Data Validation Package

September 2004 Water Sampling at the Shiprock, New Mexico, Disposal Site

February 2005



U.S. Department of Energy Office of Legacy Management

Work Performed by the S.M. Stoller Corporation under DOE Contract No. DE–AC01–02GJ79491 for the U.S. Department of Energy Office of Legacy Management. Approved for public release; distribution is unlimited.

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Sampling Event Summary

Site: Shiprock, NM, Disposal Site

Sampling Period: September 14-17, 2004

The distribution and rate of movement of contaminated ground water at the site was assessed in the Final Site Observational Work Plan (SOWP), issued in November 2000. Ground water sampling data from this sampling round did not indicate any unexpected movement of contaminated ground water outside of what was portrayed in the SOWP. Wells with sample concentrations that exceeded U.S. Environmental Protection Agency (EPA) ground water standards are listed in Table 1. Graphs that show nitrate, selenium, and uranium concentrations versus time for selected floodplain and terrace wells are included in this report.

Surface water concentrations were compared to statistical benchmark values derived using data from 13 samplings of location 0898, which is upstream of the site on the San Juan River. Benchmark values were not exceeded at river locations adjacent to or downstream from the site.

At location 0959, which is in a distributary channel of the San Juan River, concentrations of several analytes exceeded benchmark values. San Juan River water flows through the distributary channel when the river stage is high; however, at the time of this sampling, the river stage was low and no river water was entering the channel. Therefore, the elevated concentrations at 0959 reflect contaminated ground water emerging in seeps from the terrace system to the south. The SOWP indicated no unacceptable risks associated with exposure to this surface water. Other surface water locations receive discharge of ground water from the terrace system and elevated concentrations are expected.

Analyte	Standard ^a	Site	Wells (and Concentrations ^a) Exceeding Standard
Nitrate as Nitrogen	10	SHP01	0608 (470), 0614 (870), 0618 (180), 0735 (70), 1008 (73), 1077 (320), 1089 (83)
Nitrate as Nitrogen	10	SHP02	0817 (490), 0832 (670), 0835 (200), 0838 (34), 0834(34), 0839 (590), 0841 (670), 0846 (19), 1057 (1500), 1060 (240), 1070 (880), 1071 (600), 1078 (740), 1079 (84), 1091 (1600), 1092 (1500), 1093 (890), 1094 (1000)
Selenium	0.01	SHP01	0614 (0.065), 0618 (0.33), 0735 (0.031), 1008 (0.15), 1077 (0.04), 1089 (0.048)
Selenium	0.01	SHP02	0832 (4.0), 0835 (0.4), 0836 (0.063), 0838 (0.19), 0838 (0.2), 0841 (3.0), 0846 (0.2), 1057 (0.38), 1060 (1.5), 1070 (2.8), 1071 (0.17), 1078 (2.9), 1079 (0.56), 1091 (0.51), 1092 (2.1), 1093 (1.9), 1094 (0.55)
Uranium	0.044	SHP01	0608 (1.7), 0614 (2.4), 0618 (3.1), 0619 (0.45), 0735 (0.046), 1008 (2.0), 1077 (2.8), 1089 (2.1)
Uranium	0.044	SHP02	0817 (8.1), 0832 (0.16), 0835 (0.093), 0836 (0.064), 0839 (0.68), 0841 (0.12), 1060 (0.076), 1070 (0.12), 1071 (0.19), 1078 (0.13), 1091 (0.13), 1092 (0.12), 1093 (0.08), 1094 (0.087)

Table 1. Shiprock Wells Exceeding Ground Water Standards in September 2004

^aStandards are listed in 40 CFR 192.02 Table 1 to Subpart A; units are in mg/L.

David Miller Site Lead

2/18/5

Date

U.S. Department of Energy February 2005



Sample Location Map

Data Assessment Summary

Water Sampling Field Activities Verification Checklist

F	Project	Shiprock, NM	Date(s) of Water Sampling	September 14 to September 17, 2004					
[Date(s) of Verification	December 28, 2004	Name of Verifier	Jeff Price					
			Response (Yes, No, NA)	Comments					
1.	Is the SAP the primary document	directing field procedures?	Yes						
	List other documents, SOP's, inst	ructions.	NA						
2.	Were the sampling locations spec	ified in the planning documents sampled?	Yes						
3.	Was a pre-trip calibration conduct documents?	ed as specified in the above named	Yes						
4.	Was an operational check of the f	ield equipment conducted twice daily?	No						
	Did the operational checks meet of	criteria?	Yes						
5.	Were the number and types (alka ORP) of field measurements take	linity, temperature, Ec, pH, turbidity, DO, n as specified?	Yes						
6.	Was the Category of the well doc	umented?	Yes						
7.	Were the following conditions met	t when purging a Category I well:							
	Was one pump/tubing volume pu	rged prior to sampling?	Yes						
	Did the water level stabilize prior t	to sampling?	Yes						
	Did pH, specific conductance, and sampling?	d turbidity measurements stabilize prior to	Yes						
	Was the flow rate less than 500 m	hL/min?	Yes						
	If a portable pump was used, was installation and sampling?	there a 4 hour delay between pump	NA						

Water Sampling Field Activities Verification Checklist (continued)

	Response (Yes, No, NA)	Comments
8. Were the following conditions met when purging a Category II well:		
Was the flow rate less than 500 mL/min?	Yes	
Was one pump/tubing volume removed prior to sampling?	Yes	
9. Were duplicates taken at a frequency of one per 20 samples?	Yes	
10. Were equipment blanks taken at a frequency of one per 20 samples that were collected with nondedicated equipment?	Yes	
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?	Yes	
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	Mistakes in the COC were found and corrected by the lab.
17. Are field data sheets signed and dated by both team members?	No	
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?	No	
20. Were water levels measured at the locations specified in the planning documents?	Yes	

Laboratory Performance Assessment

General Information

Requisition No.:	04090104
Sample Event:	Water Sampling
Site(s):	Shiprock, New Mexico, Disposal Site
Laboratory:	Paragon Analytics
Work Order No.:	0409136
Analysis:	Metals, inorganics, gross alpha/beta, and isotopic uranium
Validator:	Jeff Price
Review Date:	December 29, 2004

This validation was performed according to *Standard Practice for Validation of Laboratory Data*, GT-9(P) (2004). 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.

Analyte	Line Item Code	Prep Method	Analytical Method
Uranium	GJO-01	SW-846 3005A	SW-846 6020
Selenium	GJO-14	SW-846 3005A	SW-846 6020
Iron	GJO-16	SW-846 3005A	SW-846 6010
Manganese	GJO-17	SW-846 3005A	SW-846 6010
Calcium, Potassium, Magnesium, Sodium, Strontium	MET-A-020	SW-846 3005A	SW-846 6010
Chloride	MIS-A-039	SW-846 9056	SW-846 9056
Sulfate	MIS-A-044	SW-846 9056	SW-846 9056
Ammonia as N (NH3-N)	WCH-A-005	MCAWW 350.1	MCAWW 350.1
Nitrate + Nitrite as N (NOx-N)	WCH-A-022	MCAWW 353.2	MCAWW 353.2
Total Organic Carbon (TOC)	WCH-A-025	MCAWW 415.1	MCAWW 415.1
Total Dissolve Solids (TDS)	WCH-A-033	MCAWW 160.1	MCAWW 160.1

Table 2. Analytes and Methods

Sample Shipping/Receiving

Paragon Analytics in Fort Collins, Colorado, received 53 samples in two shipments on September 17 and 21, 2004, accompanied by Chain of Custody (COC) forms. The COC forms were checked to confirm that all of the samples were listed on the form and that signatures and dates were present indicating sample relinquishment and receipt. The bottle set from location 0832-02 was received on September 17, 2004, but not listed on the COC form. Sample bottles from location 0797, ticket number NDX 186, had sample times recorded on the labels that did not match the time on the COC form or the sample ticket. The sample was logged in with the sample time from the COC form. Sample bottles from location 2478 for anions and TOC were mislabeled and the preservative used was not listed. The unpreserved bottle was used for anions analysis and the preserved bottle was used for TOC analysis.

Preservation and Holding Times

Sample shipments were received intact on September 17 and 19, 2004, with temperatures in the coolers of 0.2 °centigrade and 0.6 °centigrade, respectively. All samples had been preserved correctly for the requested analyses with the following exception. The TOC sample from location 0797, ticket number NDX 186, was not preserved (result is qualified as "J"). All samples were analyzed within the applicable holding times.

Data Qualifier Summary

Sample results qualified with a "J" or "U" are shown in Table 3.

Sample Number	Location	Analyte	Flag	Reason
0409136-3	0662	U	U	Less than 5 times the blank
0409136-3	0662	Se	J	Reporting limit verification failure
0409136-8	0797	TOC	J	Sample not preserved
0409136-8	0797	Se	J	Reporting limit verification failure
0409136-9	0850	Se	J	Reporting limit verification failure
0409136-13	2483	Ca	U	Less than 5 times the blank
0409136-13	2483	Mg	U	Less than 5 times the blank
0409136-13	2483	U	U	Less than 5 times the blank
0409136-44	0618-01	Fe	U	Less than 5 times the blank

Table 3. Data Qualifier Summary

Laboratory Instrument Calibration

All laboratory instrument calibrations were performed correctly in accordance with the cited methods.

Calibrations for metals analysis were performed on September 30 and October 1, 2004. The initial calibrations were performed using 5 calibration standards resulting in correlation coefficient (r^2) values greater than 0.995. The absolute value of the intercepts was less than 3 times the MDL. Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification (CCV) checks were made at the required frequency resulting in 27 CCVs. All calibration checks met the acceptance criteria.

Reporting limit verification checks were made at the required frequency to verify the linearity of the calibration curves near the practical quantitation limit. The results were within the acceptance criteria.

Selenium calibrations were performed on October 7 and 8, 2004; uranium calibrations were performed on October 5, 2004. The initial calibrations were performed using 4 calibration standards resulting in correlation coefficient (r^2) values greater than 0.995. The absolute value of the intercepts was less than 3 times the MDL. Calibration and laboratory spike standards were

prepared from independent sources. Initial and continuing calibration verification (CCV) checks were made at the required frequency resulting in 13 CCVs for selenium and 10 CCVs for uranium. All calibration checks met the acceptance criteria.

Reporting limit verification checks were made at the required frequency to verify the linearity of the calibration curves near the practical quantitation limit. The uranium results were within the acceptance criteria. The selenium results failed to meet the acceptance criteria. Selenium results that are greater than the method detection limit but less than five times the practical quantitation limit are qualified as "J."

The mass calibration and resolution was checked at the beginning of each analytical run in accordance with the procedure. Internal standard recoveries were stable and within acceptance ranges.

Initial calibrations for chloride and sulfate were performed on August 19, 2004, using 5 calibration standards. The correlation coefficient (r^2) values were greater than 0.995 for both initial calibration curves. Initial calibration and calibration check standards were prepared from independent sources. Continuing calibration checks were made for chloride at the required frequency on September 20-22, 2004, resulting in 18 CCVs, all within the acceptance range. Continuing calibration checks were made for sulfate on September 20 and 22, 2004, resulting in 14 CCVs that met the acceptance criteria.

The initial calibration for NH3-N was performed using 6 calibration standards on September 23, 2004, resulting in an r^2 value greater than 0.995. Initial and continuing calibration checks were made at the required frequency resulting in 9 CCVs. All initial and continuing calibration verifications were within the acceptance criteria.

The initial calibration for NOx-N was performed using 7 calibration standards on September 24, 2004, resulting in an r^2 value greater than 0.995. Initial and continuing calibration checks were made at the required frequency resulting in 4 CCVs. All initial and continuing calibration verifications were within the acceptance criteria.

The initial calibration for total organic carbon was performed using 5 calibration standards on September 14 and 27, 2004, resulting in an r^2 value greater than 0.995. Initial and continuing calibration checks were made at the required frequency resulting in 9 CCVs. All initial and continuing calibration verifications were within the acceptance criteria.

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

Method and Calibration Blanks

The method blanks and initial and continuing calibration blanks were below the practical quantitation limits. In cases where blank concentration exceeded the instrument detection limit and the sample result is greater than the IDL but less than 5 times the blank concentration, the associated sample results are flagged "U."

The method blanks for all analytes were below the method detection limits. All initial and continuing calibration blanks (ICBs and CCBs) were below the method detection limits with the following exceptions. The third CCB for sulfate analyzed on September 20, 2004, and the second CCB for chloride analyzed on September 21, 2004, failed to meet the acceptance criteria. All associated samples were re-analyzed with acceptable CCBs.

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

ICP interference check samples were analyzed at the required frequency and all results met the acceptance criteria.

Matrix Spike Analysis

Three matrix spikes and matrix spike duplicates (MS/MSD) were analyzed for calcium, magnesium, manganese, potassium, sodium, and strontium, with all results meeting the acceptance criteria.

Three matrix spikes and matrix spike duplicates (MS/MSD) were analyzed for selenium and uranium with all results meeting the acceptance criteria. The selenium matrix spike recovery data were not evaluated for sample 0409136-2 because the analyte concentration in the unspiked sample was greater than four times the spike concentration.

Matrix spikes and matrix spike duplicates (MS/MSD) were analyzed for NH3-N, chloride, sulfate, NOx-N, and TOC with acceptable results.

Laboratory Replicate Analysis

The relative percent difference (RPD) values for the matrix spike duplicate and laboratory duplicate sample results for all analytes were less than 20 percent.

Laboratory Control Sample

The initial calibration verification serves as a laboratory control sample for undigested metals samples. Laboratory control samples were analyzed at the correct frequency with acceptable results for all other analysis categories.

Metals Serial Dilution

The serial dilution results met the acceptance criteria for those metals with concentrations greater than 50 times the practical quantitation limit (PQL). The samples selected for serial dilution had potassium concentrations less than 50 times the PQL.

The serial dilution results met the acceptance criteria for those metals with concentrations greater than 100 times the practical quantitation limit. The samples selected for serial dilution had uranium concentrations less than 100 times the PQL.

Detection Limits/Dilutions

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

Completeness

Results were reported in correct units, appropriate contract-required laboratory qualifiers were used, and appropriate target analyte lists (TALs) were used. The required detection limits were met when possible or an explanation of why they were not met was given in the laboratory case narrative.

