	FQ	#	0.4	
Iron	mg/L	07/20/2010	N001	160	- 200	0.0049	U	FQJ	#	0.0049
Magnesium	mg/L	07/20/2010	N001	160	- 200	12	FQ	#	0.013	
Manganese	mg/L	07/20/2010	N001	160	- 200	0.00029	B	FQJ	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	160	- 200	0.00039	FQ	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	160	- 200	9.3	FQ	#	0.05	
Oxidation Reduction Potential	mV	07/20/2010	N001	160	- 200	-119.4	RFQ	#		
pH	s.u.	07/20/2010	N001	160	- 200	7.98	FQ	#		
Potassium	mg/L	07/20/2010	N001	160	- 200	1.9	FQJ	#	0.11	
Selenium	mg/L	07/20/2010	N001	160	- 200	0.0018	FQ	#	0.000032	
Silica	mg/L	07/20/2010	N001	160	- 200	13	FQ	#	0.0095	
Silicon	mg/L	07/20/2010	N001	160	- 200	6	FQ	#	0.0044	
Sodium	mg/L	07/20/2010	N001	160	- 200	15	FQ	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	160	- 200	470	FQ	#		
Sulfate	mg/L	07/20/2010	N001	160	- 200	64	FQ	#	1	
Temperature	C	07/20/2010	N001	160	- 200	20.2	FQ	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	160	- 200	300	FQ	#	20	
Turbidity	NTU	07/20/2010	N001	160	- 200	2.9	FQ	#		
Uranium	mg/L	07/20/2010	N001	160	- 200	0.0033	FQ	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0265 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	60	-	100	371	FQ	#	
Ammonia Total as N	mg/L	07/22/2010	N001	60	-	100	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/22/2010	N001	60	-	100	0.0013	FQ	#	0.000015
Calcium	mg/L	07/22/2010	N001	60	-	100	560	FQ	#	0.024
Chloride	mg/L	07/22/2010	N001	60	-	100	130	FQ	#	10
Iron	mg/L	07/22/2010	N001	60	-	100	0.015	B	FQJ	# 0.0099
Magnesium	mg/L	07/22/2010	N001	60	-	100	180	FQ	#	0.026
Manganese	mg/L	07/22/2010	N001	60	-	100	0.0038	B	FQ	# 0.00023
Molybdenum	mg/L	07/22/2010	N001	60	-	100	0.000047	B	FQ	# 0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	60	-	100	160	FQ	#	1
Oxidation Reduction Potential	mV	07/22/2010	N001	60	-	100	179.8	FQ	#	
pH	s.u.	07/22/2010	N001	60	-	100	6.66	FQ	#	
Potassium	mg/L	07/22/2010	N001	60	-	100	4.8	FQJ	#	0.22
Selenium	mg/L	07/22/2010	N001	60	-	100	0.0072	FQ	#	0.000032
Silica	mg/L	07/22/2010	N001	60	-	100	16	FQ	#	0.019
Silicon	mg/L	07/22/2010	N001	60	-	100	7.5	FQ	#	0.0089
Sodium	mg/L	07/22/2010	N001	60	-	100	110	FQ	#	0.013
Specific Conductance	umhos/cm	07/22/2010	N001	60	-	100	3919	FQ	#	
Sulfate	mg/L	07/22/2010	N001	60	-	100	1200	FQ	#	25
Temperature	C	07/22/2010	N001	60	-	100	18.42	FQ	#	
Total Dissolved Solids	mg/L	07/22/2010	N001	60	-	100	3800	FQ	#	80
Turbidity	NTU	07/22/2010	N001	60	-	100	0.77	FQ	#	
Uranium	mg/L	07/22/2010	N001	60	-	100	0.064	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0266 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	160	- 200	85	FQ	#		
Ammonia Total as N	mg/L	07/22/2010	N001	160	- 200	0.1	U	FQ	#	0.1
Arsenic	mg/L	07/22/2010	N001	160	- 200	0.0017	FQ	#	0.000015	
Calcium	mg/L	07/22/2010	N001	160	- 200	27	FQ	#	0.012	
Chloride	mg/L	07/22/2010	N001	160	- 200	7.6	FQ	#	0.4	
Iron	mg/L	07/22/2010	N001	160	- 200	0.0049	U	FQJ	#	0.0049
Magnesium	mg/L	07/22/2010	N001	160	- 200	7	FQ	#	0.013	
Manganese	mg/L	07/22/2010	N001	160	- 200	0.00011	U	FQJ	#	0.00011
Molybdenum	mg/L	07/22/2010	N001	160	- 200	0.00035	FQ	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	160	- 200	3.2	FQ	#	0.02	
Oxidation Reduction Potential	mV	07/22/2010	N001	160	- 200	145.1	FQ	#		
pH	s.u.	07/22/2010	N001	160	- 200	8.02	FQ	#		
Potassium	mg/L	07/22/2010	N001	160	- 200	1.5	FQJ	#	0.11	
Selenium	mg/L	07/22/2010	N001	160	- 200	0.0011	FQ	#	0.000032	
Silica	mg/L	07/22/2010	N001	160	- 200	12	FQ	#	0.0095	
Silicon	mg/L	07/22/2010	N001	160	- 200	5.7	FQ	#	0.0044	
Sodium	mg/L	07/22/2010	N001	160	- 200	5.9	FQ	#	0.0066	
Specific Conductance	umhos/cm	07/22/2010	N001	160	- 200	241	FQ	#		
Sulfate	mg/L	07/22/2010	N001	160	- 200	11	FQ	#	1	
Temperature	C	07/22/2010	N001	160	- 200	17.33	FQ	#		
Total Dissolved Solids	mg/L	07/22/2010	N001	160	- 200	150	FQ	#	20	
Turbidity	NTU	07/22/2010	N001	160	- 200	1.06	FQ	#		
Uranium	mg/L	07/22/2010	N001	160	- 200	0.0018	FQ	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0267 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	60	-	100	868	F	#	
Ammonia Total as N	mg/L	07/22/2010	N001	60	-	100	0.1	U	F	# 0.1
Arsenic	mg/L	07/22/2010	N001	60	-	100	0.0037	F	#	0.000015
Calcium	mg/L	07/22/2010	N001	60	-	100	610	F	#	0.024
Chloride	mg/L	07/22/2010	N001	60	-	100	120	F	#	10
Iron	mg/L	07/22/2010	N001	60	-	100	0.026	B	FJ	# 0.0099
Magnesium	mg/L	07/22/2010	N001	60	-	100	840	F	#	0.026
Manganese	mg/L	07/22/2010	N001	60	-	100	0.027	F	#	0.00023
Molybdenum	mg/L	07/22/2010	N001	60	-	100	0.00011	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	60	-	100	310	F	#	2
Oxidation Reduction Potential	mV	07/22/2010	N001	60	-	100	194.6	F	#	
pH	s.u.	07/22/2010	N001	60	-	100	6.43	F	#	
Potassium	mg/L	07/22/2010	N001	60	-	100	11	FJ	#	0.22
Selenium	mg/L	07/22/2010	N001	60	-	100	0.058	F	#	0.000032
Silica	mg/L	07/22/2010	N001	60	-	100	23	F	#	0.019
Silicon	mg/L	07/22/2010	N001	60	-	100	11	F	#	0.0089
Sodium	mg/L	07/22/2010	N001	60	-	100	410	F	#	0.013
Specific Conductance	umhos/cm	07/22/2010	N001	60	-	100	7772	F	#	
Sulfate	mg/L	07/22/2010	N001	60	-	100	3500	F	#	25
Temperature	C	07/22/2010	N001	60	-	100	17.6	F	#	
Total Dissolved Solids	mg/L	07/22/2010	N001	60	-	100	7800	F	#	200
Turbidity	NTU	07/22/2010	N001	60	-	100	1.55	F	#	
Uranium	mg/L	07/22/2010	N001	60	-	100	0.072	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0268 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	200	-	300	156	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	200	-	300	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	200	-	300	0.00067	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	200	-	300	90	F	#	0.012
Chloride	mg/L	07/20/2010	N001	200	-	300	16	F	#	1
Iron	mg/L	07/20/2010	N001	200	-	300	0.0055	B	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	200	-	300	16	F	#	0.013
Manganese	mg/L	07/20/2010	N001	200	-	300	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	200	-	300	0.00027	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	200	-	300	17	F	#	0.1
Oxidation Reduction Potential	mV	07/20/2010	N001	200	-	300	107	RF	#	
pH	s.u.	07/20/2010	N001	200	-	300	7.39	F	#	
Potassium	mg/L	07/20/2010	N001	200	-	300	4	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	200	-	300	0.0018	F	#	0.000032
Silica	mg/L	07/20/2010	N001	200	-	300	11	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	200	-	300	4.9	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	200	-	300	17	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	200	-	300	665	F	#	
Sulfate	mg/L	07/20/2010	N001	200	-	300	120	F	#	2.5
Temperature	C	07/20/2010	N001	200	-	300	19.11	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	200	-	300	460	F	#	20
Turbidity	NTU	07/20/2010	N001	200	-	300	0.5	F	#	
Uranium	mg/L	07/20/2010	N001	200	-	300	0.017	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0271 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	60	-	100	101	F	#	
Ammonia Total as N	mg/L	07/22/2010	N001	60	-	100	0.1	U	F	# 0.1
Arsenic	mg/L	07/22/2010	N001	60	-	100	0.0021	F	#	0.000015
Calcium	mg/L	07/22/2010	N001	60	-	100	34	F	#	0.012
Chloride	mg/L	07/22/2010	N001	60	-	100	11	F	#	0.4
Iron	mg/L	07/22/2010	N001	60	-	100	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/22/2010	N001	60	-	100	6.1	F	#	0.013
Manganese	mg/L	07/22/2010	N001	60	-	100	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/22/2010	N001	60	-	100	0.00031	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	60	-	100	3.5	F	#	0.02
Oxidation Reduction Potential	mV	07/22/2010	N001	60	-	100	-.4	RF	#	
pH	s.u.	07/22/2010	N001	60	-	100	8.27	F	#	
Potassium	mg/L	07/22/2010	N001	60	-	100	0.99	B	FJ	# 0.11
Selenium	mg/L	07/22/2010	N001	60	-	100	0.0015	F	#	0.000032
Silica	mg/L	07/22/2010	N001	60	-	100	11	F	#	0.0095
Silicon	mg/L	07/22/2010	N001	60	-	100	5.3	F	#	0.0044
Sodium	mg/L	07/22/2010	N001	60	-	100	9.1	F	#	0.0066
Specific Conductance	umhos/cm	07/22/2010	N001	60	-	100	279	F	#	
Sulfate	mg/L	07/22/2010	N001	60	-	100	15	F	#	1
Temperature	C	07/22/2010	N001	60	-	100	17.28	F	#	
Total Dissolved Solids	mg/L	07/22/2010	N001	60	-	100	160	F	#	20
Turbidity	NTU	07/22/2010	N001	60	-	100	1.96	F	#	
Uranium	mg/L	07/22/2010	N001	60	-	100	0.0014	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0272 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	159.1	-	179.1	104	F	#	
Ammonia Total as N	mg/L	07/21/2010	N001	159.1	-	179.1	0.1	U	F	#
Ammonia Total as N	mg/L	07/21/2010	N002	159.1	-	179.1	0.1	U	F	#
Arsenic	mg/L	07/21/2010	N001	159.1	-	179.1	0.002	F	#	0.000015
Arsenic	mg/L	07/21/2010	N002	159.1	-	179.1	0.0019	F	#	0.000015
Calcium	mg/L	07/21/2010	N001	159.1	-	179.1	32	F	#	0.012
Calcium	mg/L	07/21/2010	N002	159.1	-	179.1	31	F	#	0.012
Chloride	mg/L	07/21/2010	N001	159.1	-	179.1	7.9	F	#	0.4
Chloride	mg/L	07/21/2010	N002	159.1	-	179.1	8.2	F	#	0.4
Iron	mg/L	07/21/2010	N001	159.1	-	179.1	0.0049	U	FJ	#
Iron	mg/L	07/21/2010	N002	159.1	-	179.1	0.0049	U	FJ	#
Magnesium	mg/L	07/21/2010	N001	159.1	-	179.1	6.8	F	#	0.013
Magnesium	mg/L	07/21/2010	N002	159.1	-	179.1	6.8	F	#	0.013
Manganese	mg/L	07/21/2010	N001	159.1	-	179.1	0.00011	U	FJ	#
Manganese	mg/L	07/21/2010	N002	159.1	-	179.1	0.00029	B	UFJ	#
Molybdenum	mg/L	07/21/2010	N001	159.1	-	179.1	0.00024	F	#	0.000032
Molybdenum	mg/L	07/21/2010	N002	159.1	-	179.1	0.00025	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	159.1	-	179.1	3.6	F	#	0.02
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N002	159.1	-	179.1	3.6	F	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	159.1	-	179.1	40.4	RF	#	
pH	s.u.	07/21/2010	N001	159.1	-	179.1	7.9	F	#	
Potassium	mg/L	07/21/2010	N001	159.1	-	179.1	0.85	B	FJ	#
Potassium	mg/L	07/21/2010	N002	159.1	-	179.1	0.81	B	FJ	#
Selenium	mg/L	07/21/2010	N001	159.1	-	179.1	0.0012	F	#	0.000032
Selenium	mg/L	07/21/2010	N002	159.1	-	179.1	0.0011	F	#	0.000032

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0272 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Silica	mg/L	07/21/2010	N001	159.1	-	179.1	12	F	#	0.0095
Silica	mg/L	07/21/2010	N002	159.1	-	179.1	11	F	#	0.0095
Silicon	mg/L	07/21/2010	N001	159.1	-	179.1	5.4	F	#	0.0044
Silicon	mg/L	07/21/2010	N002	159.1	-	179.1	5.3	F	#	0.0044
Sodium	mg/L	07/21/2010	N001	159.1	-	179.1	6.2	F	#	0.0066
Sodium	mg/L	07/21/2010	N002	159.1	-	179.1	6.1	F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	159.1	-	179.1	253	F	#	
Sulfate	mg/L	07/21/2010	N001	159.1	-	179.1	12	F	#	1
Sulfate	mg/L	07/21/2010	N002	159.1	-	179.1	12	F	#	1
Temperature	C	07/21/2010	N001	159.1	-	179.1	17.77	F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	159.1	-	179.1	170	F	#	20
Total Dissolved Solids	mg/L	07/21/2010	N002	159.1	-	179.1	160	F	#	20
Turbidity	NTU	07/21/2010	N001	159.1	-	179.1	0.53	F	#	
Uranium	mg/L	07/21/2010	N001	159.1	-	179.1	0.0014	F	#	0.0000029
Uranium	mg/L	07/21/2010	N002	159.1	-	179.1	0.0014	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0273 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	153	-	173	185	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	153	-	173	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	153	-	173	0.0014	FQ	#	0.000015
Calcium	mg/L	07/20/2010	N001	153	-	173	230	FQ	#	0.012
Chloride	mg/L	07/20/2010	N001	153	-	173	55	FQ	#	2
Iron	mg/L	07/20/2010	N001	153	-	173	0.018	B	FQJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	153	-	173	39	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	153	-	173	0.0011	B	FQ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	153	-	173	0.03	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	153	-	173	61	FQ	#	0.5
Oxidation Reduction Potential	mV	07/20/2010	N001	153	-	173	120.4	RFQ	#	
pH	s.u.	07/20/2010	N001	153	-	173	7	FQ	#	
Potassium	mg/L	07/20/2010	N001	153	-	173	3.5	FQJ	#	0.11
Selenium	mg/L	07/20/2010	N001	153	-	173	0.024	FQ	#	0.000032
Silica	mg/L	07/20/2010	N001	153	-	173	14	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	153	-	173	6.4	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	153	-	173	43	FQ	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	153	-	173	1451	FQ	#	
Sulfate	mg/L	07/20/2010	N001	153	-	173	310	FQ	#	5
Temperature	C	07/20/2010	N001	153	-	173	18.36	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	153	-	173	1200	FQ	#	20
Turbidity	NTU	07/20/2010	N001	153	-	173	2.78	FQ	#	
Uranium	mg/L	07/20/2010	N001	153	-	173	0.086	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0274 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	149	-	169	109	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	149	-	169	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	149	-	169	0.0024	FQ	#	0.000015
Calcium	mg/L	07/20/2010	N001	149	-	169	35	FQ	#	0.012
Chloride	mg/L	07/20/2010	N001	149	-	169	10	FQ	#	0.4
Iron	mg/L	07/20/2010	N001	149	-	169	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	149	-	169	6.6	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	149	-	169	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	149	-	169	0.00042	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	149	-	169	3.2	FQ	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	149	-	169	93.4	RFQ	#	
pH	s.u.	07/20/2010	N001	149	-	169	7.73	FQ	#	
Potassium	mg/L	07/20/2010	N001	149	-	169	1.2	FQJ	#	0.11
Selenium	mg/L	07/20/2010	N001	149	-	169	0.0014	FQ	#	0.000032
Silica	mg/L	07/20/2010	N001	149	-	169	11	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	149	-	169	5.2	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	149	-	169	11	FQ	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	149	-	169	278	FQ	#	
Sulfate	mg/L	07/20/2010	N001	149	-	169	15	FQ	#	1
Temperature	C	07/20/2010	N001	149	-	169	18.1	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	149	-	169	170	FQ	#	20
Turbidity	NTU	07/20/2010	N001	149	-	169	1.34	FQ	#	
Uranium	mg/L	07/20/2010	N001	149	-	169	0.0016	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0275 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty	
		ID					Data	QA			
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	158.2	-	178.2	539	F	#		
Ammonia Total as N	mg/L	07/20/2010	N001	158.2	-	178.2	28	F	#	2	
Arsenic	mg/L	07/20/2010	N001	158.2	-	178.2	0.0011	F	#	0.000074	
Calcium	mg/L	07/20/2010	N001	158.2	-	178.2	760	F	#	0.06	
Chloride	mg/L	07/20/2010	N001	158.2	-	178.2	140	F	#	10	
Iron	mg/L	07/20/2010	N001	158.2	-	178.2	0.0049	U	FJ	#	0.0049
Magnesium	mg/L	07/20/2010	N001	158.2	-	178.2	350	F	#	0.013	
Manganese	mg/L	07/20/2010	N001	158.2	-	178.2	9	F	#	0.00011	
Molybdenum	mg/L	07/20/2010	N001	158.2	-	178.2	0.0003	B	F	#	0.00016
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	158.2	-	178.2	260	F	#	2	
Oxidation Reduction Potential	mV	07/20/2010	N001	158.2	-	178.2	165.7	RF	#		
pH	s.u.	07/20/2010	N001	158.2	-	178.2	6.31	F	#		
Potassium	mg/L	07/20/2010	N001	158.2	-	178.2	24	FJ	#	0.11	
Selenium	mg/L	07/20/2010	N001	158.2	-	178.2	0.031	F	#	0.00016	
Silica	mg/L	07/20/2010	N001	158.2	-	178.2	16	F	#	0.0095	
Silicon	mg/L	07/20/2010	N001	158.2	-	178.2	7.4	F	#	0.0044	
Sodium	mg/L	07/20/2010	N001	158.2	-	178.2	280	F	#	0.033	
Specific Conductance	umhos/cm	07/20/2010	N001	158.2	-	178.2	5839	F	#		
Sulfate	mg/L	07/20/2010	N001	158.2	-	178.2	2400	F	#	25	
Temperature	C	07/20/2010	N001	158.2	-	178.2	18.48	F	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	158.2	-	178.2	5800	F	#	80	
Turbidity	NTU	07/20/2010	N001	158.2	-	178.2	2.59	F	#		
Uranium	mg/L	07/20/2010	N001	158.2	-	178.2	0.47	F	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**


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REPORT DATE: 12/22/2010

Location: 0276 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	154.5	-	174.5	100	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	154.5	-	174.5	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	154.5	-	174.5	0.0028	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	154.5	-	174.5	34	F	#	0.012
Chloride	mg/L	07/20/2010	N001	154.5	-	174.5	11	F	#	0.4
Iron	mg/L	07/20/2010	N001	154.5	-	174.5	0.019	B	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	154.5	-	174.5	6.6	F	#	0.013
Manganese	mg/L	07/20/2010	N001	154.5	-	174.5	0.00076	B	F	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	154.5	-	174.5	0.00048	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	154.5	-	174.5	3.1	F	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	154.5	-	174.5	74.3	RF	#	
pH	s.u.	07/20/2010	N001	154.5	-	174.5	7.75	F	#	
Potassium	mg/L	07/20/2010	N001	154.5	-	174.5	1.2	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	154.5	-	174.5	0.0017	F	#	0.000032
Silica	mg/L	07/20/2010	N001	154.5	-	174.5	11	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	154.5	-	174.5	5.3	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	154.5	-	174.5	12	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	154.5	-	174.5	283	F	#	
Sulfate	mg/L	07/20/2010	N001	154.5	-	174.5	18	F	#	1
Temperature	C	07/20/2010	N001	154.5	-	174.5	21.04	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	154.5	-	174.5	190	F	#	20
Turbidity	NTU	07/20/2010	N001	154.5	-	174.5	0.7	F	#	
Uranium	mg/L	07/20/2010	N001	154.5	-	174.5	0.0015	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0277 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	95.7	-	105.7	100	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	95.7	-	105.7	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	95.7	-	105.7	0.00051	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	95.7	-	105.7	26	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	95.7	-	105.7	9.9	FQ	#	0.4
Iron	mg/L	07/21/2010	N001	95.7	-	105.7	0.028	B	FQ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	95.7	-	105.7	8.5	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	95.7	-	105.7	0.054	FQ	#	0.00011
Molybdenum	mg/L	07/21/2010	N001	95.7	-	105.7	0.0002	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	95.7	-	105.7	2.9	FQ	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	95.7	-	105.7	119.9	FQ	#	
pH	s.u.	07/21/2010	N001	95.7	-	105.7	7.69	FQ	#	
Potassium	mg/L	07/21/2010	N001	95.7	-	105.7	1.5	FQJ	#	0.11
Selenium	mg/L	07/21/2010	N001	95.7	-	105.7	0.0014	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	95.7	-	105.7	14	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	95.7	-	105.7	6.7	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	95.7	-	105.7	11	FQ	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	95.7	-	105.7	284	FQ	#	
Sulfate	mg/L	07/21/2010	N001	95.7	-	105.7	17	FQ	#	1
Temperature	C	07/21/2010	N001	95.7	-	105.7	17.43	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	95.7	-	105.7	180	FQ	#	20
Turbidity	NTU	07/21/2010	N001	95.7	-	105.7	5.7	FQ	#	
Uranium	mg/L	07/21/2010	N001	95.7	-	105.7	0.0027	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0278 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	90.5	-	100.5	84	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	90.5	-	100.5	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	90.5	-	100.5	0.0016	FQ	#	0.000015
Calcium	mg/L	07/20/2010	N001	90.5	-	100.5	28	FQ	#	0.012
Chloride	mg/L	07/20/2010	N001	90.5	-	100.5	8.9	FQ	#	0.4
Iron	mg/L	07/20/2010	N001	90.5	-	100.5	0.037	B	FQ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	90.5	-	100.5	6.8	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	90.5	-	100.5	0.00046	B	FQJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	90.5	-	100.5	0.00036	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	90.5	-	100.5	2.9	FQ	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	90.5	-	100.5	119.8	FQ	#	
pH	s.u.	07/20/2010	N001	90.5	-	100.5	7.81	FQ	#	
Potassium	mg/L	07/20/2010	N001	90.5	-	100.5	1.9	FQJ	#	0.11
Selenium	mg/L	07/20/2010	N001	90.5	-	100.5	0.0013	FQ	#	0.000032
Silica	mg/L	07/20/2010	N001	90.5	-	100.5	11	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	90.5	-	100.5	5.3	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	90.5	-	100.5	8.9	FQ	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	90.5	-	100.5	254	FQ	#	
Sulfate	mg/L	07/20/2010	N001	90.5	-	100.5	13	FQ	#	1
Temperature	C	07/20/2010	N001	90.5	-	100.5	17.84	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	90.5	-	100.5	170	FQ	#	20
Turbidity	NTU	07/20/2010	N001	90.5	-	100.5	0.96	FQ	#	
Uranium	mg/L	07/20/2010	N001	90.5	-	100.5	0.0013	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0279 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	26.5	- 36.5	99	F	#		
Ammonia Total as N	mg/L	07/20/2010	N001	26.5	- 36.5	0.1	U	F	#	0.1
Arsenic	mg/L	07/20/2010	N001	26.5	- 36.5	0.00083	F	#	0.000015	
Calcium	mg/L	07/20/2010	N001	26.5	- 36.5	60	F	#	0.012	
Chloride	mg/L	07/20/2010	N001	26.5	- 36.5	31	F	#	0.4	
Iron	mg/L	07/20/2010	N001	26.5	- 36.5	0.021	B	FJ	#	0.0049
Magnesium	mg/L	07/20/2010	N001	26.5	- 36.5	12	F	#	0.013	
Manganese	mg/L	07/20/2010	N001	26.5	- 36.5	0.0023	B	F	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	26.5	- 36.5	0.00063	F	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	26.5	- 36.5	10	F	#	0.1	
Oxidation Reduction Potential	mV	07/20/2010	N001	26.5	- 36.5	131	F	#		
pH	s.u.	07/20/2010	N001	26.5	- 36.5	7.47	F	#		
Potassium	mg/L	07/20/2010	N001	26.5	- 36.5	1.8	FJ	#	0.11	
Selenium	mg/L	07/20/2010	N001	26.5	- 36.5	0.0023	F	#	0.000032	
Silica	mg/L	07/20/2010	N001	26.5	- 36.5	12	F	#	0.0095	
Silicon	mg/L	07/20/2010	N001	26.5	- 36.5	5.6	F	#	0.0044	
Sodium	mg/L	07/20/2010	N001	26.5	- 36.5	15	F	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	26.5	- 36.5	495	F	#		
Sulfate	mg/L	07/20/2010	N001	26.5	- 36.5	65	F	#	1	
Temperature	C	07/20/2010	N001	26.5	- 36.5	18.14	F	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	26.5	- 36.5	310	F	#	20	
Turbidity	NTU	07/20/2010	N001	26.5	- 36.5	1.57	F	#		
Uranium	mg/L	07/20/2010	N001	26.5	- 36.5	0.0019	F	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0280 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	26.5	-	36.5	103	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	26.5	-	36.5	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	26.5	-	36.5	0.0023	FQ	#	0.000015
Calcium	mg/L	07/20/2010	N001	26.5	-	36.5	33	FQ	#	0.012
Chloride	mg/L	07/20/2010	N001	26.5	-	36.5	21	FQ	#	0.4
Iron	mg/L	07/20/2010	N001	26.5	-	36.5	0.0063	B	FQJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	26.5	-	36.5	6.7	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	26.5	-	36.5	0.00073	B	FQ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	26.5	-	36.5	0.00051	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	26.5	-	36.5	2.8	FQ	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	26.5	-	36.5	126.7	FQ	#	
pH	s.u.	07/20/2010	N001	26.5	-	36.5	7.91	FQ	#	
Potassium	mg/L	07/20/2010	N001	26.5	-	36.5	1.4	FQJ	#	0.11
Selenium	mg/L	07/20/2010	N001	26.5	-	36.5	0.0019	FQ	#	0.000032
Silica	mg/L	07/20/2010	N001	26.5	-	36.5	12	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	26.5	-	36.5	5.5	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	26.5	-	36.5	20	FQ	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	26.5	-	36.5	334	FQ	#	
Sulfate	mg/L	07/20/2010	N001	26.5	-	36.5	21	FQ	#	1
Temperature	C	07/20/2010	N001	26.5	-	36.5	18.85	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	26.5	-	36.5	200	FQ	#	20
Turbidity	NTU	07/20/2010	N001	26.5	-	36.5	1.23	FQ	#	
Uranium	mg/L	07/20/2010	N001	26.5	-	36.5	0.0016	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0281 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	0001	70.5	-	80.5	124	FQ	#	
Ammonia Total as N	mg/L	07/22/2010	0001	70.5	-	80.5	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/22/2010	0001	70.5	-	80.5	0.00022	FQ	#	0.000015
Calcium	mg/L	07/22/2010	0001	70.5	-	80.5	120	FQ	#	0.012
Chloride	mg/L	07/22/2010	0001	70.5	-	80.5	27	FQ	#	1
Iron	mg/L	07/22/2010	0001	70.5	-	80.5	0.071	B	FQ	# 0.0049
Magnesium	mg/L	07/22/2010	0001	70.5	-	80.5	21	FQ	#	0.013
Manganese	mg/L	07/22/2010	0001	70.5	-	80.5	0.016	FQ	#	0.00011
Molybdenum	mg/L	07/22/2010	0001	70.5	-	80.5	0.00095	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	0001	70.5	-	80.5	38	FQ	#	0.5
Oxidation Reduction Potential	mV	07/22/2010	N001	70.5	-	80.5	153.3	FQ	#	
pH	s.u.	07/22/2010	N001	70.5	-	80.5	7.41	FQ	#	
Potassium	mg/L	07/22/2010	0001	70.5	-	80.5	1.5	FQJ	#	0.11
Selenium	mg/L	07/22/2010	0001	70.5	-	80.5	0.0022	FQ	#	0.000032
Silica	mg/L	07/22/2010	0001	70.5	-	80.5	14	FQ	#	0.0095
Silicon	mg/L	07/22/2010	0001	70.5	-	80.5	6.4	FQ	#	0.0044
Sodium	mg/L	07/22/2010	0001	70.5	-	80.5	19	FQ	#	0.0066
Specific Conductance	umhos/cm	07/22/2010	N001	70.5	-	80.5	912	FQ	#	
Sulfate	mg/L	07/22/2010	0001	70.5	-	80.5	150	FQ	#	2.5
Temperature	C	07/22/2010	N001	70.5	-	80.5	17.71	FQ	#	
Total Dissolved Solids	mg/L	07/22/2010	0001	70.5	-	80.5	690	FQ	#	20
Uranium	mg/L	07/22/2010	0001	70.5	-	80.5	0.0074	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0282 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	74.1	-	84.1	121	FQ	#	
Ammonia Total as N	mg/L	07/22/2010	N001	74.1	-	84.1	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/22/2010	N001	74.1	-	84.1	0.00016	FQ	#	0.000015
Calcium	mg/L	07/22/2010	N001	74.1	-	84.1	100	FQ	#	0.012
Chloride	mg/L	07/22/2010	N001	74.1	-	84.1	38	FQ	#	1
Iron	mg/L	07/22/2010	N001	74.1	-	84.1	0.12	FQ	#	0.0049
Magnesium	mg/L	07/22/2010	N001	74.1	-	84.1	19	FQ	#	0.013
Manganese	mg/L	07/22/2010	N001	74.1	-	84.1	0.0061	FQ	#	0.00011
Molybdenum	mg/L	07/22/2010	N001	74.1	-	84.1	0.0005	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	74.1	-	84.1	35	FQ	#	0.5
Oxidation Reduction Potential	mV	07/22/2010	N001	74.1	-	84.1	151.1	FQ	#	
pH	s.u.	07/22/2010	N001	74.1	-	84.1	7.56	FQ	#	
Potassium	mg/L	07/22/2010	N001	74.1	-	84.1	1.7	FQJ	#	0.11
Selenium	mg/L	07/22/2010	N001	74.1	-	84.1	0.0015	FQ	#	0.000032
Silica	mg/L	07/22/2010	N001	74.1	-	84.1	14	FQ	#	0.0095
Silicon	mg/L	07/22/2010	N001	74.1	-	84.1	6.7	FQ	#	0.0044
Sodium	mg/L	07/22/2010	N001	74.1	-	84.1	14	FQ	#	0.0066
Specific Conductance	umhos/cm	07/22/2010	N001	74.1	-	84.1	812	FQ	#	
Sulfate	mg/L	07/22/2010	N001	74.1	-	84.1	67	FQ	#	2.5
Temperature	C	07/22/2010	N001	74.1	-	84.1	18.78	FQ	#	
Total Dissolved Solids	mg/L	07/22/2010	N001	74.1	-	84.1	570	FQ	#	20
Turbidity	NTU	07/22/2010	N001	74.1	-	84.1	1.06	FQ	#	
Uranium	mg/L	07/22/2010	N001	74.1	-	84.1	0.0041	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0286 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty	
			ID				Data	QA			
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	93.2	-	103.2	424	FQ	#		
Ammonia Total as N	mg/L	07/20/2010	N001	93.2	-	103.2	2.1	FQ	#	0.1	
Arsenic	mg/L	07/20/2010	N001	93.2	-	103.2	0.0009	FQ	#	0.00003	
Calcium	mg/L	07/20/2010	N001	93.2	-	103.2	530	FQ	#	0.06	
Chloride	mg/L	07/20/2010	N001	93.2	-	103.2	76	FQ	#	4	
Iron	mg/L	07/20/2010	N001	93.2	-	103.2	0.039	B	FQ	#	0.0049
Magnesium	mg/L	07/20/2010	N001	93.2	-	103.2	230	FQ	#	0.013	
Manganese	mg/L	07/20/2010	N001	93.2	-	103.2	0.59	FQ	#	0.00011	
Molybdenum	mg/L	07/20/2010	N001	93.2	-	103.2	0.00076	FQ	#	0.000064	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	93.2	-	103.2	150	FQ	#	1	
Oxidation Reduction Potential	mV	07/20/2010	N001	93.2	-	103.2	-75.2	RFQ	#		
pH	s.u.	07/20/2010	N001	93.2	-	103.2	6.5	FQ	#		
Potassium	mg/L	07/20/2010	N001	93.2	-	103.2	9.3	FQJ	#	0.11	
Selenium	mg/L	07/20/2010	N001	93.2	-	103.2	0.019	FQ	#	0.000065	
Silica	mg/L	07/20/2010	N001	93.2	-	103.2	15	FQ	#	0.0095	
Silicon	mg/L	07/20/2010	N001	93.2	-	103.2	6.9	FQ	#	0.0044	
Sodium	mg/L	07/20/2010	N001	93.2	-	103.2	130	FQ	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	93.2	-	103.2	3885	FQ	#		
Sulfate	mg/L	07/20/2010	N001	93.2	-	103.2	1500	FQ	#	10	
Temperature	C	07/20/2010	N001	93.2	-	103.2	19.27	FQ	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	93.2	-	103.2	3900	FQ	#	80	
Turbidity	NTU	07/20/2010	N001	93.2	-	103.2	7.3	FQ	#		
Uranium	mg/L	07/20/2010	N001	93.2	-	103.2	0.15	FQ	#	0.0000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0287 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	100.7	-	110.7	610	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	100.7	-	110.7	0.14	FQ	#	0.1
Arsenic	mg/L	07/20/2010	N001	100.7	-	110.7	0.0017	FQ	#	0.00003
Calcium	mg/L	07/20/2010	N001	100.7	-	110.7	920	FQ	#	0.06
Chloride	mg/L	07/20/2010	N001	100.7	-	110.7	210	FQ	#	10
Iron	mg/L	07/20/2010	N001	100.7	-	110.7	0.12	FQ	#	0.0049
Magnesium	mg/L	07/20/2010	N001	100.7	-	110.7	140	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	100.7	-	110.7	0.012	FQ	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	100.7	-	110.7	0.097	FQ	#	0.000064
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	100.7	-	110.7	270	FQ	#	2
Oxidation Reduction Potential	mV	07/20/2010	N001	100.7	-	110.7	-152.3	RFQ	#	
pH	s.u.	07/20/2010	N001	100.7	-	110.7	6.49	FQ	#	
Potassium	mg/L	07/20/2010	N001	100.7	-	110.7	9.7	FQJ	#	0.11
Selenium	mg/L	07/20/2010	N001	100.7	-	110.7	0.12	FQ	#	0.000065
Silica	mg/L	07/20/2010	N001	100.7	-	110.7	16	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	100.7	-	110.7	7.6	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	100.7	-	110.7	230	FQ	#	0.033
Specific Conductance	umhos/cm	07/20/2010	N001	100.7	-	110.7	5224	FQ	#	
Sulfate	mg/L	07/20/2010	N001	100.7	-	110.7	1500	FQ	#	25
Temperature	C	07/20/2010	N001	100.7	-	110.7	20.77	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	100.7	-	110.7	5300	FQ	#	80
Turbidity	NTU	07/20/2010	N001	100.7	-	110.7	7.01	FQ	#	
Uranium	mg/L	07/20/2010	N001	100.7	-	110.7	0.23	FQ	#	0.0000058