Chromatography Peak Integration

The integration of analyte peaks was reviewed for all ion chromatography data. The manual integrations that were performed were acceptable and all peak integrations were satisfactory.

Electronic Data Deliverable (EDD) File

An error free EDD file arrived on October 22.

Sampling Quality Control Assessment

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

Sampling Protocol

All monitor well data were given an "F" flag, which indicates that samples were collected using the micro-purge method. Some well data also were given a "Q" flag indicating that a constant water level could not be maintained during the purge and sampling process.

Equipment Blank Assessment

An equipment blank was collected and analyzed for the same constituents as the Shiprock environmental samples. All concentrations measured in the equipment blank were below the contract required detection limit (CRDL); therefore, equipment blank results are considered acceptable.

Field Duplicate Assessment

Duplicates were collected from locations 0838, 0956, and 0965. There are no established regulatory criteria for the evaluation of field duplicate samples; therefore, EPA guidance for *laboratory* duplicates (which is conservative for field duplicates) was used to assess the precision of the field duplicates. With the exception of the total organic carbon duplicate result, which varied by 35 percent, all other duplicate sample results met the laboratory duplicate criteria (20 percent relative difference) and thus are considered acceptable.

Certification

All laboratory analytical quality control criteria were met except as qualified on the SEEPro database reports. The meaning of data qualifiers is as defined on the SEEPro database report or as defined in the USEPA <u>Contract Laboratory Program Statement of Work for Inorganic</u> <u>Analysis, Multi-Media Multi-Concentration</u>, Document Number ILMO2.0, 1991. All data in this package are considered validated and available for use.

Laboratory Coordinator:

the Vone

Stephen Donivan

Date

Data Validation Lead:

<u> 4. E. 1 %</u> eff Price

2/17/5 Date

Attachment 1 Assessment of Anomalous Data

Minimums and Maximums Report

Minimums and Maximums Report

The Minimums and Maximums Report is generated by a data validation application (DataVal) used to query the SEEPro database. The data validation application compares the new data set with historical data and lists in the Minimums and Maximums Report all new data that fall outside the historical data range. Values listed in the report are further screened using the following criteria. Results are considered valid if (1) identified low concentrations are the result of low detection limits; (2) the concentration detected is within 50 percent of historical minimum or maximum values; (3) there were fewer than 5 historical samples for comparison.

Data from this sampling event were compared to historical minimum and maximum values. Results that were greater than 150 percent of the historical maximum value or less than 50 percent of the historical minimum value (excluding results with less than 5 historical data points) are listed on the Anomalous Data Review Checksheet and will be compared to results of other sampling rounds to make a final determination of validity. At this time, all data from this sampling event may be treated as final results.

		•		CURRENT		HISTORICAL MAXIMUM		HISTORICAL MINIMUM			COUNT
SITE CODE	LOCATION CODE	SAMPLE DATE	ANALYTE	RESULT	QUALIFIERS LAB DATA	RESULT	QUALIFIERS LAB DATA	RESULT	QUALIFIERS LAB DATA	N	N BELOW DETECT
SHP01	0608	09/16/2004	Magnesium	1500	F	2620		1520		29	0
SHP01	0608	09/16/2004	Manganese	4.3	F	9.85		4.4	F	33	0
SHP01	0608	09/16/2004	Total Organic Carbon	15	F	312		19		8	0
SHP01	0614	09/16/2004	Total Dissolved Solids	25000	F	24740		11200		22	0
SHP01	0618	09/16/2004	Potassium	140	F	110	F	49	J	10	0
SHP01	0619	09/15/2004	Iron	0.25	F	0.18		0.003	U	19	16
SHP01	0619	09/15/2004	Total Organic Carbon	5.7	۶ F	210		29.3	0	6	0
SHP01	0735	09/16/2004	Total Dissolved Solids	2900	F	15000	JF	3720		14	0
SHP01	0797	09/15/2004	Potassium	4.4	QF	3.34	F	1.84	F	7	
SHP01	0797	09/15/2004	Sodium	240	QF	524	F	293	F	' 7	0
SHP01	0797	09/15/2004	Uranium	0.0083	QF	0.0163	· F	0.0093	F	' 7	0
SHP01	0850	09/15/2004	Sodium	270	F	1350	F	413	F	12	0
SHP01	0850	09/15/2004	Sulfate	610	F	3200	F	751	F	12	0
SHP01	0850	09/15/2004	Total Dissolved Solids	1200	F	3300	.IF	1640	F	0	0
SHP01	0850	09/15/2004	Uranium	0.0069	F	0.0344	F	0.0088	' L	12	0
SHP01	0897	09/16/2004	Potassium	3.8		3.6		1.52		15	
SHP01	0956	09/16/2004	Potassium	3.9	E	3.6		2		12	
SHP01	0956	09/16/2004	Potassium	3.9		3.6		2		12	0
SHP01	0957	09/15/2004	Calcium	70		69.4		49.7		0	
SHP01	0957	09/15/2004	Potassium	3.4		2 69		2.06		9	0
SHP01	0957	09/15/2004	Uranium	0.0015		0.0026		0.0016		9 9	0
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				CU	RRENT	HISTORICAL MAXIMUM		HISTORICAL MINIMUM			COUNT
SITE CODE	LOCATION CODE	SAMPLE DATE	ANALYTE	RESULT	QUALIFIERS LAB DATA	RESULT	QUALIFIERS LAB DATA	RESULT	QUALIFIERS LAB DATA	N	N BELOW
SHP01	0959	09/14/2004	Calcium	550		492		401		5	0
SHP01	0959	09/14/2004	Magnesium	460		556		509		5	0 0
SHP01	0959	09/14/2004	Sodium	440		1110		834		5	0
SHP01	0959	09/14/2004	Strontium	6.3		7.81		7.23		5	0
SHP01	1089	09/16/2004	Chloride	640		616		502		7	0
SHP01	1089	09/16/2004	Sulfate	15000		14742		11983		8	0
SHP01	1089	09/16/2004	Uranium	2.1		1.848		1.4839		7	0
SHP01	1205	09/14/2004	Potassium	3.9		3.5		2.18		11	0
SHP01	1205	09/14/2004	Uranium	0.0014		0.0031		0.0015		13	0
SHP02	0425	09/16/2004	Potassium	66		56.8		18.9		23	0
SHP02	0425	09/16/2004	Uranium	0.84		0.784		0.341		23	0
SHP02	0426	09/14/2004	Sodium	930		2000		944		21	0
SHP02	0662	09/14/2004	Potassium	13		11.8		5.97		18	0
SHP02	0786	09/14/2004	Chloride	58		184	· · · · · · · · · · · · · · · · · · ·	70		8	
SHP02	0786	09/14/2004	Magnesium	370		465		377		8	0
SHP02	0786	09/14/2004	Potassium	28		21.8		17.6		8	0
SHP02	0786	09/14/2004	Selenium	0.024	N	0.179		0.029		g	0
SHP02	0786	09/14/2004	Sodium	540		845		719		0	0
SHP02	0786	09/14/2004	Strontium	6.1		7.46		66		0	0
SHP02	0786	09/14/2004	Uranium	0.032		0.0442		0.034		о 8	0
SHP02	0817	09/17/2004	Potassium	250	F	230	L	184	F	7	0

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CURRENT HISTORICAL MAXIMUM HISTORICAL MINIMUM COUNT SITE LOCATION SAMPLE QUALIFIERS QUALIFIERS QUALIFIERS N BELOW CODE CODE DATE ANALYTE LAB DATA RESULT RESULT LAB DATA RESULT LAB DATA Ν DETECT SHP02 0817 09/17/2004 Selenium 0.0031 F 0.0029 В L 0.002 в F 7 0 SHP02 0817 09/17/2004 Sodium 1300 F 2720 L 1360 F 7 0 SHP02 0817 09/17/2004 Strontium 11 F 12.5 L 11.3 F 7 0 SHP02 0832 09/15/2004 Manganese 0.04 в F 0.0095 В L 0.0001 U F 13 8 SHP02 0832 09/15/2004 Potassium 56 F 35 Е F 11 Е J 12 0 SHP02 0835 09/15/2004 Potassium 23 F 15 F 4.29 Е J 13 0 SHP02 0835 09/15/2004 Total Dissolved Solids 8400 F 7960 F 2200 10 0 SHP02 0835 09/15/2004 Uranium 0.093 F 0.0851 F 0.0258 15 0 SHP02 0836 09/15/2004 Potassium 9.1 F 5.88 Е JF 4.57 12 0 SHP02 0836 09/15/2004 Selenium 0.063 F 0.231 F 0.0976 13 0 SHP02 0836 09/15/2004 Strontium 5.9 F 6.71 F 5.97 F 12 0 SHP02 0836 09/15/2004 Uranium 0.064 F 0.0572 F 0.036 14 0 SHP02 0838 09/15/2004 Potassium 9.5 F 7.3 JF 4 11 0 SHP02 0838 09/15/2004 Potassium 9.7 F 7.3 JF 4 11 0 SHP02 0839 09/17/2004 Magnesium 2200 F 2150 FQ 1680 L 11 0 SHP02 0839 09/17/2004 Potassium 150 F 120 Q 90.2 11 0 SHP02 0839 09/17/2004 Sodium 1800 F 2140 1910 FQ 11 0 SHP02 0841 09/15/2004 Potassium 84 F 58.4 40 14 0 SHP02 0841 09/15/2004 Sodium 4800 F 6800 F 5180 14 0 SHP02 0841 09/15/2004 Strontium 7.6 F 9.73 F 7.86 14 0 SHP02 0846 09/15/2004 Selenium 0.2 F 0.931 0.243 F 13 0

				CURRENT		HISTORICAL MAXIMUM		HISTORICAL MINIMUM			COUNT
SITE CODE	LOCATION CODE	SAMPLE DATE	ANALYTE	RESULT	QUALIFIERS LAB DATA	RESULT	QUALIFIERS LAB DATA	RESULT	QUALIFIERS LAB DATA	N	N BELOW DETECT
SHP02	0846	09/15/2004	Sodium	240	F	660		383	F	12	0
SHP02	0846	09/15/2004	Strontium	4.1	F	6.48		4.37	F	12	0
SHP02	0846	09/15/2004	Total Dissolved Solids	3300	F	5660		3570	F	9	0
SHP02	0846	09/15/2004	Uranium	0.029	F	0.047		0.031	F	14	0
SHP02	0884	09/15/2004	Chloride	21		69.7		24.7	n	14	0
SHP02	0884	09/15/2004	Selenium	0.012		0.39		0.0496		14	0
SHP02	0884	09/15/2004	Uranium	0.011		0.039		0.0114		15	0
SHP02	0933	09/14/2004	Calcium	530	<u></u>	520		411		11	0
SHP02	0933	09/14/2004	Chloride	48		278		63		10	0
SHP02	0933	09/14/2004	Magnesium	320		682		400		11	0
SHP02	0933	09/14/2004	Selenium	0.024		0.307		0.03		11	0
SHP02	0933	09/14/2004	Sodium	270		959		460		11	0
SHP02	0933	09/14/2004	Strontium	5.5		7.91		6.37		11	0
SHP02	0933	09/14/2004	Sulfate	2900		5380		3100		13	ó
SHP02	0933	09/14/2004	Uranium	0.04		0.0978		0.045		13	0
SHP02	0934	09/16/2004	Magnesium	440		360		117		11	0
SHP02	0934	09/16/2004	Potassium	26		16.4		4.68		11	0
SHP02	0934	09/16/2004	Sulfate	3800		3360		1320		12	0
SHP02	0934	09/16/2004	Uranium	0.14		0.103		0.0303		12	0
SHP02	0935	09/14/2004	Potassium	30		23	LA	15.2		7	0
SHP02	0935	09/14/2004	Sodium	610		1030		654		7	0
SHP02	0935	09/14/2004	Strontium	6.3		9.78		6.43		7	0
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_				CURRENT		HISTORICAL MAXIMUM		HISTORICAL MINIMUM			COUNT		
SITE CODE	LOCATION CODE	SAMPLE DATE	ANALYTE	RESULT	QUALIF	FIERS	RESULT	QUALIFIERS LAB DATA	RESULT	QUAL LAB	IFIERS DATA	N	N BELOW DETECT
SHP02	0936	09/14/2004	Manganese	0.66			0.164		0.0006	U	a	10	2
SHP02	0942	09/17/2004	Chloride	14			102	· · · · · · · · · · · · · · · · · · ·	15			13	0
SHP02	1057	09/14/2004	Calcium	500		F	486	F	430		 F	5	0
SHP02	1057	09/14/2004	Chloride	490		F	595	L	548			5	0
SHP02	1057	09/14/2004	Manganese	6.5		F	10.7		6.9		F	6	0
SHP02	1057	09/14/2004	Sodium	1600		F	1900	L	1720			5	0
SHP02	1060	09/17/2004	Potassium	34		F	33	JQ	7.91		Q	8	0
SHP02	1070	09/14/2004	Sulfate	15000	-		17006		15281	<u>.</u>		10	0
SHP02	1071	09/14/2004	Chloride	330			1082	<u> </u>	411			8	0
SHP02	1071	09/14/2004	Sulfate	2700			12879		2727			9	0
SHP02	1079	09/15/2004	Calcium	720		F	672	F	567		F	5	0
SHP02	1079	09/15/2004	Manganese	0.0011	В	F	0.22	F	0.0023	в	F	5	0
SHP02	1079	09/15/2004	Potassium	12		F	9	JF	4.9		F	5	0
SHP02	1079	09/15/2004	Selenium	0.56		F	0.537	F	0.0873		F	5	0
SHP02	1087	09/14/2004	Ammonia Total as N	160			157.5		135			5	0
SHP02	1091	09/14/2004	Chloride	1200			1377		1235			7	0
SHP02	1091	09/14/2004	Sulfate	11000			13355		11836			8	0
SHP02	1091	09/14/2004	Uranium	0.13			0.12		0.103			7	0
SHP02	1092	09/14/2004	Chloride	1300			1584		1460			7	0
SHP02	1092	09/14/2004	Sulfate	12000			14642		13315			' 8	0
SHP02	1093	09/14/2004	Chloride	700			791		711			8	0

				CURRENT			HISTORIC	AL MAXIMUM	HISTORIC	CAL MINIMUM	COUNT	
SITE CODE	LOCATION CODE	SAMPLE DATE	ANALYTE	RESULT	QUAL LAB	IFIERS DATA	RESULT	QUALIFIERS LAB DATA	RESULT	QUALIFIERS LAB DATA	N	N BELOW
SHP02	1093	09/14/2004	Sulfate	5700			6900		5969		9	0
SHP02	1094	09/14/2004	Ammonia Total as N	690		,	270		177 5		5	
SHP02	1094	09/14/2004	Sulfate	6800			3357		1993		с С	0
SHP02	1094	09/14/2004	Uranium	0.087			0.06		0.0339		7	0

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

LAB QUALIFIERS:

- * Replicate analysis not within control limits.
- + Correlation coefficient for MSA < 0.995.
- A TIC is a suspected aldol-condensation product.
- Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank. В
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- Z Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- H Holding time expired, value suspect.
- Increased detection limit due to required dilution. 1
- Pesticide result confirmed by GC-MS. С
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compund (TIC).