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0288 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	104	-	114	283	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	104	-	114	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	104	-	114	0.00059	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	104	-	114	200	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	104	-	114	25	FQ	#	2
Iron	mg/L	07/21/2010	N001	104	-	114	0.0064	B	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	104	-	114	38	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	104	-	114	0.0015	B	FQ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	104	-	114	0.000082	B	FQ	# 0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	104	-	114	55	FQ	#	0.5
Oxidation Reduction Potential	mV	07/21/2010	N001	104	-	114	79.2	RFQ	#	
pH	s.u.	07/21/2010	N001	104	-	114	6.74	FQ	#	
Potassium	mg/L	07/21/2010	N001	104	-	114	3.4	FQJ	#	0.11
Selenium	mg/L	07/21/2010	N001	104	-	114	0.0029	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	104	-	114	16	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	104	-	114	7.4	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	104	-	114	48	FQ	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	104	-	114	1643	FQ	#	
Sulfate	mg/L	07/21/2010	N001	104	-	114	280	FQ	#	5
Temperature	C	07/21/2010	N001	104	-	114	17.09	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	104	-	114	1200	FQ	#	40
Turbidity	NTU	07/21/2010	N001	104	-	114	7.53	FQ	#	
Uranium	mg/L	07/21/2010	N001	104	-	114	0.012	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0289 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	148.3	-	158.3	258	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	148.3	-	158.3	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	148.3	-	158.3	0.001	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	148.3	-	158.3	220	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	148.3	-	158.3	27	FQ	#	2
Iron	mg/L	07/21/2010	N001	148.3	-	158.3	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	148.3	-	158.3	38	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	148.3	-	158.3	0.013	FQ	#	0.00011
Molybdenum	mg/L	07/21/2010	N001	148.3	-	158.3	0.00032	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	148.3	-	158.3	53	FQ	#	0.5
Oxidation Reduction Potential	mV	07/21/2010	N001	148.3	-	158.3	69	RFQ	#	
pH	s.u.	07/21/2010	N001	148.3	-	158.3	6.88	FQ	#	
Potassium	mg/L	07/21/2010	N001	148.3	-	158.3	3.5	FQJ	#	0.11
Selenium	mg/L	07/21/2010	N001	148.3	-	158.3	0.0036	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	148.3	-	158.3	15	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	148.3	-	158.3	7.1	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	148.3	-	158.3	36	FQ	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	148.3	-	158.3	1491	FQ	#	
Sulfate	mg/L	07/21/2010	N001	148.3	-	158.3	300	FQ	#	5
Temperature	C	07/21/2010	N001	148.3	-	158.3	17.17	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	148.3	-	158.3	1100	FQ	#	20
Turbidity	NTU	07/21/2010	N001	148.3	-	158.3	5.61	FQ	#	
Uranium	mg/L	07/21/2010	N001	148.3	-	158.3	0.02	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0290 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	102.7	-	112.7	102	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	102.7	-	112.7	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	102.7	-	112.7	0.0018	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	102.7	-	112.7	67	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	102.7	-	112.7	23	FQ	#	0.4
Iron	mg/L	07/21/2010	N001	102.7	-	112.7	0.019	B	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	102.7	-	112.7	11	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	102.7	-	112.7	0.0013	B	FQ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	102.7	-	112.7	0.00033	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	102.7	-	112.7	17	FQ	#	0.1
Oxidation Reduction Potential	mV	07/21/2010	N001	102.7	-	112.7	123.8	FQ	#	
pH	s.u.	07/21/2010	N001	102.7	-	112.7	7.73	FQ	#	
Potassium	mg/L	07/21/2010	N001	102.7	-	112.7	1.5	FQJ	#	0.11
Selenium	mg/L	07/21/2010	N001	102.7	-	112.7	0.0025	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	102.7	-	112.7	13	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	102.7	-	112.7	6.1	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	102.7	-	112.7	17	E	FQ	# 0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	102.7	-	112.7	561	FQ	#	
Sulfate	mg/L	07/21/2010	N001	102.7	-	112.7	71	FQ	#	1
Temperature	C	07/21/2010	N001	102.7	-	112.7	18.31	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	102.7	-	112.7	340	FQ	#	20
Turbidity	NTU	07/21/2010	N001	102.7	-	112.7	3.91	FQ	#	
Uranium	mg/L	07/21/2010	N001	102.7	-	112.7	0.0022	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0683 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	95	-	145	95	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	95	-	145	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	95	-	145	0.002	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	95	-	145	34	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	95	-	145	13	FQ	#	0.4
Iron	mg/L	07/21/2010	N001	95	-	145	0.0053	B	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	95	-	145	5.9	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	95	-	145	0.00013	B	FQJ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	95	-	145	0.0005	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	95	-	145	3.3	FQ	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	95	-	145	105.6	FQ	#	
pH	s.u.	07/21/2010	N001	95	-	145	8.18	FQ	#	
Potassium	mg/L	07/21/2010	N001	95	-	145	0.96	B	FQJ	# 0.11
Selenium	mg/L	07/21/2010	N001	95	-	145	0.0018	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	95	-	145	12	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	95	-	145	5.8	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	95	-	145	12	FQ	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	95	-	145	301	FQ	#	
Sulfate	mg/L	07/21/2010	N001	95	-	145	18	FQ	#	1
Temperature	C	07/21/2010	N001	95	-	145	18.42	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	95	-	145	160	FQ	#	20
Turbidity	NTU	07/21/2010	N001	95	-	145	1.58	FQ	#	
Uranium	mg/L	07/21/2010	N001	95	-	145	0.0013	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**


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REPORT DATE: 12/22/2010

Location: 0684 WELL

Parameter	Units	Sample ID	Date	Depth Range BLS)	(Ft)	Result	Qualifiers	Lab	Detection Limit	Uncertainty
							Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	124.2 -	175.5	360	FQ	#		
Ammonia Total as N	mg/L	07/21/2010	N001	124.2 -	175.5	0.1	U	FQ	#	0.1
Arsenic	mg/L	07/21/2010	N001	124.2 -	175.5	0.0029	FQ	#	0.000015	
Calcium	mg/L	07/21/2010	N001	124.2 -	175.5	32	FQ	#	0.012	
Chloride	mg/L	07/21/2010	N001	124.2 -	175.5	11	FQ	#	0.4	
Iron	mg/L	07/21/2010	N001	124.2 -	175.5	0.0049	U	FQJ	#	0.0049
Magnesium	mg/L	07/21/2010	N001	124.2 -	175.5	6.4	FQ	#	0.013	
Manganese	mg/L	07/21/2010	N001	124.2 -	175.5	0.00011	U	FQJ	#	0.00011
Molybdenum	mg/L	07/21/2010	N001	124.2 -	175.5	0.00047	FQ	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	124.2 -	175.5	3.3	FQ	#	0.02	
Oxidation Reduction Potential	mV	07/21/2010	N001	124.2 -	175.5	115.6	FQ	#		
pH	s.u.	07/21/2010	N001	124.2 -	175.5	7.91	FQ	#		
Potassium	mg/L	07/21/2010	N001	124.2 -	175.5	0.74	B	FQJ	#	0.11
Selenium	mg/L	07/21/2010	N001	124.2 -	175.5	0.0016	FQ	#	0.000032	
Silica	mg/L	07/21/2010	N001	124.2 -	175.5	12	FQ	#	0.0095	
Silicon	mg/L	07/21/2010	N001	124.2 -	175.5	5.4	FQ	#	0.0044	
Sodium	mg/L	07/21/2010	N001	124.2 -	175.5	12	FQ	#	0.0066	
Specific Conductance	umhos/cm	07/21/2010	N001	124.2 -	175.5	291	FQ	#		
Sulfate	mg/L	07/21/2010	N001	124.2 -	175.5	17	FQ	#	1	
Temperature	C	07/21/2010	N001	124.2 -	175.5	18.17	FQ	#		
Total Dissolved Solids	mg/L	07/21/2010	N001	124.2 -	175.5	160	FQ	#	20	
Turbidity	NTU	07/21/2010	N001	124.2 -	175.5	0.63	FQ	#		
Uranium	mg/L	07/21/2010	N001	124.2 -	175.5	0.0015	FQ	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0685 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	93.66	-	145.5	96	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	93.66	-	145.5	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	93.66	-	145.5	0.003	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	93.66	-	145.5	33	F	#	0.012
Chloride	mg/L	07/20/2010	N001	93.66	-	145.5	11	F	#	0.4
Iron	mg/L	07/20/2010	N001	93.66	-	145.5	0.012	B	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	93.66	-	145.5	6.4	F	#	0.013
Manganese	mg/L	07/20/2010	N001	93.66	-	145.5	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	93.66	-	145.5	0.0004	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	93.66	-	145.5	3.1	F	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	93.66	-	145.5	57.3	RF	#	
pH	s.u.	07/20/2010	N001	93.66	-	145.5	7.74	F	#	
Potassium	mg/L	07/20/2010	N001	93.66	-	145.5	1.2	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	93.66	-	145.5	0.0016	F	#	0.000032
Silica	mg/L	07/20/2010	N001	93.66	-	145.5	11	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	93.66	-	145.5	5.2	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	93.66	-	145.5	11	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	93.66	-	145.5	275	F	#	
Sulfate	mg/L	07/20/2010	N001	93.66	-	145.5	16	F	#	1
Temperature	C	07/20/2010	N001	93.66	-	145.5	18.34	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	93.66	-	145.5	180	F	#	20
Turbidity	NTU	07/20/2010	N001	93.66	-	145.5	0.8	F	#	
Uranium	mg/L	07/20/2010	N001	93.66	-	145.5	0.0013	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0686 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	60	-	100	125	F	#	
Ammonia Total as N	mg/L	07/21/2010	N001	60	-	100	0.1	U	F	# 0.1
Ammonia Total as N	mg/L	07/21/2010	N002	60	-	100	0.1	U	F	# 0.1
Arsenic	mg/L	07/21/2010	N001	60	-	100	0.0079	F	#	0.000015
Arsenic	mg/L	07/21/2010	N002	60	-	100	0.0081	F	#	0.000015
Calcium	mg/L	07/21/2010	N001	60	-	100	17	F	#	0.012
Calcium	mg/L	07/21/2010	N002	60	-	100	17	F	#	0.012
Chloride	mg/L	07/21/2010	N001	60	-	100	4.1	F	#	0.4
Chloride	mg/L	07/21/2010	N002	60	-	100	4	F	#	0.4
Iron	mg/L	07/21/2010	N001	60	-	100	0.011	B	FJ	# 0.0049
Iron	mg/L	07/21/2010	N002	60	-	100	0.013	B	FJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	60	-	100	2.2	F	#	0.013
Magnesium	mg/L	07/21/2010	N002	60	-	100	2.2	F	#	0.013
Manganese	mg/L	07/21/2010	N001	60	-	100	0.00018	B	FJ	# 0.00011
Manganese	mg/L	07/21/2010	N002	60	-	100	0.0011	B	UF	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	60	-	100	0.00054	F	#	0.000032
Molybdenum	mg/L	07/21/2010	N002	60	-	100	0.00054	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	60	-	100	1.9	F	#	0.02
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N002	60	-	100	1.9	F	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	60	-	100	-174.3	RF	#	
pH	s.u.	07/21/2010	N001	60	-	100	8.45	F	#	
Potassium	mg/L	07/21/2010	N001	60	-	100	0.78	B	FJ	# 0.11
Potassium	mg/L	07/21/2010	N002	60	-	100	0.73	B	FJ	# 0.11
Selenium	mg/L	07/21/2010	N001	60	-	100	0.00097	F	#	0.000032
Selenium	mg/L	07/21/2010	N002	60	-	100	0.001	F	#	0.000032

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0686 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Silica	mg/L	07/21/2010	N001	60	-	100	8.5	F	#	0.0095
Silica	mg/L	07/21/2010	N002	60	-	100	8.5	F	#	0.0095
Silicon	mg/L	07/21/2010	N001	60	-	100	4	F	#	0.0044
Silicon	mg/L	07/21/2010	N002	60	-	100	4	F	#	0.0044
Sodium	mg/L	07/21/2010	N001	60	-	100	23	F	#	0.0066
Sodium	mg/L	07/21/2010	N002	60	-	100	21	F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	60	-	100	234	F	#	
Sulfate	mg/L	07/21/2010	N001	60	-	100	33	F	#	1
Sulfate	mg/L	07/21/2010	N002	60	-	100	32	F	#	1
Temperature	C	07/21/2010	N001	60	-	100	19.98	F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	60	-	100	140	F	#	20
Total Dissolved Solids	mg/L	07/21/2010	N002	60	-	100	130	F	#	20
Turbidity	NTU	07/21/2010	N001	60	-	100	4.15	F	#	
Uranium	mg/L	07/21/2010	N001	60	-	100	0.00027	F	#	0.0000029
Uranium	mg/L	07/21/2010	N002	60	-	100	0.00027	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0687 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	60	-	100	87	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	60	-	100	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	60	-	100	0.011	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	60	-	100	10	F	#	0.012
Chloride	mg/L	07/20/2010	N001	60	-	100	1.6	F	#	0.4
Iron	mg/L	07/20/2010	N001	60	-	100	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	60	-	100	1.3	F	#	0.013
Manganese	mg/L	07/20/2010	N001	60	-	100	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	60	-	100	0.0026	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	60	-	100	1.7	F	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	60	-	100	70.6	RF	#	
pH	s.u.	07/20/2010	N001	60	-	100	8.2	F	#	
Potassium	mg/L	07/20/2010	N001	60	-	100	0.8	B	FJ	# 0.11
Selenium	mg/L	07/20/2010	N001	60	-	100	0.00047	FJ	#	0.000032
Silica	mg/L	07/20/2010	N001	60	-	100	11	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	60	-	100	5.2	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	60	-	100	17	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	60	-	100	155	F	#	
Sulfate	mg/L	07/20/2010	N001	60	-	100	17	F	#	1
Temperature	C	07/20/2010	N001	60	-	100	23.3	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	60	-	100	110	F	#	20
Turbidity	NTU	07/20/2010	N001	60	-	100	1.64	F	#	
Uranium	mg/L	07/20/2010	N001	60	-	100	0.0002	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0688 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	60	-	100	128	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	60	-	100	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	60	-	100	0.0013	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	60	-	100	100	F	#	0.012
Chloride	mg/L	07/20/2010	N001	60	-	100	83	F	#	1
Iron	mg/L	07/20/2010	N001	60	-	100	0.03	B	F	# 0.0049
Magnesium	mg/L	07/20/2010	N001	60	-	100	11	F	#	0.013
Manganese	mg/L	07/20/2010	N001	60	-	100	0.00098	B	F	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	60	-	100	0.0033	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	60	-	100	6.7	F	#	0.05
Oxidation Reduction Potential	mV	07/20/2010	N001	60	-	100	79.2	RF	#	
pH	s.u.	07/20/2010	N001	60	-	100	7.6	F	#	
Potassium	mg/L	07/20/2010	N001	60	-	100	2.5	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	60	-	100	0.0091	F	#	0.000032
Silica	mg/L	07/20/2010	N001	60	-	100	12	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	60	-	100	5.8	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	60	-	100	35	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	60	-	100	786	F	#	
Sulfate	mg/L	07/20/2010	N001	60	-	100	170	F	#	2.5
Temperature	C	07/20/2010	N001	60	-	100	20.19	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	60	-	100	540	F	#	20
Turbidity	NTU	07/20/2010	N001	60	-	100	3.84	F	#	
Uranium	mg/L	07/20/2010	N001	60	-	100	0.0031	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0689 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	55	-	95	102	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	55	-	95	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	55	-	95	0.0021	FQ	#	0.000015
Calcium	mg/L	07/20/2010	N001	55	-	95	35	FQ	#	0.012
Chloride	mg/L	07/20/2010	N001	55	-	95	11	FQ	#	0.4
Iron	mg/L	07/20/2010	N001	55	-	95	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	55	-	95	6.7	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	55	-	95	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	55	-	95	0.00044	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	55	-	95	2.4	FQ	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	55	-	95	135	FQ	#	
pH	s.u.	07/20/2010	N001	55	-	95	7.88	FQ	#	
Potassium	mg/L	07/20/2010	N001	55	-	95	1.3	FQJ	#	0.11
Selenium	mg/L	07/20/2010	N001	55	-	95	0.0013	FQ	#	0.000032
Silica	mg/L	07/20/2010	N001	55	-	95	12	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	55	-	95	5.7	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	55	-	95	8.8	FQ	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	55	-	95	281	FQ	#	
Sulfate	mg/L	07/20/2010	N001	55	-	95	16	FQ	#	1
Temperature	C	07/20/2010	N001	55	-	95	18.98	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	55	-	95	170	FQ	#	20
Turbidity	NTU	07/20/2010	N001	55	-	95	2.08	FQ	#	
Uranium	mg/L	07/20/2010	N001	55	-	95	0.0014	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0690 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	55	-	95	81	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	55	-	95	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	55	-	95	0.0016	FQ	#	0.000015
Calcium	mg/L	07/20/2010	N001	55	-	95	28	FQ	#	0.012
Chloride	mg/L	07/20/2010	N001	55	-	95	8.8	FQ	#	0.4
Iron	mg/L	07/20/2010	N001	55	-	95	0.013	B	FQJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	55	-	95	7.6	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	55	-	95	0.022	FQ	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	55	-	95	0.00025	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	55	-	95	3	FQ	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	55	-	95	130	FQ	#	
pH	s.u.	07/20/2010	N001	55	-	95	7.94	FQ	#	
Potassium	mg/L	07/20/2010	N001	55	-	95	2.2	FQJ	#	0.11
Selenium	mg/L	07/20/2010	N001	55	-	95	0.0013	FQ	#	0.000032
Silica	mg/L	07/20/2010	N001	55	-	95	11	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	55	-	95	5.3	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	55	-	95	8.8	FQ	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	55	-	95	259	FQ	#	
Sulfate	mg/L	07/20/2010	N001	55	-	95	13	FQ	#	1
Temperature	C	07/20/2010	N001	55	-	95	17.22	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	55	-	95	160	FQ	#	20
Turbidity	NTU	07/20/2010	N001	55	-	95	3.04	FQ	#	
Uranium	mg/L	07/20/2010	N001	55	-	95	0.0017	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**


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REPORT DATE: 12/22/2010

Location: 0691 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	55	-	95	202	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	55	-	95	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	55	-	95	0.0012	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	55	-	95	320	F	#	0.012
Chloride	mg/L	07/20/2010	N001	55	-	95	55	F	#	4
Iron	mg/L	07/20/2010	N001	55	-	95	0.01	B	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	55	-	95	47	F	#	0.013
Manganese	mg/L	07/20/2010	N001	55	-	95	0.094	F	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	55	-	95	0.000056	B	F	# 0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	55	-	95	62	F	#	0.5
Oxidation Reduction Potential	mV	07/20/2010	N001	55	-	95	172.53	F	#	
pH	s.u.	07/20/2010	N001	55	-	95	7.09	F	#	
Potassium	mg/L	07/20/2010	N001	55	-	95	4.5	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	55	-	95	0.0041	F	#	0.000032
Silica	mg/L	07/20/2010	N001	55	-	95	15	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	55	-	95	6.8	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	55	-	95	41	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	55	-	95	1847	F	#	
Sulfate	mg/L	07/20/2010	N001	55	-	95	500	F	#	10
Temperature	C	07/20/2010	N001	55	-	95	18.66	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	55	-	95	3200	F	#	40
Turbidity	NTU	07/20/2010	N001	55	-	95	3.29	F	#	
Uranium	mg/L	07/20/2010	N001	55	-	95	0.05	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0692 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	55	-	95	80	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	55	-	95	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	55	-	95	0.0075	FQ	#	0.000015
Calcium	mg/L	07/20/2010	N001	55	-	95	29	FQ	#	0.012
Chloride	mg/L	07/20/2010	N001	55	-	95	13	FQ	#	0.4
Iron	mg/L	07/20/2010	N001	55	-	95	0.42	FQ	#	0.0049
Magnesium	mg/L	07/20/2010	N001	55	-	95	6.5	FQ	#	0.013
Manganese	mg/L	07/20/2010	N001	55	-	95	0.064	FQ	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	55	-	95	0.000078	B	FQ	# 0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	55	-	95	2.9	FQ	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	55	-	95	135.2	FQ	#	
pH	s.u.	07/20/2010	N001	55	-	95	7.94	FQ	#	
Potassium	mg/L	07/20/2010	N001	55	-	95	3.6	FQJ	#	0.11
Selenium	mg/L	07/20/2010	N001	55	-	95	0.0015	FQ	#	0.000032
Silica	mg/L	07/20/2010	N001	55	-	95	12	FQ	#	0.0095
Silicon	mg/L	07/20/2010	N001	55	-	95	5.7	FQ	#	0.0044
Sodium	mg/L	07/20/2010	N001	55	-	95	12	FQ	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	55	-	95	280	FQ	#	
Sulfate	mg/L	07/20/2010	N001	55	-	95	16	FQ	#	1
Temperature	C	07/20/2010	N001	55	-	95	17.91	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	55	-	95	170	FQ	#	20
Turbidity	NTU	07/20/2010	N001	55	-	95	5.77	FQ	#	
Uranium	mg/L	07/20/2010	N001	55	-	95	0.0019	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0695 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	55	-	95	110	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	55	-	95	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	55	-	95	0.0017	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	55	-	95	50	F	#	0.012
Chloride	mg/L	07/20/2010	N001	55	-	95	14	F	#	0.4
Iron	mg/L	07/20/2010	N001	55	-	95	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	55	-	95	7.7	F	#	0.013
Manganese	mg/L	07/20/2010	N001	55	-	95	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	55	-	95	0.00065	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	55	-	95	5.2	F	#	0.05
Oxidation Reduction Potential	mV	07/20/2010	N001	55	-	95	144.7	F	#	
pH	s.u.	07/20/2010	N001	55	-	95	7.87	F	#	
Potassium	mg/L	07/20/2010	N001	55	-	95	1.8	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	55	-	95	0.002	F	#	0.000032
Silica	mg/L	07/20/2010	N001	55	-	95	12	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	55	-	95	5.6	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	55	-	95	12	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	55	-	95	394	F	#	
Sulfate	mg/L	07/20/2010	N001	55	-	95	45	F	#	1
Temperature	C	07/20/2010	N001	55	-	95	19.03	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	55	-	95	240	F	#	20
Turbidity	NTU	07/20/2010	N001	55	-	95	0.57	F	#	
Uranium	mg/L	07/20/2010	N001	55	-	95	0.0023	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0901 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	58	-	78	148	F	#	
Ammonia Total as N	mg/L	07/21/2010	N001	58	-	78	0.1	U	F	# 0.1
Arsenic	mg/L	07/21/2010	N001	58	-	78	0.0025	F	#	0.000015
Calcium	mg/L	07/21/2010	N001	58	-	78	48	F	#	0.012
Chloride	mg/L	07/21/2010	N001	58	-	78	23	F	#	0.4
Iron	mg/L	07/21/2010	N001	58	-	78	0.14	F	#	0.0049
Magnesium	mg/L	07/21/2010	N001	58	-	78	8.3	F	#	0.013
Manganese	mg/L	07/21/2010	N001	58	-	78	0.014	F	#	0.00011
Molybdenum	mg/L	07/21/2010	N001	58	-	78	0.00054	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	58	-	78	3.3	F	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	58	-	78	91.5	RF	#	
pH	s.u.	07/21/2010	N001	58	-	78	7.84	F	#	
Potassium	mg/L	07/21/2010	N001	58	-	78	0.92	B	FJ	# 0.11
Selenium	mg/L	07/21/2010	N001	58	-	78	0.0031	F	#	0.000032
Silica	mg/L	07/21/2010	N001	58	-	78	13	F	#	0.0095
Silicon	mg/L	07/21/2010	N001	58	-	78	6.1	F	#	0.0044
Sodium	mg/L	07/21/2010	N001	58	-	78	20	F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	58	-	78	393	F	#	
Sulfate	mg/L	07/21/2010	N001	58	-	78	39	F	#	1
Temperature	C	07/21/2010	N001	58	-	78	17.69	F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	58	-	78	250	F	#	20
Turbidity	NTU	07/21/2010	N001	58	-	78	9.19	F	#	
Uranium	mg/L	07/21/2010	N001	58	-	78	0.0033	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0903 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	28	-	48	97	F	#	
Ammonia Total as N	mg/L	07/21/2010	N001	28	-	48	0.1	U	F	# 0.1
Arsenic	mg/L	07/21/2010	N001	28	-	48	0.0018	F	#	0.000015
Calcium	mg/L	07/21/2010	N001	28	-	48	58	F	#	0.012
Chloride	mg/L	07/21/2010	N001	28	-	48	21	F	#	0.4
Iron	mg/L	07/21/2010	N001	28	-	48	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	28	-	48	12	F	#	0.013
Manganese	mg/L	07/21/2010	N001	28	-	48	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	28	-	48	0.00029	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	28	-	48	11	F	#	0.1
Oxidation Reduction Potential	mV	07/21/2010	N001	28	-	48	113.1	F	#	
pH	s.u.	07/21/2010	N001	28	-	48	7.82	F	#	
Potassium	mg/L	07/21/2010	N001	28	-	48	1.2	FJ	#	0.11
Selenium	mg/L	07/21/2010	N001	28	-	48	0.0019	F	#	0.000032
Silica	mg/L	07/21/2010	N001	28	-	48	12	F	#	0.0095
Silicon	mg/L	07/21/2010	N001	28	-	48	5.6	F	#	0.0044
Sodium	mg/L	07/21/2010	N001	28	-	48	12	F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	28	-	48	475	F	#	
Sulfate	mg/L	07/21/2010	N001	28	-	48	62	F	#	1
Temperature	C	07/21/2010	N001	28	-	48	18.16	F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	28	-	48	300	F	#	20
Turbidity	NTU	07/21/2010	N001	28	-	48	0.97	F	#	
Uranium	mg/L	07/21/2010	N001	28	-	48	0.002	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0904 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	28	-	38	158	F	#	
Ammonia Total as N	mg/L	07/21/2010	N001	28	-	38	0.1	U	F	# 0.1
Arsenic	mg/L	07/21/2010	N001	28	-	38	0.00057	F	#	0.000015
Calcium	mg/L	07/21/2010	N001	28	-	38	61	F	#	0.012
Chloride	mg/L	07/21/2010	N001	28	-	38	130	F	#	2
Iron	mg/L	07/21/2010	N001	28	-	38	0.011	B	FJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	28	-	38	15	F	#	0.013
Manganese	mg/L	07/21/2010	N001	28	-	38	0.0029	B	F	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	28	-	38	0.00062	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	28	-	38	1.5	F	#	0.01
Oxidation Reduction Potential	mV	07/21/2010	N001	28	-	38	129.8	F	#	
pH	s.u.	07/21/2010	N001	28	-	38	7.67	F	#	
Potassium	mg/L	07/21/2010	N001	28	-	38	0.57	B	FJ	# 0.11
Selenium	mg/L	07/21/2010	N001	28	-	38	0.013	F	#	0.000032
Silica	mg/L	07/21/2010	N001	28	-	38	19	F	#	0.0095
Silicon	mg/L	07/21/2010	N001	28	-	38	8.7	F	#	0.0044
Sodium	mg/L	07/21/2010	N001	28	-	38	85	F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	28	-	38	922	F	#	
Sulfate	mg/L	07/21/2010	N001	28	-	38	100	F	#	2.5
Temperature	C	07/21/2010	N001	28	-	38	17.17	F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	28	-	38	550	F	#	20
Turbidity	NTU	07/21/2010	N001	28	-	38	2.66	F	#	
Uranium	mg/L	07/21/2010	N001	28	-	38	0.0043	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0906 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	44	-	64	1163	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	44	-	64	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	44	-	64	0.0015	FQ	#	0.000074
Calcium	mg/L	07/21/2010	N001	44	-	64	1100	FQ	#	0.06
Chloride	mg/L	07/21/2010	N001	44	-	64	120	FQ	#	10
Iron	mg/L	07/21/2010	N001	44	-	64	0.0099	U	FQJ	# 0.0099
Magnesium	mg/L	07/21/2010	N001	44	-	64	350	FQ	#	0.026
Manganese	mg/L	07/21/2010	N001	44	-	64	0.09	FQ	#	0.00023
Molybdenum	mg/L	07/21/2010	N001	44	-	64	0.0017	FQ	#	0.00016
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	44	-	64	350	FQ	#	2
Oxidation Reduction Potential	mV	07/21/2010	N001	44	-	64	87.1	RFQ	#	
pH	s.u.	07/21/2010	N001	44	-	64	6.25	FQ	#	
Potassium	mg/L	07/21/2010	N001	44	-	64	9.3	FQJ	#	0.22
Selenium	mg/L	07/21/2010	N001	44	-	64	0.022	FQ	#	0.00016
Silica	mg/L	07/21/2010	N001	44	-	64	16	FQ	#	0.019
Silicon	mg/L	07/21/2010	N001	44	-	64	7.6	FQ	#	0.0089
Sodium	mg/L	07/21/2010	N001	44	-	64	290	FQ	#	0.013
Specific Conductance	umhos/cm	07/21/2010	N001	44	-	64	6453	FQ	#	
Sulfate	mg/L	07/21/2010	N001	44	-	64	1800	FQ	#	25
Temperature	C	07/21/2010	N001	44	-	64	18.36	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	44	-	64	6700	FQ	#	200
Turbidity	NTU	07/21/2010	N001	44	-	64	2.09	FQ	#	
Uranium	mg/L	07/21/2010	N001	44	-	64	0.81	FQ	#	0.000058

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**


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REPORT DATE: 12/22/2010

Location: 0908 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty	
			ID				Data	QA			
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	52	-	67	506	FQ	#		
Ammonia Total as N	mg/L	07/20/2010	N001	52	-	67	67	FQ	#	5	
Arsenic	mg/L	07/20/2010	N001	52	-	67	0.0012	FQ	#	0.000015	
Calcium	mg/L	07/20/2010	N001	52	-	67	630	FQ	#	0.024	
Chloride	mg/L	07/20/2010	N001	52	-	67	72	FQ	#	10	
Iron	mg/L	07/20/2010	N001	52	-	67	0.084	B	FQ	#	0.0099
Magnesium	mg/L	07/20/2010	N001	52	-	67	500	FQ	#	0.026	
Manganese	mg/L	07/20/2010	N001	52	-	67	0.15	FQ	#	0.00023	
Molybdenum	mg/L	07/20/2010	N001	52	-	67	0.00039	FQ	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	52	-	67	190	FQ	#	1	
Oxidation Reduction Potential	mV	07/20/2010	N001	52	-	67	-47.4	RFQ	#		
pH	s.u.	07/20/2010	N001	52	-	67	6.51	FQ	#		
Potassium	mg/L	07/20/2010	N001	52	-	67	27	EN	FQJ	#	0.22
Selenium	mg/L	07/20/2010	N001	52	-	67	0.029	FQ	#	0.000032	
Silica	mg/L	07/20/2010	N001	52	-	67	20	FQ	#	0.019	
Silicon	mg/L	07/20/2010	N001	52	-	67	9.3	FQ	#	0.0089	
Sodium	mg/L	07/20/2010	N001	52	-	67	310	FQ	#	0.013	
Specific Conductance	umhos/cm	07/20/2010	N001	52	-	67	6254	FQ	#		
Sulfate	mg/L	07/20/2010	N001	52	-	67	2800	FQ	#	25	
Temperature	C	07/20/2010	N001	52	-	67	18.13	FQ	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	52	-	67	5900	FQ	#	80	
Turbidity	NTU	07/20/2010	N001	52	-	67	6.54	FQ	#		
Uranium	mg/L	07/20/2010	N001	52	-	67	0.088	FQ	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**


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REPORT DATE: 12/22/2010

Location: 0909 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	0001	65	-	80	173	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	0001	65	-	80	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	0001	65	-	80	0.001	FQ	#	0.000015
Calcium	mg/L	07/21/2010	0001	65	-	80	490	FQ	#	0.024
Chloride	mg/L	07/21/2010	0001	65	-	80	110	FQ	#	4
Iron	mg/L	07/21/2010	0001	65	-	80	0.0099	U	FQJ	# 0.0099
Magnesium	mg/L	07/21/2010	0001	65	-	80	85	FQ	#	0.026
Manganese	mg/L	07/21/2010	0001	65	-	80	0.00023	U	FQJ	# 0.00023
Molybdenum	mg/L	07/21/2010	0001	65	-	80	0.00026	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	0001	65	-	80	160	FQ	#	1
Oxidation Reduction Potential	mV	07/21/2010	N001	65	-	80	145	FQ	#	
pH	s.u.	07/21/2010	N001	65	-	80	7.09	FQ	#	
Potassium	mg/L	07/21/2010	0001	65	-	80	3.8	FQJ	#	0.22
Selenium	mg/L	07/21/2010	0001	65	-	80	0.054	FQ	#	0.000032
Silica	mg/L	07/21/2010	0001	65	-	80	14	FQ	#	0.019
Silicon	mg/L	07/21/2010	0001	65	-	80	6.7	FQ	#	0.0089
Sodium	mg/L	07/21/2010	0001	65	-	80	84	FQ	#	0.013
Specific Conductance	umhos/cm	07/21/2010	N001	65	-	80	3030	FQ	#	
Sulfate	mg/L	07/21/2010	0001	65	-	80	850	FQ	#	10
Temperature	C	07/21/2010	N001	65	-	80	22	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	0001	65	-	80	3000	FQ	#	80
Turbidity	NTU	07/21/2010	N001	65	-	80	18.3	FQ	#	
Uranium	mg/L	07/21/2010	0001	65	-	80	0.054	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0910 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	97	-	197	102	F	#	
Ammonia Total as N	mg/L	07/21/2010	N001	97	-	197	0.1	U	F	# 0.1
Arsenic	mg/L	07/21/2010	N001	97	-	197	0.002	F	#	0.000015
Calcium	mg/L	07/21/2010	N001	97	-	197	32	F	#	0.012
Chloride	mg/L	07/21/2010	N001	97	-	197	11	F	#	0.4
Iron	mg/L	07/21/2010	N001	97	-	197	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	97	-	197	5.5	F	#	0.013
Manganese	mg/L	07/21/2010	N001	97	-	197	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	97	-	197	0.00049	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	97	-	197	3.1	F	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	97	-	197	69	RF	#	
pH	s.u.	07/21/2010	N001	97	-	197	7.79	F	#	
Potassium	mg/L	07/21/2010	N001	97	-	197	0.57	B	FJ	# 0.11
Selenium	mg/L	07/21/2010	N001	97	-	197	0.0014	F	#	0.000032
Silica	mg/L	07/21/2010	N001	97	-	197	11	F	#	0.0095
Silicon	mg/L	07/21/2010	N001	97	-	197	5.3	F	#	0.0044
Sodium	mg/L	07/21/2010	N001	97	-	197	12	F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	97	-	197	269	F	#	
Sulfate	mg/L	07/21/2010	N001	97	-	197	15	F	#	1
Temperature	C	07/21/2010	N001	97	-	197	19.29	F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	97	-	197	170	F	#	20
Turbidity	NTU	07/21/2010	N001	97	-	197	0.54	F	#	
Uranium	mg/L	07/21/2010	N001	97	-	197	0.0012	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0911 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	309.4	-	349.4	87	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	309.4	-	349.4	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	309.4	-	349.4	0.0019	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	309.4	-	349.4	25	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	309.4	-	349.4	6.9	FQ	#	0.4
Iron	mg/L	07/21/2010	N001	309.4	-	349.4	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	309.4	-	349.4	5.3	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	309.4	-	349.4	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	309.4	-	349.4	0.00023	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	309.4	-	349.4	3.1	FQ	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	309.4	-	349.4	76.4	RFQ	#	
pH	s.u.	07/21/2010	N001	309.4	-	349.4	7.98	FQ	#	
Potassium	mg/L	07/21/2010	N001	309.4	-	349.4	0.88	B	FQJ	# 0.11
Selenium	mg/L	07/21/2010	N001	309.4	-	349.4	0.001	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	309.4	-	349.4	12	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	309.4	-	349.4	5.8	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	309.4	-	349.4	7.3	FQ	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	309.4	-	349.4	215	FQ	#	
Sulfate	mg/L	07/21/2010	N001	309.4	-	349.4	9.6	FQ	#	1
Temperature	C	07/21/2010	N001	309.4	-	349.4	18.67	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	309.4	-	349.4	140	FQ	#	20
Turbidity	NTU	07/21/2010	N001	309.4	-	349.4	1.04	FQ	#	
Uranium	mg/L	07/21/2010	N001	309.4	-	349.4	0.0013	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0912 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	123	-	163	281	FQ	#	
Ammonia Total as N	mg/L	07/22/2010	N001	123	-	163	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/22/2010	N001	123	-	163	0.0012	FQ	#	0.000015
Calcium	mg/L	07/22/2010	N001	123	-	163	300	FQ	#	0.012
Chloride	mg/L	07/22/2010	N001	123	-	163	28	FQ	#	4
Iron	mg/L	07/22/2010	N001	123	-	163	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/22/2010	N001	123	-	163	59	FQ	#	0.013
Manganese	mg/L	07/22/2010	N001	123	-	163	0.00039	B	FQJ	# 0.00011
Molybdenum	mg/L	07/22/2010	N001	123	-	163	0.00016	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	123	-	163	61	FQ	#	0.5
Oxidation Reduction Potential	mV	07/22/2010	N001	123	-	163	41.7	RFQ	#	
pH	s.u.	07/22/2010	N001	123	-	163	6.75	FQ	#	
Potassium	mg/L	07/22/2010	N001	123	-	163	4.2	FQJ	#	0.11
Selenium	mg/L	07/22/2010	N001	123	-	163	0.0076	FQ	#	0.000032
Silica	mg/L	07/22/2010	N001	123	-	163	13	FQ	#	0.0095
Silicon	mg/L	07/22/2010	N001	123	-	163	6.3	FQ	#	0.0044
Sodium	mg/L	07/22/2010	N001	123	-	163	53	FQ	#	0.0066
Specific Conductance	umhos/cm	07/22/2010	N001	123	-	163	1799	FQ	#	
Sulfate	mg/L	07/22/2010	N001	123	-	163	480	FQ	#	10
Temperature	C	07/22/2010	N001	123	-	163	17.4	FQ	#	
Total Dissolved Solids	mg/L	07/22/2010	N001	123	-	163	1500	FQ	#	40
Turbidity	NTU	07/22/2010	N001	123	-	163	0.81	FQ	#	
Uranium	mg/L	07/22/2010	N001	123	-	163	0.024	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0913 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	328.7	-	368.7	89	FQ	#	
Ammonia Total as N	mg/L	07/22/2010	N001	328.7	-	368.7	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/22/2010	N001	328.7	-	368.7	0.0025	FQ	#	0.000015
Calcium	mg/L	07/22/2010	N001	328.7	-	368.7	23	FQ	#	0.012
Chloride	mg/L	07/22/2010	N001	328.7	-	368.7	5.6	FQ	#	0.4
Iron	mg/L	07/22/2010	N001	328.7	-	368.7	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/22/2010	N001	328.7	-	368.7	4.8	FQ	#	0.013
Manganese	mg/L	07/22/2010	N001	328.7	-	368.7	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/22/2010	N001	328.7	-	368.7	0.00014	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	328.7	-	368.7	2.9	FQ	#	0.02
Oxidation Reduction Potential	mV	07/22/2010	N001	328.7	-	368.7	32.8	RFQ	#	
pH	s.u.	07/22/2010	N001	328.7	-	368.7	7.99	FQ	#	
Potassium	mg/L	07/22/2010	N001	328.7	-	368.7	0.92	B	FQJ	# 0.11
Selenium	mg/L	07/22/2010	N001	328.7	-	368.7	0.00084	FQ	#	0.000032
Silica	mg/L	07/22/2010	N001	328.7	-	368.7	10	FQ	#	0.0095
Silicon	mg/L	07/22/2010	N001	328.7	-	368.7	4.7	FQ	#	0.0044
Sodium	mg/L	07/22/2010	N001	328.7	-	368.7	6.8	FQ	#	0.0066
Specific Conductance	umhos/cm	07/22/2010	N001	328.7	-	368.7	199	FQ	#	
Sulfate	mg/L	07/22/2010	N001	328.7	-	368.7	8.4	FQ	#	1
Temperature	C	07/22/2010	N001	328.7	-	368.7	16.65	FQ	#	
Total Dissolved Solids	mg/L	07/22/2010	N001	328.7	-	368.7	110	FQ	#	20
Turbidity	NTU	07/22/2010	N001	328.7	-	368.7	0.84	FQ	#	
Uranium	mg/L	07/22/2010	N001	328.7	-	368.7	0.0013	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0914 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	137.2	-	154.2	62	FQ	#	
Ammonia Total as N	mg/L	07/22/2010	N001	137.2	-	154.2	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/22/2010	N001	137.2	-	154.2	0.00074	FQ	#	0.000015
Calcium	mg/L	07/22/2010	N001	137.2	-	154.2	7.7	FQ	#	0.012
Chloride	mg/L	07/22/2010	N001	137.2	-	154.2	11	FQ	#	0.4
Iron	mg/L	07/22/2010	N001	137.2	-	154.2	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/22/2010	N001	137.2	-	154.2	0.19	B	FQ	# 0.013
Manganese	mg/L	07/22/2010	N001	137.2	-	154.2	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/22/2010	N001	137.2	-	154.2	0.00084	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	137.2	-	154.2	2.7	FQ	#	0.02
Oxidation Reduction Potential	mV	07/22/2010	N001	137.2	-	154.2	93	FQ	#	
pH	s.u.	07/22/2010	N001	137.2	-	154.2	10.13	FQ	#	
Potassium	mg/L	07/22/2010	N001	137.2	-	154.2	4.5	FQJ	#	0.11
Selenium	mg/L	07/22/2010	N001	137.2	-	154.2	0.0012	FQ	#	0.000032
Silica	mg/L	07/22/2010	N001	137.2	-	154.2	34	FQ	#	0.0095
Silicon	mg/L	07/22/2010	N001	137.2	-	154.2	16	FQ	#	0.0044
Sodium	mg/L	07/22/2010	N001	137.2	-	154.2	18	FQ	#	0.0066
Specific Conductance	umhos/cm	07/22/2010	N001	137.2	-	154.2	185	FQ	#	
Sulfate	mg/L	07/22/2010	N001	137.2	-	154.2	13	FQ	#	1
Temperature	C	07/22/2010	N001	137.2	-	154.2	20	FQ	#	
Total Dissolved Solids	mg/L	07/22/2010	N001	137.2	-	154.2	120	FQ	#	20
Turbidity	NTU	07/22/2010	N001	137.2	-	154.2	2.11	FQ	#	
Uranium	mg/L	07/22/2010	N001	137.2	-	154.2	0.000006	B	FQ	# 0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0915 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	170	-	180	17	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	170	-	180	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	170	-	180	0.00011	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	170	-	180	11	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	170	-	180	12	FQ	#	0.4
Iron	mg/L	07/21/2010	N001	170	-	180	0.0055	B	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	170	-	180	1.4	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	170	-	180	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	170	-	180	0.00056	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	170	-	180	3.2	FQ	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	170	-	180	41.6	FQ	#	
pH	s.u.	07/21/2010	N001	170	-	180	10.49	FQ	#	
Potassium	mg/L	07/21/2010	N001	170	-	180	1.4	FQJ	#	0.11
Selenium	mg/L	07/21/2010	N001	170	-	180	0.0017	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	170	-	180	6.4	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	170	-	180	3	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	170	-	180	12	FQ	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	170	-	180	202	FQ	#	
Sulfate	mg/L	07/21/2010	N001	170	-	180	18	FQ	#	1
Temperature	C	07/21/2010	N001	170	-	180	18.21	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	170	-	180	89	FQ	#	20
Turbidity	NTU	07/21/2010	N001	170	-	180	1.57	FQ	#	
Uranium	mg/L	07/21/2010	N001	170	-	180	0.000009	B	FQ	# 0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0916 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	345.7	-	355.7	238	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	345.7	-	355.7	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	345.7	-	355.7	0.00014	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	345.7	-	355.7	88	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	345.7	-	355.7	7.2	FQ	#	0.4
Iron	mg/L	07/21/2010	N001	345.7	-	355.7	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	345.7	-	355.7	0.013	U	FQJ	# 0.013
Manganese	mg/L	07/21/2010	N001	345.7	-	355.7	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	345.7	-	355.7	0.00097	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	345.7	-	355.7	2.1	FQ	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	345.7	-	355.7	16.7	FQ	#	
pH	s.u.	07/21/2010	N001	345.7	-	355.7	11.58	FQ	#	
Potassium	mg/L	07/21/2010	N001	345.7	-	355.7	5.5	E	FQJ	# 0.11
Selenium	mg/L	07/21/2010	N001	345.7	-	355.7	0.00086	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	345.7	-	355.7	13	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	345.7	-	355.7	5.9	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	345.7	-	355.7	17	E	FQ	# 0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	345.7	-	355.7	1215	FQ	#	
Sulfate	mg/L	07/21/2010	N001	345.7	-	355.7	9.2	FQ	#	1
Temperature	C	07/21/2010	N001	345.7	-	355.7	18.02	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	345.7	-	355.7	290	FQ	#	20
Turbidity	NTU	07/21/2010	N001	345.7	-	355.7	0.9	FQ	#	
Uranium	mg/L	07/21/2010	N001	345.7	-	355.7	0.000018	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0920 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	114.4	-	154.4	94	F	#	
Ammonia Total as N	mg/L	07/21/2010	N001	114.4	-	154.4	0.1	U	F	# 0.1
Arsenic	mg/L	07/21/2010	N001	114.4	-	154.4	0.0023	F	#	0.000015
Calcium	mg/L	07/21/2010	N001	114.4	-	154.4	30	F	#	0.012
Chloride	mg/L	07/21/2010	N001	114.4	-	154.4	9	F	#	0.4
Iron	mg/L	07/21/2010	N001	114.4	-	154.4	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	114.4	-	154.4	6.9	F	#	0.013
Manganese	mg/L	07/21/2010	N001	114.4	-	154.4	0.0008	B	F	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	114.4	-	154.4	0.0003	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	114.4	-	154.4	3.3	F	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	114.4	-	154.4	113.6	F	#	
pH	s.u.	07/21/2010	N001	114.4	-	154.4	8.04	F	#	
Potassium	mg/L	07/21/2010	N001	114.4	-	154.4	1	FJ	#	0.11
Selenium	mg/L	07/21/2010	N001	114.4	-	154.4	0.0013	F	#	0.000032
Silica	mg/L	07/21/2010	N001	114.4	-	154.4	11	F	#	0.0095
Silicon	mg/L	07/21/2010	N001	114.4	-	154.4	5.2	F	#	0.0044
Sodium	mg/L	07/21/2010	N001	114.4	-	154.4	7.9	F	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	114.4	-	154.4	266	F	#	
Sulfate	mg/L	07/21/2010	N001	114.4	-	154.4	13	F	#	1
Temperature	C	07/21/2010	N001	114.4	-	154.4	18.04	F	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	114.4	-	154.4	150	F	#	20
Turbidity	NTU	07/21/2010	N001	114.4	-	154.4	1.58	F	#	
Uranium	mg/L	07/21/2010	N001	114.4	-	154.4	0.0014	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0921 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	313.2	-	353.2	83	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	313.2	-	353.2	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	313.2	-	353.2	0.00021	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	313.2	-	353.2	23	F	#	0.012
Chloride	mg/L	07/20/2010	N001	313.2	-	353.2	6	F	#	0.4
Iron	mg/L	07/20/2010	N001	313.2	-	353.2	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	313.2	-	353.2	3.3	F	#	0.013
Manganese	mg/L	07/20/2010	N001	313.2	-	353.2	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	313.2	-	353.2	0.00022	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	313.2	-	353.2	2.5	F	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	313.2	-	353.2	130	F	#	
pH	s.u.	07/20/2010	N001	313.2	-	353.2	8.24	F	#	
Potassium	mg/L	07/20/2010	N001	313.2	-	353.2	4.6	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	313.2	-	353.2	0.00096	F	#	0.000032
Silica	mg/L	07/20/2010	N001	313.2	-	353.2	9.1	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	313.2	-	353.2	4.3	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	313.2	-	353.2	9.2	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	313.2	-	353.2	217	F	#	
Sulfate	mg/L	07/20/2010	N001	313.2	-	353.2	8.7	F	#	1
Temperature	C	07/20/2010	N001	313.2	-	353.2	20.53	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	313.2	-	353.2	120	F	#	20
Turbidity	NTU	07/20/2010	N001	313.2	-	353.2	0.99	F	#	
Uranium	mg/L	07/20/2010	N001	313.2	-	353.2	0.0048	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**