R

- S Result determined by method of standard addition (MSA).
- Analytical result below detection limit. U
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- D Analyte determined in diluted sample.
- P > 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
- X Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Υ Laboratory defined (USEPA CLP organic) qualifier, see case narrative.

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- Result above upper detection limit. >
- J Estimated

DATA QUALIFIERS:

J Estimated value.

- F Low flow sampling method used.
- L Less than 3 bore volumes purged prior to sampling. Parameter analyzed for but was not detected. U

Unusable result.

- Q Qualitative result due to sampling technique
- G Possible grout contamination, pH > 9.
- X Location is undefined.

Anomalous Data Review Checksheet

Anomalous Data Review Checksheet

Site: Shiprock, NM

Date: September 2004

Reviewer:	Jeff Price		······································
	Name (print)	1. E. Mus Signature	Date 2/4/05
Site Lead:	Dave Miller		
	Name (print)	Signature	Date
Date of Review:	12/29/04	Diules	2/18/5

Loc. No.	Analyte	Type of Anomaly	Disposition
0835	Potassium	High	Compare to other rounds
0836	Potassium	High	Compare to other rounds
0884	Selenium	Low	Compare to other rounds
0934	Potassium	High	Compare to other rounds
0936	Manganese	High	Compare to other rounds
1094	Ammonia as N	High	Compare to other rounds
1094	Sulfate	High	Compare to other rounds

Attachment 2 Data Presentation Ground Water Quality Data and Surface Water Quality Data

,

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	RS: QA		UN- CERTAINTY
Alkalinity, Total (As CaCO3	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	582		F	#		_
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	655		F	#	-	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	1076		F	#	-	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	523		F	#	-	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	376		F	#	-	_
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	155		QF	#		_
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	134		F	#	-	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	127			#	-	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	77			#	-	_
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	68			#	· _	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	124			#	-	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	69			#	-	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	210			#	-	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	140			#	-	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	869		F	#	-	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	982			#	-	_
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	896			#	_	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	73			#	-	-
Ammonia Total as N	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	230		F	#	20	
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	40		F	#	2	_
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	52		F	#	2	_
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	0.67		F	#	0.1	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	6.9		F	#	0.2	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	0.1 l	J	QF	#	0.1	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	0.1 l	J	F	#	0.1	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	0.1 เ	J		#	0.1	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	RS: E QA	DETECTION	UN- CERTAINTY
Ammonia Total as N	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	0.1	U		#	0.1	<u>_</u> * .
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	15		F	#	0.5	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	11			#	0.5	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	3.2			#	0.1	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
Calcium	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	440.000		F	#	0.014	-
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	480.000		F	#	0.014	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	420.000		F	#	0.014	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	370.000		F	#	0.0068	_
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	62.000		F	#	0.0027	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	60.000		QF	#	0.0014	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	56.000		F	#	0.0014	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	70.000			#	0.0014	
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	72.000			#	0.0014	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	63.000			#	0.0014	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	70.000			#	0.0014	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	72.000			#	0.0014	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	70.000			#	0.0014	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	550.000			#	0.0027	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIEF LAB DATA	RS: E QA	DETECTION	UN- CERTAINTY
Calcium	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	73.000		#	0.0014	_
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	72.000		#	0.0014	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	430.000	F	#	0.014	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	480.000		#	0.014	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	420.000		#	0.014	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	69.000		#	0.0014	-
Chloride	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	330	F	#	40	
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	490	F	#	40	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	630	F	#	40	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	160	F	#	20	_
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	66	F	#	10	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	27	QF	#	4	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	46	F	#	4	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	15		#	1	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	14		#	2	_
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	14		#	2	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	15		#	1	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	15		#	1	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	14		#	2	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	74		#	10	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	14		#	1	-
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	14		#	1	_
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	570	F	#	40	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	770		#	40	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	640		#	40	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	14		#	2	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE	SHP01	Shiprock Disposal Site (Electrolain)
REPORT DATE: 12/28/2004 3:27 pm	0111 01,	emproce Disposar Site (Moouplain)

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	S: QA		UN- CERTAINTY
Dissolved Oxygen	mg/L	0608	WL	09/16/2004	N001	10.00 - 15.00	5.98		F	#		_
	mg/L	0614	WL	09/16/2004	N001	10.00 - 15.00	4.30		F	#	-	_
	mg/L	0618	WL	09/16/2004	N001	11.00 - 16.00	3.79		F	#	-	-
	mg/L	0619	WL	09/15/2004	N001	8.00 - 13.00	4.74		F	#	-	_
	mg/L	0735	WL	09/16/2004	N001	3.00 - 8.00	11.16		F	#	-	-
	mg/L	0797	WL, WP	09/15/2004	N001	7.30 - 9.30	1.71		QF	#	-	_
	mg/L	0850	WL	09/15/2004	N001	5.60 - 15.40	1.27		F	#	-	-
	mg/L	1008	WL	09/16/2004	N001	6.90 - 16.90	4.20		F	#	-	-
	mg/L	1077	WL, EXT	09/16/2004	N001	5.00 - 14.50	2.90			#	-	-
	mg/L	1089	WL, EXT	09/16/2004	N001	4.80 - 14.80	2.40			#	-	-
iron	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	0.140	U	F	#	0.14	
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	0.140	U	F	#	0.14	_
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	0.340	В	UF	#	0.14	_
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	0.250		F	#	0.072	_
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	0.029	U	F	#	0.029	<u>-</u>
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	0.014	U	QF	#	0.014	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	0.170		F.	#	0.014	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	0.014	U		#	0.014	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	0.014	U		#	0.014	_
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	0.014	U		#	0.014	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	0.140	U	F	#	0.14	_
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	0.140	U		#	0.14	_
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	0.140	U		#	0.14	-
Magnesium	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	1500.000		F	#	0.073	-
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	2500.000		F	#	0.073	-
· · · · · · · · · · · · · · · · · · ·	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	1700.000		F	#	0.073	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE	SHP01.	Shiprock Disposal Site (Floodplain)
REPORT DATE: 12/28/2004 3:27 pm	,	

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PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIER LAB DATA	S: [QA	DETECTION	UN- CERTAINTY
Magnesium	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	390.000	F	#	0.037	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	120.000	F	#	0.015	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	13.000	QF	#	0.0073	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	10.000	F	#	0.0073	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	13.000		#	0.0073	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	12.000		#	0.0073	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	12.000		#	0.0073	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	13.000		#	0.0073	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	13.000		#	0.0073	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	12.000		#	0.0073	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	460.000		#	0.015	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	13.000		#	0.0073	-
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	13.000		#	0.0073	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	1600.000	F	#	0.073	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	2500.000		#	0.073	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	1700.000		#	0.073	
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	12.000		#	0.0073	-
Manganese	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	4.300	F	#	0.0039	_
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	5.300	F	#	0.0039	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	8.700	F	#	0.0039	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	2.400	F	#	0.0019	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	0.510	F	#	0.00078	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	0.590	QF	#.	0.00039	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	0.310	F	#	0.00039	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	0.0051		#	0.00039	· _
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	0.0037	В	#	0.00039	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	S: E QA	DETECTION	UN- CERTAINTY
Manganese	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	0.0041	В	a <u></u>	#	0.00039	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	0.0062			#	0.00039	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	0.0065			#	0.00039	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	0.0031	В		#	0.00039	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	0.0057	в		#	0.00078	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	0.0093			#	0.00039	-
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	0.0097			#	0.00039	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	7.000		F	#	0.0039	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	5.300			#	0.0039	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	2.500			#	0.0039	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	0.014			#	0.00039	_
Nitrate + Nitrite as Nitrogen	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	470		F	#	5	_
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	870		F	#	5	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	180		F	#	2	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	0.01	U	F	#	0.01	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	70		F	#	0.5	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	0.016		QF	#	0.01	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	0.01	U	F	#	0.01	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	0.17			#	0.01	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	0.25			#	0.01	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	0.09			#	0.01	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	0.17			#	0.01	_
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	0.17			#	0.01	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	0.19			#	0.01	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	4.1			#	0.05	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	0.19			#	0.01	-

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PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIEF DATA	RS: D	ETECTION	UN- CERTAINTY
Nitrate + Nitrite as Nitrogen	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	0.22			#	0.01	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	73		F	#	0.5	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	320			#	2	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	83			#	0.5	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	0.2			#	0.01	-
Oxidation Reduction Potent	mV	0608	WL	09/16/2004	N001	10.00 - 15.00	251.7		F	#		
	mV	0614	WL	09/16/2004	N001	10.00 - 15.00	250		F	#	-	-
	mV	0618	WL	09/16/2004	N001	11.00 - 16.00	254		F	#	-	-
	mV	0619	WL	09/15/2004	N001	8.00 - 13.00	6.5		F	#	-	-
	mV	0735	WL	09/16/2004	N001	3.00 - 8.00	219		F	#	-	-
	mV	0797	WL, WP	09/15/2004	N001	7.30 - 9.30	-136.0		QF	#	-	-
	mV	0850	ŴL	09/15/2004	N001	5.60 - 15.40	-65		F	#	-	-
	mV	0897	SL	09/16/2004	N001	0.00 - 0.00	28.2			#	-	-
	mV	0898	SL, RIV	09/15/2004	N001	0.00 - 0.00	23.4			#	-	-
	mV	0940	SL, RIV	09/14/2004	N001	0.00 - 0.00	27.6			#	-	-
	mV	0956	SL	09/16/2004	N001	0.00 - 0.00	-59.5			#	-	-
	mV	0957	SL	09/15/2004	N001	0.00 - 0.00	42			#	-	-
	mV	0959	SL, STRM	09/14/2004	N001	0.00 - 0.00	23.3			#	-	-
	mV	0965	SL, RIV	09/16/2004	N001	0.00 - 0.00	90.1			#	-	-
	mV	1008	WL	09/16/2004	N001	6.90 - 16.90	237		F	#	-	-
	mV	1077	WL, EXT	09/16/2004	N001	5.00 - 14.50	214			#	_	-
	mV	1089	WL, EXT	09/16/2004	N001	4.80 - 14.80	183			#	-	-
	mV	1205	SL	09/14/2004	N001	0.00 - 0.00	197			#	-	-
рН	s.u.	0608	WL	09/16/2004	N001	10.00 - 15.00	7.13	i	F	#		
	s.u.	0614	WL	09/16/2004	N001	10.00 - 15.00	7.04		F	#	-	_
	s.u.	0618	WL	09/16/2004	N001	11.00 - 16.00	6.92		F	#	-	-

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PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIE LAB DAT	ERS: I	DETECTION	UN- CERTAINTY
pН	s.u.	0619	WL	09/15/2004	N001	8.00 - 13.00	7.17	F	#	-	_
	s.u.	0735	WL	09/16/2004	N001	3.00 - 8.00	7.38	F	#	-	-
	s.u.	0797	WL, WP	09/15/2004	N001	7.30 - 9.30	7.56	QF	#	-	-
	s.u.	0850	WL	09/15/2004	N001	5.60 - 15.40	7.56	F	#	-	·_
	s.u.	0897	SL	09/16/2004	N001	0.00 - 0.00	8.43		#	-	-
	s.u.	0898	SL, RIV	09/15/2004	N001	0.00 - 0.00	8.35		#	-	-
	s.u.	0940	SL, RIV	09/14/2004	N001	0.00 - 0.00	8.57		#	-	-
	s.u.	0956	SL	09/16/2004	N001	0.00 - 0.00	8.39		#	-	-
	s.u.	0957	SL	09/15/2004	N001	0.00 - 0.00	8.33		#	-	-
	s.u.	0959	SL, STRM	09/14/2004	N001	0.00 - 0.00	7.83		#	-	-
	s.u.	0965	SL, RIV	09/16/2004	N001	0.00 - 0.00	8.16		#	-	-
	s.u.	1008	WL	09/16/2004	N001	6.90 - 16.90	6.96	F	#	_	-
	s.u.	1077	WL, EXT	09/16/2004	N001	5.00 - 14.50	7.00		#	-	-
	s.u.	1089	WL, EXT	09/16/2004	N001	4.80 - 14.80	7.20		#	-	-
	s.u.	1205	SL	09/14/2004	N001	0.00 - 0.00	8.21		#	-	-
Potassium	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	170.000	F	#	0.44	_
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	180.000	F	#	0.44	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	140.000	F	#	0.44	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	64.000	F	#	0.22	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	24.000	F	#	0.089	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	4.400	QF	#	0.044	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	4.200	F	#	0.044	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	3.800		#	0.044	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	3.700		#	0.044	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	3.800	E	#	0.044	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	3.900	E	#	0.044	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMPI DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU. LAB	ALIFIER DATA	S: QA	DETECTION	UN- CERTAINTY
Potassium	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	3.900			#	0.044	_
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	3.400			#	0.044	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	20.000			#	0.089	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	3.800			#	0.044	_
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	3.800			#	0.044	_
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	130.000		F	#	0.44	_
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	200.000			#	0.44	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	150.000			#	0.44	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	3.900			#	0.044	-
Selenium	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	0.0093		F	#	5.9E-05	-
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	0.065		F	#	0.00029	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	0.330		F	#	0.0015	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	0.0059		F	#	2.9E-05	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	0.031		F	#	0.00029	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	0.00011		JQF	#	2.9E-05	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	0.00018		JF	#	2.9E-05	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	0.00073			#	2.9E-05	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	0.00069			#	2.9E-05	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	0.00053 N			#	2.9E-05	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	0.00076			#	2.9E-05	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	0.00067			#	2.9E-05	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	0.00059			#	2.9E-05	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	0.024			#	5.9E-05	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	0.00064			#	2.9E-05	-
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	0.00061			#	2.9E-05	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	0.150		F	#	0.00029	-

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PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIER LAB DATA	S: [QA		UN- CERTAINTY
Selenium	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	0.040		#	0.00029	_
•	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	0.048		#	0.00029	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	0.00056		#	2.9E-05	
Sodium	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	2000.000	F	#	22	
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	2500.000	F	#	2.2	_
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	3000.000	F	#	22	_
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	1400.000	F	#	2.2	_
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	590.000	F	#	1.1	_
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	240.000	QF	.#	0.22	_
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	270.000	F	#	0.22	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	38.000		#	0.022	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	33.000		#	0.022	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	36.000		#	0.022	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	39.000		#	0.022	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	39.000		#	0.022	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	34.000		#	0.022	_
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	440.000		#	0.22	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	38.000		#	0.022	-
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	39.000		#	0.022	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	3000.000	F	#	2.2	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	3700.000		#	2.2	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	3700.000		#	2.2	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	36.000		#	0.022	-
Specific Conductance	umhos/cm	0608	WL	09/16/2004	N001	10.00 - 15.00	15994	F	#	<u> </u>	_
	umhos/cm	0614	WL	09/16/2004	N001	10.00 - 15.00	19677	F	#	_	_
	umhos/cm	0618	WL	09/16/2004	N001	11.00 - 16.00	18660	F	#	-	-

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PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFI LAB DAT	ERS: A QA	DETECTION LIMIT	UN- CERTAINTY
Specific Conductance	umhos/cm	0619	WL	09/15/2004	N001	8.00 - 13.00	7903	F	#	_	_
	umhos/cm	0735	WL	09/16/2004	N001	3.00 - 8.00	3704	F	#	<u> </u>	-
	umhos/cm	0797	WL, WP	09/15/2004	N001	7.30 - 9.30	1628	QF	#	-	_
	umhos/cm	0850	WL	09/15/2004	N001	5.60 - 15.40	1803	F	#	_	-
	umhos/cm	0897	SL	09/16/2004	N001	0.00 - 0.00	638		#	-	-
	umhos/cm	0898	SL, RIV	09/15/2004	N001	0.00 - 0.00	610		#	-	-
	umhos/cm	0940	SL, RIV	09/14/2004	N001	0.00 - 0.00	451		#	-	-
	umhos/cm	0956	SL	09/16/2004	N001	0.00 - 0.00	653		#	-	-
	umhos/cm	0957	SL	09/15/2004	N001	0.00 - 0.00	573		#	_	-
	umhos/cm	0959	SL, STRM	09/14/2004	N001	0.00 - 0.00	5796		#	_	-
	umhos/cm	0965	SL, RIV	09/16/2004	N001	0.00 - 0.00	634		#	-	-
	umhos/cm	1008	WL	09/16/2004	N001	6.90 - 16.90	18662	F	#	-	_
	umhos/cm	1077	WL, EXT	09/16/2004	N001	5.00 - 14.50	23511		#	_	-
	umhos/cm	1089	WL, EXT	09/16/2004	N001	4.80 - 14.80	18508		#	_	-
	umhos/cm	1205	SL	09/14/2004	N001	0.00 - 0.00	605		#	-	-
Strontium	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	12.000	F	#	0.00083	-
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	12.000	F	#	0.00083	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	9.800	F	#	0.00083	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	6.200	F	#	0.00042	_
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	1.300	F	#	0.00017	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	0.930	QF	#	8.4E-05	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	0.730	F	#	8.4E-05	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	0.850		#	8.4E-05	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	0.790		#	8.4E-05	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	0.820		#	8.4E-05	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	0.870		#	8.4E-05	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMPI DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIEF LAB DATA	S: C QA	DETECTION	UN- CERTAINTY
Strontium	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	0.870		#	8.4E-05	_
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	0.800		#	8.4E-05	_
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	6.300		#	0.00017	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	0.860		#	8.4E-05	-
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	0.870		#	8.4E-05	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	10.000	F	#	0.00083	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	13.000		#	0.00083	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	10.000		#	0.00083	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	0.840		#	8.4E-05	-
Sulfate	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	9800	F	#	100	_
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	13000	F	#	100	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	13000	F	#	100	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	5400	F	#	50	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	1300	F	#	25	-
	mg/L	0797	WĿ, WP	09/15/2004	0001	7.30 - 9.30	520	QF	#	10	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	610	F	#	10	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	160		#	2.5	_
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	150		#	5	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	140		#	5	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	160		#	2.5	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	160		#	2.5	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	150		#	5	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	3800		#	25	-
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	160		#	2.5	-
	.mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	160		#	2.5	-
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	13000	F	#	100	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIER LAB DATA	S: E QA	ETECTION LIMIT	UN- CERTAINTY
Sulfate	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	16000		#	100	_
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	15000		#	100	_ ·
aa	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	140		#	5	-
Temperature	С	0608	WL	09/16/2004	N001	10.00 - 15.00	20.68	F	#		_
	С	0614	WL	09/16/2004	N001	10.00 - 15.00	19.28	F	#	-	-
	С	0618	WL	09/16/2004	N001	11.00 - 16.00	19.15	F	#	-	-
	С	0619	WL	09/15/2004	N001	8.00 - 13.00	19.59	F	#	-	_
	С	0735	WL	09/16/2004	N001	3.00 - 8.00	17.14	F	#	-	-
	С	0797	WL, WP	09/15/2004	N001	7.30 - 9.30	20.47	QF	#	-	_
	С	0850	WL	09/15/2004	N001	5.60 - 15.40	18.90	F	#	_	_
	С	0897	SL	09/16/2004	N001	0.00 - 0.00	20.90		#	-	-
	С	0898	SL, RIV	09/15/2004	N001	0.00 - 0.00	19.08		#	-	_
	С	0940	SL, RIV	09/14/2004	N001	0.00 - 0.00	23.02		#	-	_
	С	0956	SL	09/16/2004	N001	0.00 - 0.00	21.85		#	_	_
	С	0959	SL, STRM	09/14/2004	N001	0.00 - 0.00	20.80		#	-	_
	С	0965	SL, RIV	09/16/2004	N001	0.00 - 0.00	17.52		#	-	_
	С	1008	WL	09/16/2004	N001	6.90 - 16.90	20.76	F	#	-	-
	С	1077	WL, EXT	09/16/2004	N001	5.00 - 14.50	19.26		#	-	-
	С	1089	WL, EXT	09/16/2004	N001	4.80 - 14.80	22.09		#	-	-
	С	1205	SL	09/14/2004	N001	0.00 - 0.00	21.48		#	-	-
Total Dissolved Solids	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	17000	F	#	400	-
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	25000	F	#	400	-
	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	23000	F	#	400	-
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	8500	F	#	400	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	2900	F	#	80	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	1100	QF	#	40	-

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PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUA LAB		RS: E QA	DETECTION	UN- CERTAINTY
Total Dissolved Solids	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	1200		F	#	40	
	mg/L	1008	WL	09/16/2004	0001	6.90 - 16.90	26000		F	#	400	-
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	30000			#	400	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	25000			#	400	-
Total Organic Carbon	mg/L	0608	WL	09/16/2004	N001	10.00 - 15.00	15		F	#	1	-
	mg/L	0614	WL	09/16/2004	N001	10.00 - 15.00	20		F	#	1	-
	mg/L	0618	WL	09/16/2004	N001	11.00 - 16.00	23		F	#	1	-
	mg/L	0619	WL	09/15/2004	N001	8.00 - 13.00	5.7		F	#	1	-
	mg/L	0735	WL	09/16/2004	N001	3.00 - 8.00	4.7		F	#	1	-
	mg/L	0797	WL, WP	09/15/2004	N001	7.30 - 9.30	2.8		JQF	#	1	-
	mg/L	0850	WL	09/15/2004	N001	5.60 - 15.40	3.2		F	#	1	-
	mg/L	1008	WL	09/16/2004	N001	6.90 - 16.90	23		F	#	1	-
	mg/L	1077	WL, EXT	09/16/2004	N001	5.00 - 14.50	28			#	1	-
	mg/L	1089	WL, EXT	09/16/2004	N001	4.80 - 14.80	22			#	1	-
Turbidity	NTU	0608	WL	09/16/2004	N001	10.00 - 15.00	8.46		F	. #	_	_
	NTU	0614	WL	09/16/2004	N001	10.00 - 15.00	38.8		F	#	-	-
	NTU	0618	WL	09/16/2004	N001	11.00 - 16.00	1.55		F	#	-	-
	NTU	0619	WL	09/15/2004	N001	8.00 - 13.00	2.18		F	#	-	-
	NTU	0735	WL	09/16/2004	N001	3.00 - 8.00	1.03		F	#	-	-
	NTU	0797	WL, WP	09/15/2004	N001	7.30 - 9.30	13.0		QF	#	_	-
	NTU	0850	WL	09/15/2004	N001	5.60 - 15.40	8.53		F	#	-	-
	NTU	1008	WL	09/16/2004	N001	6.90 - 16.90	7.45		F	#	-	-
	NTU	1077	WL, EXT	09/16/2004	N001	5.00 - 14.50	0.23			#	-	-
	NTU	1089	WL, EXT	09/16/2004	N001	4.80 - 14.80	0.77			#	-	-
Uranium	mg/L	0608	WL	09/16/2004	0001	10.00 - 15.00	1.700		F	#	0.0012	
	mg/L	0614	WL	09/16/2004	0001	10.00 - 15.00	2.400		F	#	0.0012	<u> </u>

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPL DATE	-E: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS LAB DATA (5: D QA	ETECTION	UN- CERTAINTY
Uranium	mg/L	0618	WL	09/16/2004	0001	11.00 - 16.00	3.100	F	#	0.0012	_
	mg/L	0619	WL	09/15/2004	0001	8.00 - 13.00	0.450	F	#	6.2E-05	-
	mg/L	0735	WL	09/16/2004	0001	3.00 - 8.00	0.046	F	#	6.2E-05	-
	mg/L	0797	WL, WP	09/15/2004	0001	7.30 - 9.30	0.0083	QF	#	1.2E-05	-
	mg/L	0850	WL	09/15/2004	0001	5.60 - 15.40	0.0069	F	#	1.2E-05	-
	mg/L	0897	SL	09/16/2004	0001	0.00 - 0.00	0.0015		#	1.2E-05	-
	mg/L	0898	SL, RIV	09/15/2004	0001	0.00 - 0.00	0.0014		#	1.2E-05	-
	mg/L	0940	SL, RIV	09/14/2004	0001	0.00 - 0.00	0.0014	E	#	1.2E-05	-
	mg/L	0956	SL	09/16/2004	0001	0.00 - 0.00	0.0016	E	#	1.2E-05	-
	mg/L	0956	SL	09/16/2004	0002	0.00 - 0.00	0.0016		#	1.2E-05	-
	mg/L	0957	SL	09/15/2004	0001	0.00 - 0.00	0.0015		#	1.2E-05	-
	mg/L	0959	SL, STRM	09/14/2004	0001	0.00 - 0.00	0.047		#	6.2E-05	_
	mg/L	0965	SL, RIV	09/16/2004	0001	0.00 - 0.00	0.0015		#	1.2E-05	-
	mg/L	0965	SL, RIV	09/16/2004	0002	0.00 - 0.00	0.0015		#	1.2E-05	-
	mg/L	1008	WL *	09/16/2004	0001	6.90 - 16.90	2.000	F	#	0.0012	_
	mg/L	1077	WL, EXT	09/16/2004	0001	5.00 - 14.50	2.800		#	0.0012	-
	mg/L	1089	WL, EXT	09/16/2004	0001	4.80 - 14.80	2.100		#	0.0012	-
	mg/L	1205	SL	09/14/2004	0001	0.00 - 0.00	0.0014		#	1.2E-05	_

PAR	AMETER	L	JNITS	LOCATIO	ON LOC SUE	TYPE, TYPE	SAM DATE	PLE: ID	DEPTH R (FT Bl	ANGE _S)	RESULT	QU. LAB	ALIFIER DATA	S: QA	DETECTION LIMIT	UN- CERTAINTY
RECO	DRDS: SELEC data_va	FED FROM U	ISEE200 V fiers NOT I	VHERE site_ LIKE '%X%')	code='SH AND DA	P01' ANI TE_SAM	D quality_ass PLED betwe	surance = TF en #9/10/200	RUE AND (data_ 04# and #9/21/20	validation_qua	alifiers IS NULL OF	R data_v	alidation_	qualif	iers NOT LIKE '%	R%' AND
SAMF	PLE ID CODES:	000X = Filte	ered sampl	e (0.45 µm).	N00X =	Unfiltere	d sample.)	X = replicate	number.							
LOCA	TION TYPES:	SL SURFA	CE LOCAT	ΓΙΟΝ		WL WE	ELL									
LOCA	TION SUBTYPE	S: EXT	Extraction	on Well		RIV	River		STRM	Stream		W/P	Woll D	aint		
LAB C	QUALIFIERS:											**1	Wenn	Jint		
* +	Replicate analy Correlation coe	sis not within fficient for MS	control lim SA < 0.995.	iits.												
>	Result above up	oper detection	n limit.													
А	TIC is a suspec	ted aldol-con	densation	product.												
В	Inorganic: Res	ult is between	the IDL ar	nd CRDL. Or	rganic: Ar	nalyte als	o found in m	ethod blank.								
C	Pesticide result	confirmed by	GC-MS.													
5	Analyte determi	ned in diluted	sample.													
E	Inorganic: Estir	nate value be	ecause of ir	nterference, s	see case r	narrative.	Organic: A	nalyte excèe	ded calibration ration	ange of the G	C-MS.					
н	Holding time ex	pired, value s	uspect.													
1	Increased detec	tion limit due	to required	d dilution.												
J	Estimated								•							
M	GFAA duplicate	injection pred	cision not r	net.												
N	Inorganic or rad	iochemical: S	Spike samp	ole recovery i	not within	control lir	mits. Organio	c: Tentative	ly identified com	pund (TIC).						
P	> 25% differenc	e in detected	pesticide o	or Arochlor co	oncentratio	ons betwe	een 2 columr	ıs.								
о 11	Result determin	ed by method	l of standa	rd addition (N	/ISA).											
U W	Analytical result	below detect	ion limit.													
vv	Post-algestion s	pike outside o	control limi	ts while sam	ple absort	ance < 5	i0% of analyt	ical spike ab	osorbance.							
~ V	Laboratory defin	ed (USEPA (LP organi	c) qualifier, s	ee case n	arrative.										
7	Laboratory defin		JLP organi	c) qualifier, s	ee case n	arrative.										
2	Laboratory denn	ed (USEPA C	JLP organi	c) qualifier, s	ee case n	arrative.										
DATA	QUALIFIERS:															
F	Low flow sampli	ng method us	ed.		G	Possib	le grout cont	amination, p	H > 9.		Estimated value	<u>م</u>				
L	Less than 3 bore	e volumes pur	rged prior t	o sampling.	Q	Qualita	tive result du	ue to samplir	na technique	R	Unusable resul	6. f				
U	Parameter analy	zed for but wa	as not dete	ected.	Х	Locatio	on is undefine	ed.	- ,							
QA QU	ALIFIER: #=v	alidated acco	ording to Q	uality Assura	nce auide	lines										
			0 4	,	30.00											