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REPORT DATE: 12/22/2010

Location: 0929 WELL No Log Information.

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	48.2	-	88.2	90	FQ	#	
Ammonia Total as N	mg/L	07/22/2010	N001	48.2	-	88.2	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/22/2010	N001	48.2	-	88.2	0.0015	FQ	#	0.000015
Calcium	mg/L	07/22/2010	N001	48.2	-	88.2	49	FQ	#	0.012
Chloride	mg/L	07/22/2010	N001	48.2	-	88.2	16	FQ	#	0.4
Iron	mg/L	07/22/2010	N001	48.2	-	88.2	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/22/2010	N001	48.2	-	88.2	8.3	FQ	#	0.013
Manganese	mg/L	07/22/2010	N001	48.2	-	88.2	0.0008	B	UFQ	# 0.00011
Molybdenum	mg/L	07/22/2010	N001	48.2	-	88.2	0.00032	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	N001	48.2	-	88.2	15	FQ	#	0.1
Oxidation Reduction Potential	mV	07/22/2010	N001	48.2	-	88.2	42.2	RFQ	#	
pH	s.u.	07/22/2010	N001	48.2	-	88.2	7.6	FQ	#	
Potassium	mg/L	07/22/2010	N001	48.2	-	88.2	1.2	FQJ	#	0.11
Selenium	mg/L	07/22/2010	N001	48.2	-	88.2	0.0023	FQ	#	0.000032
Silica	mg/L	07/22/2010	N001	48.2	-	88.2	12	FQ	#	0.0095
Silicon	mg/L	07/22/2010	N001	48.2	-	88.2	5.6	FQ	#	0.0044
Sodium	mg/L	07/22/2010	N001	48.2	-	88.2	11	FQ	#	0.0066
Specific Conductance	umhos/cm	07/22/2010	N001	48.2	-	88.2	392	FQ	#	
Sulfate	mg/L	07/22/2010	N001	48.2	-	88.2	25	FQ	#	1
Temperature	C	07/22/2010	N001	48.2	-	88.2	16.87	FQ	#	
Total Dissolved Solids	mg/L	07/22/2010	N001	48.2	-	88.2	270	FQ	#	20
Turbidity	NTU	07/22/2010	N001	48.2	-	88.2	1.37	FQ	#	
Uranium	mg/L	07/22/2010	N001	48.2	-	88.2	0.0015	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0930 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	20	-	50	97	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	20	-	50	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	20	-	50	0.0015	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	20	-	50	58	F	#	0.012
Chloride	mg/L	07/20/2010	N001	20	-	50	19	F	#	0.4
Iron	mg/L	07/20/2010	N001	20	-	50	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	20	-	50	12	F	#	0.013
Manganese	mg/L	07/20/2010	N001	20	-	50	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	20	-	50	0.00022	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	20	-	50	13	F	#	0.1
Oxidation Reduction Potential	mV	07/20/2010	N001	20	-	50	124.9	F	#	
pH	s.u.	07/20/2010	N001	20	-	50	7.75	F	#	
Potassium	mg/L	07/20/2010	N001	20	-	50	1.5	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	20	-	50	0.0019	F	#	0.000032
Silica	mg/L	07/20/2010	N001	20	-	50	13	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	20	-	50	5.9	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	20	-	50	11	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	20	-	50	477	F	#	
Sulfate	mg/L	07/20/2010	N001	20	-	50	60	F	#	1
Temperature	C	07/20/2010	N001	20	-	50	18.33	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	20	-	50	310	F	#	20
Turbidity	NTU	07/20/2010	N001	20	-	50	5.21	F	#	
Uranium	mg/L	07/20/2010	N001	20	-	50	0.0031	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0932 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	112.5 -	132.5	130	F	#		
Ammonia Total as N	mg/L	07/21/2010	N001	112.5 -	132.5	0.1	U	F	#	0.1
Arsenic	mg/L	07/21/2010	N001	112.5 -	132.5	0.0014	F	#	0.000015	
Calcium	mg/L	07/21/2010	N001	112.5 -	132.5	40	F	#	0.012	
Chloride	mg/L	07/21/2010	N001	112.5 -	132.5	12	F	#	0.4	
Iron	mg/L	07/21/2010	N001	112.5 -	132.5	0.0049	U	FJ	#	0.0049
Magnesium	mg/L	07/21/2010	N001	112.5 -	132.5	8.3	F	#	0.013	
Manganese	mg/L	07/21/2010	N001	112.5 -	132.5	0.00011	U	FJ	#	0.00011
Molybdenum	mg/L	07/21/2010	N001	112.5 -	132.5	0.00044	F	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	112.5 -	132.5	6.7	F	#	0.05	
Oxidation Reduction Potential	mV	07/21/2010	N001	112.5 -	132.5	110	F	#		
pH	s.u.	07/21/2010	N001	112.5 -	132.5	7.89	F	#		
Potassium	mg/L	07/21/2010	N001	112.5 -	132.5	1.2	FJ	#	0.11	
Selenium	mg/L	07/21/2010	N001	112.5 -	132.5	0.0015	F	#	0.000032	
Silica	mg/L	07/21/2010	N001	112.5 -	132.5	12	F	#	0.0095	
Silicon	mg/L	07/21/2010	N001	112.5 -	132.5	5.5	F	#	0.0044	
Sodium	mg/L	07/21/2010	N001	112.5 -	132.5	13	F	#	0.0066	
Specific Conductance	umhos/cm	07/21/2010	N001	112.5 -	132.5	360	F	#		
Sulfate	mg/L	07/21/2010	N001	112.5 -	132.5	28	F	#	1	
Temperature	C	07/21/2010	N001	112.5 -	132.5	19.8	F	#		
Total Dissolved Solids	mg/L	07/21/2010	N001	112.5 -	132.5	200	F	#	20	
Turbidity	NTU	07/21/2010	N001	112.5 -	132.5	0.53	F	#		
Uranium	mg/L	07/21/2010	N001	112.5 -	132.5	0.0016	F	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0934 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	45	-	90	720	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	45	-	90	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	45	-	90	0.00084	FQ	#	0.00003
Calcium	mg/L	07/20/2010	N001	45	-	90	730	FQ	#	0.024
Chloride	mg/L	07/20/2010	N001	45	-	90	230	FQ	#	10
Iron	mg/L	07/20/2010	N001	45	-	90	0.0099	U	FQJ	# 0.0099
Magnesium	mg/L	07/20/2010	N001	45	-	90	940	FQ	#	0.026
Manganese	mg/L	07/20/2010	N001	45	-	90	0.0064	B	FQ	# 0.00023
Molybdenum	mg/L	07/20/2010	N001	45	-	90	0.00014	B	FQ	# 0.000064
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	45	-	90	390	FQ	#	2
Oxidation Reduction Potential	mV	07/20/2010	N001	45	-	90	47.1	RFQ	#	
pH	s.u.	07/20/2010	N001	45	-	90	6.62	FQ	#	
Potassium	mg/L	07/20/2010	N001	45	-	90	9.4	FQJ	#	0.22
Selenium	mg/L	07/20/2010	N001	45	-	90	0.012	FQ	#	0.000065
Silica	mg/L	07/20/2010	N001	45	-	90	17	FQ	#	0.019
Silicon	mg/L	07/20/2010	N001	45	-	90	8.1	FQ	#	0.0089
Sodium	mg/L	07/20/2010	N001	45	-	90	140	FQ	#	0.013
Specific Conductance	umhos/cm	07/20/2010	N001	45	-	90	7586	FQ	#	
Sulfate	mg/L	07/20/2010	N001	45	-	90	3000	FQ	#	25
Temperature	C	07/20/2010	N001	45	-	90	18.53	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	45	-	90	8000	FQ	#	80
Turbidity	NTU	07/20/2010	N001	45	-	90	1.42	FQ	#	
Uranium	mg/L	07/20/2010	N001	45	-	90	0.18	FQ	#	0.0000058

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0935 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	50	-	90	570	#		
Ammonia Total as N	mg/L	07/20/2010	N001	50	-	90	63	#	5	
Arsenic	mg/L	07/20/2010	N001	50	-	90	0.0011	#	0.00003	
Calcium	mg/L	07/20/2010	N001	50	-	90	730	#	0.024	
Chloride	mg/L	07/20/2010	N001	50	-	90	87	#	10	
Iron	mg/L	07/20/2010	N001	50	-	90	0.051	B	#	0.0099
Magnesium	mg/L	07/20/2010	N001	50	-	90	320	#	0.026	
Manganese	mg/L	07/20/2010	N001	50	-	90	0.48	#	0.00023	
Molybdenum	mg/L	07/20/2010	N001	50	-	90	0.000064	U	#	0.000064
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	50	-	90	240	#	2	
Oxidation Reduction Potential	mV	07/20/2010	N001	50	-	90	-9.4	R	#	
pH	s.u.	07/20/2010	N001	50	-	90	6.72		#	
Potassium	mg/L	07/20/2010	N001	50	-	90	23	J	#	0.22
Selenium	mg/L	07/20/2010	N001	50	-	90	0.019	#	0.000065	
Silica	mg/L	07/20/2010	N001	50	-	90	20	#	0.019	
Silicon	mg/L	07/20/2010	N001	50	-	90	9.3	#	0.0089	
Sodium	mg/L	07/20/2010	N001	50	-	90	320	#	0.013	
Specific Conductance	umhos/cm	07/20/2010	N001	50	-	90	6093	#		
Sulfate	mg/L	07/20/2010	N001	50	-	90	2500	#	25	
Temperature	C	07/20/2010	N001	50	-	90	19.32	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	50	-	90	5500	#	80	
Turbidity	NTU	07/20/2010	N001	50	-	90	2.9	#		
Uranium	mg/L	07/20/2010	N001	50	-	90	0.12	#	0.0000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0936 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	42	-	82	380	#		
Ammonia Total as N	mg/L	07/20/2010	N001	42	-	82	3.1	#	0.1	
Arsenic	mg/L	07/20/2010	N001	42	-	82	0.00045	#	0.00003	
Calcium	mg/L	07/20/2010	N001	42	-	82	380	#	0.012	
Chloride	mg/L	07/20/2010	N001	42	-	82	64	#	4	
Iron	mg/L	07/20/2010	N001	42	-	82	0.0049	U J	#	0.0049
Magnesium	mg/L	07/20/2010	N001	42	-	82	190	#	0.013	
Manganese	mg/L	07/20/2010	N001	42	-	82	1.3	#	0.00011	
Molybdenum	mg/L	07/20/2010	N001	42	-	82	0.0013	#	0.000064	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	42	-	82	200	#	2	
Oxidation Reduction Potential	mV	07/20/2010	N001	42	-	82	232.6	#		
pH	s.u.	07/20/2010	N001	42	-	82	6.75	#		
Potassium	mg/L	07/20/2010	N001	42	-	82	7.2	J	#	0.11
Selenium	mg/L	07/20/2010	N001	42	-	82	0.017	#	0.000065	
Silica	mg/L	07/20/2010	N001	42	-	82	16	#	0.0095	
Silicon	mg/L	07/20/2010	N001	42	-	82	7.5	#	0.0044	
Sodium	mg/L	07/20/2010	N001	42	-	82	73	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	42	-	82	3311	#		
Sulfate	mg/L	07/20/2010	N001	42	-	82	710	#	10	
Temperature	C	07/20/2010	N001	42	-	82	24.93	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	42	-	82	2900	#	80	
Turbidity	NTU	07/20/2010	N001	42	-	82	0.79	#		
Uranium	mg/L	07/20/2010	N001	42	-	82	0.13	#	0.0000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0938 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	40	-	95	844	#		
Ammonia Total as N	mg/L	07/20/2010	N001	40	-	95	0.56	#	0.1	
Arsenic	mg/L	07/20/2010	N001	40	-	95	0.0016	#	0.000074	
Calcium	mg/L	07/20/2010	N001	40	-	95	970	#	0.024	
Chloride	mg/L	07/20/2010	N001	40	-	95	160	#	10	
Iron	mg/L	07/20/2010	N001	40	-	95	0.0099	U J #	0.0099	
Magnesium	mg/L	07/20/2010	N001	40	-	95	530	#	0.026	
Manganese	mg/L	07/20/2010	N001	40	-	95	0.74	#	0.00023	
Molybdenum	mg/L	07/20/2010	N001	40	-	95	0.011	#	0.00016	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	40	-	95	360	#	2	
Oxidation Reduction Potential	mV	07/20/2010	N001	40	-	95	238.6	#		
pH	s.u.	07/20/2010	N001	40	-	95	6.6	#		
Potassium	mg/L	07/20/2010	N001	40	-	95	15	J #	0.22	
Selenium	mg/L	07/20/2010	N001	40	-	95	0.051	#	0.00016	
Silica	mg/L	07/20/2010	N001	40	-	95	15	#	0.019	
Silicon	mg/L	07/20/2010	N001	40	-	95	7.1	#	0.0089	
Sodium	mg/L	07/20/2010	N001	40	-	95	350	#	0.013	
Specific Conductance	umhos/cm	07/20/2010	N001	40	-	95	6471	#		
Sulfate	mg/L	07/20/2010	N001	40	-	95	2800	#	25	
Temperature	C	07/20/2010	N001	40	-	95	28.21	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	40	-	95	7600	#	80	
Turbidity	NTU	07/20/2010	N001	40	-	95	1.41	#		
Uranium	mg/L	07/20/2010	N001	40	-	95	0.45	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0940 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty	
		ID					Data	QA			
Ammonia Total as N	mg/L	07/21/2010	N001	45	-	60	0.1	U	FQ	#	0.1
Arsenic	mg/L	07/21/2010	N001	45	-	60	0.003		FQ	#	0.000074
Calcium	mg/L	07/21/2010	N001	45	-	60	460		FQ	#	0.06
Chloride	mg/L	07/21/2010	N001	45	-	60	180		FQ	#	20
Iron	mg/L	07/21/2010	N001	45	-	60	0.025	U	FQJ	#	0.025
Magnesium	mg/L	07/21/2010	N001	45	-	60	2800		FQ	#	0.13
Manganese	mg/L	07/21/2010	N001	45	-	60	26		FQ	#	0.00057
Molybdenum	mg/L	07/21/2010	N001	45	-	60	0.0036		FQ	#	0.00016
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	45	-	60	480		FQ	#	5
Potassium	mg/L	07/21/2010	N001	45	-	60	30		FQJ	#	0.54
Selenium	mg/L	07/21/2010	N001	45	-	60	0.072		FQ	#	0.00016
Silica	mg/L	07/21/2010	N001	45	-	60	19		FQ	#	0.047
Silicon	mg/L	07/21/2010	N001	45	-	60	8.8		FQ	#	0.022
Sodium	mg/L	07/21/2010	N001	45	-	60	400		FQ	#	0.033
Sulfate	mg/L	07/21/2010	N001	45	-	60	9000		FQ	#	50
Total Dissolved Solids	mg/L	07/21/2010	N001	45	-	60	17000		FQ	#	200
Uranium	mg/L	07/21/2010	N001	45	-	60	0.42		FQ	#	0.000015

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**


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REPORT DATE: 12/22/2010

Location: 0941 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	45	-	65	480	FQ	#	
Ammonia Total as N	mg/L	07/20/2010	N001	45	-	65	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/20/2010	N001	45	-	65	0.0016	FQ	#	0.000074
Calcium	mg/L	07/20/2010	N001	45	-	65	930	FQ	#	0.024
Chloride	mg/L	07/20/2010	N001	45	-	65	170	FQ	#	10
Iron	mg/L	07/20/2010	N001	45	-	65	0.0099	U	FQJ	# 0.0099
Magnesium	mg/L	07/20/2010	N001	45	-	65	130	FQ	#	0.026
Manganese	mg/L	07/20/2010	N001	45	-	65	0.006	B	FQ	# 0.00023
Molybdenum	mg/L	07/20/2010	N001	45	-	65	0.013	FQ	#	0.00016
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	45	-	65	250	FQ	#	2
Oxidation Reduction Potential	mV	07/20/2010	N001	45	-	65	144.8	RFQ	#	
pH	s.u.	07/20/2010	N001	45	-	65	6.55	FQ	#	
Potassium	mg/L	07/20/2010	N001	45	-	65	6.2	FQJ	#	0.22
Selenium	mg/L	07/20/2010	N001	45	-	65	0.099	FQ	#	0.00016
Silica	mg/L	07/20/2010	N001	45	-	65	16	FQ	#	0.019
Silicon	mg/L	07/20/2010	N001	45	-	65	7.7	FQ	#	0.0089
Sodium	mg/L	07/20/2010	N001	45	-	65	150	FQ	#	0.013
Specific Conductance	umhos/cm	07/20/2010	N001	45	-	65	4932	FQ	#	
Sulfate	mg/L	07/20/2010	N001	45	-	65	1300	FQ	#	25
Temperature	C	07/20/2010	N001	45	-	65	17.31	FQ	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	45	-	65	4900	FQ	#	80
Turbidity	NTU	07/20/2010	N001	45	-	65	4.74	FQ	#	
Uranium	mg/L	07/20/2010	N001	45	-	65	0.19	FQ	#	0.000015

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0942 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	54	-	74	605	#		
Ammonia Total as N	mg/L	07/20/2010	N001	54	-	74	100	#	10	
Arsenic	mg/L	07/20/2010	N001	54	-	74	0.002	#	0.000074	
Calcium	mg/L	07/20/2010	N001	54	-	74	650	#	0.024	
Chloride	mg/L	07/20/2010	N001	54	-	74	190	#	10	
Iron	mg/L	07/20/2010	N001	54	-	74	0.0099	U J	#	0.0099
Magnesium	mg/L	07/20/2010	N001	54	-	74	410	#	0.026	
Manganese	mg/L	07/20/2010	N001	54	-	74	2.9	#	0.00023	
Molybdenum	mg/L	07/20/2010	N001	54	-	74	0.011	#	0.00016	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	54	-	74	220	#	2	
Oxidation Reduction Potential	mV	07/20/2010	N001	54	-	74	264.1	#		
pH	s.u.	07/20/2010	N001	54	-	74	6.35	#		
Potassium	mg/L	07/20/2010	N001	54	-	74	31	J	#	0.22
Selenium	mg/L	07/20/2010	N001	54	-	74	0.045	#	0.00016	
Silica	mg/L	07/20/2010	N001	54	-	74	16	#	0.019	
Silicon	mg/L	07/20/2010	N001	54	-	74	7.6	#	0.0089	
Sodium	mg/L	07/20/2010	N001	54	-	74	500	#	0.013	
Specific Conductance	umhos/cm	07/20/2010	N001	54	-	74	7093	#		
Sulfate	mg/L	07/20/2010	N001	54	-	74	2900	#	25	
Temperature	C	07/20/2010	N001	54	-	74	17.35	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	54	-	74	6300	#	80	
Turbidity	NTU	07/20/2010	N001	54	-	74	2.1	#		
Uranium	mg/L	07/20/2010	N001	54	-	74	0.53	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0943 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	101	-	121	72	#		
Ammonia Total as N	mg/L	07/20/2010	N001	101	-	121	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	101	-	121	0.0044	#	0.000015	
Calcium	mg/L	07/20/2010	N001	101	-	121	11	#	0.012	
Chloride	mg/L	07/20/2010	N001	101	-	121	2	#	0.4	
Iron	mg/L	07/20/2010	N001	101	-	121	0.0049	U J	#	0.0049
Magnesium	mg/L	07/20/2010	N001	101	-	121	2.4	#	0.013	
Manganese	mg/L	07/20/2010	N001	101	-	121	0.011	#	0.00011	
Molybdenum	mg/L	07/20/2010	N001	101	-	121	0.00079	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	101	-	121	2.3	#	0.02	
Oxidation Reduction Potential	mV	07/20/2010	N001	101	-	121	42.5	R	#	
pH	s.u.	07/20/2010	N001	101	-	121	7.08	#		
Potassium	mg/L	07/20/2010	N001	101	-	121	0.61	B J	#	0.11
Selenium	mg/L	07/20/2010	N001	101	-	121	0.00035	J	#	0.000032
Silica	mg/L	07/20/2010	N001	101	-	121	15	#	0.0095	
Silicon	mg/L	07/20/2010	N001	101	-	121	6.9	#	0.0044	
Sodium	mg/L	07/20/2010	N001	101	-	121	15	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	101	-	121	163	#		
Sulfate	mg/L	07/20/2010	N001	101	-	121	26	#	1	
Temperature	C	07/20/2010	N001	101	-	121	20.13	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	101	-	121	110	#	20	
Turbidity	NTU	07/20/2010	N001	101	-	121	1.28	#		
Uranium	mg/L	07/20/2010	N001	101	-	121	0.0087	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0945 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	110	-	130	118	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	110	-	130	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	110	-	130	0.0022	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	110	-	130	40	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	110	-	130	33	FQ	#	0.4
Iron	mg/L	07/21/2010	N001	110	-	130	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	110	-	130	8.1	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	110	-	130	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	110	-	130	0.00063	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	110	-	130	4.9	FQ	#	0.05
Oxidation Reduction Potential	mV	07/21/2010	N001	110	-	130	68.1	RFQ	#	
pH	s.u.	07/21/2010	N001	110	-	130	7.59	FQ	#	
Potassium	mg/L	07/21/2010	N001	110	-	130	1	FQJ	#	0.11
Selenium	mg/L	07/21/2010	N001	110	-	130	0.0027	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	110	-	130	12	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	110	-	130	5.5	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	110	-	130	14	FQ	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	110	-	130	354	FQ	#	
Sulfate	mg/L	07/21/2010	N001	110	-	130	26	FQ	#	1
Temperature	C	07/21/2010	N001	110	-	130	18.51	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	110	-	130	210	FQ	#	20
Turbidity	NTU	07/21/2010	N001	110	-	130	8.15	FQ	#	
Uranium	mg/L	07/21/2010	N001	110	-	130	0.0013	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0946 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	40	-	60	62	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	40	-	60	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	40	-	60	0.018	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	40	-	60	14	F	#	0.012
Chloride	mg/L	07/20/2010	N001	40	-	60	4.4	F	#	0.4
Iron	mg/L	07/20/2010	N001	40	-	60	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	40	-	60	2.4	F	#	0.013
Manganese	mg/L	07/20/2010	N001	40	-	60	0.00023	B	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	40	-	60	0.00049	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	40	-	60	2.3	F	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	40	-	60	-100.6	RF	#	
pH	s.u.	07/20/2010	N001	40	-	60	8.41	F	#	
Potassium	mg/L	07/20/2010	N001	40	-	60	0.34	B	FJ	# 0.11
Selenium	mg/L	07/20/2010	N001	40	-	60	0.00063	F	#	0.000032
Silica	mg/L	07/20/2010	N001	40	-	60	12	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	40	-	60	5.7	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	40	-	60	17	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	40	-	60	197	F	#	
Sulfate	mg/L	07/20/2010	N001	40	-	60	25	F	#	1
Temperature	C	07/20/2010	N001	40	-	60	19.96	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	40	-	60	110	F	#	20
Turbidity	NTU	07/20/2010	N001	40	-	60	1.79	F	#	
Uranium	mg/L	07/20/2010	N001	40	-	60	0.00011	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 0947 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	105	-	125	99	FQ	#	
Ammonia Total as N	mg/L	07/21/2010	N001	105	-	125	0.1	U	FQ	# 0.1
Arsenic	mg/L	07/21/2010	N001	105	-	125	0.0029	FQ	#	0.000015
Calcium	mg/L	07/21/2010	N001	105	-	125	33	FQ	#	0.012
Chloride	mg/L	07/21/2010	N001	105	-	125	12	FQ	#	0.4
Iron	mg/L	07/21/2010	N001	105	-	125	0.0049	U	FQJ	# 0.0049
Magnesium	mg/L	07/21/2010	N001	105	-	125	6.6	FQ	#	0.013
Manganese	mg/L	07/21/2010	N001	105	-	125	0.00011	U	FQJ	# 0.00011
Molybdenum	mg/L	07/21/2010	N001	105	-	125	0.00044	FQ	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	105	-	125	3.1	FQ	#	0.02
Oxidation Reduction Potential	mV	07/21/2010	N001	105	-	125	95.3	RFQ	#	
pH	s.u.	07/21/2010	N001	105	-	125	7.63	FQ	#	
Potassium	mg/L	07/21/2010	N001	105	-	125	0.68	B	FQJ	# 0.11
Selenium	mg/L	07/21/2010	N001	105	-	125	0.0018	FQ	#	0.000032
Silica	mg/L	07/21/2010	N001	105	-	125	12	FQ	#	0.0095
Silicon	mg/L	07/21/2010	N001	105	-	125	5.5	FQ	#	0.0044
Sodium	mg/L	07/21/2010	N001	105	-	125	10	FQ	#	0.0066
Specific Conductance	umhos/cm	07/21/2010	N001	105	-	125	277	FQ	#	
Sulfate	mg/L	07/21/2010	N001	105	-	125	17	FQ	#	1
Temperature	C	07/21/2010	N001	105	-	125	18.49	FQ	#	
Total Dissolved Solids	mg/L	07/21/2010	N001	105	-	125	170	FQ	#	20
Turbidity	NTU	07/21/2010	N001	105	-	125	3.02	FQ	#	
Uranium	mg/L	07/21/2010	N001	105	-	125	0.0012	FQ	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1003 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	55.5	-	105.5	197	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	55.5	-	105.5	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	55.5	-	105.5	0.0013	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	55.5	-	105.5	320	F	#	0.012
Chloride	mg/L	07/20/2010	N001	55.5	-	105.5	53	F	#	4
Iron	mg/L	07/20/2010	N001	55.5	-	105.5	0.0049	U	FJ	# 0.0049
Magnesium	mg/L	07/20/2010	N001	55.5	-	105.5	45	F	#	0.013
Manganese	mg/L	07/20/2010	N001	55.5	-	105.5	0.00011	U	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	55.5	-	105.5	0.00017	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	55.5	-	105.5	61	F	#	0.5
Oxidation Reduction Potential	mV	07/20/2010	N001	55.5	-	105.5	173	F	#	
pH	s.u.	07/20/2010	N001	55.5	-	105.5	7.2	F	#	
Potassium	mg/L	07/20/2010	N001	55.5	-	105.5	3.8	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	55.5	-	105.5	0.0036	F	#	0.000032
Silica	mg/L	07/20/2010	N001	55.5	-	105.5	14	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	55.5	-	105.5	6.4	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	55.5	-	105.5	35	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	55.5	-	105.5	1810	F	#	
Sulfate	mg/L	07/20/2010	N001	55.5	-	105.5	480	F	#	10
Temperature	C	07/20/2010	N001	55.5	-	105.5	20.4	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	55.5	-	105.5	1600	F	#	40
Turbidity	NTU	07/20/2010	N001	55.5	-	105.5	2.73	F	#	
Uranium	mg/L	07/20/2010	N001	55.5	-	105.5	0.038	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1004 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	45.5	-	95.5	121	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	45.5	-	95.5	0.1	U	F	# 0.1
Arsenic	mg/L	07/20/2010	N001	45.5	-	95.5	0.0029	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	45.5	-	95.5	59	F	#	0.012
Chloride	mg/L	07/20/2010	N001	45.5	-	95.5	15	F	#	0.4
Iron	mg/L	07/20/2010	N001	45.5	-	95.5	0.11	F	#	0.0049
Magnesium	mg/L	07/20/2010	N001	45.5	-	95.5	10	F	#	0.013
Manganese	mg/L	07/20/2010	N001	45.5	-	95.5	0.00026	B	FJ	# 0.00011
Molybdenum	mg/L	07/20/2010	N001	45.5	-	95.5	0.00038	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	45.5	-	95.5	8.7	F	#	0.05
Oxidation Reduction Potential	mV	07/20/2010	N001	45.5	-	95.5	145.6	F	#	
pH	s.u.	07/20/2010	N001	45.5	-	95.5	7.58	F	#	
Potassium	mg/L	07/20/2010	N001	45.5	-	95.5	0.9	B	FJ	# 0.11
Selenium	mg/L	07/20/2010	N001	45.5	-	95.5	0.0017	F	#	0.000032
Silica	mg/L	07/20/2010	N001	45.5	-	95.5	12	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	45.5	-	95.5	5.7	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	45.5	-	95.5	14	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	45.5	-	95.5	463	F	#	
Sulfate	mg/L	07/20/2010	N001	45.5	-	95.5	56	F	#	1
Temperature	C	07/20/2010	N001	45.5	-	95.5	21.93	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	45.5	-	95.5	300	F	#	20
Turbidity	NTU	07/20/2010	N001	45.5	-	95.5	2.22	F	#	
Uranium	mg/L	07/20/2010	N001	45.5	-	95.5	0.0064	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1006 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	45.74	-	95.74	80	F	#	
Ammonia Total as N	mg/L	07/20/2010	N001	45.74	-	95.74	0.1	U	F	#
Arsenic	mg/L	07/20/2010	N001	45.74	-	95.74	0.0019	F	#	0.000015
Calcium	mg/L	07/20/2010	N001	45.74	-	95.74	25	F	#	0.012
Chloride	mg/L	07/20/2010	N001	45.74	-	95.74	9.1	F	#	0.4
Iron	mg/L	07/20/2010	N001	45.74	-	95.74	0.0077	B	FJ	#
Magnesium	mg/L	07/20/2010	N001	45.74	-	95.74	7	F	#	0.013
Manganese	mg/L	07/20/2010	N001	45.74	-	95.74	0.00069	B	F	#
Molybdenum	mg/L	07/20/2010	N001	45.74	-	95.74	0.00036	F	#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	45.74	-	95.74	3.1	F	#	0.02
Oxidation Reduction Potential	mV	07/20/2010	N001	45.74	-	95.74	113.4	F	#	
pH	s.u.	07/20/2010	N001	45.74	-	95.74	8.04	F	#	
Potassium	mg/L	07/20/2010	N001	45.74	-	95.74	1.5	FJ	#	0.11
Selenium	mg/L	07/20/2010	N001	45.74	-	95.74	0.0012	F	#	0.000032
Silica	mg/L	07/20/2010	N001	45.74	-	95.74	12	F	#	0.0095
Silicon	mg/L	07/20/2010	N001	45.74	-	95.74	5.8	F	#	0.0044
Sodium	mg/L	07/20/2010	N001	45.74	-	95.74	8.6	F	#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	45.74	-	95.74	246	F	#	
Sulfate	mg/L	07/20/2010	N001	45.74	-	95.74	13	F	#	1
Temperature	C	07/20/2010	N001	45.74	-	95.74	19.45	F	#	
Total Dissolved Solids	mg/L	07/20/2010	N001	45.74	-	95.74	140	F	#	20
Turbidity	NTU	07/20/2010	N001	45.74	-	95.74	0.65	F	#	
Uranium	mg/L	07/20/2010	N001	45.74	-	95.74	0.0013	F	#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1007 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	45.79	- 95.99	95	F	#		
Ammonia Total as N	mg/L	07/20/2010	N001	45.79	- 95.99	0.1	U	F	#	0.1
Arsenic	mg/L	07/20/2010	N001	45.79	- 95.99	0.0023	F	#	0.000015	
Calcium	mg/L	07/20/2010	N001	45.79	- 95.99	30	F	#	0.012	
Chloride	mg/L	07/20/2010	N001	45.79	- 95.99	8.8	F	#	0.4	
Iron	mg/L	07/20/2010	N001	45.79	- 95.99	0.2	F	#	0.0049	
Magnesium	mg/L	07/20/2010	N001	45.79	- 95.99	7	F	#	0.013	
Manganese	mg/L	07/20/2010	N001	45.79	- 95.99	0.00072	B	F	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	45.79	- 95.99	0.00028	F	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	45.79	- 95.99	3.1	F	#	0.02	
Oxidation Reduction Potential	mV	07/20/2010	N001	45.79	- 95.99	86.7	F	#		
pH	s.u.	07/20/2010	N001	45.79	- 95.99	8.3	F	#		
Potassium	mg/L	07/20/2010	N001	45.79	- 95.99	1.1	FJ	#	0.11	
Selenium	mg/L	07/20/2010	N001	45.79	- 95.99	0.0013	F	#	0.000032	
Silica	mg/L	07/20/2010	N001	45.79	- 95.99	12	F	#	0.0095	
Silicon	mg/L	07/20/2010	N001	45.79	- 95.99	5.8	F	#	0.0044	
Sodium	mg/L	07/20/2010	N001	45.79	- 95.99	6.9	F	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	45.79	- 95.99	262	F	#		
Sulfate	mg/L	07/20/2010	N001	45.79	- 95.99	13	F	#	1	
Temperature	C	07/20/2010	N001	45.79	- 95.99	19.99	F	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	45.79	- 95.99	160	F	#	20	
Turbidity	NTU	07/20/2010	N001	45.79	- 95.99	3.89	F	#		
Uranium	mg/L	07/20/2010	N001	45.79	- 95.99	0.0014	F	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**