Surface Water Quality Data

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU/ LAB	ALIFIER DATA	S: D	ETECTION LIMIT	UN- CERTAINTY
Alkalinity, Total (As CaCO3	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	1098			#	_	
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	190			#	-	_
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	34			#	-	_
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	199			#	-	_
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	1612		F	#	-	_
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	420		F	#	-	_
·	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	448		F	#	-	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	454		F	#	-	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	273		F	#	-	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	873		F	#	-	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	562		F	#	-	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	245		F	#	-	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	657			#	-	_
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	159			#	-	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	428			#	-	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	241			#	-	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	214			#	-	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	570		F	#	-	_
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	481		F	#	-	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	153			#	-	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	643			#	-	_
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	292		F	#	-	-
;	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	802			#	_	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	630			#	-	_
I	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	949			#	-	-
1	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	731			#	-	_

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PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	S: QA		UN- CERTAINTY
Alkalinity, Total (As CaCO3	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	352			#		-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	1204			#	-	_
Ammonia Total as N	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	0.1	U		#	0.1	
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	0.1	Ŭ		" #	0.1	-
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	0.1	U		" #	0.1	_
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.1	U		#	0.1	_
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	860		F	#	20	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	0.1	U	F	#	0.1	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	0.1	U	F	#	0.1	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	0.1	U	F	#	0.1	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	0.1	U	F	#	0.1	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	0.1	U	F	#	0.1	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	89		F	#	2.	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	0.1	U	F	#	0.1	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	0.1	U	F	#	0.1	-
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	0.19			#	0.1	-
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.18			#	0.1	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
l	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	1200		F	#	50	-
ł	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	0.1	U	F	#	0.1	-
I	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	22			#	1	-
1	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	160			#	F	

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	RS: I QA	DETECTION	UN- CERTAINTY
Ammonia Total as N	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	10			#	0.5	_
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	0.1	U	F	#	0.1	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	160			#	5	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	0.1	U		#	0.1	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	2.7			#	0.1	_
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	1.2			#	0.1	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	110			#	5	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	690			#	20	-
Calcium	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	470.000			#	0.0068	-
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	430.000			#	0.0027	-
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	110.000			#	0.0027	_
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	460.000			#	0.0027	_
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	480.000		F	#	0.014	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	460.000		F	#	0.014	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	570.000		F	#	0.0068	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	560.000		F	#	0.0027	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	530.000		F	#	0.0027	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	540.000		F	#	0.0027	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	460.000		F	#	0.014	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	420.000		F	#	0.014	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	500.000		F	#	0.0027	-
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	480.000			#	0.0014	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	390.000			#	0.014	_
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	530.000			#	0.0027	_
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	460.000			#	0.0068	-
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	450.000			#	0.0027	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIE LAB DATA	RS: [QA	DETECTION	UN- CERTAINTY
Calcium	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	550.000		#	0.0027	_
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	320.000		#	0.0014	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	500.000	F	#	0.014	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	190.000	F	#	0.0068	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	420.000		#	0.014	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	1600.000		#	0.014	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	420.000		#	0.014	_
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	720.000	F	#	0.0027	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	450.000		#	0.0068	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	390.000		#	0.014	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	540.000		#	0.014	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	530.000		#	0.014	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	1200.000		#	0.014	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	1200.000		#	0.014	-
Chloride	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	340		#	40	-
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	100		#	10	-
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	54		#	10	_
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	58		#	10	-
1	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	450	F	#	40	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	870	F	#	40	-
I	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	300	F	#	20	_
I	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	37	F	#	1	_
· · · ·	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	58	F	#	10	_
r	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	56	F	#	10	-
r	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	400	F	#	40	-
r	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	800	F	#	40	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	S: I QA	DETECTION	UN- CERTAINTY
Chloride	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	34		F	#	1	_
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	21			#	4	_
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	1400			#	100	_
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	48			#	10	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	170			#	20	-
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	86			#	10	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	160			#	10	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	14			#	4	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	490		F	#	40	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	260		F	#	40	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	1600			#	100	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	330			#	40	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	1100			#	100	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	100		F	#	10	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	320			#	40	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	1300			#	100	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	1200			#	100	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	1300			#	100	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	700			#	100	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	610			#	100	-
Dissolved Oxygen	mg/L	0426	SL	09/14/2004	N001	0.00 - 0.00	2.92			#	-	-
	mg/L	0817	WL	09/17/2004	N001	21.60 - 31.62	4.38		F	#	-	-
	mg/L	0832	WL	09/15/2004	N001	21.10 - 31.10	2.18		F	#	-	-
	mg/L	0835	WL	09/15/2004	N001	21.90 - 31.90	4.73		F	#	-	-
	mg/L	0836	WL	09/15/2004	N001	26.80 - 36.80	2.10		F	#	-	-
	mg/L	0838	WL	09/15/2004	N001	21.90 - 31.90	6.76		F	#	-	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU/ LAB	ALIFIEF DATA	RS: D	DETECTION	UN- CERTAINTY
Dissolved Oxygen	mg/L	0839	WL	09/17/2004	N001	18.10 - 28.10	-0.03		F	#	-	
	mg/L	0841	WL	09/15/2004	N001	42.00 - 52.00	2.90		F	#	-	-
	mg/L	0846	WL	09/15/2004	N001	17.90 - 27.90	3.09		F	#	-	-
	mg/L	1057	WL	09/14/2004	N001	36.66 - 41.66	2.80		F	#	_	-
	mg/L	1060	WL	09/17/2004	N001	27.20 - 36.70	0.02		F	#	-	_
	mg/L	1070	WL, EXT	09/14/2004	N001	52.50 - 62.00	7.99			#	-	-
	mg/L	1071	WL, EXT	09/14/2004	N001	36.50 - 46.00	8.49			#	-	-
	mg/L	1078	WL, EXT	09/14/2004	N001	35.50 - 45.00	8.89			#	-	-
	mg/L	1079	WL	09/15/2004	N001	10.50 - 20.00	7.99		F	#	-	-
	mg/L	1087	TS, SUMP	09/14/2004	N001	0.00 - 0.00	7.50			#	_	-
	mg/L	1088	TS, SUMP	09/14/2004	N001	0.00 - 0.00	8.91			#	-	-
	mg/L	1091	WL, EXT	09/14/2004	N001	33.00 - 43.00	-2.35			#	-	-
	mg/L	1092	WL, EXT	09/14/2004	N001	33.00 - 43.00	12.92			#	-	-
	mg/L	1093	WL, EXT	09/14/2004	N001	31.17 - 34.50	10.94			#	-	-
	mg/L	1094	WL, EXT	09/14/2004	N001	30.50 - 34.50	14.59			#	-	-
Iron	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	0.140	U	F	#	0.14	
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	0.140	U	F	#	0.14	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	0.072	U	F	#	0.072	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	0.029	U	F	#	0.029	_
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	0.029	U	F	#	0.029	- -
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	0.029	U	F	#	0.029	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	0.140	U	F	#	0.14	-
	_mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	0.140	U	F	#	0.14	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	0.029	U	F	#	0.029	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	0.140	U	F	#	0.14	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	0.072	U	F	#	0.072	-

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PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	RS: QA	DETECTION LIMIT	UN- CERTAINTY
Iron	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	0.140	U		#	0.14	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	0.140	U		#	0.14	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	0.140	U		#	0.14	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	0.029	U	F	#	0.029	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	0.072	U		#	0.072	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	0.140	U		#	0.14	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	1.800			#	0.14	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	8.500			#	0.14	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	8.500			#	0.14	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	0.620			#	0.14	-
Magnesium	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	1000.000			#	0.037	-
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	160.000			#	0.015	-
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	13.000			#	0.015	_
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	370.000			#	0.015	-
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	1800.000		F	#	0.073	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	1500.000		F	#	0.073	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	530.000		F	#	0.037	- -
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	300.000		F	#	0.015	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	110.000		F	#	0.015	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	120.000		F	#	0.015	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	2200.000		F	#	0.073	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	740.000		F	#	0.073	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	170.000		F	#	0.015	_
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	100.000			#	0.0073	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	970.000			#	0.073	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	320.000			 #	0.015	-

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PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIERS: DATA Q	D	ETECTION LIMIT	UN- CERTAINTY
Magnesium	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	440.000			#	0.037	_
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	520.000			#	0.015	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	360.000			#	0.015	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	31.000			#	0.0073	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	2300.000		F	#	0.073	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	390.000		F	#	0.037	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	1600.000			#	0.073	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	1200.000			#	0.073	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	1200.000			#	0.073	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	140.000		F	#	0.015	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	1500.000			#	0.037	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	890.000			#	0.073	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	2500.000			#	0.073	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	2500.000			#	0.073	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	2600.000			#	0.073	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	2400.000			#	0.073	-
Manganese	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	0.0078	В		#	0.0019	-
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	0.076			#	0.00078	-
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	0.0031	В		#	0.00078	-
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.0011	В		#	0.00078	-
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	2.000		F	#	0.0039	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	0.040	В	F	#	0.0039	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	0.0027	В	F	#	0.0019	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	2.000		F	#	0.00078	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	0.0049	В	F	#	0.00078	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	0.0045	В	F	#	0.00078	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE 205) FOR SITE	SHDUD	Shiprook Disposed Cite (Tamasa)
REPORT DATE: 12/29/2004 2:07 mm	51 IF 02,	Shiprock Disposal Site (Terrace)
REFORT DATE: 12/28/2004 3:27 pm		

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIEF DATA	RS: QA	DETECTION LIMIT	UN- CERTAINTY
Manganese	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	0.830		F	#	0.0039	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	0.029	В	F	#	0.0039	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	0.0029	В	F	#	0.00078	_
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	0.0029	В		#	0.00039	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	0.0039	U		#	0.0039	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	0.051			#	0.00078	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	0.031			#	0.0019	-
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.039			#	0.00078	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.660			#	0.00078	-
	mg/L	0942	SL	09/17/2004	0001 .	0.00 - 0.00	0.025			#	0.00039	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	6.500		F	#	0.0039	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	0.0046	В	F	#	0.0019	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	3.500			#	0.0039	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	0.930			#	0.0039	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	0.130			#	0.0039	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	0.0011	В	F	#	0.00078	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	1.600			#	0.0019	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	0.038	в		#	0.0039	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	1.200			#	0.0039	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	1.600			#	0.0039	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	0.660			#	0.0039	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	4.900			#	0.0039	-
Nitrate + Nitrite as Nitrogen	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	40			#	0.5	_
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	14			 #	0.1	_
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	0.1			#	0.01	_
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	11			#	0.1	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIEF LAB DATA	RS: D QA	ETECTION LIMIT	UN- CERTAINTY
Nitrate + Nitrite as Nitrogen	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	490	F	#	5	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	670	F	#	5	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	200	F	#	2	· _
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	6.9	F	#	0.05	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	34	F	#	0.2	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	34	F	#	0.2	-
	mg/L	0839	WL	09/17/2004	,0001	18.10 - 28.10	590	F	#	5	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	670	F	#	5	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	19	F	#	0.1	-
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	0.2		#	0.01	_
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	710		#	5	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	6.5		#	0.05	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	38		#	0.2	-
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	16		#	0.1	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	55		#	0.5	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	0.37		#	0.01	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	1500	F	#	10	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	240	F.	#	2	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	880		#	5	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	600		#	20	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	740		#	5	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	84	F	#	0.5	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	370		#	2	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	660		#	5	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	1600		#	10	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	1500		#	10	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUA LAB	LIFIER DATA	S: D QA	ETECTION LIMIT	UN- CERTAINTY
Nitrate + Nitrite as Nitrogen	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	890			#	20	
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	1000			#	20	-
Oxidation Reduction Potent	mV	0425	SL	09/16/2004	N001	0.00 - 0.00	-51.7			#	_	-
	mV	0426	SL	09/14/2004	N001	0.00 - 0.00	141.2			#	-	_
	mV	0662	SL	09/14/2004	N001	0.00 - 0.00	43.1			#	-	-
	mV	0786	SL, SEEP	09/14/2004	N001	0.00 - 0.00	57			#	-	-
	mV	0817	WL	09/17/2004	N001	21.60 - 31.62	69.1		F	#	-	-
	mV	0832	WL	09/15/2004	N001	21.10 - 31.10	187		F	#	-	-
	mV	0835	WL	09/15/2004	N001	21.90 - 31.90	229		F	#	-	-
	mV	0836	WL	09/15/2004	N001	26.80 - 36.80	102.7		F	#	_	-
	mV	0838	WL	09/15/2004	N001	21.90 - 31.90	86.3		F	#	-	-
	mV	0839	WL	09/17/2004	N001	18.10 - 28.10	235		F	#	-	-
	mV	0841	WL	09/15/2004	N001	42.00 - 52.00	178		F	#	_	-
	mV	0846	WL	09/15/2004	N001	17.90 - 27.90	143		F	#	-	-
	mV	0884	SL	09/15/2004	N001	0.00 - 0.00	-95			#	-	
	mV	0889	SL	09/16/2004	N001	0.00 - 0.00	53.0			#	_	-
	mV	0933	SL, STRM	09/14/2004	N001	0.00 - 0.00	-42.3			#	-	-
	mV	0934	SL, STRM	09/16/2004	N001	0.00 - 0.00	-125		•	#	-	-
	mV	0936	SL, SEEP	09/14/2004	N001	0.00 - 0.00	25.0			#	_	_
	mV	0942	SL	09/17/2004	N001	0.00 - 0.00	56			#	_	_
	mV	1057	WL	09/14/2004	N001	36.66 - 41.66	281.1		F	#	-	_
	mV	1060	WL	09/17/2004	N001	27.20 - 36.70	202		F	#	_	-
	mV	1070	WL, EXT	09/14/2004	N001	52.50 - 62.00	484.6			#	-	_
	mV	1071	WL, EXT	09/14/2004	N001	36.50 - 46.00	153.1			#	_	-
	mV	1078	WL, EXT	09/14/2004	N001	35.50 - 45.00	125.2			#	-	-
	mV	1079	WL	09/15/2004	N001	10.50 - 20.00	-57		F	#	-	-

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PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA		UN- CERTAINTY
Oxidation Reduction Potent	mV	1087	TS, SUMP	09/14/2004	N001	0.00 - 0.00	409.6		#	
	mV	1088	TS, SUMP	09/14/2004	N001	0.00 - 0.00	96.4		# -	_
	mV	1091	WL, EXT	09/14/2004	N001	33.00 - 43.00	0.3		¥	_
	mV	1092	WL, EXT	09/14/2004	N001	33.00 - 43.00	-49.9		¥ _	_
	mV	1093	WL, EXT	09/14/2004	N001	31.17 - 34.50	-25.5		4 –	_
	mV	1094	WL, EXT	09/14/2004	N001	30.50 - 34.50	63.5	-	4 -	-
рН	s.u.	0425	SL	09/16/2004	N001	0.00 - 0.00	6.82		 # _	
	s.u.	0426	SL	09/14/2004	N001	0.00 - 0.00	6.98	,	, ¥ _	_
	s.u.	0662	SL	09/14/2004	N001	0.00 - 0.00	7.66	,	, ¥ _	_
	s.u.	0786	SL, SEEP	09/14/2004	N001	0.00 - 0.00	7.54	1	¥ _	_
	s.u.	0817	WL	09/17/2004	N001	21.60 - 31.62	6.54	F #	, ŧ _	_
	s.u.	0832	WL	09/15/2004	N001	21.10 - 31.10	7.23	F ‡	, ŧ _	
	s.u.	0835	WL	09/15/2004	N001	21.90 - 31.90	6.98	F #	,	
	s.u.	0836	WL	09/15/2004	N001	26.80 - 36.80	7.06	F #	t _	-
	s.u.	0838	WL	09/15/2004	N001	21.90 - 31.90	7.12	., F #	t _	-
	s.u.	0839	WL	09/17/2004	N001	18.10 - 28.10	6.91	F #	£	
	s.u.	0841	WL	09/15/2004	N001	42.00 - 52.00	7.32	F #	ŧ _	_
	s.u.	0846	WL	09/15/2004	N001	17.90 - 27.90	7.29	F #	£	-
	s.u.	0884	SL	09/15/2004	N001	0.00 - 0.00	7.74		£	_
	s.u.	0889	SL	09/16/2004	N001	0.00 - 0.00	7.76	#	<u> </u>	_
	s.u.	0933	SL, STRM	09/14/2004	N001	0.00 - 0.00	7.19	#	_	_
	s.u.	0934	SL, STRM	09/16/2004	N001	0.00 - 0.00	7.67	"	-	-
	s.u.	0936	SL, SEEP	09/14/2004	N001	0.00 - 0.00	6.86	"		-
	s.u.	0942	SL	09/17/2004	N001	0.00 - 0.00	7.10	" "	-	-
	s.u.	1057	WL	09/14/2004	N001	36.66 - 41.66	6.83	F #	-	-
	s.u.	1060	WL	09/17/2004	N001	27.20 - 36.70	7.81	F #	-	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS LAB DATA (5: D QA	ETECTION LIMIT	UN- CERTAINTY
рH	s.u.	1070	WL, EXT	09/14/2004	N001	52.50 - 62.00	6.61		#	-	_
	s.u.	1071	WL, EXT	09/14/2004	N001	36.50 - 46.00	6.51		#	-	-
	s.u.	1078	WL, EXT	09/14/2004	N001	35.50 - 45.00	7.09		#	-	-
	s.u.	1079	WL	09/15/2004	N001	10.50 - 20.00	6.99	F	#	-	-
	s.u.	1087	TS, SUMP	09/14/2004	N001	0.00 - 0.00	6.91		#	-	-
	s.u.	1088	TS, SUMP	09/14/2004	N001	0.00 - 0.00	7.47		#	-	-
	s.u.	1091	WL, EXT	09/14/2004	N001	33.00 - 43.00	6.61		#	-	-
	s.u.	1092	WL, EXT	09/14/2004	N001	33.00 - 43.00	6.93		#	-	-
	s.u.	1093	WL, EXT	09/14/2004	N001	31.17 - 34.50	6.66		#	-	-
	s.u.	1094	WL, EXT	09/14/2004	N001	30.50 - 34.50	6.63		#	-	-
Potassium	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	66.000		#	0.22	-
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	25.000		#	0.089	_
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	13.000		#	0.089	-
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	28.000		#	0.089	-
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	250.000	F	#	0.44	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	56.000	F	#	0.44	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	23.000	F	#	0.22	_
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	9.100	F	#	0.089	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	9.500	F	#	0.089	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	9.700	F	#	0.089	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	150.000	F	#	0.44	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	84.000	F	#	0.44	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	10.000	F	#	0.089	-
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	7.200		#	0.044	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	84.000		#	0.44	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	16.000		#	0.089	-

		LOCATION		SAMP								· · · · · · · · · · · · · · · · · · ·
PARAMETER	UNITS	ID	SUBTYPE		ID	(FT BLS)	RESULT	LAB	DATA C	: 2A	DETECTION LIMIT	UN- CERTAINTY
Potassium	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	26.000			#	0.22	_
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	30.000			#	0.089	_
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	21.000			#	0.089	_
	mg/L	0942	SL.	09/17/2004	0001	0.00 - 0.00	4.100			#	0.044	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	330.000		F	#	0.44	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	34.000		F	#	0.22	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	130.000			#	0.44	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	200.000			#	0.44	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	84.000			#	0.44	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	12.000		F	#	0.089	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	150.000			#	0.22	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	85.000			#	0.44	_
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	90.000			#	0.44	_
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	92.000			#	0.44	_
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	160.000			#	0.44	_
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	270.000			#	0.44	-
Selenium	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	0.030			#	0.00029	_
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	0.041			#	0.00029	-
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	0.00004 E	3	J	#	2.9E-05	-
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.024	١		#	5.9E-05	-
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	0.0031		F	#	5.9E-05	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	4.000		F	#	0.015	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	0.400		F	#	0.0015	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	0.063		F	#	0.00029	_
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	0.190		F	#	0.0015	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	0.200		F	#	0.0015	-

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GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE SHP02, Shiprock Disposal Site (Terrace) REPORT DATE: 12/28/2004 3:27 pm

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PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIER LAB DATA	RS: E QA	ETECTION LIMIT	UN- CERTAINTY
Selenium	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	0.0016	F	#	5.9E-05	
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	3.000	F	#	0.015	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	0.200	F	#	0.0015	-
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	0.012		#	2.9E-05	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	1.400		#	0.0059	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	0.024		#	5.9E-05	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	0.120		#	0.0015	-
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.079		#	0.00029	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.210		#	0.0029	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	0.0088		#	2.9E-05	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	0.380	F	#	0.0015	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	1.500	F	#	0.0029	_ ·
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	2.800		#	0.015	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	0.170		#	0.00029	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	2.900		#	0.015	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	0.560	F	#	0.0015	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	0.037		#	5.9E-05	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	1.200		#	0.0059	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	0.510		#	0.0015	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	2.100		#	0.0059	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	1.900		#	0.0059	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	0.550		#	0.0015	-
Sodium	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	1300.000		#	2.2	
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	930.000		#	0.22	_
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	660.000		#	0.22	-
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	540.000		#	0.22	_