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REPORT DATE: 12/22/2010

Location: 1101 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	96.15	-	251.5	2.98	#		
Ammonia Total as N	mg/L	07/19/2010	N001	96.15	-	251.5	1.1	#	0.1	
Arsenic	mg/L	07/19/2010	N001	96.15	-	251.5	0.0016	#	0.000074	
Calcium	mg/L	07/19/2010	N001	96.15	-	251.5	400	#	0.012	
Chloride	mg/L	07/19/2010	N001	96.15	-	251.5	110	#	4	
Iron	mg/L	07/19/2010	N001	96.15	-	251.5	0.033	B	#	0.0049
Magnesium	mg/L	07/19/2010	N001	96.15	-	251.5	94	#	0.013	
Manganese	mg/L	07/19/2010	N001	96.15	-	251.5	0.31	#	0.00011	
Molybdenum	mg/L	07/19/2010	N001	96.15	-	251.5	0.00048	B	#	0.00016
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	96.15	-	251.5	69	#	0.5	
Oxidation Reduction Potential	mV	07/19/2010	N001	96.15	-	251.5	59.9	R	#	
pH	s.u.	07/19/2010	N001	96.15	-	251.5	6.56	#		
Potassium	mg/L	07/19/2010	N001	96.15	-	251.5	7.6	J	#	0.11
Selenium	mg/L	07/19/2010	N001	96.15	-	251.5	0.02	#	0.00016	
Silica	mg/L	07/19/2010	N001	96.15	-	251.5	14	#	0.0095	
Silicon	mg/L	07/19/2010	N001	96.15	-	251.5	6.8	#	0.0044	
Sodium	mg/L	07/19/2010	N001	96.15	-	251.5	220	#	0.0066	
Specific Conductance	umhos/cm	07/19/2010	N001	96.15	-	251.5	2783	#		
Sulfate	mg/L	07/19/2010	N001	96.15	-	251.5	1200	#	10	
Temperature	C	07/19/2010	N001	96.15	-	251.5	17.76	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	96.15	-	251.5	2600	#	40	
Turbidity	NTU	07/19/2010	N001	96.15	-	251.5	1.11	#		
Uranium	mg/L	07/19/2010	N001	96.15	-	251.5	0.24	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1102 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	101.5	-	251.5	339	#		
Ammonia Total as N	mg/L	07/19/2010	N001	101.5	-	251.5	0.5	#	0.1	
Arsenic	mg/L	07/19/2010	N001	101.5	-	251.5	0.0017	#	0.000074	
Calcium	mg/L	07/19/2010	N001	101.5	-	251.5	500	#	0.024	
Chloride	mg/L	07/19/2010	N001	101.5	-	251.5	93	#	4	
Iron	mg/L	07/19/2010	N001	101.5	-	251.5	0.0099	U J	#	0.0099
Magnesium	mg/L	07/19/2010	N001	101.5	-	251.5	130	#	0.026	
Manganese	mg/L	07/19/2010	N001	101.5	-	251.5	0.61	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	101.5	-	251.5	0.00016	U	#	0.00016
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	101.5	-	251.5	110	#	1	
Oxidation Reduction Potential	mV	07/19/2010	N001	101.5	-	251.5	58.4	R	#	
pH	s.u.	07/19/2010	N001	101.5	-	251.5	6.49	#		
Potassium	mg/L	07/19/2010	N001	101.5	-	251.5	6.6	J	#	0.22
Selenium	mg/L	07/19/2010	N001	101.5	-	251.5	0.022	#	0.00016	
Silica	mg/L	07/19/2010	N001	101.5	-	251.5	15	#	0.019	
Silicon	mg/L	07/19/2010	N001	101.5	-	251.5	6.8	#	0.0089	
Sodium	mg/L	07/19/2010	N001	101.5	-	251.5	190	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	101.5	-	251.5	3284	#		
Sulfate	mg/L	07/19/2010	N001	101.5	-	251.5	1300	#	10	
Temperature	C	07/19/2010	N001	101.5	-	251.5	17.39	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	101.5	-	251.5	3100	#	80	
Turbidity	NTU	07/19/2010	N001	101.5	-	251.5	2	#		
Uranium	mg/L	07/19/2010	N001	101.5	-	251.5	0.39	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1103 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	100	-	250	452	#		
Ammonia Total as N	mg/L	07/20/2010	N001	100	-	250	20	#	0.5	
Arsenic	mg/L	07/20/2010	N001	100	-	250	0.0052	#	0.000074	
Calcium	mg/L	07/20/2010	N001	100	-	250	650	#	0.024	
Chloride	mg/L	07/20/2010	N001	100	-	250	140	#	10	
Iron	mg/L	07/20/2010	N001	100	-	250	5.5	#	0.0099	
Magnesium	mg/L	07/20/2010	N001	100	-	250	280	#	0.026	
Manganese	mg/L	07/20/2010	N001	100	-	250	4.9	#	0.00023	
Molybdenum	mg/L	07/20/2010	N001	100	-	250	0.0039	#	0.00016	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	100	-	250	240	#	2	
Oxidation Reduction Potential	mV	07/20/2010	N001	100	-	250	135.7	R	#	
pH	s.u.	07/20/2010	N001	100	-	250	6.32	#		
Potassium	mg/L	07/20/2010	N001	100	-	250	18	J	#	0.22
Selenium	mg/L	07/20/2010	N001	100	-	250	0.036	#	0.00016	
Silica	mg/L	07/20/2010	N001	100	-	250	17	#	0.019	
Silicon	mg/L	07/20/2010	N001	100	-	250	8	#	0.0089	
Sodium	mg/L	07/20/2010	N001	100	-	250	370	#	0.013	
Specific Conductance	umhos/cm	07/20/2010	N001	100	-	250	5469	#		
Sulfate	mg/L	07/20/2010	N001	100	-	250	2200	#	25	
Temperature	C	07/20/2010	N001	100	-	250	18.27	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	100	-	250	5200	#	80	
Turbidity	NTU	07/20/2010	N001	100	-	250	1.83	#		
Uranium	mg/L	07/20/2010	N001	100	-	250	0.47	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1104 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	90	-	245	388	#		
Ammonia Total as N	mg/L	07/19/2010	N001	90	-	245	19	#	0.5	
Arsenic	mg/L	07/19/2010	N001	90	-	245	0.0022	#	0.00015	
Calcium	mg/L	07/19/2010	N001	90	-	245	400	#	0.024	
Chloride	mg/L	07/19/2010	N001	90	-	245	78	#	4	
Iron	mg/L	07/19/2010	N001	90	-	245	0.033	B J	#	0.0099
Magnesium	mg/L	07/19/2010	N001	90	-	245	130	#	0.026	
Manganese	mg/L	07/19/2010	N001	90	-	245	0.55	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	90	-	245	0.042	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	90	-	245	110	#	1	
Oxidation Reduction Potential	mV	07/19/2010	N001	90	-	245	158.5	#		
pH	s.u.	07/19/2010	N001	90	-	245	6.45	#		
Potassium	mg/L	07/19/2010	N001	90	-	245	8.8	J	#	0.22
Selenium	mg/L	07/19/2010	N001	90	-	245	0.028	#	0.00032	
Silica	mg/L	07/19/2010	N001	90	-	245	15	#	0.019	
Silicon	mg/L	07/19/2010	N001	90	-	245	6.9	#	0.0089	
Sodium	mg/L	07/19/2010	N001	90	-	245	200	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	90	-	245	3483	#		
Sulfate	mg/L	07/19/2010	N001	90	-	245	1200	#	10	
Temperature	C	07/19/2010	N001	90	-	245	17.35	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	90	-	245	2800	#	80	
Turbidity	NTU	07/19/2010	N001	90	-	245	1.3	#		
Uranium	mg/L	07/19/2010	N001	90	-	245	0.65	#	0.000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1105 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	90	-	245	591	#		
Ammonia Total as N	mg/L	07/19/2010	N001	90	-	245	19	#	0.5	
Arsenic	mg/L	07/19/2010	N001	90	-	245	0.67	#	0.0003	
Calcium	mg/L	07/19/2010	N001	90	-	245	730	#	0.024	
Chloride	mg/L	07/19/2010	N001	90	-	245	140	#	10	
Iron	mg/L	07/19/2010	N001	90	-	245	0.0099	U J	#	0.0099
Magnesium	mg/L	07/19/2010	N001	90	-	245	220	#	0.026	
Manganese	mg/L	07/19/2010	N001	90	-	245	0.21	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	90	-	245	0.89	#	0.00064	
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	90	-	245	200	#	2	
Oxidation Reduction Potential	mV	07/19/2010	N001	90	-	245	164.1	#		
pH	s.u.	07/19/2010	N001	90	-	245	6.41	#		
Potassium	mg/L	07/19/2010	N001	90	-	245	13	J	#	0.22
Selenium	mg/L	07/19/2010	N001	90	-	245	0.066	#	0.00065	
Silica	mg/L	07/19/2010	N001	90	-	245	16	#	0.019	
Silicon	mg/L	07/19/2010	N001	90	-	245	7.4	#	0.0089	
Sodium	mg/L	07/19/2010	N001	90	-	245	420	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	90	-	245	5667	#		
Sulfate	mg/L	07/19/2010	N001	90	-	245	2100	#	25	
Temperature	C	07/19/2010	N001	90	-	245	17.67	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	90	-	245	5200	#	80	
Turbidity	NTU	07/19/2010	N001	90	-	245	1.89	#		
Uranium	mg/L	07/19/2010	N001	90	-	245	2	#	0.000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1106 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	96.5	-	251.1	252	#		
Ammonia Total as N	mg/L	07/19/2010	N001	96.5	-	251.1	16	#	0.5	
Arsenic	mg/L	07/19/2010	N001	96.5	-	251.1	0.18	#	0.00015	
Calcium	mg/L	07/19/2010	N001	96.5	-	251.1	250	#	0.012	
Chloride	mg/L	07/19/2010	N001	96.5	-	251.1	51	#	4	
Iron	mg/L	07/19/2010	N001	96.5	-	251.1	0.019	B J	#	0.0049
Magnesium	mg/L	07/19/2010	N001	96.5	-	251.1	57	#	0.013	
Manganese	mg/L	07/19/2010	N001	96.5	-	251.1	0.024	#	0.00011	
Molybdenum	mg/L	07/19/2010	N001	96.5	-	251.1	0.088	#	0.00032	
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	96.5	-	251.1	70	#	0.5	
Oxidation Reduction Potential	mV	07/19/2010	N001	96.5	-	251.1	145.2	#		
pH	s.u.	07/19/2010	N001	96.5	-	251.1	6.71	#		
Potassium	mg/L	07/19/2010	N001	96.5	-	251.1	7.5	E J	#	0.11
Selenium	mg/L	07/19/2010	N001	96.5	-	251.1	0.025	#	0.00032	
Silica	mg/L	07/19/2010	N001	96.5	-	251.1	13	#	0.0095	
Silicon	mg/L	07/19/2010	N001	96.5	-	251.1	6.3	#	0.0044	
Sodium	mg/L	07/19/2010	N001	96.5	-	251.1	140	#	0.0066	
Specific Conductance	umhos/cm	07/19/2010	N001	96.5	-	251.1	2255	#		
Sulfate	mg/L	07/19/2010	N001	96.5	-	251.1	610	#	10	
Temperature	C	07/19/2010	N001	96.5	-	251.1	17.93	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	96.5	-	251.1	1700	#	40	
Turbidity	NTU	07/19/2010	N001	96.5	-	251.1	0.87	#		
Uranium	mg/L	07/19/2010	N001	96.5	-	251.1	0.65	#	0.000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1107 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	91.1	-	245.5	598	#		
Ammonia Total as N	mg/L	07/19/2010	N001	91.1	-	245.5	0.59	#	0.1	
Arsenic	mg/L	07/19/2010	N001	91.1	-	245.5	0.0027	#	0.000074	
Calcium	mg/L	07/19/2010	N001	91.1	-	245.5	840	#	0.024	
Chloride	mg/L	07/19/2010	N001	91.1	-	245.5	150	#	10	
Iron	mg/L	07/19/2010	N001	91.1	-	245.5	0.068	B	#	0.0099
Magnesium	mg/L	07/19/2010	N001	91.1	-	245.5	150	#	0.026	
Manganese	mg/L	07/19/2010	N001	91.1	-	245.5	0.13	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	91.1	-	245.5	0.065	#	0.00016	
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	91.1	-	245.5	230	#	2	
Oxidation Reduction Potential	mV	07/19/2010	N001	91.1	-	245.5	145.6	#		
pH	s.u.	07/19/2010	N001	91.1	-	245.5	6.4	#		
Potassium	mg/L	07/19/2010	N001	91.1	-	245.5	9.3	J	#	0.22
Selenium	mg/L	07/19/2010	N001	91.1	-	245.5	0.068	#	0.00016	
Silica	mg/L	07/19/2010	N001	91.1	-	245.5	16	#	0.019	
Silicon	mg/L	07/19/2010	N001	91.1	-	245.5	7.6	#	0.0089	
Sodium	mg/L	07/19/2010	N001	91.1	-	245.5	310	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	91.1	-	245.5	5167	#		
Sulfate	mg/L	07/19/2010	N001	91.1	-	245.5	1600	#	25	
Temperature	C	07/19/2010	N001	91.1	-	245.5	17.81	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	91.1	-	245.5	4700	#	80	
Turbidity	NTU	07/19/2010	N001	91.1	-	245.5	1.88	#		
Uranium	mg/L	07/19/2010	N001	91.1	-	245.5	0.23	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1108 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	96.3	-	246.3	545	#		
Ammonia Total as N	mg/L	07/19/2010	N001	96.3	-	246.3	46	#	2	
Arsenic	mg/L	07/19/2010	N001	96.3	-	246.3	0.0011	#	0.000074	
Calcium	mg/L	07/19/2010	N001	96.3	-	246.3	620	#	0.024	
Chloride	mg/L	07/19/2010	N001	96.3	-	246.3	99	#	10	
Iron	mg/L	07/19/2010	N001	96.3	-	246.3	0.0099	U J	#	0.0099
Magnesium	mg/L	07/19/2010	N001	96.3	-	246.3	210	#	0.026	
Manganese	mg/L	07/19/2010	N001	96.3	-	246.3	3.8	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	96.3	-	246.3	0.00096	#	0.00016	
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	96.3	-	246.3	150	#	1	
Oxidation Reduction Potential	mV	07/19/2010	N001	96.3	-	246.3	171.4	#		
pH	s.u.	07/19/2010	N001	96.3	-	246.3	6.46	#		
Potassium	mg/L	07/19/2010	N001	96.3	-	246.3	15	J	#	0.22
Selenium	mg/L	07/19/2010	N001	96.3	-	246.3	0.038	#	0.00016	
Silica	mg/L	07/19/2010	N001	96.3	-	246.3	16	#	0.019	
Silicon	mg/L	07/19/2010	N001	96.3	-	246.3	7.3	#	0.0089	
Sodium	mg/L	07/19/2010	N001	96.3	-	246.3	260	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	96.3	-	246.3	4847	#		
Sulfate	mg/L	07/19/2010	N001	96.3	-	246.3	1900	#	25	
Temperature	C	07/19/2010	N001	96.3	-	246.3	17.58	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	96.3	-	246.3	4200	#	80	
Turbidity	NTU	07/19/2010	N001	96.3	-	246.3	1.73	#		
Uranium	mg/L	07/19/2010	N001	96.3	-	246.3	0.57	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1109 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	90.34	-	245.1	344	#		
Ammonia Total as N	mg/L	07/19/2010	N001	90.34	-	245.1	17	#	0.5	
Arsenic	mg/L	07/19/2010	N001	90.34	-	245.1	0.0015	#	0.00003	
Calcium	mg/L	07/19/2010	N001	90.34	-	245.1	370	#	0.024	
Chloride	mg/L	07/19/2010	N001	90.34	-	245.1	61	#	10	
Iron	mg/L	07/19/2010	N001	90.34	-	245.1	0.0099	U J	#	0.0099
Magnesium	mg/L	07/19/2010	N001	90.34	-	245.1	270	#	0.026	
Manganese	mg/L	07/19/2010	N001	90.34	-	245.1	5.5	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	90.34	-	245.1	0.00084	#	0.000064	
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	90.34	-	245.1	100	#	1	
Oxidation Reduction Potential	mV	07/19/2010	N001	90.34	-	245.1	147.6	#		
pH	s.u.	07/19/2010	N001	90.34	-	245.1	6.35	#		
Potassium	mg/L	07/19/2010	N001	90.34	-	245.1	9	J	#	0.22
Selenium	mg/L	07/19/2010	N001	90.34	-	245.1	0.018	#	0.000065	
Silica	mg/L	07/19/2010	N001	90.34	-	245.1	14	#	0.019	
Silicon	mg/L	07/19/2010	N001	90.34	-	245.1	6.6	#	0.0089	
Sodium	mg/L	07/19/2010	N001	90.34	-	245.1	130	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	90.34	-	245.1	3665	#		
Sulfate	mg/L	07/19/2010	N001	90.34	-	245.1	1500	#	25	
Temperature	C	07/19/2010	N001	90.34	-	245.1	19.1	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	90.34	-	245.1	3300	#	80	
Turbidity	NTU	07/19/2010	N001	90.34	-	245.1	1.36	#		
Uranium	mg/L	07/19/2010	N001	90.34	-	245.1	0.35	#	0.0000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1110 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	95.5	-	245.5	227	#		
Ammonia Total as N	mg/L	07/19/2010	N001	95.5	-	245.5	1.7	#	0.1	
Arsenic	mg/L	07/19/2010	N001	95.5	-	245.5	0.0018	#	0.000015	
Calcium	mg/L	07/19/2010	N001	95.5	-	245.5	210	#	0.012	
Chloride	mg/L	07/19/2010	N001	95.5	-	245.5	31	#	4	
Iron	mg/L	07/19/2010	N001	95.5	-	245.5	0.022	B J	#	0.0049
Magnesium	mg/L	07/19/2010	N001	95.5	-	245.5	65	#	0.013	
Manganese	mg/L	07/19/2010	N001	95.5	-	245.5	0.37	#	0.00011	
Molybdenum	mg/L	07/19/2010	N001	95.5	-	245.5	0.0002	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	95.5	-	245.5	47	#	0.5	
Oxidation Reduction Potential	mV	07/19/2010	N001	95.5	-	245.5	111.8	#		
pH	s.u.	07/19/2010	N001	95.5	-	245.5	6.58	#		
Potassium	mg/L	07/19/2010	N001	95.5	-	245.5	3.9	J	#	0.11
Selenium	mg/L	07/19/2010	N001	95.5	-	245.5	0.0073	#	0.000032	
Silica	mg/L	07/19/2010	N001	95.5	-	245.5	13	#	0.0095	
Silicon	mg/L	07/19/2010	N001	95.5	-	245.5	5.9	#	0.0044	
Sodium	mg/L	07/19/2010	N001	95.5	-	245.5	56	#	0.0066	
Specific Conductance	umhos/cm	07/19/2010	N001	95.5	-	245.5	1677	#		
Sulfate	mg/L	07/19/2010	N001	95.5	-	245.5	510	#	10	
Temperature	C	07/19/2010	N001	95.5	-	245.5	17.91	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	95.5	-	245.5	1300	#	40	
Turbidity	NTU	07/19/2010	N001	95.5	-	245.5	0.87	#		
Uranium	mg/L	07/19/2010	N001	95.5	-	245.5	0.087	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1111 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	90.68	-	245.1	401	#		
Ammonia Total as N	mg/L	07/19/2010	N001	90.68	-	245.1	21	#	0.5	
Arsenic	mg/L	07/19/2010	N001	90.68	-	245.1	0.0011	#	0.00003	
Calcium	mg/L	07/19/2010	N001	90.68	-	245.1	700	#	0.024	
Chloride	mg/L	07/19/2010	N001	90.68	-	245.1	90	#	10	
Iron	mg/L	07/19/2010	N001	90.68	-	245.1	0.0099	U J #	0.0099	
Magnesium	mg/L	07/19/2010	N001	90.68	-	245.1	210	#	0.026	
Manganese	mg/L	07/19/2010	N001	90.68	-	245.1	1.3	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	90.68	-	245.1	0.000064	U	#	0.000064
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	90.68	-	245.1	160	#	1	
Oxidation Reduction Potential	mV	07/19/2010	N001	90.68	-	245.1	140	#		
pH	s.u.	07/19/2010	N001	90.68	-	245.1	6.38	#		
Potassium	mg/L	07/19/2010	N001	90.68	-	245.1	15	J #	0.22	
Selenium	mg/L	07/19/2010	N001	90.68	-	245.1	0.016	#	0.000065	
Silica	mg/L	07/19/2010	N001	90.68	-	245.1	17	#	0.019	
Silicon	mg/L	07/19/2010	N001	90.68	-	245.1	8.1	#	0.0089	
Sodium	mg/L	07/19/2010	N001	90.68	-	245.1	230	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	90.68	-	245.1	4790	#		
Sulfate	mg/L	07/19/2010	N001	90.68	-	245.1	1900	#	25	
Temperature	C	07/19/2010	N001	90.68	-	245.1	17.2	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	90.68	-	245.1	4300	#	80	
Turbidity	NTU	07/19/2010	N001	90.68	-	245.1	1.18	#		
Uranium	mg/L	07/19/2010	N001	90.68	-	245.1	0.26	#	0.0000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1112 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	90.5	-	245.5	157		#	
Ammonia Total as N	mg/L	07/20/2010	N001	90.5	-	245.5	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	90.5	-	245.5	0.0017		#	0.000015
Calcium	mg/L	07/20/2010	N001	90.5	-	245.5	150		#	0.012
Chloride	mg/L	07/20/2010	N001	90.5	-	245.5	22		#	2
Iron	mg/L	07/20/2010	N001	90.5	-	245.5	0.0049	U J	#	0.0049
Magnesium	mg/L	07/20/2010	N001	90.5	-	245.5	37		#	0.013
Manganese	mg/L	07/20/2010	N001	90.5	-	245.5	0.0005	B J	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	90.5	-	245.5	0.00023		#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	90.5	-	245.5	39		#	0.2
Oxidation Reduction Potential	mV	07/20/2010	N001	90.5	-	245.5	124.4	R	#	
pH	s.u.	07/20/2010	N001	90.5	-	245.5	7.26		#	
Potassium	mg/L	07/20/2010	N001	90.5	-	245.5	2.1	J	#	0.11
Selenium	mg/L	07/20/2010	N001	90.5	-	245.5	0.0047		#	0.000032
Silica	mg/L	07/20/2010	N001	90.5	-	245.5	12		#	0.0095
Silicon	mg/L	07/20/2010	N001	90.5	-	245.5	5.7		#	0.0044
Sodium	mg/L	07/20/2010	N001	90.5	-	245.5	23		#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	90.5	-	245.5	1117		#	
Sulfate	mg/L	07/20/2010	N001	90.5	-	245.5	240		#	5
Temperature	C	07/20/2010	N001	90.5	-	245.5	19.29		#	
Total Dissolved Solids	mg/L	07/20/2010	N001	90.5	-	245.5	790		#	20
Turbidity	NTU	07/20/2010	N001	90.5	-	245.5	4.59		#	
Uranium	mg/L	07/20/2010	N001	90.5	-	245.5	0.05		#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1113 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	90.5	-	245.5	137		#	
Ammonia Total as N	mg/L	07/20/2010	N001	90.5	-	245.5	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	90.5	-	245.5	0.0016		#	0.000015
Calcium	mg/L	07/20/2010	N001	90.5	-	245.5	99		#	0.012
Chloride	mg/L	07/20/2010	N001	90.5	-	245.5	18		#	1
Iron	mg/L	07/20/2010	N001	90.5	-	245.5	0.0049	U J	#	0.0049
Magnesium	mg/L	07/20/2010	N001	90.5	-	245.5	20		#	0.013
Manganese	mg/L	07/20/2010	N001	90.5	-	245.5	0.00011	U J	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	90.5	-	245.5	0.00016		#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	90.5	-	245.5	26		#	0.2
Oxidation Reduction Potential	mV	07/20/2010	N001	90.5	-	245.5	142.1	R	#	
pH	s.u.	07/20/2010	N001	90.5	-	245.5	7.58		#	
Potassium	mg/L	07/20/2010	N001	90.5	-	245.5	2	J	#	0.11
Selenium	mg/L	07/20/2010	N001	90.5	-	245.5	0.0027		#	0.000032
Silica	mg/L	07/20/2010	N001	90.5	-	245.5	11		#	0.0095
Silicon	mg/L	07/20/2010	N001	90.5	-	245.5	5.4		#	0.0044
Sodium	mg/L	07/20/2010	N001	90.5	-	245.5	12		#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	90.5	-	245.5	777		#	
Sulfate	mg/L	07/20/2010	N001	90.5	-	245.5	110		#	2.5
Temperature	C	07/20/2010	N001	90.5	-	245.5	19.53		#	
Total Dissolved Solids	mg/L	07/20/2010	N001	90.5	-	245.5	520		#	20
Turbidity	NTU	07/20/2010	N001	90.5	-	245.5	2.13		#	
Uranium	mg/L	07/20/2010	N001	90.5	-	245.5	0.015		#	0.0000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1114 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	90.59	-	245.5	345	#		
Ammonia Total as N	mg/L	07/20/2010	N001	90.59	-	245.5	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	90.59	-	245.5	0.0015	#	0.000015	
Calcium	mg/L	07/20/2010	N001	90.59	-	245.5	410	#	0.012	
Chloride	mg/L	07/20/2010	N001	90.59	-	245.5	41	#	4	
Iron	mg/L	07/20/2010	N001	90.59	-	245.5	0.061	B	#	0.0049
Magnesium	mg/L	07/20/2010	N001	90.59	-	245.5	74	#	0.013	
Manganese	mg/L	07/20/2010	N001	90.59	-	245.5	0.0025	B	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	90.59	-	245.5	0.0071	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	90.59	-	245.5	78	#	0.5	
Oxidation Reduction Potential	mV	07/20/2010	N001	90.59	-	245.5	145.3	R	#	
pH	s.u.	07/20/2010	N001	90.59	-	245.5	6.81	#		
Potassium	mg/L	07/20/2010	N001	90.59	-	245.5	5	J	#	0.11
Selenium	mg/L	07/20/2010	N001	90.59	-	245.5	0.011	#	0.000032	
Silica	mg/L	07/20/2010	N001	90.59	-	245.5	15	#	0.0095	
Silicon	mg/L	07/20/2010	N001	90.59	-	245.5	6.9	#	0.0044	
Sodium	mg/L	07/20/2010	N001	90.59	-	245.5	67	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	90.59	-	245.5	2369	#		
Sulfate	mg/L	07/20/2010	N001	90.59	-	245.5	740	#	10	
Temperature	C	07/20/2010	N001	90.59	-	245.5	19.54	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	90.59	-	245.5	2000	#	40	
Turbidity	NTU	07/20/2010	N001	90.59	-	245.5	3.4	#		
Uranium	mg/L	07/20/2010	N001	90.59	-	245.5	0.082	#	0.0000029	

**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1115 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)			Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	90.52	-	245.5	346			#		
Ammonia Total as N	mg/L	07/20/2010	N001	90.52	-	245.5	0.1	U		#	0.1	
Arsenic	mg/L	07/20/2010	N001	90.52	-	245.5	0.0016			#	0.000015	
Calcium	mg/L	07/20/2010	N001	90.52	-	245.5	420			#	0.012	
Chloride	mg/L	07/20/2010	N001	90.52	-	245.5	43			#	4	
Iron	mg/L	07/20/2010	N001	90.52	-	245.5	0.032	B		#	0.0049	
Magnesium	mg/L	07/20/2010	N001	90.52	-	245.5	94			#	0.013	
Manganese	mg/L	07/20/2010	N001	90.52	-	245.5	0.099			#	0.00011	
Molybdenum	mg/L	07/20/2010	N001	90.52	-	245.5	0.00016			#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	90.52	-	245.5	80			#	0.5	
Oxidation Reduction Potential	mV	07/20/2010	N001	90.52	-	245.5	136.5	R		#		
pH	s.u.	07/20/2010	N001	90.52	-	245.5	6.66			#		
Potassium	mg/L	07/20/2010	N001	90.52	-	245.5	5.6	J		#	0.11	
Selenium	mg/L	07/20/2010	N001	90.52	-	245.5	0.014			#	0.000032	
Silica	mg/L	07/20/2010	N001	90.52	-	245.5	14			#	0.0095	
Silicon	mg/L	07/20/2010	N001	90.52	-	245.5	6.5			#	0.0044	
Sodium	mg/L	07/20/2010	N001	90.52	-	245.5	94			#	0.0066	
Specific Conductance	umhos /cm	07/20/2010	N001	90.52	-	245.5	2611			#		
Sulfate	mg/L	07/20/2010	N001	90.52	-	245.5	880			#	10	
Temperature	C	07/20/2010	N001	90.52	-	245.5	20.04			#		
Total Dissolved Solids	mg/L	07/20/2010	N001	90.52	-	245.5	2200			#	40	
Turbidity	NTU	07/20/2010	N001	90.52	-	245.5	1.35			#		
Uranium	mg/L	07/20/2010	N001	90.52	-	245.5	0.098			#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1116 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	92.37	-	195.5	232	#		
Ammonia Total as N	mg/L	07/20/2010	N001	92.37	-	195.5	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	92.37	-	195.5	0.0015	#	0.000015	
Calcium	mg/L	07/20/2010	N001	92.37	-	195.5	200	#	0.012	
Chloride	mg/L	07/20/2010	N001	92.37	-	195.5	33	#	2	
Iron	mg/L	07/20/2010	N001	92.37	-	195.5	0.0049	U J	#	0.0049
Magnesium	mg/L	07/20/2010	N001	92.37	-	195.5	46	#	0.013	
Manganese	mg/L	07/20/2010	N001	92.37	-	195.5	0.00011	U J	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	92.37	-	195.5	0.00012	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	92.37	-	195.5	52	#	0.5	
Oxidation Reduction Potential	mV	07/20/2010	N001	92.37	-	195.5	190.9	#		
pH	s.u.	07/20/2010	N001	92.37	-	195.5	7	#		
Potassium	mg/L	07/20/2010	N001	92.37	-	195.5	2.9	J	#	0.11
Selenium	mg/L	07/20/2010	N001	92.37	-	195.5	0.0036	#	0.000032	
Silica	mg/L	07/20/2010	N001	92.37	-	195.5	13	#	0.0095	
Silicon	mg/L	07/20/2010	N001	92.37	-	195.5	6.3	#	0.0044	
Sodium	mg/L	07/20/2010	N001	92.37	-	195.5	31	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	92.37	-	195.5	1421	#		
Sulfate	mg/L	07/20/2010	N001	92.37	-	195.5	320	#	5	
Temperature	C	07/20/2010	N001	92.37	-	195.5	17.35	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	92.37	-	195.5	1100	#	20	
Turbidity	NTU	07/20/2010	N001	92.37	-	195.5	0.85	#		
Uranium	mg/L	07/20/2010	N001	92.37	-	195.5	0.021	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1117 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	92.3	-	195.5	323		#	
Ammonia Total as N	mg/L	07/20/2010	N001	92.3	-	195.5	0.1	U	#	0.1
Ammonia Total as N	mg/L	07/20/2010	N002	92.3	-	195.5	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	92.3	-	195.5	0.0014		#	0.000015
Arsenic	mg/L	07/20/2010	N002	92.3	-	195.5	0.0013		#	0.000015
Calcium	mg/L	07/20/2010	N001	92.3	-	195.5	330		#	0.012
Calcium	mg/L	07/20/2010	N002	92.3	-	195.5	330		#	0.012
Chloride	mg/L	07/20/2010	N001	92.3	-	195.5	47		#	4
Chloride	mg/L	07/20/2010	N002	92.3	-	195.5	44		#	4
Iron	mg/L	07/20/2010	N001	92.3	-	195.5	0.067	B	#	0.0049
Iron	mg/L	07/20/2010	N002	92.3	-	195.5	0.02	B J	#	0.0049
Magnesium	mg/L	07/20/2010	N001	92.3	-	195.5	110		#	0.013
Magnesium	mg/L	07/20/2010	N002	92.3	-	195.5	110		#	0.013
Manganese	mg/L	07/20/2010	N001	92.3	-	195.5	0.02		#	0.00011
Manganese	mg/L	07/20/2010	N002	92.3	-	195.5	0.02		#	0.00011
Molybdenum	mg/L	07/20/2010	N001	92.3	-	195.5	0.00013		#	0.000032
Molybdenum	mg/L	07/20/2010	N002	92.3	-	195.5	0.00013		#	0.000032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	92.3	-	195.5	98		#	1
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N002	92.3	-	195.5	94		#	0.5
Oxidation Reduction Potential	mV	07/20/2010	N001	92.3	-	195.5	215.3		#	
pH	s.u.	07/20/2010	N001	92.3	-	195.5	6.66		#	
Potassium	mg/L	07/20/2010	N001	92.3	-	195.5	5.9	J	#	0.11
Potassium	mg/L	07/20/2010	N002	92.3	-	195.5	5.9	J	#	0.11
Selenium	mg/L	07/20/2010	N001	92.3	-	195.5	0.011		#	0.000032
Selenium	mg/L	07/20/2010	N002	92.3	-	195.5	0.011		#	0.000032