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PARAMETER UNITS	LOCATION LOC TYPE ID SUBTYPE	E, SAMP E DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIER LAB DATA	S: D QA	ETECTION LIMIT	UN- CERTAINTY
Sodium mg/L	0817 WL	09/17/2004	0001	21.60 - 31.62	1300.000	F	#	2.2	-
mg/L	0832 WL	09/15/2004	0001	21.10 - 31.10	3200.000	F	#	2.2	-
mg/L	0835 WL	09/15/2004	0001	21.90 - 31.90	960.000	F	#	2.2	-
mg/L	0836 WL	09/15/2004	0001	26.80 - 36.80	370.000	F	#	1.1	-
mg/L	0838 WL	09/15/2004	0001	21.90 - 31.90	180.000	F	#	1.1	-
mg/L	0838 WL	09/15/2004	0002	21.90 - 31.90	190.000	F	#	1.1	-
mg/L	0839 WL	09/17/2004	0001	18.10 - 28.10	1800.000	F	#	2.2	-
mg/L	0841 WL	09/15/2004	0001	42.00 - 52.00	4800.000	F	#	2.2	-
mg/L	0846 WL	09/15/2004	0001	17.90 - 27.90	240.000	F	#	1.1	-
mg/L	0884 SL	09/15/2004	0001	0.00 - 0.00	130.000		#	0.22	-
mg/L	0889 SL	09/16/2004	0001	0.00 - 0.00	6500.000		#	2.2	-
mg/L	0933 SL, STRM	09/14/2004	0001	0.00 - 0.00	270.000		#	0.22	-
mg/L	0934 SL, STRM	09/16/2004	0001	0.00 - 0.00	770.000		#	1.1	-
mg/L	0935 SL, SEEP	09/14/2004	0001	0.00 - 0.00	610.000		#	0.22	-
mg/L	0936 SL, SEEP	09/14/2004	0001	0.00 - 0.00	610.000		#	0.22	-
mg/L	0942 SL	09/17/2004	0001	0.00 - 0.00	50.000		#	0.022	-
mg/L	1057 WL	09/14/2004	0001	36.66 - 41.66	1600.000	F	#	2.2	-
mg/L	1060 WL	09/17/2004	0001	27.20 - 36.70	2100.000	F	#	2.2	-
mg/L	1070 WL, EXT	09/14/2004	0001	52.50 - 62.00	5100.000		#	2.2	-
mg/L	1071 WL, EXT	09/14/2004	0001	36.50 - 46.00	1100.000		#	2.2	-
mg/L	1078 WL, EXT	09/14/2004	0001	35.50 - 45.00	4500.000		#	2.2	-
mg/L	1079 WL	09/15/2004	0001	10.50 - 20.00	280.000	F	#	1.1	-
mg/L	1087 TS, SUMP	09/14/2004	0001	0.00 - 0.00	1300.000		#	2.2	-
mg/L	1088 TS, SUMP	09/14/2004	0001	0.00 - 0.00	5500.000		#	2.2	-
mg/L	1091 WL, EXT	09/14/2004	0001	33.00 - 43.00	3500.000		#	2.2	-
mg/L	1092 WL, EXT	09/14/2004	0001	33.00 - 43.00	3500.000		#	2.2	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIEF LAB DATA	RS: E QA	DETECTION	UN- CERTAINTY
Sodium	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	2300.000		#	2.2	_
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	1800.000		#	2.2	-
Specific Conductance	umhos/cm	0425	SL	09/16/2004	N001	0.00 - 0.00	11330	- A	#	_	_
	umhos/cm	0426	SL	09/14/2004	N001	0.00 - 0.00	6486		#	-	-
	umhos/cm	0662	SL	09/14/2004	N001	0.00 - 0.00	3973		#	-	-
	umhos/cm	0786	SL, SEEP	09/14/2004	N001	0.00 - 0.00	5797		#	-	-
	umhos/cm	0817	WL	09/17/2004	N001	21.60 - 31.62	19870	F	#	-	-
	umhos/cm	0832	WL	09/15/2004	N001	21.10 - 31.10	17982	F	#	-	-
	umhos/cm	0835	WL	09/15/2004	N001	21.90 - 31.90	7437	F	#	-	-
	umhos/cm	0836	WL	09/15/2004	N001	26.80 - 36.80	4210	F	#	-	-
	umhos/cm	0838	WL	09/15/2004	N001	21.90 - 31.90	2846	F	#	-	-
	umhos/cm	0839	WL	09/17/2004	N001	18.10 - 28.10	15069	F	#	-	-
	umhos/cm	0841	WL	09/15/2004	N001	42.00 - 52.00	21842	F	#	-	-
	umhos/cm	0846	WL	09/15/2004	N001	17.90 - 27.90	3155	F	#	-	_
	umhos/cm	0884	SL	09/15/2004	N001	0.00 - 0.00	2564		#	-	_
	umhos/cm	0889	SL	09/16/2004	N001	0.00 - 0.00	29500		#	-	_
	umhos/cm	0933	SL, STRM	09/14/2004	N001	0.00 - 0.00	4493		#	-	-
	umhos/cm	0934	SL, STRM	09/16/2004	N001	0.00 - 0.00	4431		#	-	-
	umhos/cm	0936	SL, SEEP	09/14/2004	N001	0.00 - 0.00	6384		#	-	-
	umhos/cm	0942	SL	09/17/2004	N001	0.00 - 0.00	1518		#	-	-
	umhos/cm	1057	WL	09/14/2004	N001	36.66 - 41.66	23573	F	#	-	-
	umhos/cm	1060	WL	09/17/2004	N001	27.20 - 36.70	10468	F	#	-	_
	umhos/cm	1070	WL, EXT	09/14/2004	N001	52.50 - 62.00	26658		#	-	-
	umhos/cm	1071	WL, EXT	09/14/2004	N001	36.50 - 46.00	19179		#	-	_
	umhos/cm	1078	WL, EXT	09/14/2004	N001	35.50 - 45.00	22658		#	-	_
•	umhos/cm	1079	WL	09/15/2004	N001	10.50 - 20.00	3890	F	#	-	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMPI DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU/ LAB	ALIFIERS: DATA QA	D A	ETECTION LIMIT	UN- CERTAINTY
Specific Conductance	umhos/cm	1087	TS, SUMP	09/14/2004	N001	0.00 - 0.00	12457			#	-	
	umhos/cm	1088	TS, SUMP	09/14/2004	N001	0.00 - 0.00	27987			#	-	-
	umhos/cm	1091	WL, EXT	09/14/2004	N001	33.00 - 43.00	25077			#	-	×
	umhos/cm	1092	WL, EXT	09/14/2004	N001	33.00 - 43.00	24902			#	-	-
	umhos/cm	1093	WL, EXT	09/14/2004	N001	31.17 - 34.50	25698			#	-	-
	umhos/cm	1094	WL, EXT	09/14/2004	N001	30.50 - 34.50	19071			#	-	-
Strontium	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	9.300			#	0.00042	
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	8.700			#	0.00017	_
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	11.000			#	0.00017	-
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	6.100			#	0.00017	-
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	11.000		F	#	0.00083	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	9.700		F	#	0.00083	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	7.500		F	#	0.00042	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	5.900		F	#	0.00017	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	4.200		F	#	0.00017	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	4.300		F	#	0.00017	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	10.000		F	#	0.00083	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	7.600		F ;	#	0.00083	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	4.100		F ;	#	0.00017	-
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	3.400		i	#	8.4E-05	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	8.900		į	#	0.00083	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	5.500		7	ŧ	0.00017	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	6.300		\$	¥	0.00042	-
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	6.300		\$	¥	0.00017	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	6.800		#	¥	0.00017	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	1.800		#	¥	8.4E-05	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIEF LAB DATA	RS: I QA		UN- CERTAINTY
Strontium	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	9.600	F	#	0.00083	_
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	3.700	F	#	0.00042	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	11.000		#	0.00083	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	9.500		#	0.00083	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	10.000		#	0.00083	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	6.000	F	#	0.00017	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	9.600		#	0.00042	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	8.700		#	0.00083	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	13.000		#	0.00083	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	12.000		#	0.00083	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	17.000		#	0.00083	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	13.000		#	0.00083	-
Sulfate	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	6800		#	100	_
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	3600		#	25	-
	mg/L	0662	SL	09/14/2004	0001	0.00 - 0.00	2000		#	25	-
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	3600		#	25	-
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	10000	F	#	100	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	12000	F	#	100	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	4200	F	#	50	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	2900	F	#	25	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	1600	F	#	25	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	1600	F	#	25	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	11000	F	#	100	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	13000	F	#	100	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	2000	F	#	25	-
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	1400		#	10	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU/ LAB	ALIFIER DATA	S: I QA	DETECTION LIMIT	UN- CERTAINTY
Sulfate	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	17000			#	250	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	2900			#	25	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	3800			#	50	-
	mg/L	0935	SL, SEEP	09/14/2004	0001	0.00 - 0.00	4300			#	25	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	3600			#	25	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	630			#	10	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	11000		F	#	100	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	5600		F	#	100	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	15000			#	250	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	2700			#	100	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	14000			#	250	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	2200		F	#	25	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	8000			#	100	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	16000			#	250	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	11000			#	250	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	12000			#	250	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	5700			#	250	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	6800			#	250	-
Temperature	С	0426	SL	09/14/2004	N001	0.00 - 0.00	15.22		-10	#		_
	С	0662	SL	09/14/2004	N001	0.00 - 0.00	25.36			#	-	-
	С	0786	SL, SEEP	09/14/2004	N001	0.00 - 0.00	19.4			#	-	-
	С	0817	WL	09/17/2004	N001	21.60 - 31.62	22.13		F	#	-	-
	С	0832	WL	09/15/2004	N001	21.10 - 31.10	16.90		F	#	-	-
	С	0835	WL	09/15/2004	N001	21.90 - 31.90	17.52		F	#	-	-
	С	0836	WL	09/15/2004	N001	26.80 - 36.80	15.94		F	#	-	_
	С	0838	WL	09/15/2004	N001	21.90 - 31.90	16.20		F	#	-	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIEF LAB DATA	RS: E QA	DETECTION	UN- CERTAINTY
Temperature	С	0839	WL	09/17/2004	N001	18.10 - 28.10	17.18	F	#	-	_
	С	0841	WL	09/15/2004	N001	42.00 - 52.00	17.53	F	#	_	-
	С	0846	WL	09/15/2004	N001	17.90 - 27.90	16.78	F	#	-	-
	С	0884	SL	09/15/2004	N001	0.00 - 0.00	16.01		#	-	-
	С	0889	SL	09/16/2004	N001	0.00 - 0.00	19.78		#	-	-
	С	0933	SL, STRM	09/14/2004	N001	0.00 - 0.00	18.87		#	-	-
	С	0934	SL, STRM	09/16/2004	N001	0.00 - 0.00	23.95		#	_	_
	С	0936	SL, SEEP	09/14/2004	N001	0.00 - 0.00	18.34		#	_	-
	С	0942	SL	09/17/2004	N001	0.00 - 0.00	16.75		#	_	-
	С	1057	WL	09/14/2004	N001	36.66 - 41.66	15.90	F	#	-	-
	С	1060	WL	09/17/2004	N001	27.20 - 36.70	18.31	F	#	-	-
	С	1070	WL, EXT	09/14/2004	N001	52.50 - 62.00	16.05		#	-	-
	С	1071	WL, EXT	09/14/2004	N001	36.50 - 46.00	18.03		#	-	-
	С	1078	WL, EXT	09/14/2004	N001	35.50 - 45.00	16.60		#	-	_
	С	1079	WL	09/15/2004	N001	10.50 - 20.00	17.02	F	#	-	_
	С	1087	TS, SUMP	09/14/2004	N001	0.00 - 0.00	23.60		#	-	-
	С	1088	TS, SUMP	09/14/2004	N001	0.00 - 0.00	22.14		#	-	-
	С	1091	WL, EXT	09/14/2004	N001	33.00 - 43.00	15.16		#	-	-
	С	1092	WL, EXT	09/14/2004	N001	33.00 - 43.00	15.62		#	-	-
	С	1093	WL, EXT	09/14/2004	N001	31.17 - 34.50	15.57		#	-	-
	С	1094	WL, EXT	09/14/2004	N001	30.50 - 34.50	17.71		#	-	-
Total Dissolved Solids	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	18000	F	#	400	_
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	22000	F	#	400	_
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	8400	F	#	200	- -
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	4900	F	 #	200	- -
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	3000	F	 #	200	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIE LAB DAT	ERS: E	DETECTION	UN- CERTAINTY
Total Dissolved Solids	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	2900	F	#	200	_
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	20000	F	#	400	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	26000	F	#	400	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	3300	F	#	200	-
	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	23000	F	#	400	_
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	11000	F	#	200	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	31000		#	400	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	24000		#	400	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	26000		#	400	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	4300	F	#	200	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	15000		#	400	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	31000		#	400	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	29000		#	400	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	29000		#	400	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	31000		#	400	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	30000		#	400	-
Total Organic Carbon	mg/L	0817	WL	09/17/2004	N001	21.60 - 31.62	28	F	#	1	_
	mg/L	0832	WL	09/15/2004	N001	21.10 - 31.10	26	F	#	1	-
	mg/L	0835	WL	09/15/2004	N001	21.90 - 31.90	11	F	#	1	-
	mg/L	0836	WL	09/15/2004	N001	26.80 - 36.80	7.9	F	#	1	-
	mg/L	0838	WL	09/15/2004	N001	21.90 - 31.90	5.7	F	#	1	-
	mg/L	0838	WL	09/15/2004	N002	21.90 - 31.90	4	F	#	1	-
	mg/L	0839	WL	09/17/2004	N001	18.10 - 28.10	20	F	#	1	-
	mg/L	0841	WL	09/15/2004	N001	42.00 - 52.00	28	F	#	1	-
	mg/L	0846	WL	09/15/2004	N001	17.90 - 27.90	2.8	F	#	1	-
	mg/L	1057	WL	09/14/2004	N001	36.66 - 41.66	7.9	F	#	1	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUA LAB		S: D QA	ETECTION	UN- CERTAINTY
Total Organic Carbon	mg/L	1060	WL	09/17/2004	N001	27.20 - 36.70	15		F	#	1	_
	mg/L	1070	WL, EXT	09/14/2004	N001	52.50 - 62.00	23			#	1	-
	mg/L	1071	WL, EXT	09/14/2004	N001	36.50 - 46.00	7.1			#	1	-
	mg/L	1078	WL, EXT	09/14/2004	N001	35.50 - 45.00	27			#	1	-
	mg/L	1079	WL	09/15/2004	N001	10.50 - 20.00	5		F	#	1	-
	mg/L	1087	TS, SUMP	09/14/2004	N001	0.00 - 0.00	16			#	1	-
	mg/L	1088	TS, SUMP	09/14/2004	N001	0.00 - 0.00	39			#	1	-
	mg/L	1091	WL, EXT	09/14/2004	N001	33.00 - 43.00	36			#	1	-
	mg/L	1092	WL, EXT	09/14/2004	N001	33.00 - 43.00	35			#	1	-
	mg/L	1093	WL, EXT	09/14/2004	N001	31.17 - 34.50	20			#	1	-
	mg/L	1094	WL, EXT	09/14/2004	N001	30.50 - 34.50	23			#	1	-
Turbidity	NTU	0426	SL	09/14/2004	N001	0.00 - 0.00	1.16			#		_
	NTU	0817	WL	09/17/2004	N001	21.60 - 31.62	3.95		F	#	-	. <u>-</u>
	NTU	0832	WL	09/15/2004	N001	21.10 - 31.10	4.98		F	#	-	-
	NTU	0835	WL	09/15/2004	N001	21.90 - 31.90	2.49		F	#	-	_
	NTU	0836	WL	09/15/2004	N001	26.80 - 36.80	12.3		F	#	-	-
	NTU	0838	WL	09/15/2004	N001	21.90 - 31.90	1.04		F	#	-	_
	NTU	0839	WL	09/17/2004	N001	18.10 - 28.10	11.6		F	#	-	-
ана. Алагана	NTU	0841	WL	09/15/2004	N001	42.00 - 52.00	2.85		F	#	-	-
	NTU	0846	WL	09/15/2004	N001	17.90 - 27.90	1.71		F	#	-	-
	NTU	1057	WL	09/14/2004	N001	36.66 - 41.66	8.20		F	#	-	-
	NTU	1060	WL	09/17/2004	N001	27.20 - 36.70	21.0		F	#	-	-
	NTU	1070	WL, EXT	09/14/2004	N001	52.50 - 62.00	12.9			#	-	-
	NTU	1071	WL, EXT	09/14/2004	N001	36.50 - 46.00	0.50			#	-	-
	NTU	1078	WL, EXT	09/14/2004	N001	35.50 - 45.00	0.43			#	-	-
	NTU	1079	WL	09/15/2004	N001	10.50 - 20.00	1.36		F	#	-	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE SUBTYPE	, SAMPI DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QU LAB	ALIFIER DATA	S: QA	DETECTION	UN- CERTAINTY
Turbidity	NTU	1087	TS, SUMP	09/14/2004	N001	0.00 - 0.00	1.02			#	-	-
	NTU	1088	TS, SUMP	09/14/2004	N001	0.00 - 0.00	3.69			#	-	· _
	NTU	1091	WL, EXT	09/14/2004	N001	33.00 - 43.00	1.7			#	-	-
	NTU	1092	WL, EXT	09/14/2004	N001	33.00 - 43.00	6.32			#	-	-
	NTU	1093	WL, EXT	09/14/2004	N001	31.17 - 34.50	3.87			#	•	-
	NTU	1094	WL, EXT	09/14/2004	N001	30.50 - 34.50	17.1			#	-	-
Uranium	mg/L	0425	SL	09/16/2004	0001	0.00 - 0.00	0.840	-11-		#	0.00012	-
	mg/L	0426	SL	09/14/2004	0001	0.00 - 0.00	0.230			#	6.2E-05	-
	mg/L	0662.	SL	09/14/2004	0001	0.00 - 0.00	0.00007	В	U	#	1.2E-05	-
	mg/L	0786	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.032			#	6.2E-05	-
	mg/L	0817	WL	09/17/2004	0001	21.60 - 31.62	8.100		F	#	0.0012	-
	mg/L	0832	WL	09/15/2004	0001	21.10 - 31.10	0.160		F	#	0.00012	-
	mg/L	0835	WL	09/15/2004	0001	21.90 - 31.90	0.093		F	#	6.2E-05	-
	mg/L	0836	WL	09/15/2004	0001	26.80 - 36.80	0.064		F	#	6.2E-05	-
	mg/L	0838	WL	09/15/2004	0001	21.90 - 31.90	0.027		F	#	6.2E-05	-
	mg/L	0838	WL	09/15/2004	0002	21.90 - 31.90	0.028		F	#	6.2E-05	-
	mg/L	0839	WL	09/17/2004	0001	18.10 - 28.10	0.680		F	#	0.00012	-
	mg/L	0841	WL	09/15/2004	0001	42.00 - 52.00	0.120		F	#	0.00012	-
	mg/L	0846	WL	09/15/2004	0001	17.90 - 27.90	0.029		F	#	6.2E-05	_
	mg/L	0884	SL	09/15/2004	0001	0.00 - 0.00	0.011			#	1.2E-05	-
	mg/L	0889	SL	09/16/2004	0001	0.00 - 0.00	0.180			#	0.00012	-
	mg/L	0933	SL, STRM	09/14/2004	0001	0.00 - 0.00	0.040			#	6.2E-05	-
	mg/L	0934	SL, STRM	09/16/2004	0001	0.00 - 0.00	0.140			#	6.2E-05	-
	mg/L	0935	SL, SEEP.	09/14/2004	0001	0.00 - 0.00	0.068			#	6.2E-05	-
	mg/L	0936	SL, SEEP	09/14/2004	0001	0.00 - 0.00	0.059			#	6.2E-05	-
	mg/L	0942	SL	09/17/2004	0001	0.00 - 0.00	0.0084			#	1.2E-05	-