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1117 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Silica	mg/L	07/20/2010	N001	92.3	-	195.5	15	#	0.0095	
Silica	mg/L	07/20/2010	N002	92.3	-	195.5	15	#	0.0095	
Silicon	mg/L	07/20/2010	N001	92.3	-	195.5	6.9	#	0.0044	
Silicon	mg/L	07/20/2010	N002	92.3	-	195.5	7	#	0.0044	
Sodium	mg/L	07/20/2010	N001	92.3	-	195.5	86	#	0.0066	
Sodium	mg/L	07/20/2010	N002	92.3	-	195.5	85	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	92.3	-	195.5	2511	#		
Sulfate	mg/L	07/20/2010	N001	92.3	-	195.5	730	#	10	
Sulfate	mg/L	07/20/2010	N002	92.3	-	195.5	720	#	10	
Temperature	C	07/20/2010	N001	92.3	-	195.5	16.99	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	92.3	-	195.5	2100	#	40	
Total Dissolved Solids	mg/L	07/20/2010	N002	92.3	-	195.5	2100	#	40	
Turbidity	NTU	07/20/2010	N001	92.3	-	195.5	0.71	#		
Uranium	mg/L	07/20/2010	N001	92.3	-	195.5	0.031	#	0.0000029	
Uranium	mg/L	07/20/2010	N002	92.3	-	195.5	0.03	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1118 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	89.93	-	195.5	492	#		
Ammonia Total as N	mg/L	07/20/2010	N001	89.93	-	195.5	14	#	0.5	
Ammonia Total as N	mg/L	07/20/2010	N002	89.93	-	195.5	13	#	0.5	
Arsenic	mg/L	07/20/2010	N001	89.93	-	195.5	0.0018	#	0.000015	
Arsenic	mg/L	07/20/2010	N002	89.93	-	195.5	0.0018	#	0.000015	
Calcium	mg/L	07/20/2010	N001	89.93	-	195.5	540	#	0.024	
Calcium	mg/L	07/20/2010	N002	89.93	-	195.5	520	#	0.024	
Chloride	mg/L	07/20/2010	N001	89.93	-	195.5	67	#	10	
Chloride	mg/L	07/20/2010	N002	89.93	-	195.5	59	#	10	
Iron	mg/L	07/20/2010	N001	89.93	-	195.5	0.0099	U J	#	0.0099
Iron	mg/L	07/20/2010	N002	89.93	-	195.5	0.0099	U J	#	0.0099
Magnesium	mg/L	07/20/2010	N001	89.93	-	195.5	260	#	0.026	
Magnesium	mg/L	07/20/2010	N002	89.93	-	195.5	250	#	0.026	
Manganese	mg/L	07/20/2010	N001	89.93	-	195.5	0.25	#	0.00023	
Manganese	mg/L	07/20/2010	N002	89.93	-	195.5	0.25	#	0.00023	
Molybdenum	mg/L	07/20/2010	N001	89.93	-	195.5	0.00039	#	0.000032	
Molybdenum	mg/L	07/20/2010	N002	89.93	-	195.5	0.00044	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	89.93	-	195.5	150	#	1	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N002	89.93	-	195.5	140	#	1	
Oxidation Reduction Potential	mV	07/20/2010	N001	89.93	-	195.5	251	#		
pH	s.u.	07/20/2010	N001	89.93	-	195.5	6.53	#		
Potassium	mg/L	07/20/2010	N001	89.93	-	195.5	12	J	#	0.22
Potassium	mg/L	07/20/2010	N002	89.93	-	195.5	12	J	#	0.22
Selenium	mg/L	07/20/2010	N001	89.93	-	195.5	0.019	#	0.000032	
Selenium	mg/L	07/20/2010	N002	89.93	-	195.5	0.02	#	0.000032	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1118 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Silica	mg/L	07/20/2010	N001	89.93	-	195.5	16	#	0.019	
Silica	mg/L	07/20/2010	N002	89.93	-	195.5	16	#	0.019	
Silicon	mg/L	07/20/2010	N001	89.93	-	195.5	7.4	#	0.0089	
Silicon	mg/L	07/20/2010	N002	89.93	-	195.5	7.5	#	0.0089	
Sodium	mg/L	07/20/2010	N001	89.93	-	195.5	170	#	0.013	
Sodium	mg/L	07/20/2010	N002	89.93	-	195.5	160	#	0.013	
Specific Conductance	umhos/cm	07/20/2010	N001	89.93	-	195.5	4251	#		
Sulfate	mg/L	07/20/2010	N001	89.93	-	195.5	1600	#	25	
Sulfate	mg/L	07/20/2010	N002	89.93	-	195.5	1600	#	25	
Temperature	C	07/20/2010	N001	89.93	-	195.5	17.18	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	89.93	-	195.5	3900	#	80	
Total Dissolved Solids	mg/L	07/20/2010	N002	89.93	-	195.5	3900	#	80	
Turbidity	NTU	07/20/2010	N001	89.93	-	195.5	0.84	#		
Uranium	mg/L	07/20/2010	N001	89.93	-	195.5	0.082	#	0.0000029	
Uranium	mg/L	07/20/2010	N002	89.93	-	195.5	0.08	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1119 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	95.33	- 245.33	516		#		
Ammonia Total as N	mg/L	07/20/2010	N001	95.33	- 245.33	19		#	0.5	
Arsenic	mg/L	07/20/2010	N001	95.33	- 245.33	0.0016		#	0.000074	
Calcium	mg/L	07/20/2010	N001	95.33	- 245.33	610		#	0.024	
Chloride	mg/L	07/20/2010	N001	95.33	- 245.33	120		#	10	
Iron	mg/L	07/20/2010	N001	95.33	- 245.33	0.22		#	0.0099	
Magnesium	mg/L	07/20/2010	N001	95.33	- 245.33	220		#	0.026	
Manganese	mg/L	07/20/2010	N001	95.33	- 245.33	3.2		#	0.00023	
Molybdenum	mg/L	07/20/2010	N001	95.33	- 245.33	0.0064		#	0.00016	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	95.33	- 245.33	160		#	1	
Oxidation Reduction Potential	mV	07/20/2010	N001	95.33	- 245.33	118.5	R	#		
pH	s.u.	07/20/2010	N001	95.33	- 245.33	6.36		#		
Potassium	mg/L	07/20/2010	N001	95.33	- 245.33	14	J	#	0.22	
Selenium	mg/L	07/20/2010	N001	95.33	- 245.33	0.03		#	0.00016	
Silica	mg/L	07/20/2010	N001	95.33	- 245.33	17		#	0.019	
Silicon	mg/L	07/20/2010	N001	95.33	- 245.33	8.1		#	0.0089	
Sodium	mg/L	07/20/2010	N001	95.33	- 245.33	310		#	0.013	
Specific Conductance	umhos/cm	07/20/2010	N001	95.33	- 245.33	4732		#		
Sulfate	mg/L	07/20/2010	N001	95.33	- 245.33	1900		#	25	
Temperature	C	07/20/2010	N001	95.33	- 245.33	17.25		#		
Total Dissolved Solids	mg/L	07/20/2010	N001	95.33	- 245.33	4400		#	80	
Turbidity	NTU	07/20/2010	N001	95.33	- 245.33	0.7		#		
Uranium	mg/L	07/20/2010	N001	95.33	- 245.33	0.37		#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1120 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	95.5	-	245.5	232	#		
Ammonia Total as N	mg/L	07/20/2010	N001	95.5	-	245.5	20	#	0.5	
Ammonia Total as N	mg/L	07/20/2010	N002	95.5	-	245.5	20	#	0.5	
Arsenic	mg/L	07/20/2010	N001	95.5	-	245.5	0.0016	#	0.00003	
Arsenic	mg/L	07/20/2010	N002	95.5	-	245.5	0.0016	#	0.00003	
Calcium	mg/L	07/20/2010	N001	95.5	-	245.5	390	#	0.024	
Calcium	mg/L	07/20/2010	N002	95.5	-	245.5	390	#	0.024	
Chloride	mg/L	07/20/2010	N001	95.5	-	245.5	66	#	4	
Chloride	mg/L	07/20/2010	N002	95.5	-	245.5	61	#	4	
Iron	mg/L	07/20/2010	N001	95.5	-	245.5	0.0099	U J	#	0.0099
Iron	mg/L	07/20/2010	N002	95.5	-	245.5	0.0099	U J	#	0.0099
Magnesium	mg/L	07/20/2010	N001	95.5	-	245.5	140	#	0.026	
Magnesium	mg/L	07/20/2010	N002	95.5	-	245.5	150	#	0.026	
Manganese	mg/L	07/20/2010	N001	95.5	-	245.5	31	#	0.0011	
Manganese	mg/L	07/20/2010	N002	95.5	-	245.5	32	#	0.0011	
Molybdenum	mg/L	07/20/2010	N001	95.5	-	245.5	0.026	#	0.000064	
Molybdenum	mg/L	07/20/2010	N002	95.5	-	245.5	0.026	#	0.000064	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	95.5	-	245.5	39	#	0.2	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N002	95.5	-	245.5	38	#	0.2	
Oxidation Reduction Potential	mV	07/20/2010	N001	95.5	-	245.5	93.8	R	#	
pH	s.u.	07/20/2010	N001	95.5	-	245.5	6.41	#		
Potassium	mg/L	07/20/2010	N001	95.5	-	245.5	9.4	J	#	0.22
Potassium	mg/L	07/20/2010	N002	95.5	-	245.5	9.4	J	#	0.22
Selenium	mg/L	07/20/2010	N001	95.5	-	245.5	0.016	#	0.000065	
Selenium	mg/L	07/20/2010	N002	95.5	-	245.5	0.017	#	0.000065	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1120 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Silica	mg/L	07/20/2010	N001	95.5	-	245.5	19	#	0.019	
Silica	mg/L	07/20/2010	N002	95.5	-	245.5	19	#	0.019	
Silicon	mg/L	07/20/2010	N001	95.5	-	245.5	9	#	0.0089	
Silicon	mg/L	07/20/2010	N002	95.5	-	245.5	9	#	0.0089	
Sodium	mg/L	07/20/2010	N001	95.5	-	245.5	200	#	0.013	
Sodium	mg/L	07/20/2010	N002	95.5	-	245.5	200	#	0.013	
Specific Conductance	umhos/cm	07/20/2010	N001	95.5	-	245.5	3290	#		
Sulfate	mg/L	07/20/2010	N001	95.5	-	245.5	1700	#	10	
Sulfate	mg/L	07/20/2010	N002	95.5	-	245.5	1700	#	10	
Temperature	C	07/20/2010	N001	95.5	-	245.5	17.89	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	95.5	-	245.5	3000	#	80	
Total Dissolved Solids	mg/L	07/20/2010	N002	95.5	-	245.5	3000	#	40	
Turbidity	NTU	07/20/2010	N001	95.5	-	245.5	0.76	#		
Uranium	mg/L	07/20/2010	N001	95.5	-	245.5	0.15	#	0.0000058	
Uranium	mg/L	07/20/2010	N002	95.5	-	245.5	0.15	#	0.0000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1121 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	97.5	-	247.5	203	#		
Ammonia Total as N	mg/L	07/21/2010	N001	97.5	-	247.5	26	#	1	
Arsenic	mg/L	07/21/2010	N001	97.5	-	247.5	0.0011	#	0.000015	
Calcium	mg/L	07/21/2010	N001	97.5	-	247.5	420	#	0.024	
Chloride	mg/L	07/21/2010	N001	97.5	-	247.5	28	#	4	
Iron	mg/L	07/21/2010	N001	97.5	-	247.5	0.0099	U J	#	0.0099
Magnesium	mg/L	07/21/2010	N001	97.5	-	247.5	100	#	0.026	
Manganese	mg/L	07/21/2010	N001	97.5	-	247.5	37	#	0.0011	
Molybdenum	mg/L	07/21/2010	N001	97.5	-	247.5	0.022	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	97.5	-	247.5	13	#	0.1	
Oxidation Reduction Potential	mV	07/21/2010	N001	97.5	-	247.5	87.1	R	#	
pH	s.u.	07/21/2010	N001	97.5	-	247.5	6.63	#		
Potassium	mg/L	07/21/2010	N001	97.5	-	247.5	8.8	J	#	0.22
Selenium	mg/L	07/21/2010	N001	97.5	-	247.5	0.0041	#	0.000032	
Silica	mg/L	07/21/2010	N001	97.5	-	247.5	18	#	0.019	
Silicon	mg/L	07/21/2010	N001	97.5	-	247.5	8.6	#	0.0089	
Sodium	mg/L	07/21/2010	N001	97.5	-	247.5	130	#	0.013	
Specific Conductance	umhos/cm	07/21/2010	N001	97.5	-	247.5	2876	#		
Sulfate	mg/L	07/21/2010	N001	97.5	-	247.5	1600	#	10	
Temperature	C	07/21/2010	N001	97.5	-	247.5	20.88	#		
Total Dissolved Solids	mg/L	07/21/2010	N001	97.5	-	247.5	2700	#	80	
Turbidity	NTU	07/21/2010	N001	97.5	-	247.5	0.8	#		
Uranium	mg/L	07/21/2010	N001	97.5	-	247.5	0.083	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1122 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	96.94	-	251.1	291	#		
Ammonia Total as N	mg/L	07/19/2010	N001	96.94	-	251.1	15	#	0.5	
Arsenic	mg/L	07/19/2010	N001	96.94	-	251.1	0.0018	#	0.00003	
Calcium	mg/L	07/19/2010	N001	96.94	-	251.1	390	#	0.024	
Chloride	mg/L	07/19/2010	N001	96.94	-	251.1	150	#	10	
Iron	mg/L	07/19/2010	N001	96.94	-	251.1	0.0099	U J #	0.0099	
Magnesium	mg/L	07/19/2010	N001	96.94	-	251.1	170	#	0.026	
Manganese	mg/L	07/19/2010	N001	96.94	-	251.1	6.8	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	96.94	-	251.1	0.0011	#	0.000064	
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	96.94	-	251.1	44	#	0.5	
Oxidation Reduction Potential	mV	07/19/2010	N001	96.94	-	251.1	69.6	R #		
pH	s.u.	07/19/2010	N001	96.94	-	251.1	6.41	#		
Potassium	mg/L	07/19/2010	N001	96.94	-	251.1	13	J #	0.22	
Selenium	mg/L	07/19/2010	N001	96.94	-	251.1	0.025	#	0.000065	
Silica	mg/L	07/19/2010	N001	96.94	-	251.1	18	#	0.019	
Silicon	mg/L	07/19/2010	N001	96.94	-	251.1	8.4	#	0.0089	
Sodium	mg/L	07/19/2010	N001	96.94	-	251.1	310	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	96.94	-	251.1	3719	#		
Sulfate	mg/L	07/19/2010	N001	96.94	-	251.1	1800	#	25	
Temperature	C	07/19/2010	N001	96.94	-	251.1	18.34	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	96.94	-	251.1	3500	#	80	
Turbidity	NTU	07/19/2010	N001	96.94	-	251.1	0.46	#		
Uranium	mg/L	07/19/2010	N001	96.94	-	251.1	0.22	#	0.0000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1123 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
		ID					Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	91	-	245	408	#		
Ammonia Total as N	mg/L	07/19/2010	N001	91	-	245	21	#	0.5	
Arsenic	mg/L	07/19/2010	N001	91	-	245	0.0028	#	0.000074	
Calcium	mg/L	07/19/2010	N001	91	-	245	470	#	0.024	
Chloride	mg/L	07/19/2010	N001	91	-	245	160	#	10	
Iron	mg/L	07/19/2010	N001	91	-	245	1.2	#	0.0099	
Magnesium	mg/L	07/19/2010	N001	91	-	245	260	#	0.026	
Manganese	mg/L	07/19/2010	N001	91	-	245	0.098	#	0.00023	
Molybdenum	mg/L	07/19/2010	N001	91	-	245	0.00016	U	#	0.00016
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	91	-	245	26	#	0.2	
Oxidation Reduction Potential	mV	07/19/2010	N001	91	-	245	36.7	R	#	
pH	s.u.	07/19/2010	N001	91	-	245	6.47		#	
Potassium	mg/L	07/19/2010	N001	91	-	245	19	J	#	0.22
Selenium	mg/L	07/19/2010	N001	91	-	245	0.017		#	0.00016
Silica	mg/L	07/19/2010	N001	91	-	245	18		#	0.019
Silicon	mg/L	07/19/2010	N001	91	-	245	8.4		#	0.0089
Sodium	mg/L	07/19/2010	N001	91	-	245	380		#	0.013
Specific Conductance	umhos/cm	07/19/2010	N001	91	-	245	4537		#	
Sulfate	mg/L	07/19/2010	N001	91	-	245	2500		#	25
Temperature	C	07/19/2010	N001	91	-	245	26.63		#	
Total Dissolved Solids	mg/L	07/19/2010	N001	91	-	245	4500		#	80
Turbidity	NTU	07/19/2010	N001	91	-	245	9.6		#	
Uranium	mg/L	07/19/2010	N001	91	-	245	0.32		#	0.000015

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1124 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/19/2010	N001	87.9	-	245.5	434	#		
Ammonia Total as N	mg/L	07/19/2010	N001	87.9	-	245.5	0.1	U	#	0.1
Arsenic	mg/L	07/19/2010	N001	87.9	-	245.5	0.0016	#	0.000074	
Calcium	mg/L	07/19/2010	N001	87.9	-	245.5	740	#	0.024	
Chloride	mg/L	07/19/2010	N001	87.9	-	245.5	110	#	10	
Iron	mg/L	07/19/2010	N001	87.9	-	245.5	0.0099	U J	#	0.0099
Magnesium	mg/L	07/19/2010	N001	87.9	-	245.5	110	#	0.026	
Manganese	mg/L	07/19/2010	N001	87.9	-	245.5	0.00031	B UJ	#	0.00023
Molybdenum	mg/L	07/19/2010	N001	87.9	-	245.5	0.00017	B	#	0.00016
Nitrate + Nitrite as Nitrogen	mg/L	07/19/2010	N001	87.9	-	245.5	130	#	1	
Oxidation Reduction Potential	mV	07/19/2010	N001	87.9	-	245.5	66.9	R	#	
pH	s.u.	07/19/2010	N001	87.9	-	245.5	6.63	#		
Potassium	mg/L	07/19/2010	N001	87.9	-	245.5	6.2	J	#	0.22
Selenium	mg/L	07/19/2010	N001	87.9	-	245.5	0.03	#	0.00016	
Silica	mg/L	07/19/2010	N001	87.9	-	245.5	15	#	0.019	
Silicon	mg/L	07/19/2010	N001	87.9	-	245.5	7.2	#	0.0089	
Sodium	mg/L	07/19/2010	N001	87.9	-	245.5	260	#	0.013	
Specific Conductance	umhos/cm	07/19/2010	N001	87.9	-	245.5	4046	#		
Sulfate	mg/L	07/19/2010	N001	87.9	-	245.5	1700	#	25	
Temperature	C	07/19/2010	N001	87.9	-	245.5	17.35	#		
Total Dissolved Solids	mg/L	07/19/2010	N001	87.9	-	245.5	4000	#	80	
Turbidity	NTU	07/19/2010	N001	87.9	-	245.5	0.41	#		
Uranium	mg/L	07/19/2010	N001	87.9	-	245.5	0.3	#	0.000015	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1125 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	95.5	-	245.5	128	#		
Ammonia Total as N	mg/L	07/20/2010	N001	95.5	-	245.5	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	95.5	-	245.5	0.0027	#	0.000015	
Calcium	mg/L	07/20/2010	N001	95.5	-	245.5	45	#	0.012	
Chloride	mg/L	07/20/2010	N001	95.5	-	245.5	14	#	0.4	
Iron	mg/L	07/20/2010	N001	95.5	-	245.5	0.17	#	0.0049	
Magnesium	mg/L	07/20/2010	N001	95.5	-	245.5	9.3	#	0.013	
Manganese	mg/L	07/20/2010	N001	95.5	-	245.5	0.00045	B J	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	95.5	-	245.5	0.00042	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	95.5	-	245.5	7.1	#	0.05	
Oxidation Reduction Potential	mV	07/20/2010	N001	95.5	-	245.5	53.7	R	#	
pH	s.u.	07/20/2010	N001	95.5	-	245.5	7.52	#		
Potassium	mg/L	07/20/2010	N001	95.5	-	245.5	1.1	J	#	0.11
Selenium	mg/L	07/20/2010	N001	95.5	-	245.5	0.002	#	0.000032	
Silica	mg/L	07/20/2010	N001	95.5	-	245.5	12	#	0.0095	
Silicon	mg/L	07/20/2010	N001	95.5	-	245.5	5.4	#	0.0044	
Sodium	mg/L	07/20/2010	N001	95.5	-	245.5	13	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	95.5	-	245.5	383	#		
Sulfate	mg/L	07/20/2010	N001	95.5	-	245.5	42	#	1	
Temperature	C	07/20/2010	N001	95.5	-	245.5	29.11	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	95.5	-	245.5	260	#	20	
Turbidity	NTU	07/20/2010	N001	95.5	-	245.5	2.53	#		
Uranium	mg/L	07/20/2010	N001	95.5	-	245.5	0.0047	#	0.0000029	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1129 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	68.2	-	98.2	259		#	
Ammonia Total as N	mg/L	07/20/2010	N001	68.2	-	98.2	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	68.2	-	98.2	0.0017		#	0.00015
Calcium	mg/L	07/20/2010	N001	68.2	-	98.2	470		#	0.012
Chloride	mg/L	07/20/2010	N001	68.2	-	98.2	56		#	4
Iron	mg/L	07/20/2010	N001	68.2	-	98.2	0.0049	U J	#	0.0049
Magnesium	mg/L	07/20/2010	N001	68.2	-	98.2	88		#	0.013
Manganese	mg/L	07/20/2010	N001	68.2	-	98.2	0.00048	B J	#	0.00011
Molybdenum	mg/L	07/20/2010	N001	68.2	-	98.2	0.75		#	0.00032
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	68.2	-	98.2	110		#	1
Oxidation Reduction Potential	mV	07/20/2010	N001	68.2	-	98.2	77.7	R	#	
pH	s.u.	07/20/2010	N001	68.2	-	98.2	6.82		#	
Potassium	mg/L	07/20/2010	N001	68.2	-	98.2	4.9	J	#	0.11
Selenium	mg/L	07/20/2010	N001	68.2	-	98.2	0.065		#	0.00032
Silica	mg/L	07/20/2010	N001	68.2	-	98.2	15		#	0.0095
Silicon	mg/L	07/20/2010	N001	68.2	-	98.2	6.9		#	0.0044
Sodium	mg/L	07/20/2010	N001	68.2	-	98.2	92		#	0.0066
Specific Conductance	umhos/cm	07/20/2010	N001	68.2	-	98.2	2651		#	
Sulfate	mg/L	07/20/2010	N001	68.2	-	98.2	920		#	10
Temperature	C	07/20/2010	N001	68.2	-	98.2	25.56		#	
Total Dissolved Solids	mg/L	07/20/2010	N001	68.2	-	98.2	2600		#	40
Turbidity	NTU	07/20/2010	N001	68.2	-	98.2	1.02		#	
Uranium	mg/L	07/20/2010	N001	68.2	-	98.2	0.72		#	0.000029

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1130 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	71.7	-	121.7	249	#		
Ammonia Total as N	mg/L	07/20/2010	N001	71.7	-	121.7	3.2	#	0.1	
Arsenic	mg/L	07/20/2010	N001	71.7	-	121.7	0.0016	#	0.00003	
Calcium	mg/L	07/20/2010	N001	71.7	-	121.7	370	#	0.012	
Chloride	mg/L	07/20/2010	N001	71.7	-	121.7	69	#	4	
Iron	mg/L	07/20/2010	N001	71.7	-	121.7	0.01	B J	#	0.0049
Magnesium	mg/L	07/20/2010	N001	71.7	-	121.7	95	#	0.013	
Manganese	mg/L	07/20/2010	N001	71.7	-	121.7	0.083	#	0.00011	
Molybdenum	mg/L	07/20/2010	N001	71.7	-	121.7	0.049	#	0.000064	
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	71.7	-	121.7	100	#	1	
Oxidation Reduction Potential	mV	07/20/2010	N001	71.7	-	121.7	95.9	R	#	
pH	s.u.	07/20/2010	N001	71.7	-	121.7	6.5	#		
Potassium	mg/L	07/20/2010	N001	71.7	-	121.7	6.2	E J	#	0.11
Selenium	mg/L	07/20/2010	N001	71.7	-	121.7	0.017	#	0.000065	
Silica	mg/L	07/20/2010	N001	71.7	-	121.7	14	#	0.0095	
Silicon	mg/L	07/20/2010	N001	71.7	-	121.7	6.5	#	0.0044	
Sodium	mg/L	07/20/2010	N001	71.7	-	121.7	120	#	0.0066	
Specific Conductance	umhos/cm	07/20/2010	N001	71.7	-	121.7	2637	#		
Sulfate	mg/L	07/20/2010	N001	71.7	-	121.7	870	#	10	
Temperature	C	07/20/2010	N001	71.7	-	121.7	25.5	#		
Total Dissolved Solids	mg/L	07/20/2010	N001	71.7	-	121.7	2300	#	40	
Turbidity	NTU	07/20/2010	N001	71.7	-	121.7	1.23	#		
Uranium	mg/L	07/20/2010	N001	71.7	-	121.7	0.14	#	0.0000058	

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1132 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/20/2010	N001	49.7	-	99.7	538	#		
Ammonia Total as N	mg/L	07/20/2010	N001	49.7	-	99.7	0.1	U	#	0.1
Arsenic	mg/L	07/20/2010	N001	49.7	-	99.7	0.002		#	0.000074
Calcium	mg/L	07/20/2010	N001	49.7	-	99.7	920		#	0.024
Chloride	mg/L	07/20/2010	N001	49.7	-	99.7	140		#	10
Iron	mg/L	07/20/2010	N001	49.7	-	99.7	0.0099	U J	#	0.0099
Magnesium	mg/L	07/20/2010	N001	49.7	-	99.7	310		#	0.026
Manganese	mg/L	07/20/2010	N001	49.7	-	99.7	0.0021	B	#	0.00023
Molybdenum	mg/L	07/20/2010	N001	49.7	-	99.7	1.8		#	0.0016
Nitrate + Nitrite as Nitrogen	mg/L	07/20/2010	N001	49.7	-	99.7	270		#	2
Oxidation Reduction Potential	mV	07/20/2010	N001	49.7	-	99.7	204.7		#	
pH	s.u.	07/20/2010	N001	49.7	-	99.7	6.67		#	
Potassium	mg/L	07/20/2010	N001	49.7	-	99.7	9.8	J	#	0.22
Selenium	mg/L	07/20/2010	N001	49.7	-	99.7	0.14		#	0.0016
Silica	mg/L	07/20/2010	N001	49.7	-	99.7	14		#	0.019
Silicon	mg/L	07/20/2010	N001	49.7	-	99.7	6.5		#	0.0089
Sodium	mg/L	07/20/2010	N001	49.7	-	99.7	410		#	0.013
Specific Conductance	umhos/cm	07/20/2010	N001	49.7	-	99.7	6524		#	
Sulfate	mg/L	07/20/2010	N001	49.7	-	99.7	2600		#	25
Temperature	C	07/20/2010	N001	49.7	-	99.7	19.49		#	
Total Dissolved Solids	mg/L	07/20/2010	N001	49.7	-	99.7	6600		#	80
Turbidity	NTU	07/20/2010	N001	49.7	-	99.7	0.65		#	
Uranium	mg/L	07/20/2010	N001	49.7	-	99.7	2.3		#	0.00015

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**Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1133 WELL

Parameter	Units	Sample	Date	Depth Range BLS)	(Ft	Result	Qualifiers	Lab	Detection Limit	Uncertainty
			ID				Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	59.7	-	99.7	153	#		
Ammonia Total as N	mg/L	07/21/2010	N001	59.7	-	99.7	0.1	U	#	0.1
Arsenic	mg/L	07/21/2010	N001	59.7	-	99.7	0.0018	#	0.000015	
Calcium	mg/L	07/21/2010	N001	59.7	-	99.7	130	#	0.012	
Chloride	mg/L	07/21/2010	N001	59.7	-	99.7	120	#	2	
Iron	mg/L	07/21/2010	N001	59.7	-	99.7	0.0081	B J	#	0.0049
Magnesium	mg/L	07/21/2010	N001	59.7	-	99.7	23	#	0.013	
Manganese	mg/L	07/21/2010	N001	59.7	-	99.7	0.0051	#	0.00011	
Molybdenum	mg/L	07/21/2010	N001	59.7	-	99.7	0.013	#	0.000032	
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	59.7	-	99.7	33	#	0.5	
Oxidation Reduction Potential	mV	07/21/2010	N001	59.7	-	99.7	150	#		
pH	s.u.	07/21/2010	N001	59.7	-	99.7	6.92	#		
Potassium	mg/L	07/21/2010	N001	59.7	-	99.7	1.8	J	#	0.11
Selenium	mg/L	07/21/2010	N001	59.7	-	99.7	0.014	#	0.000032	
Silica	mg/L	07/21/2010	N001	59.7	-	99.7	13	#	0.0095	
Silicon	mg/L	07/21/2010	N001	59.7	-	99.7	6.2	#	0.0044	
Sodium	mg/L	07/21/2010	N001	59.7	-	99.7	22	#	0.0066	
Specific Conductance	umhos/cm	07/21/2010	N001	59.7	-	99.7	960	#		
Sulfate	mg/L	07/21/2010	N001	59.7	-	99.7	180	#	2.5	
Temperature	C	07/21/2010	N001	59.7	-	99.7	24.3	#		
Total Dissolved Solids	mg/L	07/21/2010	N001	59.7	-	99.7	720	#	20	
Turbidity	NTU	07/21/2010	N001	59.7	-	99.7	1	#		
Uranium	mg/L	07/21/2010	N001	59.7	-	99.7	0.066	#	0.00029	

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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## **Surface Water Quality Data**

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**Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1569 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	0001	0		#			
Arsenic	mg/L	07/22/2010	0001	2.1		#	0.0015		
Calcium	mg/L	07/22/2010	0001	240		#	0.6		
Chloride	mg/L	07/22/2010	0001	170000		#	2000		
Iron	mg/L	07/22/2010	0001	4.1	B	#	0.25		
Magnesium	mg/L	07/22/2010	0001	19000		#	0.65		
Manganese	mg/L	07/22/2010	0001	300		#	0.0057		
Molybdenum	mg/L	07/22/2010	0001	2.2		#	0.0032		
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	0001	13000		#	100		
Potassium	mg/L	07/22/2010	0001	1800	J	#	5.4		
Selenium	mg/L	07/22/2010	0001	2.3		#	0.0032		
Sodium	mg/L	07/22/2010	0001	86000		#	3.3		
Sulfate	mg/L	07/22/2010	0001	31000		#	1000		
Total Dissolved Solids	mg/L	07/22/2010	0001	410000		#	20000		
Uranium	mg/L	07/22/2010	0001	5.6		#	0.00029		
Oxidation Reduction Potential	mV	07/22/2010	N001	457.1	R	#			
pH	s.u.	07/22/2010	N001	1.87		#			
Specific Conductance	umhos/cm	07/22/2010	N001	164671		#			
Temperature	C	07/22/2010	N001	33.95		#			
Turbidity	NTU	07/22/2010	N001	25.9		#			

**Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1570 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Arsenic	mg/L	07/22/2010	0001	2.3		#		0.0015	
Calcium	mg/L	07/22/2010	0001	210		#		0.6	
Chloride	mg/L	07/22/2010	0001	170000		#		2000	
Iron	mg/L	07/22/2010	0001	4	B	#		0.25	
Magnesium	mg/L	07/22/2010	0001	20000		#		0.65	
Manganese	mg/L	07/22/2010	0001	310		#		0.0057	
Molybdenum	mg/L	07/22/2010	0001	2.3		#		0.0032	
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	0001	14000		#		100	
Potassium	mg/L	07/22/2010	0001	1900	J	#		5.4	
Selenium	mg/L	07/22/2010	0001	2.4		#		0.0032	
Sodium	mg/L	07/22/2010	0001	84000		#		3.3	
Sulfate	mg/L	07/22/2010	0001	31000		#		1000	
Total Dissolved Solids	mg/L	07/22/2010	0001	410000		#		20000	
Uranium	mg/L	07/22/2010	0001	5.1		#		0.00029	
Arsenic	mg/L	07/22/2010	0002	2.3		#		0.0015	
Calcium	mg/L	07/22/2010	0002	220		#		0.6	
Chloride	mg/L	07/22/2010	0002	170000		#		2000	
Iron	mg/L	07/22/2010	0002	4.4	B	#		0.25	
Magnesium	mg/L	07/22/2010	0002	21000		#		0.65	
Manganese	mg/L	07/22/2010	0002	320		#		0.0057	
Molybdenum	mg/L	07/22/2010	0002	2.3		#		0.0032	

**Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1570 SURFACE LOCATION

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Nitrate + Nitrite as Nitrogen	mg/L	07/22/2010	0002	13000		#		100	
Potassium	mg/L	07/22/2010	0002	2000	J	#		5.4	
Selenium	mg/L	07/22/2010	0002	2.6		#		0.0032	
Sodium	mg/L	07/22/2010	0002	86000		#		3.3	
Sulfate	mg/L	07/22/2010	0002	32000		#		1000	
Total Dissolved Solids	mg/L	07/22/2010	0002	410000		#		20000	
Uranium	mg/L	07/22/2010	0002	5.1		#		0.00029	
Alkalinity, Total (As CaCO3)	mg/L	07/22/2010	N001	0		#			
Oxidation Reduction Potential	mV	07/22/2010	N001	328.8	R	#			
pH	s.u.	07/22/2010	N001	1.75		#			
Specific Conductance	umhos/cm	07/22/2010	N001	172997		#			
Temperature	C	07/22/2010	N001	31.05		#			
Turbidity	NTU	07/22/2010	N001	5031.05		#			

**Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1571 SURFACE LOCATION Jimmy Spring West

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	0001	167		#			
Arsenic	mg/L	07/21/2010	0001	0.002		#	0.000015		
Calcium	mg/L	07/21/2010	0001	34		#	0.012		
Chloride	mg/L	07/21/2010	0001	40		#	1		
Iron	mg/L	07/21/2010	0001	0.017	B	J	#	0.0049	
Magnesium	mg/L	07/21/2010	0001	10		#	0.013		
Manganese	mg/L	07/21/2010	0001	0.0061		#	0.00011		
Molybdenum	mg/L	07/21/2010	0001	0.0033		#	0.000032		
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	0001	2.3		#	0.02		
Potassium	mg/L	07/21/2010	0001	2.1		J	#	0.11	
Selenium	mg/L	07/21/2010	0001	0.0045		#	0.000032		
Sodium	mg/L	07/21/2010	0001	58		#	0.0066		
Sulfate	mg/L	07/21/2010	0001	85		#	2.5		
Total Dissolved Solids	mg/L	07/21/2010	0001	370		#	20		
Uranium	mg/L	07/21/2010	0001	0.0033		#	0.0000029		
Oxidation Reduction Potential	mV	07/21/2010	N001	-191.7	R	#			
pH	s.u.	07/21/2010	N001	8.36		#			
Specific Conductance	umhos/cm	07/21/2010	N001	619		#			
Temperature	C	07/21/2010	N001	23.45		#			
Turbidity	NTU	07/21/2010	N001	16.1		#			

**Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site**

REPORT DATE: 12/22/2010

Location: 1573 SURFACE LOCATION Shonto Well West Pipe

Parameter	Units	Sample Date	ID	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	07/21/2010	N001	196		#			
Arsenic	mg/L	07/21/2010	N001	0.0051		#	0.000015		
Calcium	mg/L	07/21/2010	N001	14		#	0.012		
Chloride	mg/L	07/21/2010	N001	29		#	0.4		
Iron	mg/L	07/21/2010	N001	0.018	B	J	#	0.0049	
Magnesium	mg/L	07/21/2010	N001	3.6		#	0.013		
Manganese	mg/L	07/21/2010	N001	0.001	B	U	#	0.00011	
Molybdenum	mg/L	07/21/2010	N001	0.0014		#	0.000032		
Nitrate + Nitrite as Nitrogen	mg/L	07/21/2010	N001	0.51		#	0.01		
Oxidation Reduction Potential	mV	07/21/2010	N001	-172.6	R	#			
pH	s.u.	07/21/2010	N001	8.11		#			
Potassium	mg/L	07/21/2010	N001	0.73	B	J	#	0.11	
Selenium	mg/L	07/21/2010	N001	0.0029		#	0.000032		
Sodium	mg/L	07/21/2010	N001	62		#	0.0066		
Specific Conductance	umhos/cm	07/21/2010	N001	465		#			
Sulfate	mg/L	07/21/2010	N001	30		#	1		
Temperature	C	07/21/2010	N001	25.63		#			
Total Dissolved Solids	mg/L	07/21/2010	N001	260		#	20		
Turbidity	NTU	07/21/2010	N001	3.41		#			
Uranium	mg/L	07/21/2010	N001	0.0024		#	0.0000029		

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.

## **Static Water Level Data**

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**STATIC WATER LEVELS (USEE700) FOR SITE TUB01, Tuba City Disposal Site**  
**REPORT DATE: 12/22/2010**

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
000I		5064.56	07/21/2010	09:53:00	55.45	5009.11	
000J		5063.46	07/21/2010	09:52:00	47.22	5016.24	
000M		5063.7	07/21/2010	09:55:00	55.53	5008.17	
0251		5061.25	07/21/2010	18:11:05	87.87	4973.38	
0252		5061.3	07/21/2010	18:38:41	74.01	4987.29	
0258		5055.56	07/21/2010	12:45:48	104.45	4951.11	
0261		5069.69	07/21/2010	13:25:17	130.45	4939.24	
0262		5061.99	07/21/2010	18:05:35	60.07	5001.92	
0263		5063.1	07/20/2010	12:45:46	65.1	4998	
0264		5062.19	07/20/2010	12:30:24	100.85	4961.34	
0265		5053.88	07/22/2010	08:30:53	80.12	4973.76	
0266		5053.32	07/22/2010	08:50:39	105.37	4947.95	
0267		5053.4	07/22/2010	09:55:53	62.34	4991.06	
0268		5067.24	07/20/2010	16:29:22	109.79	4957.45	
0271		5046.72	07/22/2010	09:40:13	54.91	4991.81	
0272		5064.24	07/21/2010	11:24:42	76.69	4987.55	
0273		5064.74	07/20/2010	17:38:46	94.02	4970.72	
0274		5064.42	07/20/2010	16:53:00	94.18	4970.24	
0275		5062.64	07/20/2010	15:51:13	99.29	4963.35	
0276		5067.55	07/20/2010	15:15:47	104.5	4963.05	
0277		4982.35	07/21/2010	11:15:15	40.5	4941.85	
0278		4956.09	07/20/2010	16:15:00	24.98	4931.11	
0279		4951.04	07/20/2010	16:55:34	25.85	4925.19	
0280		4951.52	07/20/2010	17:40:59	27.62	4923.9	
0281		5051	07/22/2010	09:30:43	70.46	4980.54	
0282		5060.04	07/22/2010	09:10:34	84.42	4975.62	
0284		5098.72	07/22/2010	09:59:00	29.36	5069.36	
0285		5096.47	07/20/2010	13:43:00	10.77	5085.7	

**STATIC WATER LEVELS (USEE700) FOR SITE TUB01, Tuba City Disposal Site**  
**REPORT DATE: 12/22/2010**

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
0286		5063.99	07/20/2010	15:45:22	80.49	4983.5	
0287		5065.65	07/20/2010	15:15:03	63.3	5002.35	
0288		5072.54	07/21/2010	12:21:11	58.04	5014.5	
0289		5070.82	07/21/2010	11:56:47	58.69	5012.13	
0290		5068.91	07/21/2010	16:55:19	97.97	4970.94	
0683		5070.64	07/21/2010	16:35:07	107.2	4963.44	
0684		5070.05	07/21/2010	17:10:49	78.13	4991.92	
0685		5072.44	07/20/2010	14:17:54	50.21	5022.23	
0686		5107.97	07/21/2010	16:35:18	58.95	5049.02	
0687		5109.82	07/20/2010	11:50:45	50.11	5059.71	
0688		5106.98	07/20/2010	12:33:44	57.95	5049.03	
0689		4981.63	07/20/2010	12:55:38	41.7	4939.93	
0690		4950.87	07/20/2010	17:10:25	26.2	4924.67	
0691		4979.41	07/20/2010	11:40:02	44.7	4934.71	
0692		4953.31	07/20/2010	17:25:18	27.92	4925.39	
0695		4976.83	07/20/2010	12:05:46	50.88	4925.95	
0901	U	5105.46	07/21/2010	16:26:08	48.29	5057.17	
0902	N	4737.42	07/21/2010	17:54:00	30.41	4707.01	
0903	D	4983.33	07/21/2010	11:00:18	35.46	4947.87	
0904	N	4904.11	07/21/2010	12:05:45	22.84	4881.27	
0906	O	5062.1	07/21/2010	10:21:22	56.43	5005.67	
0908	D	5058.14	07/20/2010	10:55:02	62.59	4995.55	
0909	D	5057.17	07/21/2010	19:25:22		B	
0910	U	5106.7	07/21/2010	15:15:14	51.12	5055.58	
0911	U	5106.96	07/21/2010	15:42:45	47.66	5059.3	
0912	D	5059.97	07/22/2010	08:44:07	65.8	4994.17	
0913	D	5060.16	07/22/2010	09:07:43	69.2	4990.96	
0914	D	5070.1	07/22/2010	13:35:25	115.1	4955	
0915	D	5070.84	07/21/2010	14:45:09	114.03	4956.81	

**STATIC WATER LEVELS (USEE700) FOR SITE TUB01, Tuba City Disposal Site**  
**REPORT DATE: 12/22/2010**

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
0916	D	5070	07/21/2010	14:25:04	121.57	4948.43	
0917	D	5048.02	07/22/2010	09:51:00	69.52	4978.5	
0918	D	5049.63	07/22/2010	09:55:00	0	5049.63	
0919	D	5048.56	07/22/2010	09:50:00	146.41	4902.15	
0920	D	4982.97	07/21/2010	11:40:43	39.86	4943.11	
0921	D	4979.08	07/20/2010	18:35:22	41.24	4937.84	
0929	D	5060.82	07/22/2010	09:24:14	63.14	4997.68	
0930	D	4954.96	07/20/2010	16:35:01	21.93	4933.03	
0932	D	5057.32	07/21/2010	18:45:24	107.39	4949.93	
0934	D	5059.73	07/20/2010	16:55:37	77.8	4981.93	
0941	D	5065.97	07/20/2010	17:51:55	60.69	5005.28	
0943	U	5098.05	07/20/2010	17:50:37	48.81	5049.24	
0945	U	5140.49	07/21/2010	14:32:49	86.95	5053.54	
0946	C	5100.5	07/20/2010	16:20:09	40.73	5059.77	
0947	U	5097.01	07/21/2010	17:10:42	69.44	5027.57	
0968	U	5107	07/21/2010	09:57:00	52.33	5054.67	
0970	U	5109.53	07/21/2010	16:38:00	50.2	5059.33	
1003		4976.58	07/20/2010	11:20:51	41.83	4934.75	
1004		4961.55	07/20/2010	12:30:00	27.15	4934.40	
1005		4947.83	07/21/2010	17:53:00	22.55	4925.28	
1006		4947.08	07/20/2010	15:55:07	18.54	4928.54	
1007		4958.56	07/20/2010	15:40:46	23.96	4934.6	
1008		4980.52	07/21/2010	17:54:00	40	4940.52	
1101		5067.29	07/19/2010	18:40:39	115.54	4951.75	
1102		5066.76	07/19/2010	18:52:33	149.21	4917.55	
1119		5061.19	07/20/2010	09:08:36	99.14	4962.05	
1120		5063.6	07/20/2010	08:45:10	74.19	4989.41	
1122		5067.31	07/19/2010	18:23:09	94.78	4972.53	
1123		5064.54	07/19/2010	18:01:40	66.91	4997.63	

**STATIC WATER LEVELS (USEE700) FOR SITE TUB01, Tuba City Disposal Site**  
**REPORT DATE: 12/22/2010**

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
1124		5063.86	07/19/2010	19:15:00	84.74	4979.12	
1125		5065.47	07/20/2010	09:53:24	103.05	4962.42	
1126			07/20/2010	10:00:00			D
1127			07/20/2010	10:05:00			D
1128			07/20/2010	10:10:00			D
1129			07/20/2010	10:22:35	88.52		
1130			07/20/2010	10:37:50	77.91		

FLOW CODES: B BACKGROUND  
N UNKNOWN

C CROSS GRADIENT  
O ON SITE

D DOWN GRADIENT  
U UPGRAIDENT

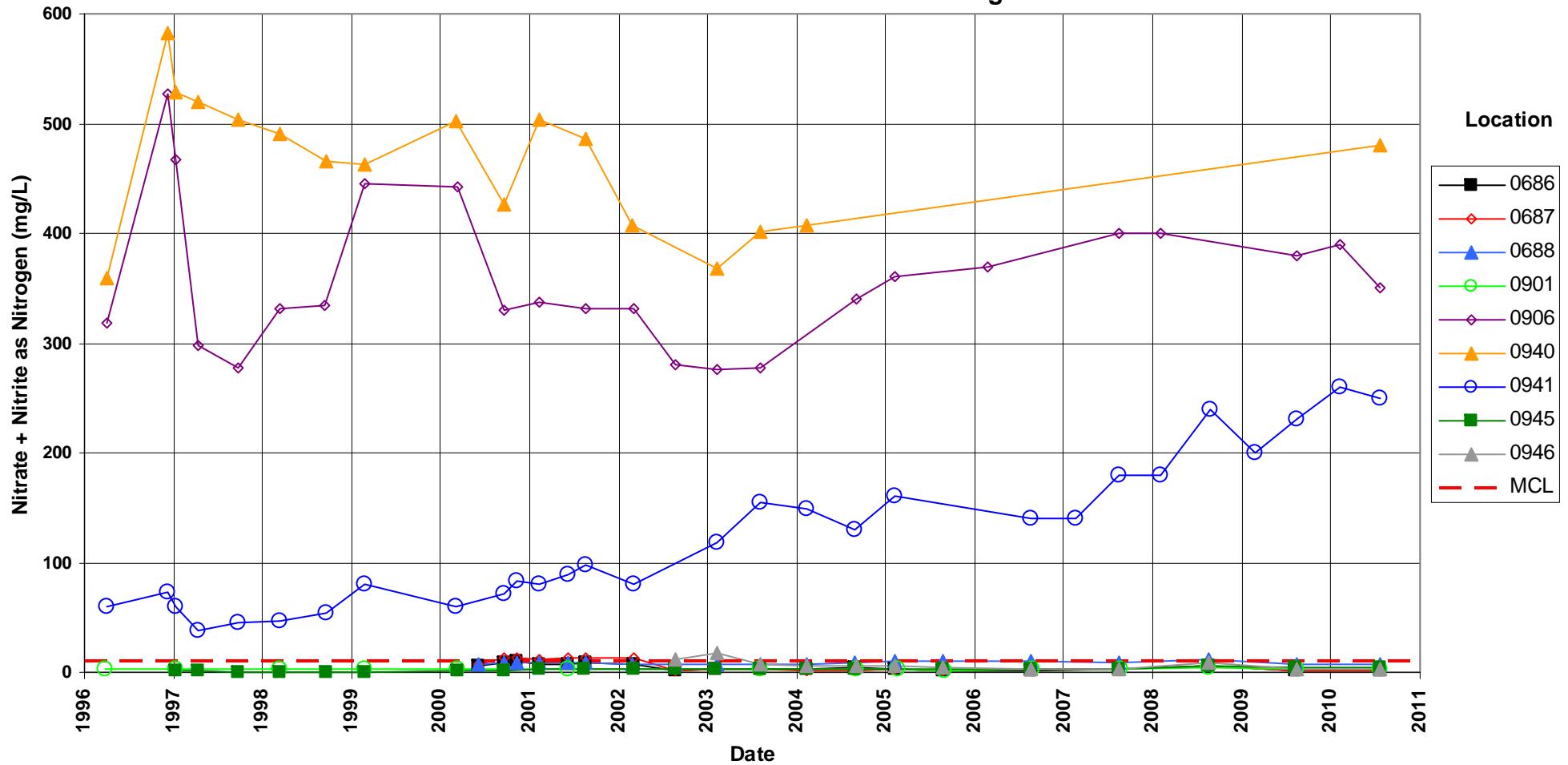
F OFF SITE

WATER LEVEL FLAGS: D Dry      B Below top of pump

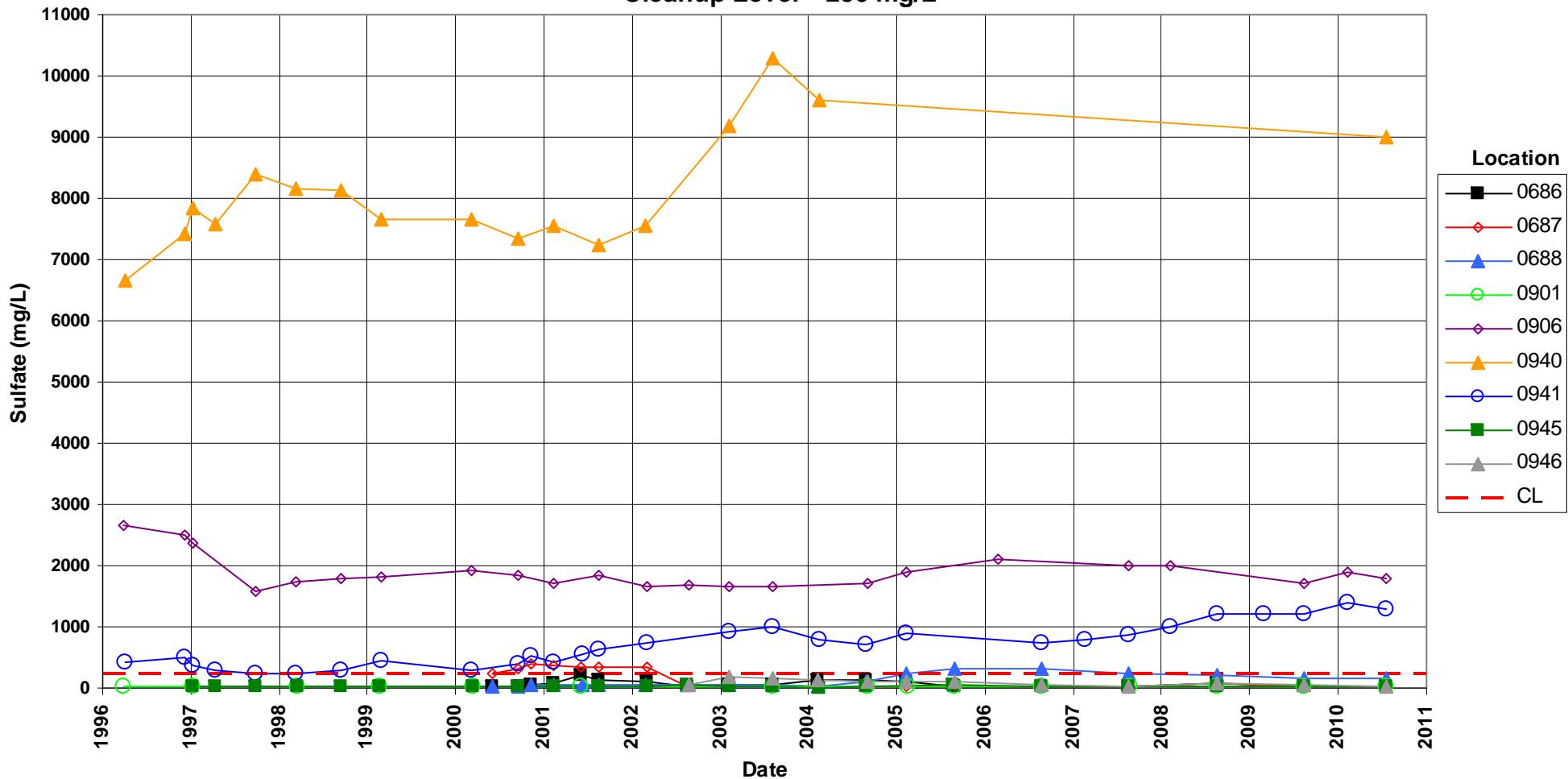
## **Time-Concentration Graphs**

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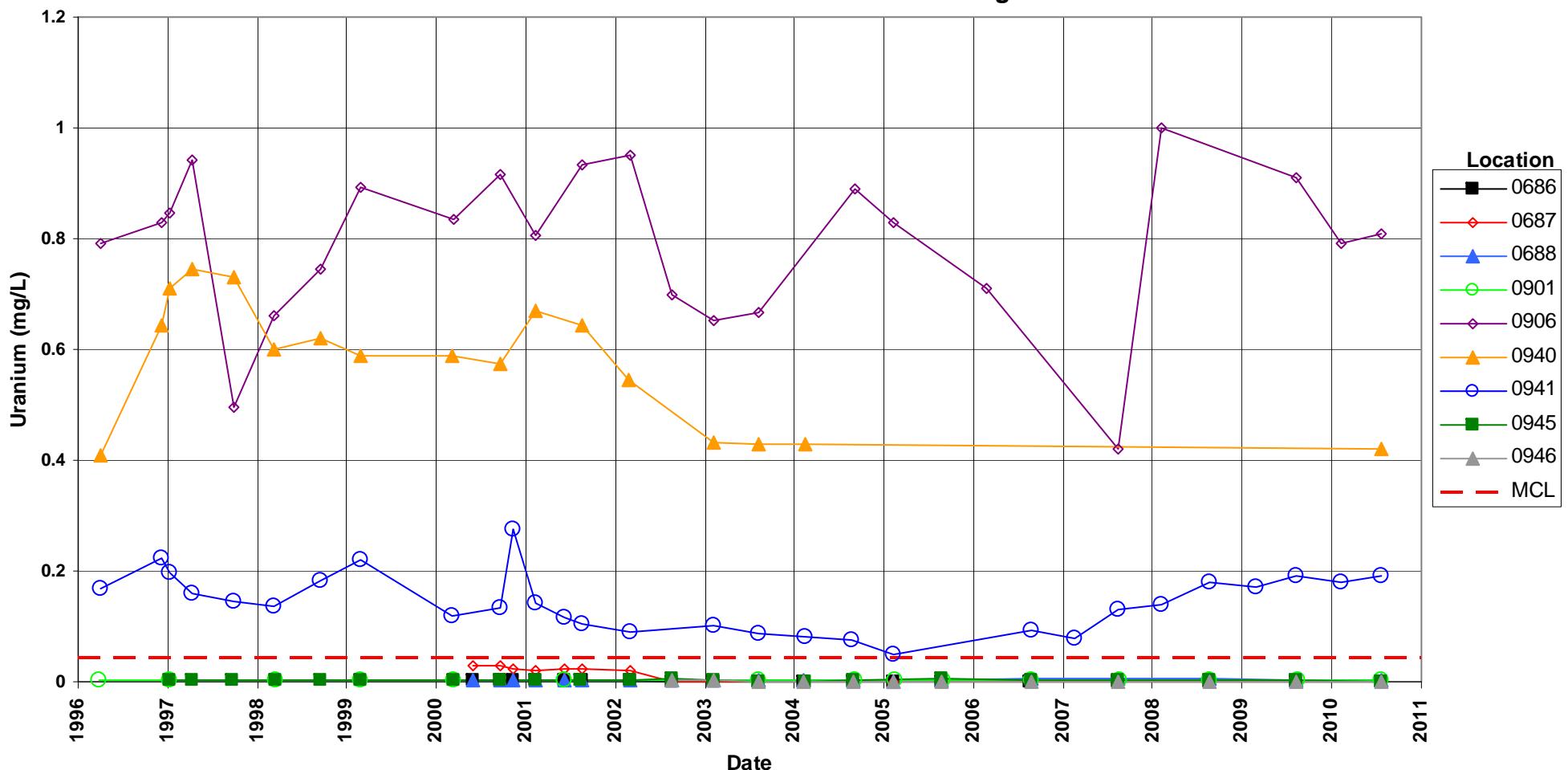
**Tuba City Disposal Site**  
**Horizon A Monitoring Wells**  
**Nitrate + Nitrite as Nitrogen Concentration**  
**Maximum Contaminant Level = 10.0 mg/L**



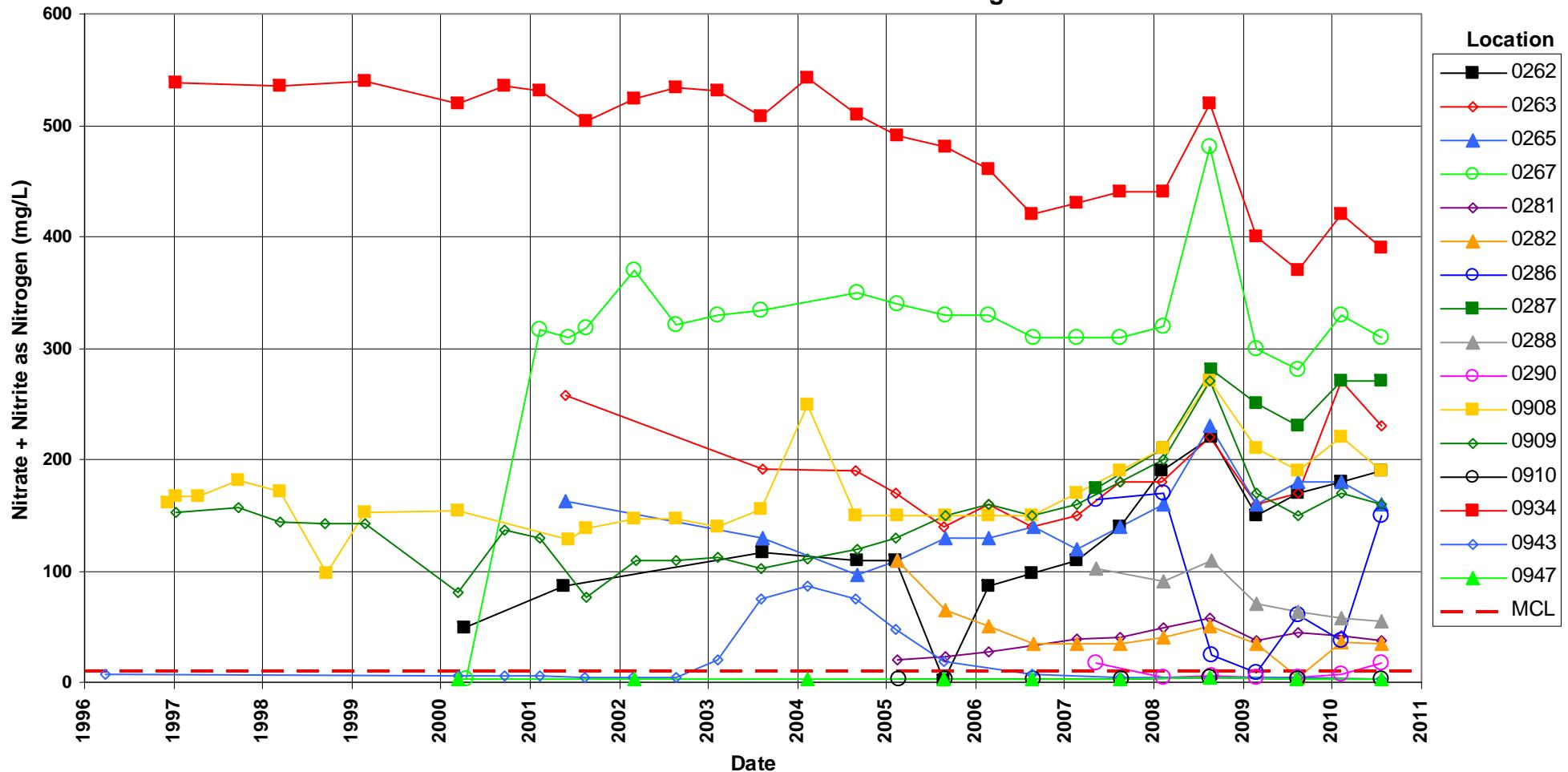
**Tuba City Disposal Site**  
**Horizon A Monitoring Wells**  
**Sulfate Concentration**  
**Cleanup Level = 250 mg/L**



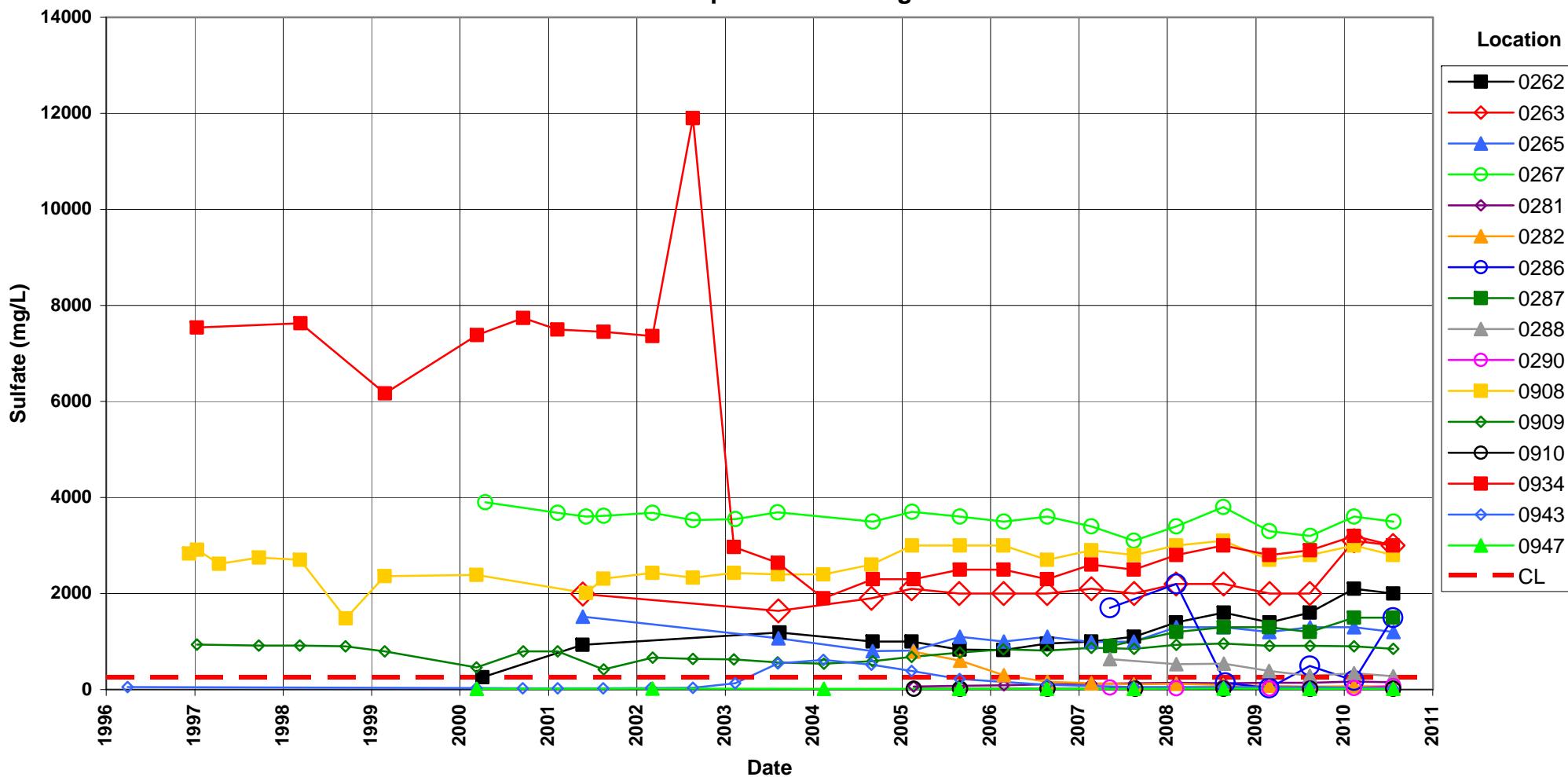
**Tuba City Disposal Site**  
**Horizon A Monitoring Wells**  
**Uranium Concentration**  
**Maximum Contaminant Level = 0.044 mg/L**



**Tuba City Disposal Site**  
**Horizon B Monitoring Wells**  
**Nitrate + Nitrite as Nitrogen Concentration**  
**Maximum Contaminant Level = 10.0 mg/L**

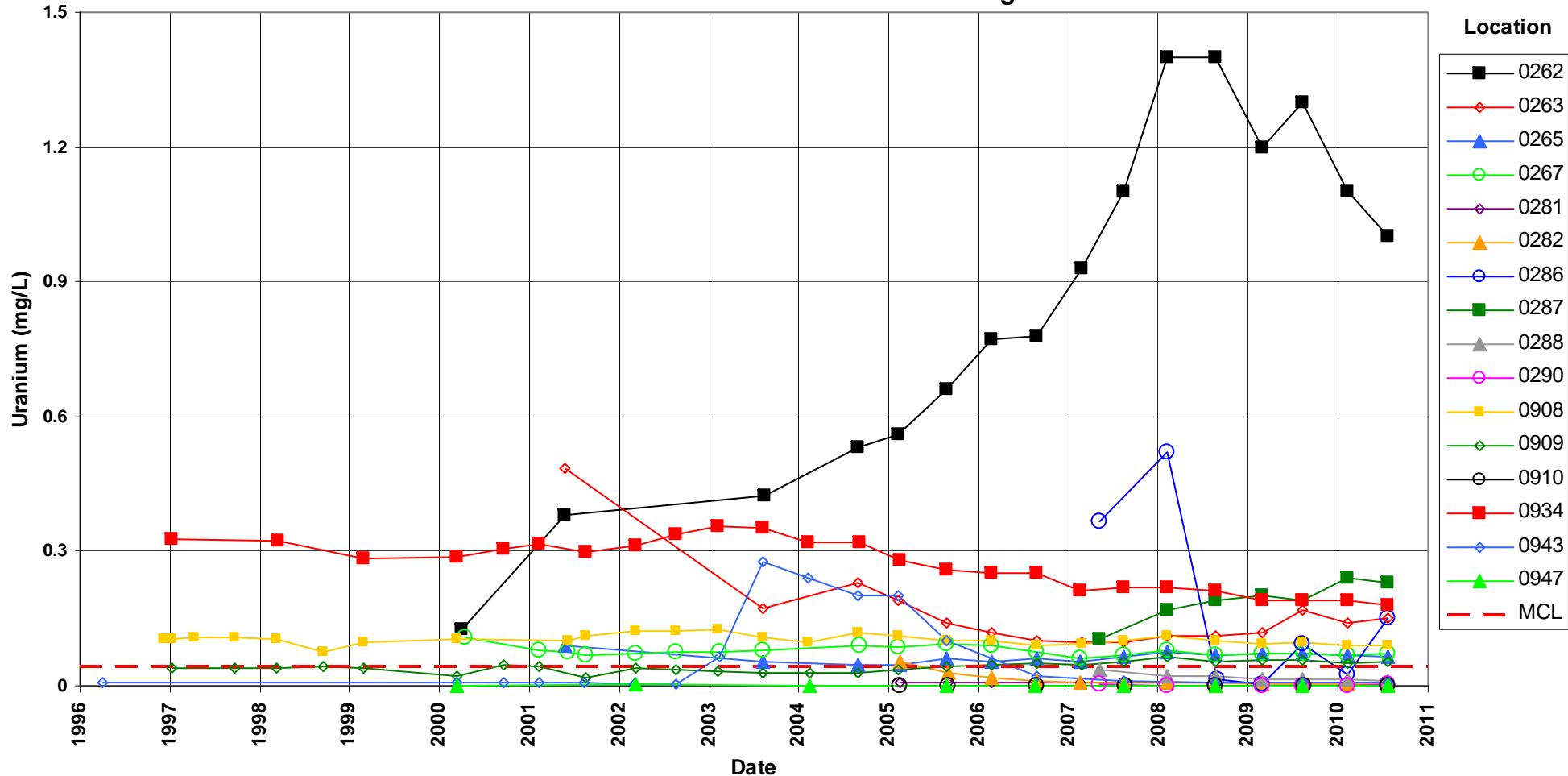


# Tuba City Disposal Site Horizon B Monitoring Wells Sulfate Concentration Cleanup Level = 250 mg/L

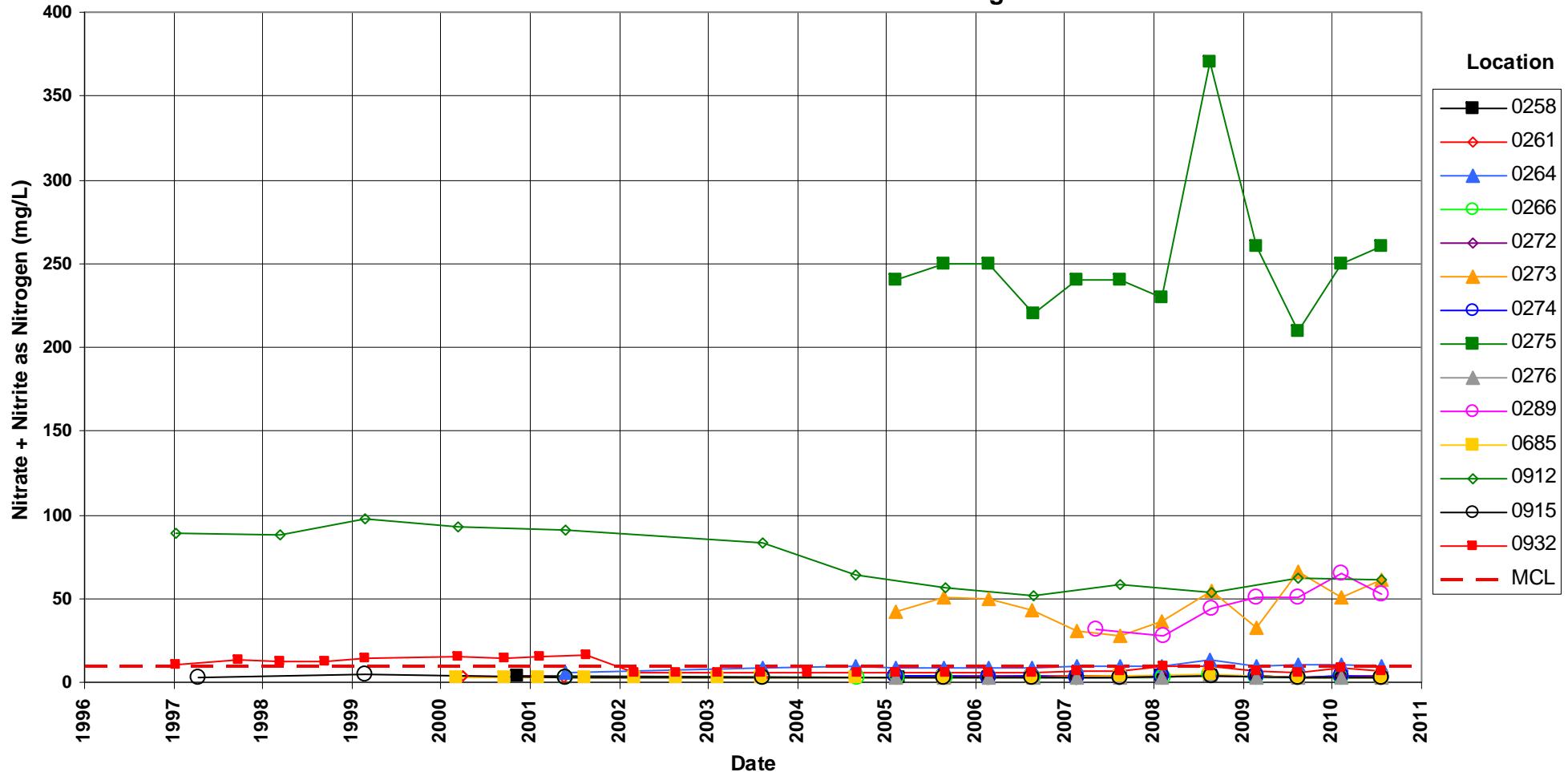


**Tuba City Disposal Site**  
**Horizon B Monitoring Wells**  
**Uranium Concentration**

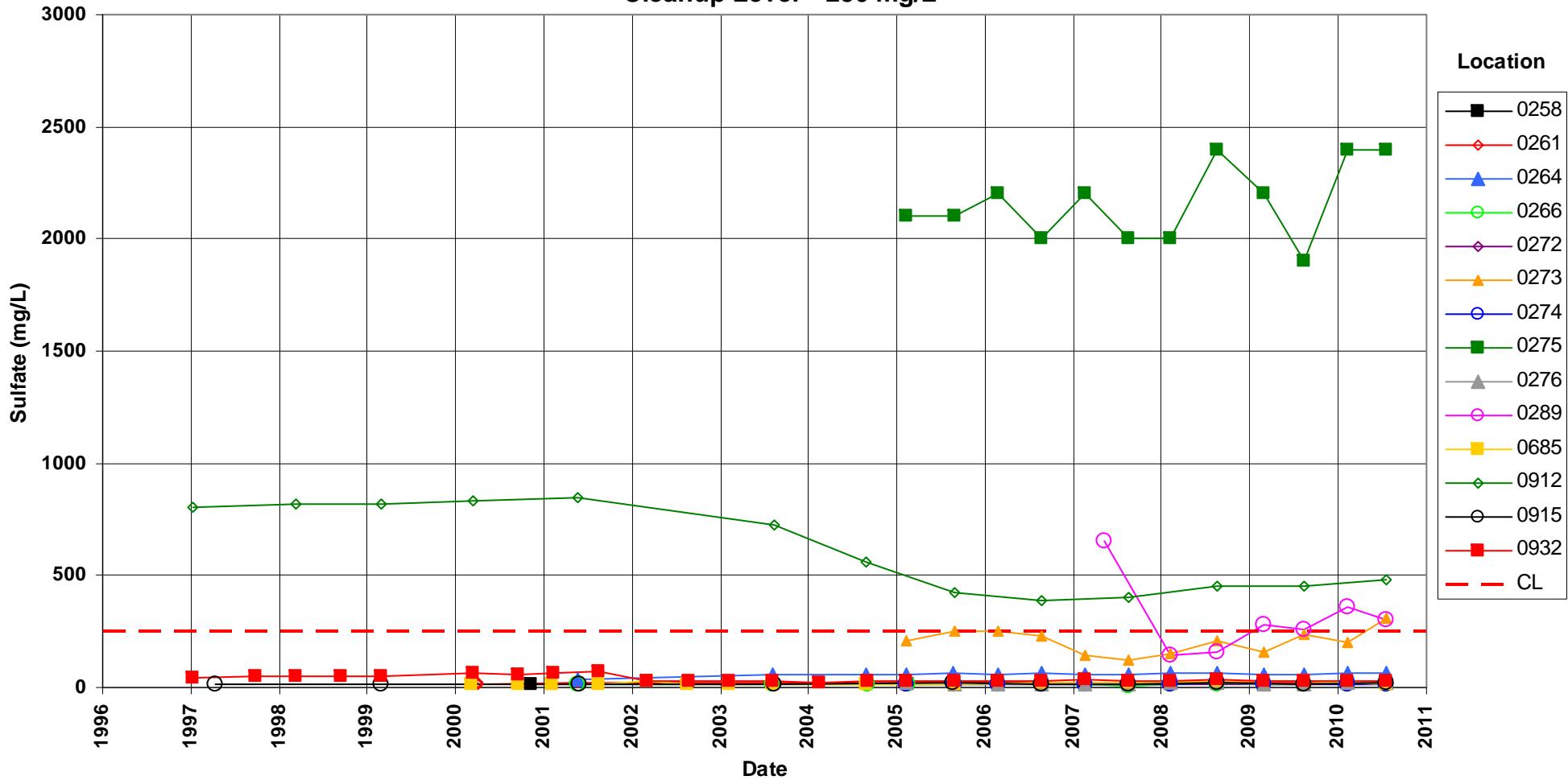
Maximum Contaminant Level = 0.044 mg/L



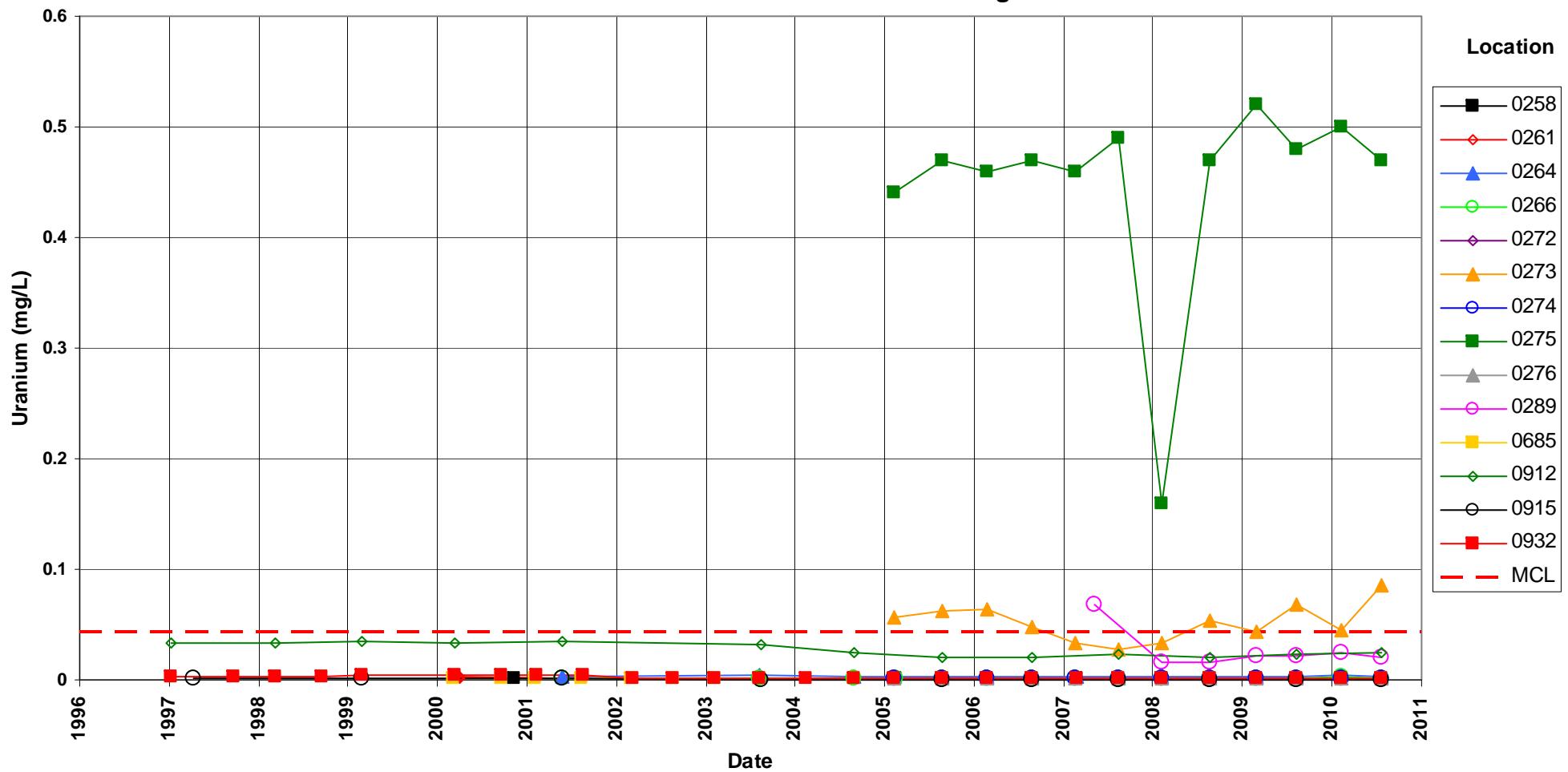
**Tuba City Disposal Site**  
**Horizons C & D Monitoring Wells**  
**Nitrate + Nitrite as Nitrogen Concentration**  
**Maximum Contaminant Level = 10.0 mg/L**



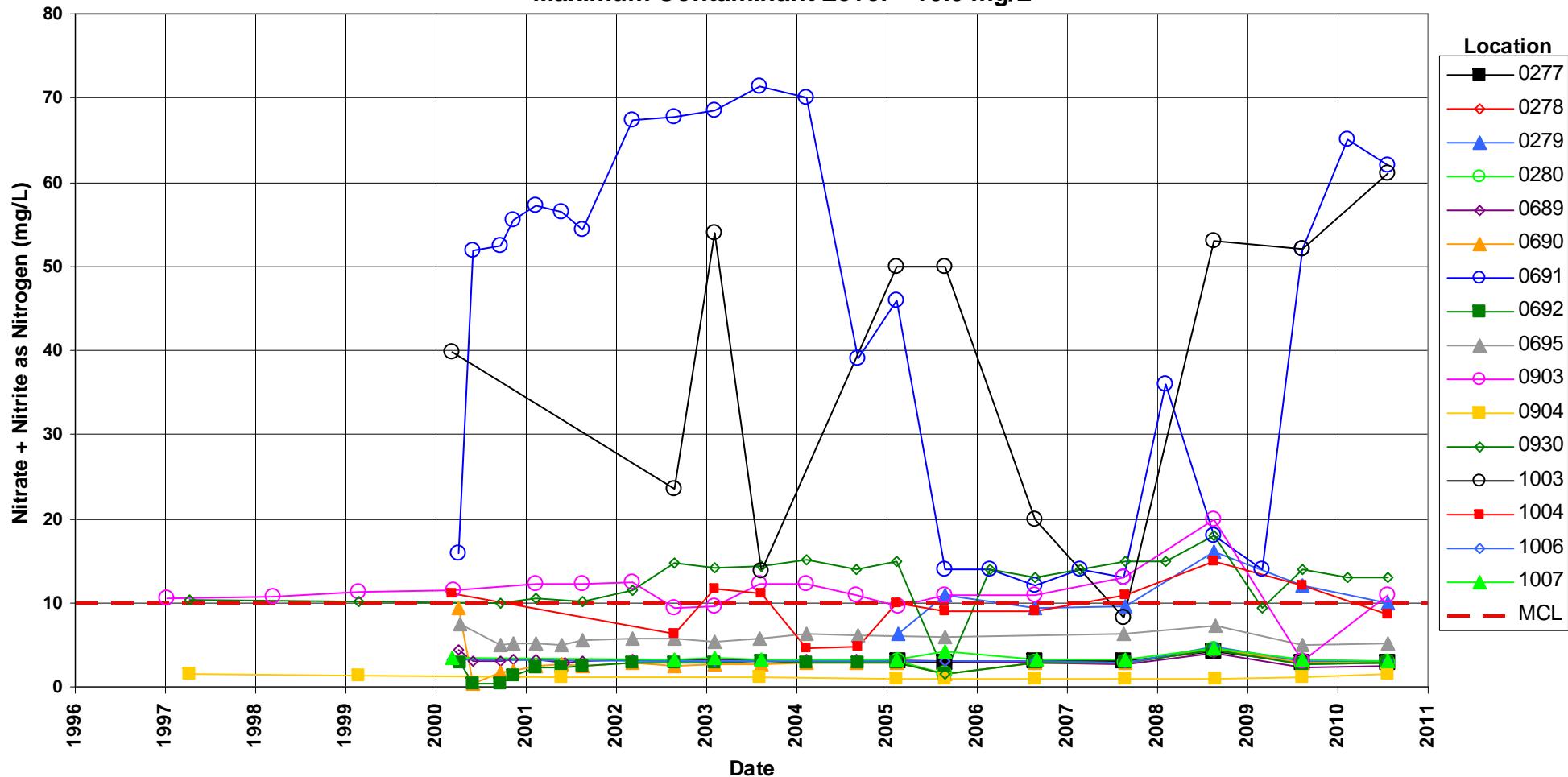
**Tuba City Disposal Site**  
**Horizons C & D Monitoring Wells**  
**Sulfate Concentration**  
**Cleanup Level = 250 mg/L**



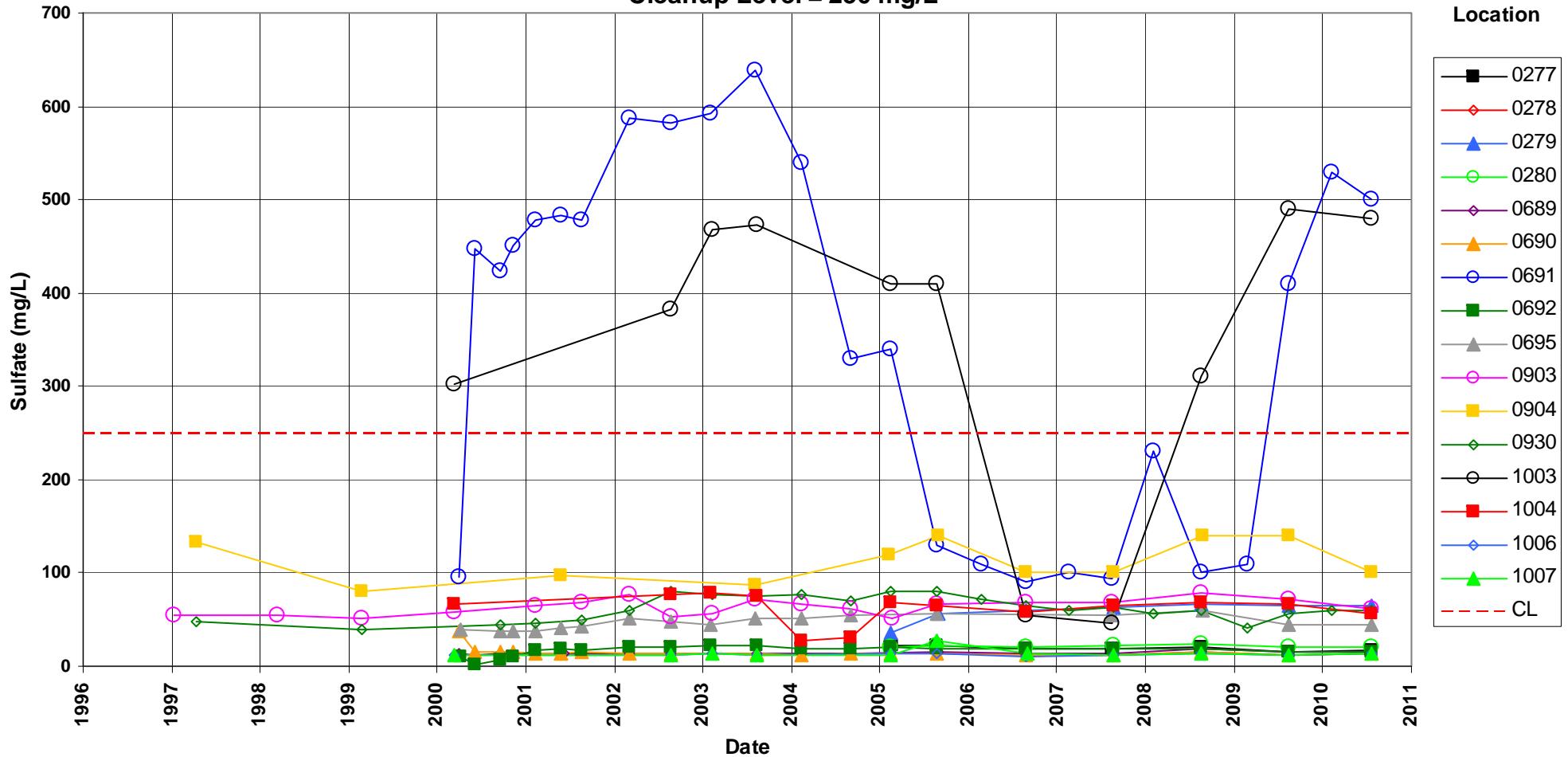
**Tuba City Disposal Site**  
**Horizons C & D Monitoring Wells**  
**Uranium Concentration**  
**Maximum Contaminant Level = 0.044 mg/L**



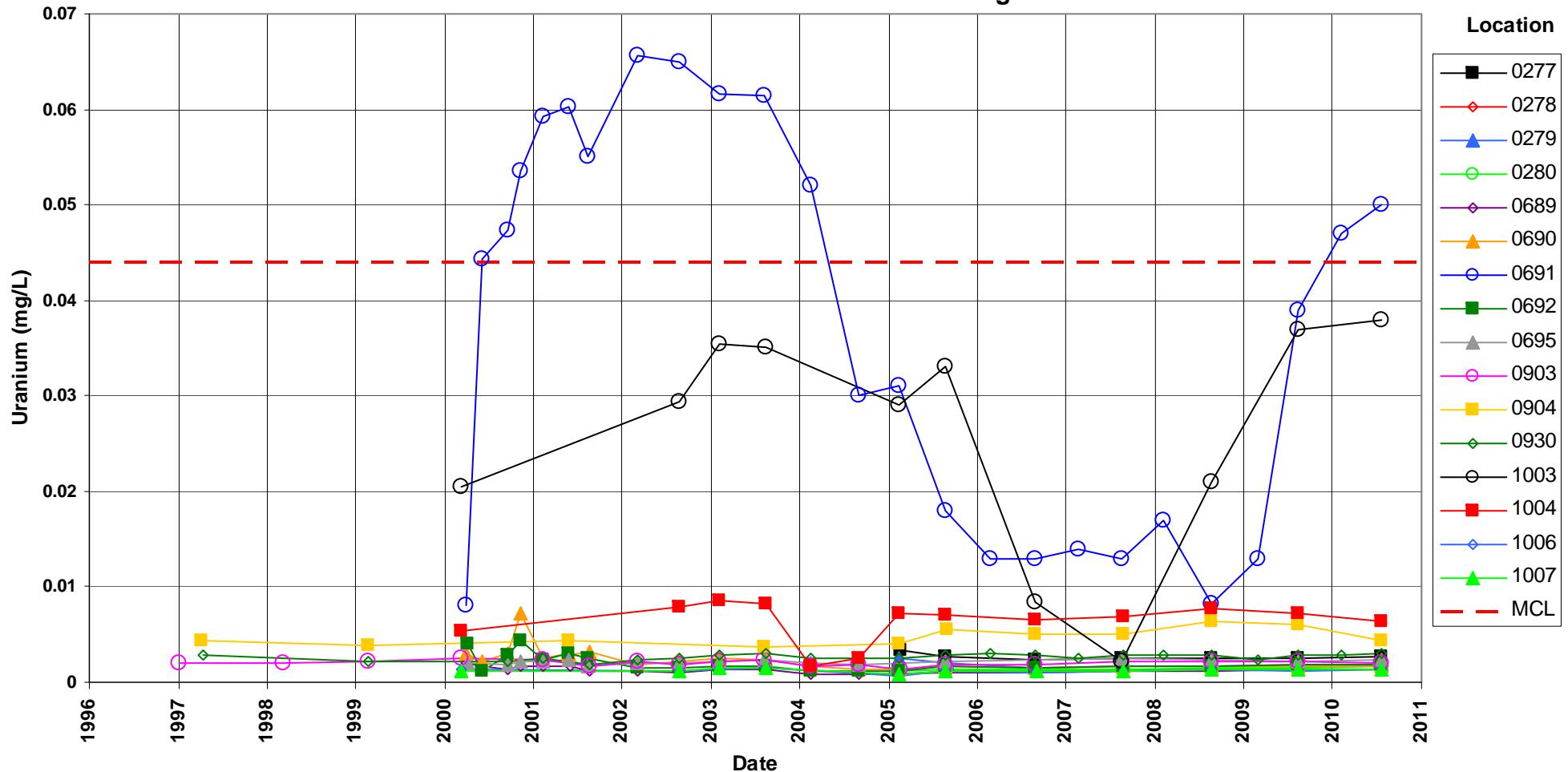
**Tuba City Disposal Site**  
**Lower Terrace, Horizons C & D Monitoring Wells**  
**Nitrate + Nitrite as Nitrogen Concentration**  
**Maximum Contaminant Level = 10.0 mg/L**



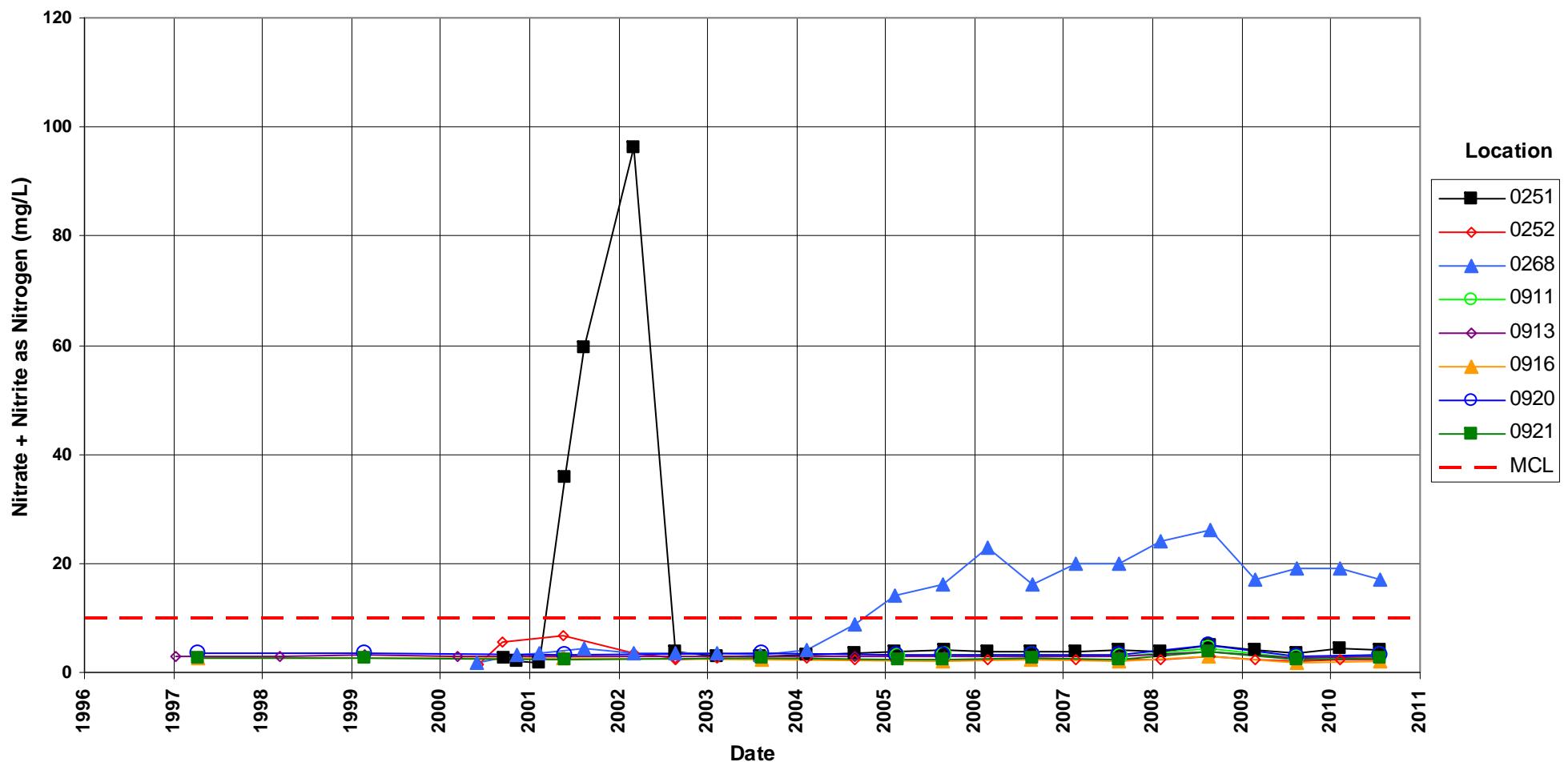
**Tuba City Disposal Site**  
**Lower Terrace, Horizons C & D Monitoring Wells**  
**Sulfate Concentration**  
**Cleanup Level = 250 mg/L**



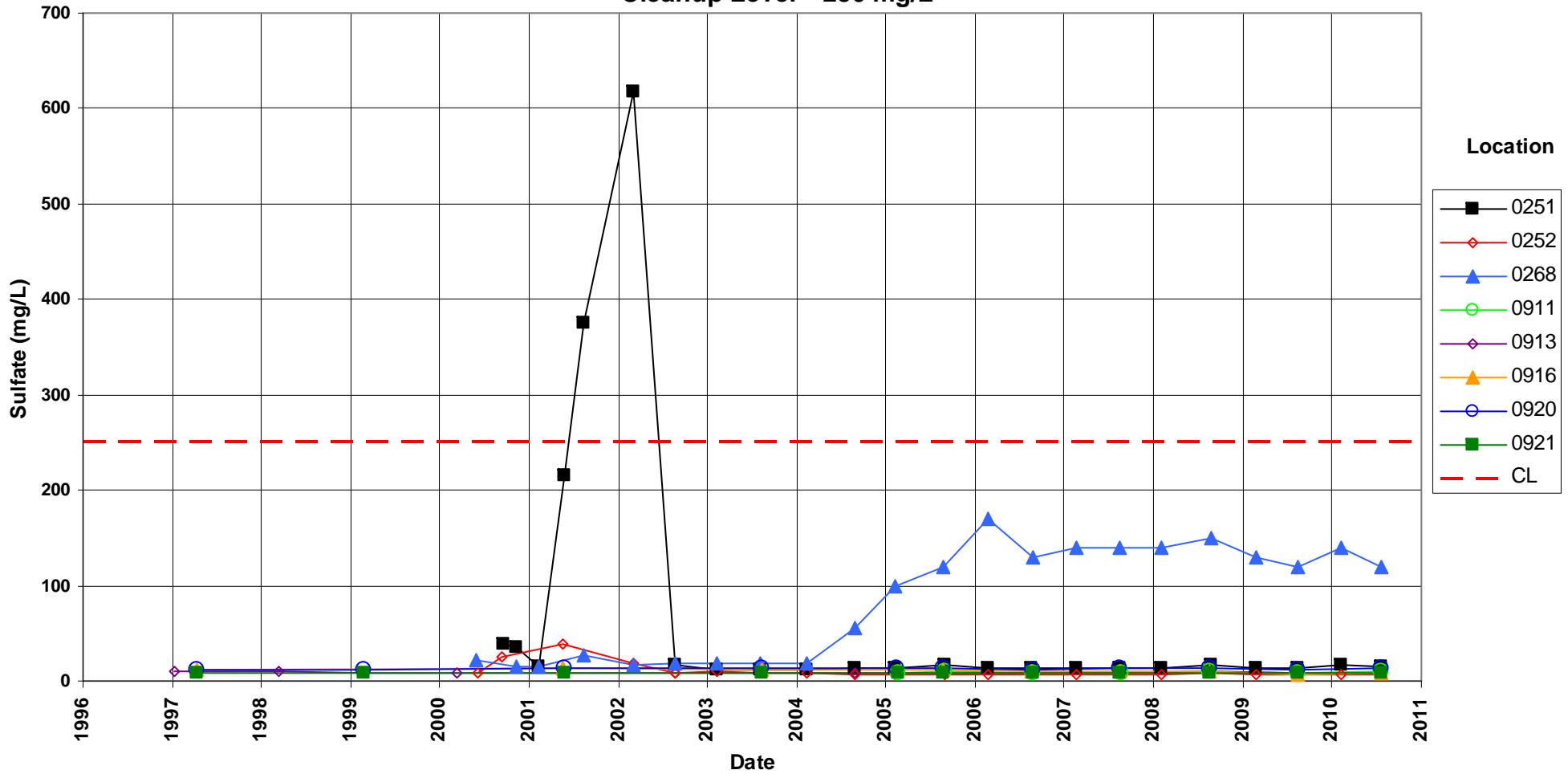
**Tuba City Disposal Site**  
**Lower Terrace, Horizons C & D Monitoring Wells**  
**Uranium Concentration**  
**Maximum Contaminant Level = 0.044 mg/L**



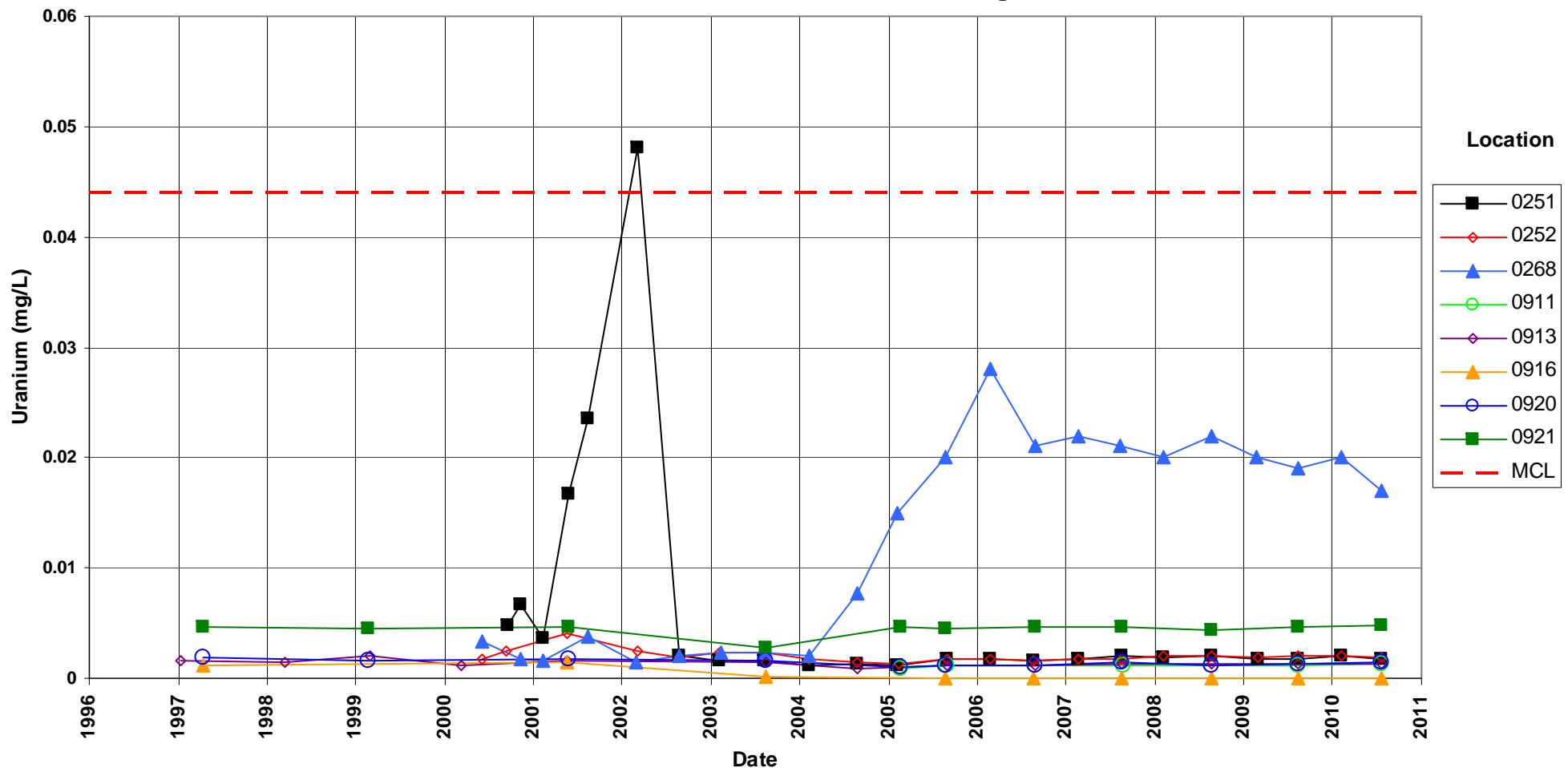
**Tuba City Disposal Site**  
**Deep Monitoring Wells**  
**Nitrate + Nitrite as Nitrogen Concentration**  
**Maximum Contaminant Level = 10.0 mg/L**



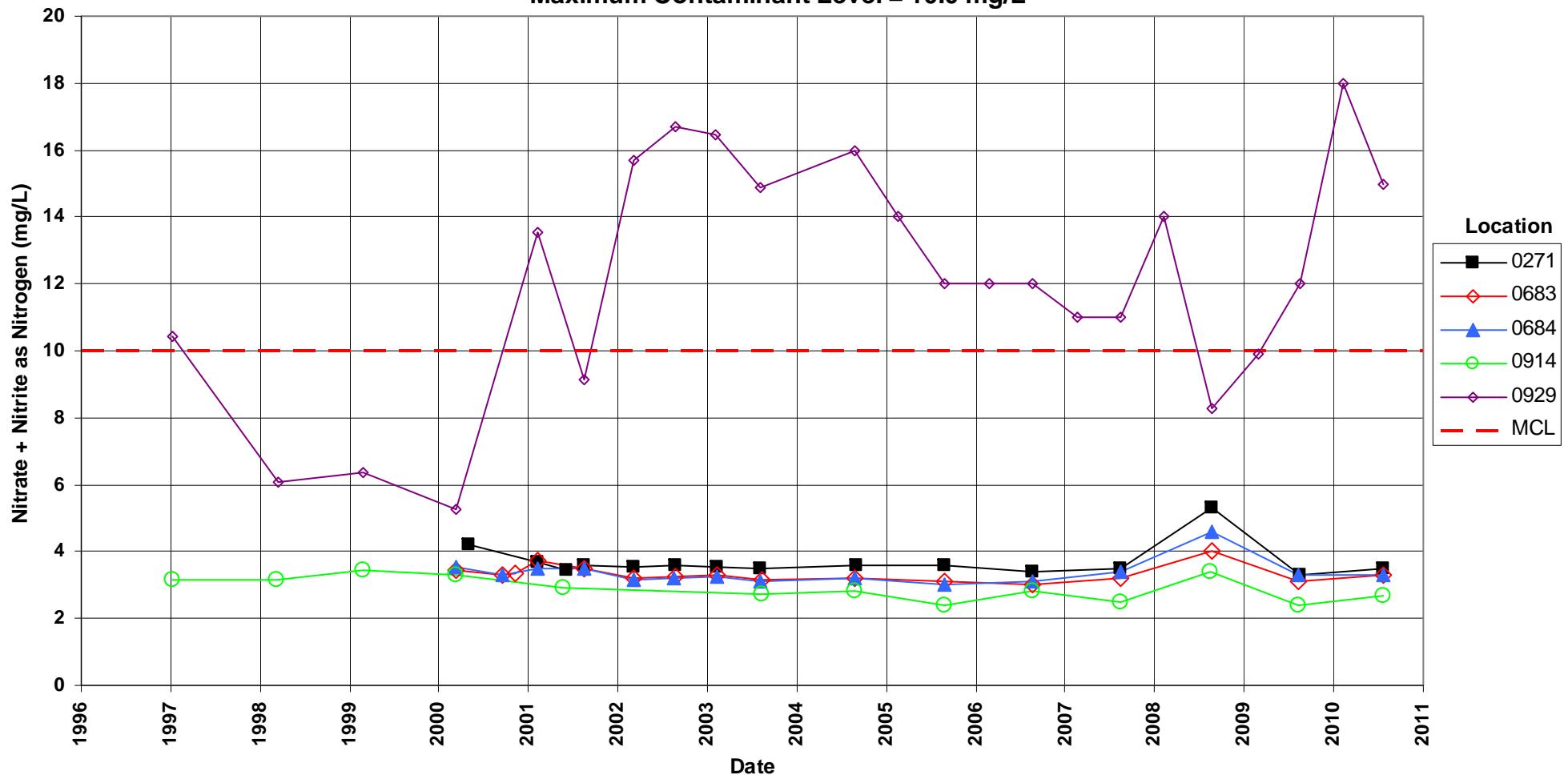
**Tuba City Disposal Site**  
**Deep Monitoring Wells**  
**Sulfate Concentration**  
**Cleanup Level = 250 mg/L**



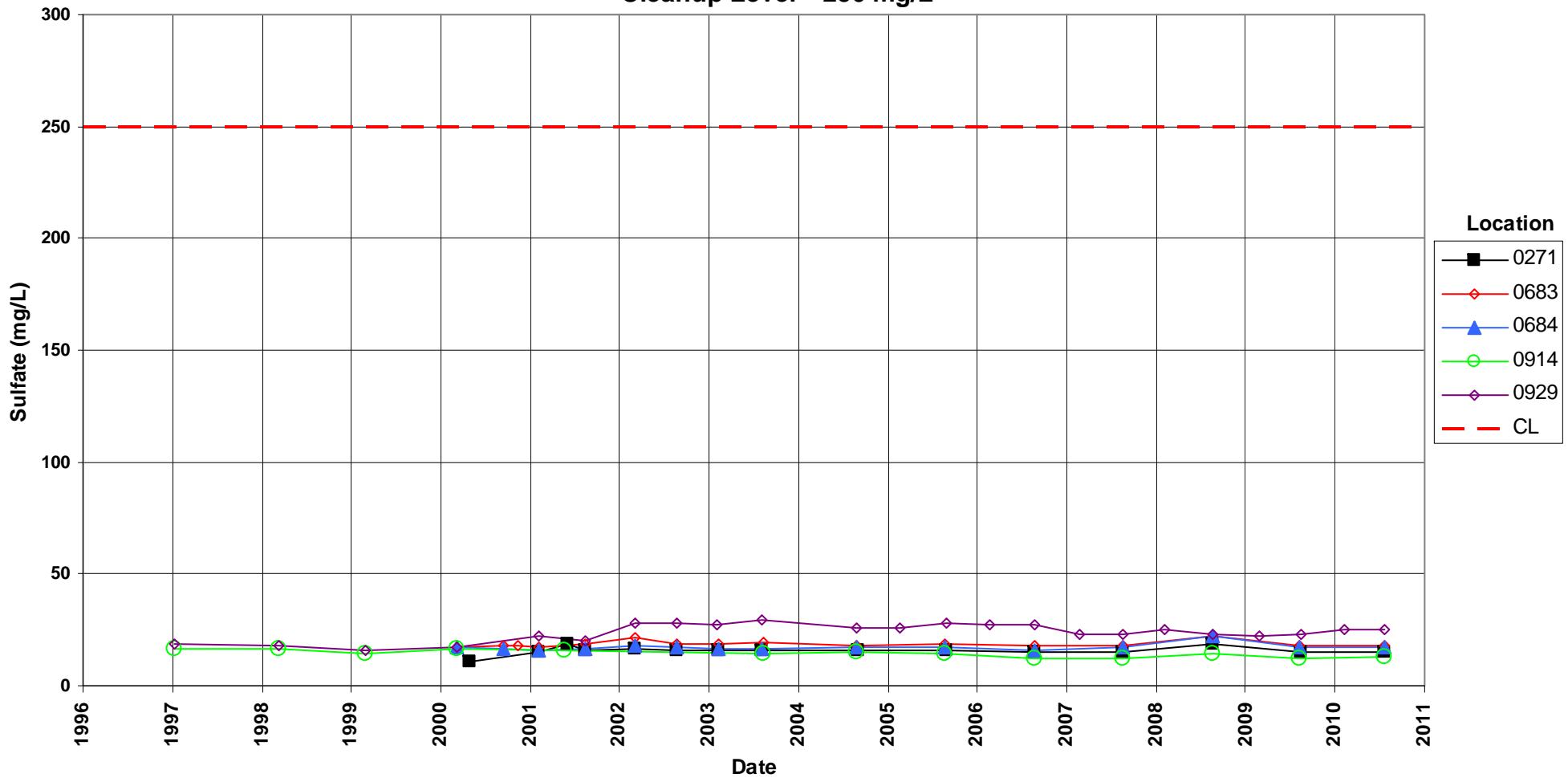
**Tuba City Disposal Site**  
**Deep Monitoring Wells**  
**Uranium Concentration**  
**Maximum Contaminant Level = 0.044 mg/L**



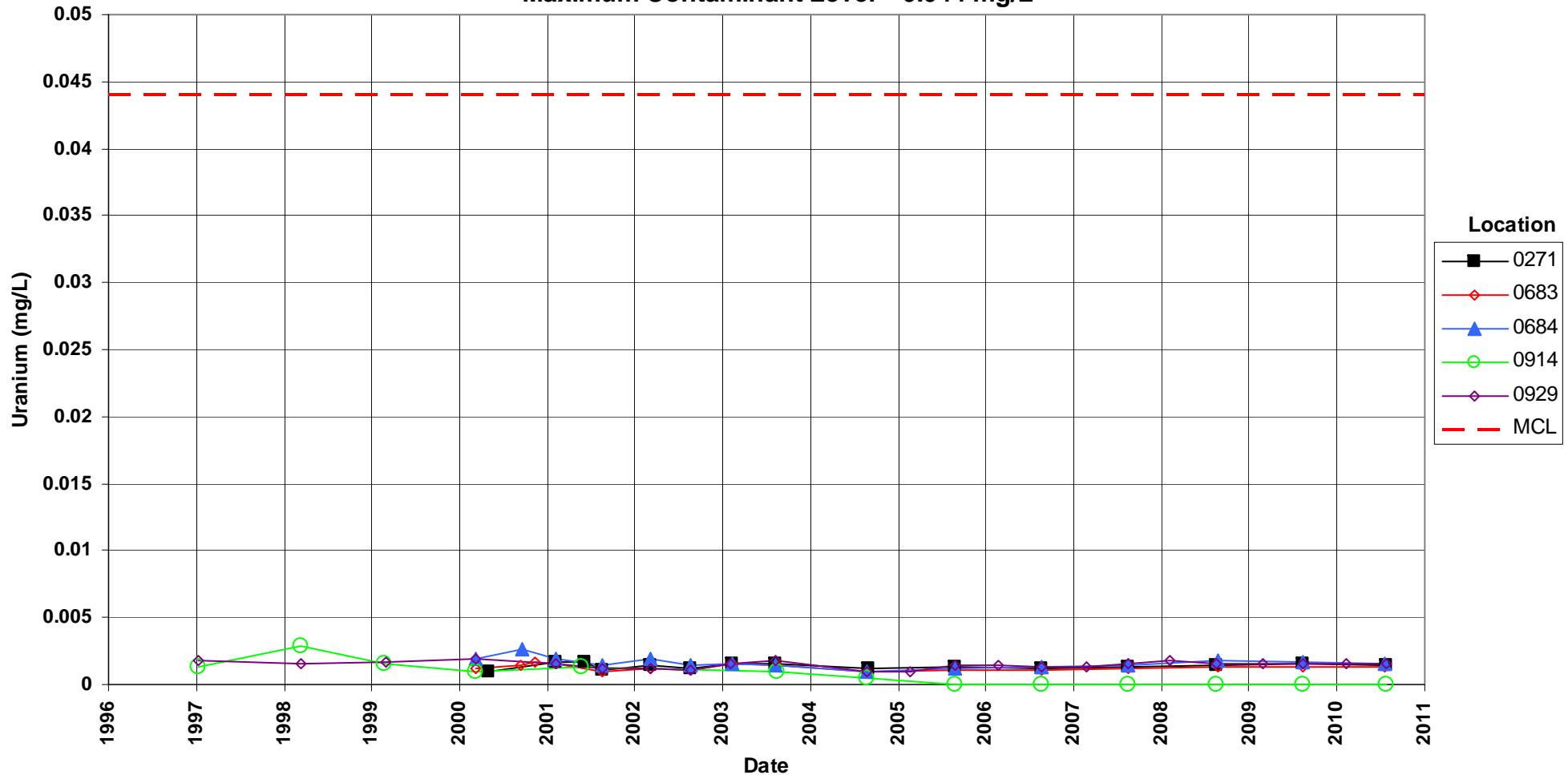
**Tuba City Disposal Site**  
**Horizons A, B, & C "Sentinel" Wells**  
**Nitrate + Nitrite as Nitrogen Concentration**  
**Maximum Contaminant Level = 10.0 mg/L**



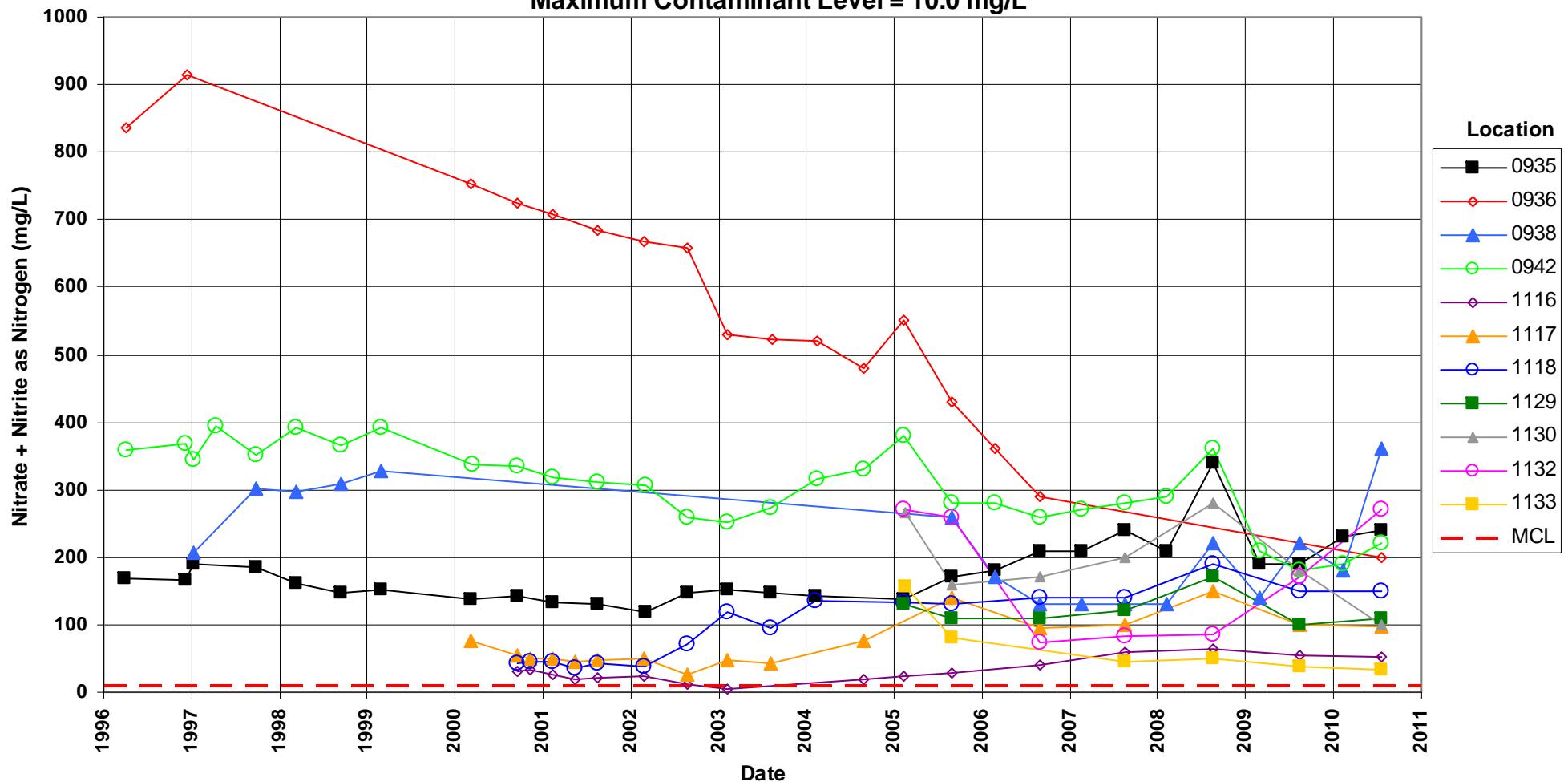
**Tuba City Disposal Site**  
**Horizons A, B, & C "Sentinel" Wells**  
**Sulfate Concentration**  
**Cleanup Level = 250 mg/L**



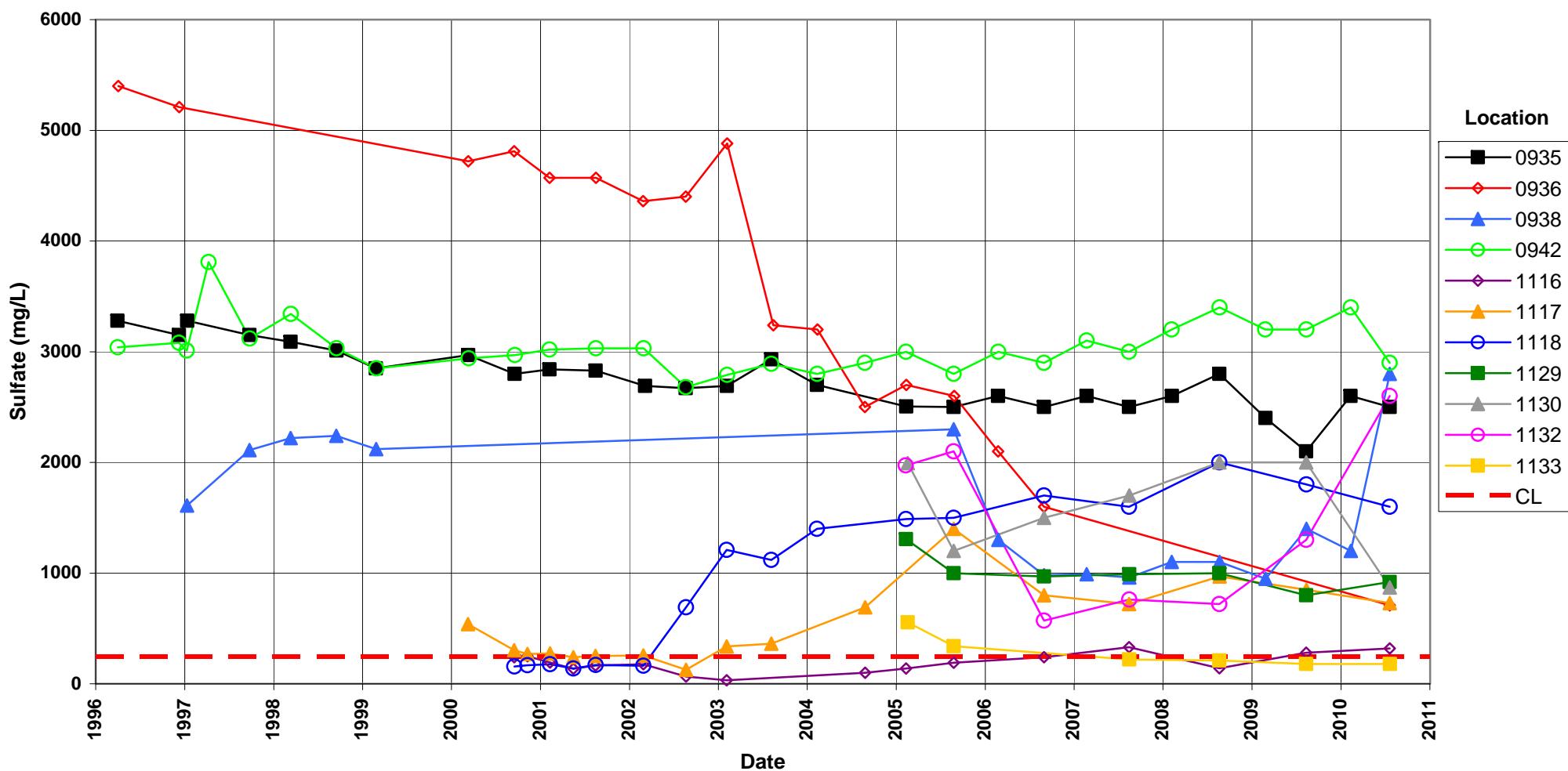
**Tuba City Disposal Site**  
**Horizons A, B, & C "Sentinel" Wells**  
**Uranium Concentration**  
**Maximum Contaminant Level = 0.044 mg/L**



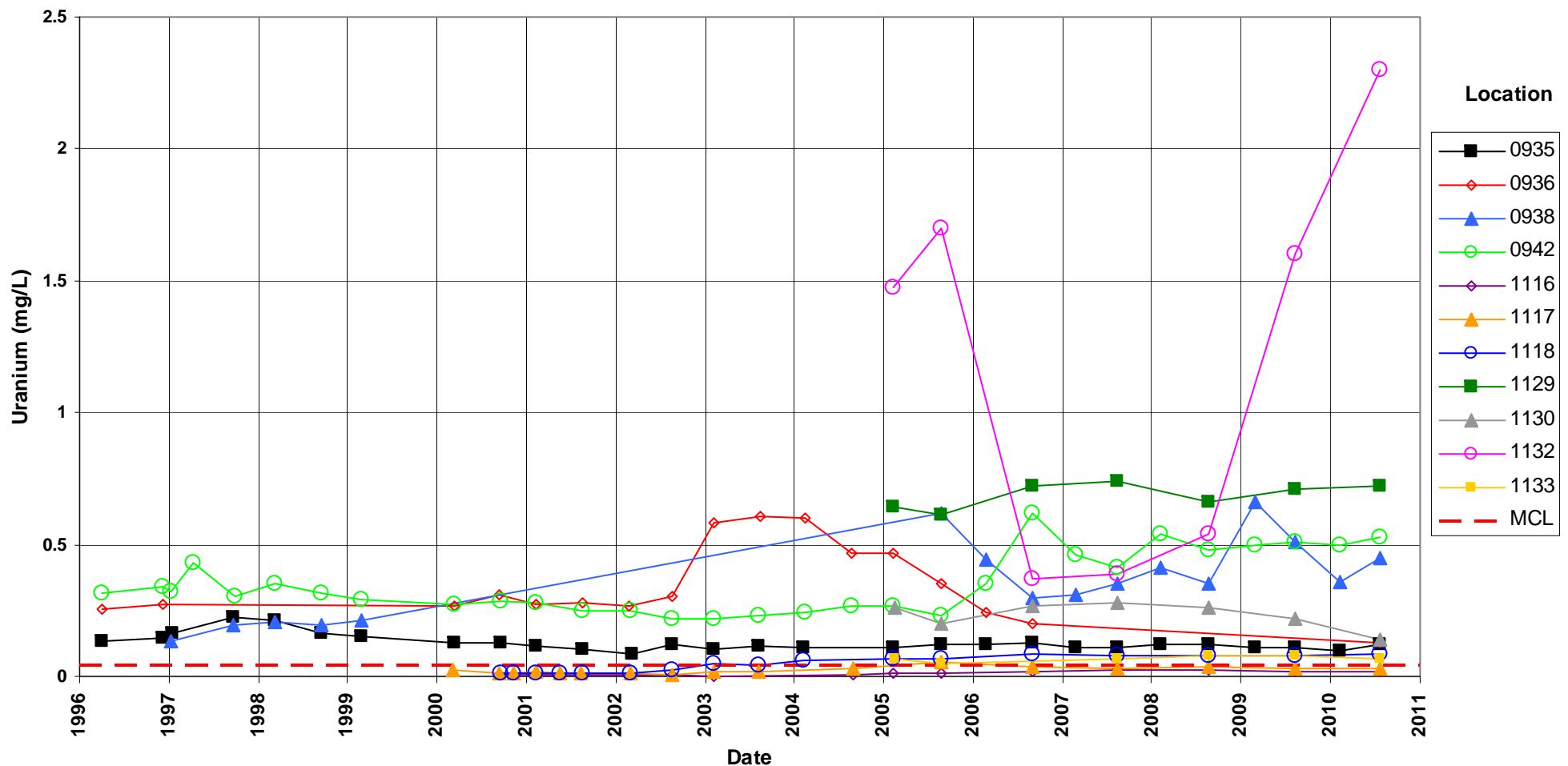
**Tuba City Disposal Site**  
**Horizons B & C Extraction Wells**  
**Nitrate + Nitrite as Nitrogen Concentration**  
**Maximum Contaminant Level = 10.0 mg/L**



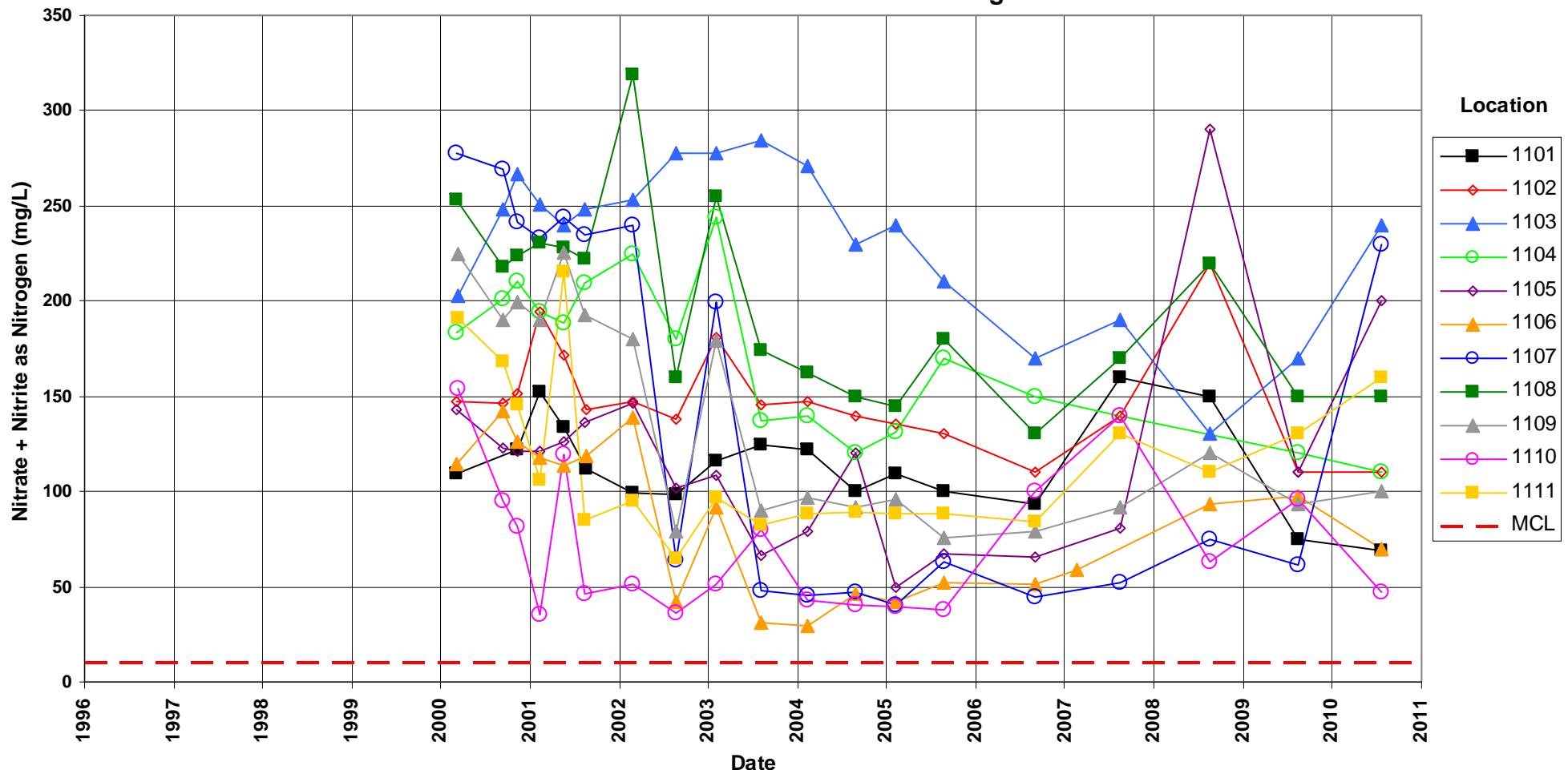
**Tuba City Disposal Site**  
**Horizons B & C Extraction Wells**  
**Sulfate Concentration**  
**Cleanup Level = 250 mg/L**



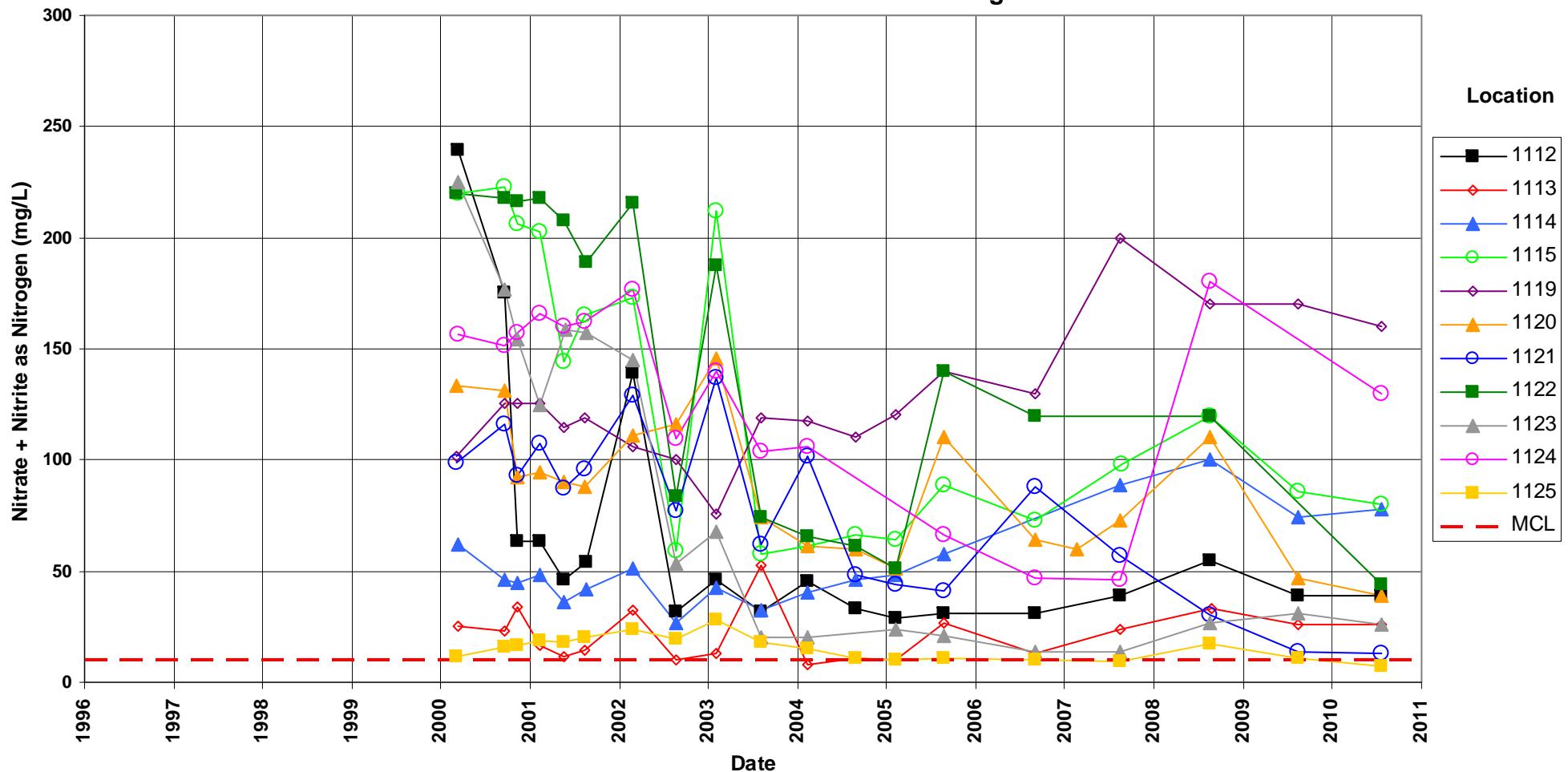
**Tuba City Disposal Site**  
**Horizons B & C Extraction Wells**  
**Uranium Concentration**  
**Maximum Contaminant Level = 0.044 mg/L**



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



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

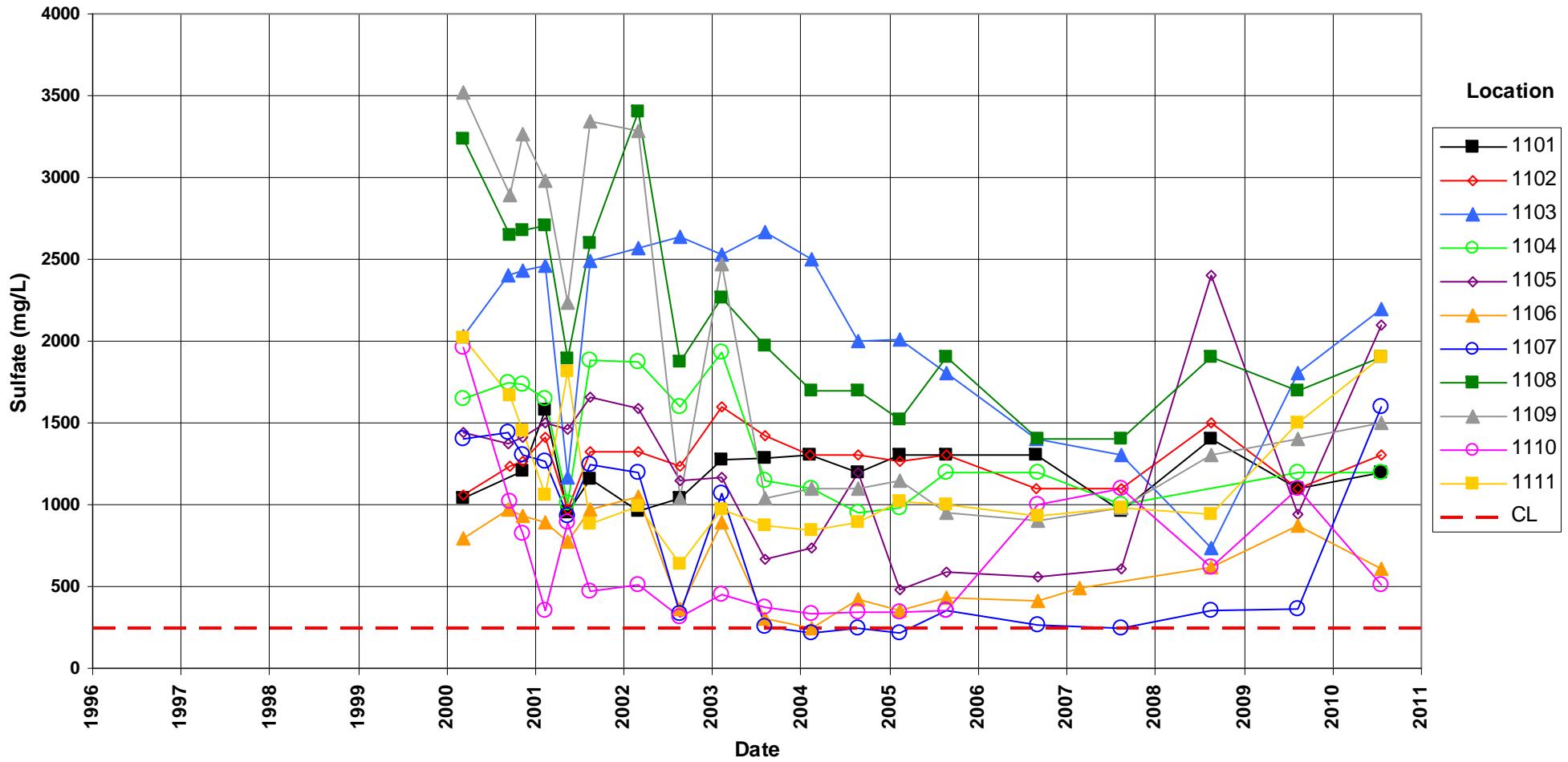


# Tuba City Disposal Site

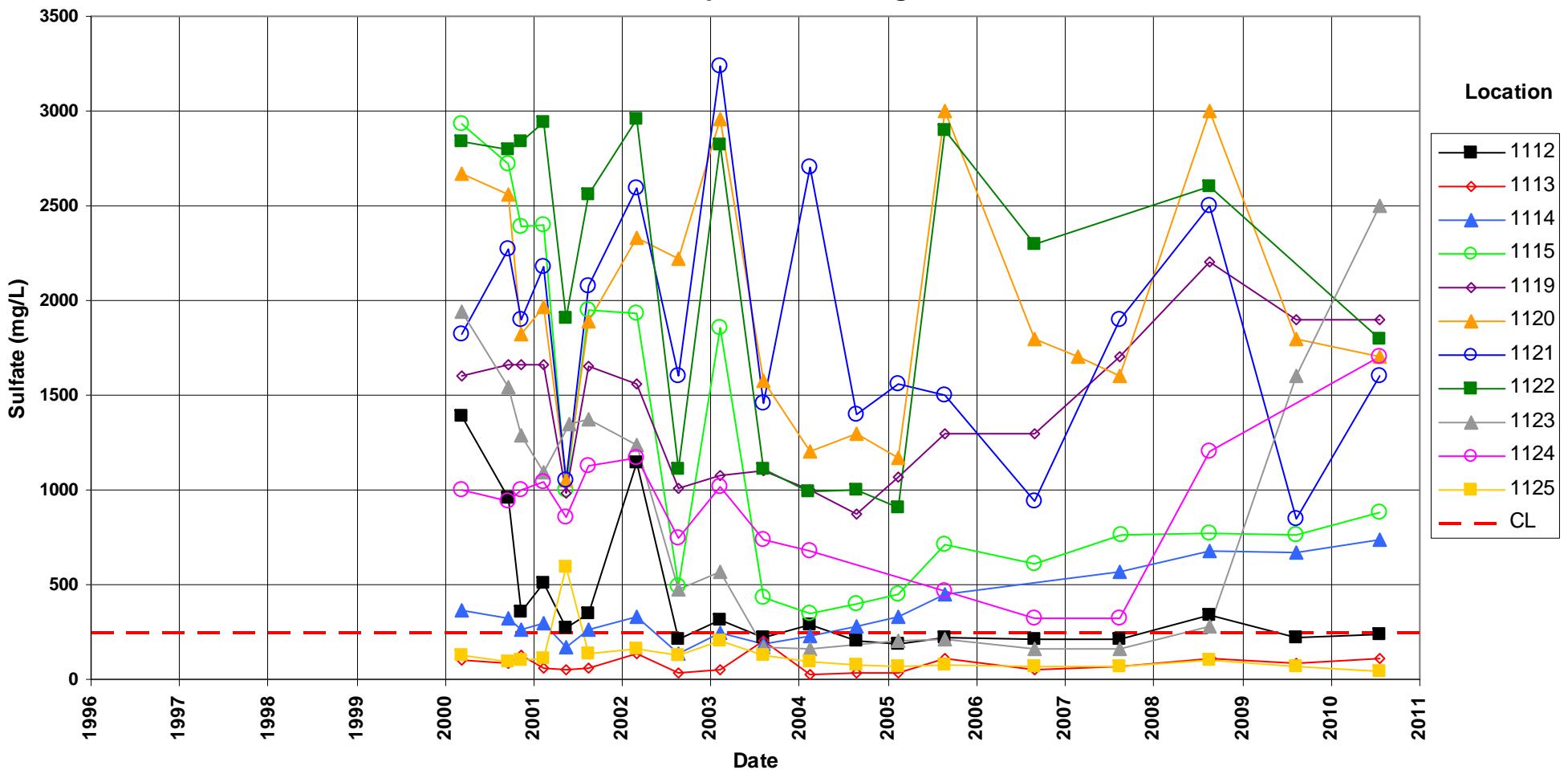
## Horizon D Extraction Wells

### Sulfate Concentration

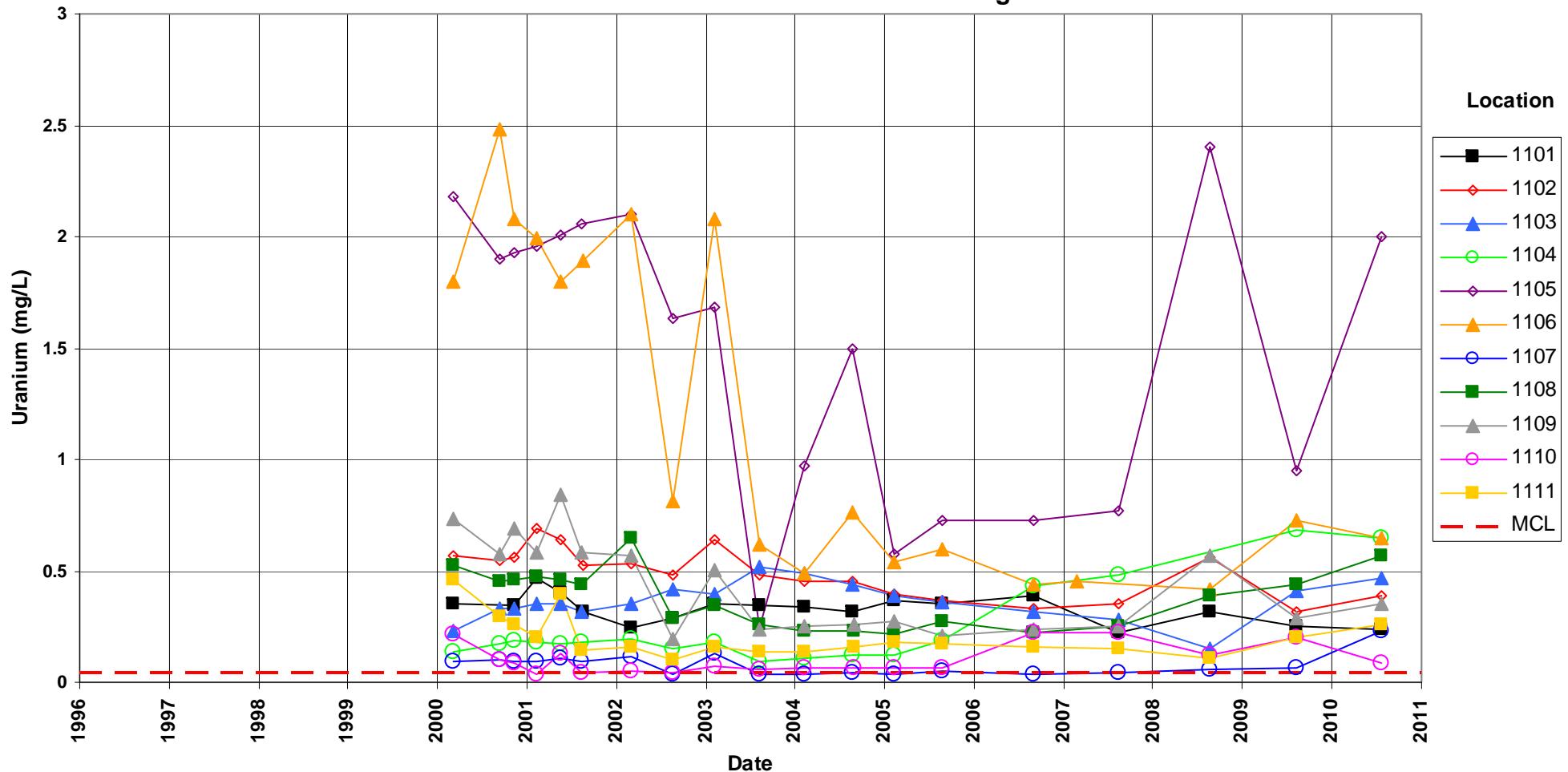
Cleanup Level = 250 mg/L



**Tuba City Disposal Site**  
**Horizon D Extraction Wells**  
**Sulfate Concentration**  
**Cleanup Level = 250 mg/L**

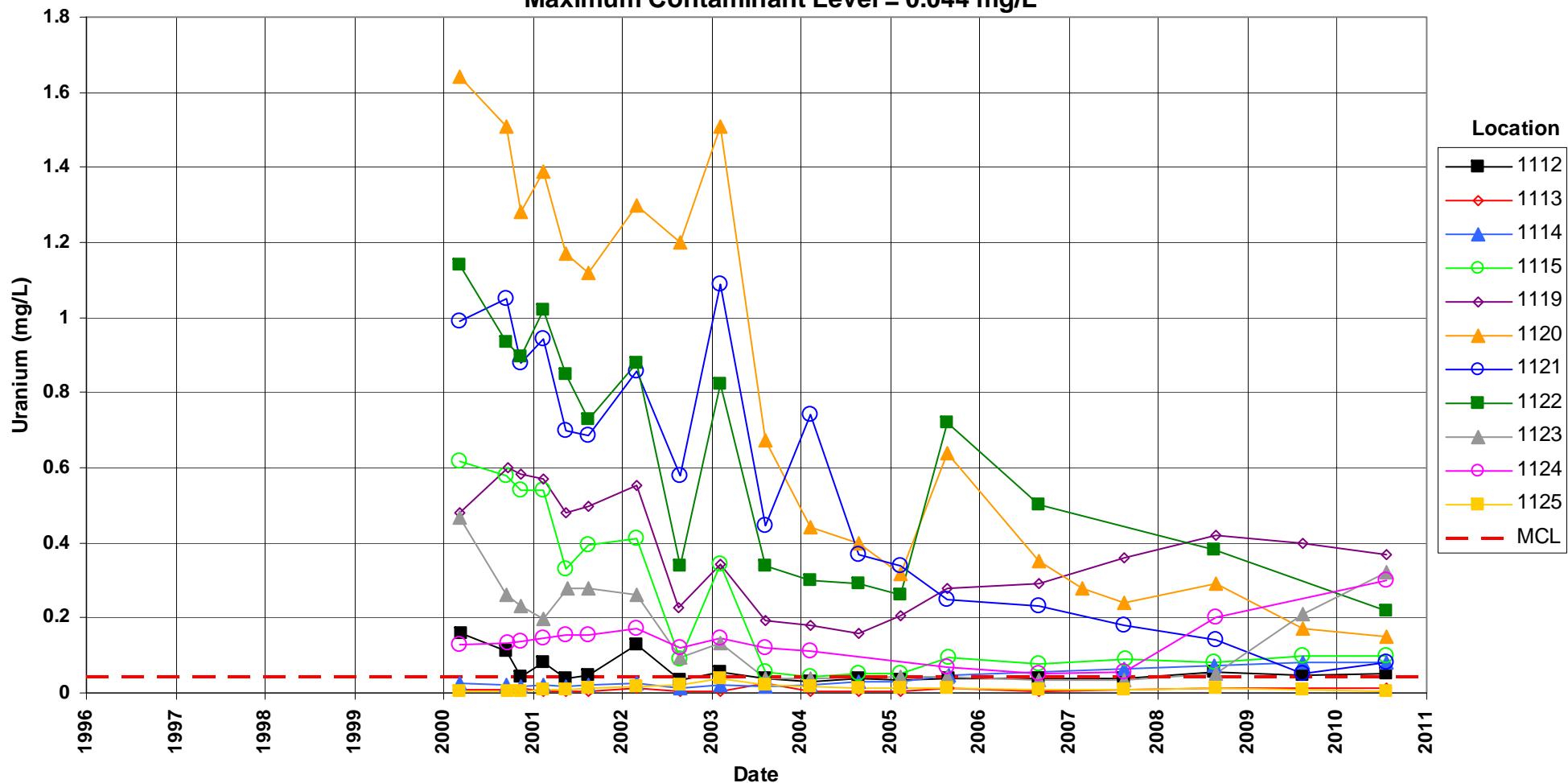


**Tuba City Disposal Site**  
**Horizon D Extraction Wells**  
**Uranium Concentration**  
**Maximum Contaminant Level = 0.044 mg/L**



**Tuba City Disposal Site**  
**Horizon D Extraction Wells**  
**Uranium Concentration**

Maximum Contaminant Level = 0.044 mg/L



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## **Attachment 3**

### **Sampling and Analysis Work Order**

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*established 1959*

Task Order LM00-501  
Control Number 10-0727

July 1, 2010

U.S. Department of Energy  
Office of Legacy Management  
ATTN: Richard Bush  
Site Manager  
2597 B ¼ Road  
Grand Junction, CO 81503

SUBJECT: Contract No. DE-AM01-07LM00060, S.M. Stoller Corporation (Stoller)  
July 2010 Environmental Sampling at Tuba City, Arizona

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

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 monitoring at the Tuba City disposal site. Water quality data will be collected from monitoring wells and surface locations at this site as part of the routine environmental sampling currently scheduled to begin the week of July 19, 2010.

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

**Monitoring 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

The S.M. Stoller Corporation      2597 B ¼ Road      Grand Junction, CO 81503      (970) 248-6000      Fax: (970) 248-6040

Richard Bush  
Control Number 10-0727  
Page 2

**Surface locations**

759	778	965	1569	1570	1571	1573
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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 contact me at (970) 248-6568 if you have any questions or concerns.

Sincerely,



Carl Jacobson  
Site Lead

CJ/lcg/lb

Enclosures (3)

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

**Sampling Frequencies for Locations at  
Tuba City, Arizona**

Location ID	Quarterly	Semiannually	Annually	Biennially	Not Sampled	Notes
<b>Monitoring Wells</b>						
000I					X	Water level only
000J					X	Water level only
000M					X	Water level only
251		X				
252		X				
258		X				
261			X			August
262		X				
263		X				
264		X				
265		X				
266		X				
267		X				
268		X				
271			X			August
272		X				
273		X				
274		X				
275		X				
276		X				
277			X			August
278			X			August
279			X			August
280			X			August
281		X				
282		X				
283		X				
284					X	Water level only
285					X	Water level only
286		X				
287		X				
288		X				
289		X				
290		X				
683			X			August
684			X			August
685			X			August
686			X			DATA LOGGER; August
687			X			DATA LOGGER; August
688			X			DATA LOGGER; August
689			X			August
690			X			August
691		X				
692			X			August
695			X			August
901			X			August
902					X	Water level only
903			X			August
904			X			August

**Sampling Frequencies for Locations at  
Tuba City, Arizona**

Location ID	Quarterly	Semiannually	Annually	Biennially	Not Sampled	Notes
<b>Monitoring Wells</b>						
906		X				DATA LOGGER
908		X				DATA LOGGER
909		X				DATA LOGGER
910			X			August
911			X			August
912			X			August
913			X			August
914			X			August
915			X			August
916			X			August
917					X	Water level only
918					X	Water level only
919					X	Water level only
920			X			August
921			X			August
929		X				
930		X				
932		X				
934		X				DATA LOGGER
935		X				Converted to extraction well 7/05
936		X				DATA LOGGER
938		X				Converted to extraction well 7/05
940		X				DATA LOGGER
941		X				DATA LOGGER
942		X				DATA LOGGER
943			X			DATA LOGGER; August
945			X			August
946			X			DATA LOGGER; August
947			X			August
948					X	Water level only
968					X	Water level only
970					X	Water level only
971					X	Water level only
972					X	Water level only
1003			X			August
1004			X			August
1005					X	Water level only
1006			X			August
1007			X			August
1008					X	Water level only
1101			X			August
1102			X			August
1103			X			August
1104			X			August
1105			X			August
1106			X			August
1107			X			August
1108			X			August
1109			X			August

**Sampling Frequencies for Locations at  
Tuba City, Arizona**

Location ID	Quarterly	Semiannually	Annually	Biennially	Not Sampled	Notes
<b>Monitoring Wells</b>						
1110			X			August
1111			X			August
1112			X			August
1113			X			August
1114			X			August
1115			X			August
1116			X			August
1117			X			August
1118			X			August
1119			X			August
1120			X			August
1121			X			August
1122			X			August
1123			X			August
1124			X			August
1125			X			August
1126			X			August
1127			X			August
1128			X			August
1129			X			August
1130			X			August
1131			X			August
1132			X			August
1133			X			August
<b>Surface Locations</b>						
759			X			August; Moenkopi wash-downgradient
778			X			August; Moenkopi wash-at Jimmy Spring
965			X			August; Moenkopi wash-far upgradient
1569		X				Evap pond - North
1570		X				Evap pond - South
1571			X			Jimmy Spr West - August
1572					X	Jimmy Spr East
1573			X			West pipe Shonto Well - August
1574					X	East pipe Shonto Well

Semi-annual sampling conducted in February and August; Annual sampling conducted in August.

### Constituent Sampling Breakdown

Site	Tuba City		Required Detection Limit (mg/L)	Analytical Method	Line Item Code
Analyte	Groundwater	Surface Water			
Approx. No. Samples/yr	143	9			
<b>Field Measurements</b>					
Alkalinity	X	X			
Dissolved Oxygen					
Redox Potential	X	X			
pH	X	X			
Specific Conductance	X	X			
Turbidity	X				
Temperature	X	X			
<b>Laboratory Measurements</b>					
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					
<b>Total No. of Analytes</b>	<b>16</b>	<b>14</b>			

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.

## **Attachment 4**

### **Trip Report**

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*established 1959*

## *Memorandum*

Control Number N/A

DATE: August 5, 2010  
TO: Carl Jacobson  
FROM: Dan Sellers  
SUBJECT: Trip Report

**Site:** Tuba City, AZ.

**Date of Sampling Event:** July 19-23, 2010

**Team Members:** Jeff Price, Joe Trevino, Dave Atkinson, Kent Moe, Jeff Walters, and Dan Sellers.

**Number of Locations Sampled:** 101 monitoring/extraction wells, 4 surface water locations, and 6 duplicates were collected. All monitoring and extraction wells were sampled for As, Ca, Fe, Mg, Mn, Mo, K, Se, Na, U, SiO<sub>2</sub>, Cl, SO<sub>4</sub>, (NO<sub>3</sub>+NO<sub>2</sub>)-N, (NH<sub>3</sub>-N), and TDS. All surface water locations were sampled for As, Ca, Fe, Mg, Mn, Mo, K, Se, Na, U, Cl, SO<sub>4</sub>, (NO<sub>3</sub>+NO<sub>2</sub>)-N, and TDS.

**Locations Not Sampled/Reason:** Well 0283 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:** Well 0282 was purged to below top of pump; pump depth measured at 84.70 feet. A water level could not be obtained from well 1103; the sounder kept getting hung up in the well.

All samples were shipped to ALS Laboratory Group via Fed-Ex. The first shipment was sent from Tuba City on July 21, 2010, and the second shipment on July 23, 2010.

**Field Variance:** Well 0940 parameters were not taken due to insufficient water. Samples were collected. The water level was not measured at well 1121 – did not want to get the WL meter caught in the well.

**Requisition Numbers Assigned:** All samples were assigned to requisition identification number (RIN) 10073213.

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

False ID	True ID	Sample Type	Matrix	Ticket Number
2987	0686	Duplicate	Groundwater	IY 707
2988	1118	Duplicate	Groundwater	IY 708
2989	1117	Duplicate	Groundwater	IY 709
2990	1120	Duplicate	Groundwater	IY 710
2991	0272	Duplicate	Groundwater	IY 711
2532	1570	Duplicate	Surface Water	IY 716

**Water Level Measurements:** Water levels were measured at all sampled monitoring wells. Additional water levels were recorded at 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.

**Dataloggers:** Dataloggers were downloaded and checked for accuracy at the following locations: 0263, 0286, 0287, 0908, 0934, 0943, and 0946.

At well 0286, water level (WL) increased ~2.0 feet in 3 hours on July 20, 2010. Returned in two days to re-measure and compare WL to last reading of device. On July 22, 2010, the manual WL obtained at 1030 a.m. was 70.10; the transducer reading at 0800 was 70.10. The transducer is considered fully operational and a determination was made that the WL had fluctuated greatly within two days after the water treatment system was shut off. The water level rose ~12.0 feet in 48 hours.

At well 0287, the WL decreased ~1.0 foot in 3 hours. The transducer is considered be functioning and a determination was made that the WL had fluctuated within 2 days. The water level decreased ~3.0 feet in 48 hours. The WL on July 18, 2010, was recorded at 61.25 feet and at 64.57 feet on July 20, 2010.

**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.

Carl Jacobson  
August 5, 2010  
Page 3

(DLS/lcg)

cc: (electronic)  
Richard Bush, DOE  
Timothy Bartlett, Stoller

Steve Donivan, Stoller  
EDD Delivery

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