PARAMETER	UNITS	LOCATION	LOC TYPE, SUBTYPE	SAMPL DATE	-E: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN- CERTAINTY
Uranium	mg/L	1057	WL	09/14/2004	0001	36.66 - 41.66	0.091	F i	# 0.00012	-
	mg/L	1060	WL	09/17/2004	0001	27.20 - 36.70	0.076	F ;	# 6.2E-05	-
	mg/L	1070	WL, EXT	09/14/2004	0001	52.50 - 62.00	0.120	ŧ	¢ 0.00012	-
	mg/L	1071	WL, EXT	09/14/2004	0001	36.50 - 46.00	0.190	ŧ	# 0.00012	-
	mg/L	1078	WL, EXT	09/14/2004	0001	35.50 - 45.00	0.130	#	# 0.00012	-
	mg/L	1079	WL	09/15/2004	0001	10.50 - 20.00	0.031	F #	¢ 6.2E-05	-
	mg/L	1087	TS, SUMP	09/14/2004	0001	0.00 - 0.00	0.620	#	# 0.0012	-
	mg/L	1088	TS, SUMP	09/14/2004	0001	0.00 - 0.00	0.170	#	\$ 0.00012	-
	mg/L	1091	WL, EXT	09/14/2004	0001	33.00 - 43.00	0.130	#	\$ 0.00012	-
	mg/L	1092	WL, EXT	09/14/2004	0001	33.00 - 43.00	0.120	#	\$ 0.00012	-
	mg/L	1093	WL, EXT	09/14/2004	0001	31.17 - 34.50	0.080	#	\$ 0.00012	-
	mg/L	1094	WL, EXT	09/14/2004	0001	30.50 - 34.50	0.087	#	\$ 0.00012	-

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAM DATE	PLE: ID	DEPTH RA (FT BL	ANGE .S)	RESU	QI ILT LAB	JALIFIEI DATA	RS: QA	DETECTION	UN- CERTAINTY
RECORDS: SELECTED FRI data_validation_	OM USEE200 W qualifiers NOT L	VHERE site_cod LIKE '%X%') AN	e='SHP02' AN ID DATE_SAN	D quality_ass	urance = TR en #9/10/200	UE AND (data_v 4# and #9/21/20	/alidation_qua 04#	alifiers IS	NULL OR data	validatior	_qualif	iers NOT LIKE '%	6R%' AND
SAMPLE ID CODES: 000X	Filtered sample	e (0.45 µm). N	00X = Unfiltere	ed sample.	X = replicate	number.							
LOCATION TYPES: SL SL	IRFACE LOCAT	TION	TS TF	REATMENT S	SYSTEM	\A/I							
LOCATION SUBTYPES: EX	T Extractio	on Well	SEEP	Seen		STDM	Stroom		01.0.4				
LAB QUALIFIERS:			OLLI	occp		3 I KIVI	Stream		SUM	Sump)		
* Replicate analysis not y	vithin control lim	its.											
+ Correlation coefficient f	or MSA < 0.995.												
> Result above upper det	ection limit.												
A TIC is a suspected aldo	I-condensation p	product.											
B Inorganic: Result is bet	ween the IDL ar	nd CRDL. Orgar	nic: Analyte al	so found in m	ethod blank.								
D Analyte determined in d	iluted sample												
E Inorganic: Estimate val	ue because of ir	terference see	caso parrativo	Organia: A	nobén eurora	d = .d. =							
H Holding time expired, va	alue suspect	iterierenee, see	case nanalive	. Organic. Ai	nalyte exceed	ued calibration ra	ange of the GC	C-MS.					
I Increased detection limit	t due to required	d dilution.											
J Estimated													
M GFAA duplicate injectio	n precision not r	net.											
N Inorganic or radiochemi	cal: Spike samp	ple recovery not	within control [imits. Organi	c: Tentativel	v identified comr	ound (TIC)						
P > 25% difference in determine	ected pesticide c	or Arochlor conce	entrations betw	/een 2 columr	าร.	,							
S Result determined by m	ethod of standa	rd addition (MSA	N) .										
U Analytical result below of	etection limit.												
W Post-digestion spike out	side control limi	ts while sample	absorbance <	50% of analyt	ical spike ab	sorbance.							
X Laboratory defined (USI	EPA CLP organi	ic) qualifier, see	case narrative										
T Laboratory defined (USI	PA CLP organi	ic) qualifier, see	case narrative.										
	EPA CLP organi	c) qualifier, see	case narrative.										
DATA QUALIFIERS:													
F Low flow sampling meth	od used.		G Possi	ble grout cont	amination, pl	H > 9.	J	Estima	ited value.				
Less than 3 bore volume	es purged prior to	o sampling.	Q Qualit	ative result du	ue to samplin	ig technique	R	Unusa	ble result.				
QA QUALIFIER: # = validated	Laccording to O	ected. Wality Assurance	X Locati	on is undefine	ed.								
			guidennes.										

•

Equipment Blank Data

BLANKS REPORT (USEE810) FOR SITE SHP02, Shiprock Disposal Site (Terrace) REPORT DATE: 12/29/2004 3:11 pm

			SAME							· · · · · · · · ·	
PARAMETER	UNITS	ID	DATE	ID	TYPE	RESULT			RS:	DETECTIO	UN-
Ammonia Total as N		0000	00/15/000 1				LAD	DATA	QA	IN	CERTAINTY
	ing/∟	0999	09/15/2004	0001	E	0.1	U		#	0.1	-
Calcium	mg/L	0999	09/15/2004	0001	E	0.180	В	U	#	0.0014	-
Chloride	mg/L	0999	09/15/2004	0001	E	0.2	U		#	0.2	
Magnesium	ma/l	0999	09/15/2004	0001	E	0.005					
				0001	E	0.025	В	U	#	0.0073	-
Manganese	mg/L	0999	09/15/2004	0001	Е	0.00039	U		#	0.00039	-
Nitrate + Nitrite as Nitrogen	mg/L	0999	09/15/2004	0001	E	0.01	U		#	0.01	<u> </u>
Potassium	mg/L	0999	09/15/2004	0001	E	0.750	В		#	0.044	_
Selenium	mg/L	0999	09/15/2004	0001	E	0.00002	U		#	2.9E-05	-
Sodium	ma/l	0000	00/15/2004	0004						2.02.00	
			09/15/2004	0001	E	0.022	U		#	0.022	-
Strontium	mg/L	0999	09/15/2004	0001	E	0.00065	В		#	8.4E-05	-
Sulfate	mg/L	0999	09/15/2004	0001	E	0.5	U		#	0.5	-
Uranium	mg/L	0999	09/15/2004	0001	E	0.00002	B		#	1 25 05	
					_	0.00002	U	U	#	1.20-05	-
BLANKS REPORT (USEE810) FOR SITE SHP02, Shiprock Disposal Site (Terrace) REPORT DATE: 12/29/2004 3:11 pm

PARAMETER		CATION ID	SAMP DATE	LE ID	SAMPLE TYPE	RESULT	QUALIFIERS: LAB DATA QA	DETECTIO N	UN- CERTAINTY
RECORDS: SELECTED FROM USEE810 WHERE site_code='SHP02' AND quality_assurance = TRUE AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%R%' AND									
SAMPLE ID CODES: 000X = Filtered sa	SAMPLE ID CODES: 000X = Filtered sample (0.45 μm). N00X = Unfiltered sample. X = replicate number.								
SAMPLE TYPES: E EQUIPMENT	SAMPLE TYPES: E EQUIPMENT BLANK								
LAB QUALIFIERS:	LAB QUALIFIERS:								
 Replicate analysis not within control 	* Replicate analysis not within control limits								
+ Correlation coefficient for MSA < 0.9	995.								
> Result above upper detection limit.									
A TIC is a suspected aldol-condensati	on product.								
B Inorganic: Result is between the ID	Land CRDL. Org	janic: Analyt	e also found in r	nethod bl	ank.				
C Pesticide result confirmed by GC-M	S.								
D Analyte determined in diluted sample	e.								
E Inorganic: Estimate value because	of interference, se	e case narra	tive. Organic: /	Analyte ex	ceeded calibration	range of the GC	C-MS		
H Holding time expired, value suspect				•					
I Increased detection limit due to requ	ired dilution.								
J Estimated									
M GFAA duplicate injection precision r	iot met.								
N Inorganic or radiochemical: Spike s	ample recovery no	ot within cont	rol limits. Orgar	nic: Tenta	tively identified cor	npund (TIC).			
P > 25% difference in detected pestici	de or Arochlor cor	ncentrations I	petween 2 colun	nns.					
S Result determined by method of sta	ndard addition (M	SA).							
U Analytical result below detection limi	t.								
V Post-digestion spike outside control	limits while sampl	e absorbanc	e < 50% of anal	ytical spik	e absorbance.				
 Laboratory defined (USEPA CLP org Laboratory defined (USEPA CLP org 	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.								
Z Laboratory defined (USEPA CLP or	janic) qualifier, se	e case narra	tive.		•				
2 Laboratory defined (USEPA CLP or	2 Laboratory defined (USEPA CLP organic) qualifier, see case narrative.								
DATA QUALIFIERS:									
F Low flow sampling method used.		G Po	ossible grout cor	ntaminatio	on, pH > 9.	J	Estimated value.		
L Less than 3 bore volumes purged pr	ior to sampling.	QQ	ualitative result o	due to sar	npling technique	R	Unusable result.		
 Parameter analyzed for but was not 	detected.	X Lo	ocation is undefi	ned.					
JA QUALIFIER: # = validated according to Quality Assurance guidelines.									

Static Water Level Data

STATIC WATER LEVELS (USEE700) FOR SITE SHP02, Shiprock Disposal Site (Terrace) REPORT DATE: 12/28/2004 3:27 pm

	FLOW/	TOP OF CASING	MEASUREMENT		DEPTH FROM TOP	WATER	WATER
	CODE	(FT)	DATE	TIME	(FT)	ELEVATION (FT)	FLAG
0600		4955.87	09/17/2004	13:07	33.56	4922.31	
0603		4978.62	09/17/2004	15:00	30.41	4948.21	
0726		4939.95	09/17/2004	15:36	25.72	4914.23	
0727		4940.65	09/17/2004	15:03	7.18	4933.47	
0728		4964.46	09/17/2004	17:40	24.56	4939.90	
. 0730		4977.75	09/17/2004	12:05			D
0812		5004.98	09/17/2004	13:50	60.78	4944.20	
0813		4984.37	09/17/2004	13:44	43.29	4941.08	
0814		4968.12	09/17/2004	14:03	31.98	4936.14	
0815		4953.67	09/17/2004	12:02	25.90	4927.77	<u> </u>
0816		4937.92	09/17/2004	16:51	25.75	4912.17	
0817		4957.34	09/17/2004	10:29	18.78	4938.56	
0820		4954.95	09/17/2004	13:17	147.87	4807.08	
0821		4955.46	09/17/2004	13:15	102.46	4853.00	
0822		4954.42	09/17/2004	13:12	170.58	4783.84	
0823		4957.65	09/17/2004	12:38	100.80	4856.85	
0824		4958.21	09/17/2004	12:48	174.00	4784.21	
0825		4958.68	09/17/2004	12:41	139.98	4818.70	ant
0826		4950.73	09/17/2004	12:16	17.51	4933.22	
0827		4946.92	09/17/2004	13:24		-	D
0828		4949.34	09/17/2004	14:14	14.84	4934.50	
0829		4941.94	09/17/2004	15:28	52.33	4889.61	.1001
0833		4940.52	09/17/2004	17:01	29.56	4910.96	
0835		4930.48	09/15/2004	09:35	20.02	4910.46	
0836		4901.74	09/15/2004	12:35	20.80	4880.94	
0838		4937.70	09/15/2004	10:48	26.60	4911.10	
0839		4943.21	09/16/2004		26.59	4916.62	
		4943.21	09/17/2004	08:26	25.90	4917.31	т
0841		4984.05	09/15/2004	15:30	45.25	4938.80	
0844		4948.46	09/17/2004	17:08	31.82	4916.64	
				-			

Page 1

STATIC WATER LEVELS (USEE700) FOR SITE SHP02, Shiprock Disposal Site (Terrace) REPORT DATE: 12/28/2004 3:27 pm

····							
		TOP OF CASING	MEASUREMENT		DEPTH FROM TOP	WATER	WATER
	CODE	(FT)	DATE	TIME	(FT)	(FT)	FLAG
0846		4934.57	09/15/2004	13:42	22.16	4912.41	
0885		4914.17	09/17/2004			-	D
1002		4957.63	09/17/2004	13:02	103.02	4854.61	
1003		4957.84	09/17/2004	13:00	93.18	4864.66	
1004		4957.61	09/17/2004	12:58	42.01	4915.60	
1007		4962.01	09/17/2004	12:33	44.62	4917.39	
1048		4921.35	09/17/2004	12:49	4.88	4916.47	
1049		4923.89	09/17/2004	12:43	5.95	4917.94	
1057		4984.83	09/14/2004	17:15	36.75	4948.08	
		4984.83	09/17/2004	15:40	36.78	4948.05	
1059		4970.52	09/17/2004	13:22	23.08	4947.44	
1060		4970.62	09/16/2004	09:40	35.33	4935.29	
		4970.62	09/17/2004	09:03	35.29	4935.33	Т
1067		4930.77	09/17/2004	16:28		-	D
1068	11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	4927.97	09/17/2004	16:40	7.45	4920.52	
1069		4922.62	09/17/2004	12:15			D
1072		4985.30	09/17/2004	17:16	44.26	4941.04	
1073		4991.43	09/17/2004	13:58	49.92	4941.51	
1079		4925.22	09/15/2004	10:15	14.80	4910.42	
DM7		4974.44	09/17/2004	13:32	50.15	4924.29	
MW1		4955.64	09/17/2004	13:29	50.72	4904.92	

RECORDS: SELECTED FROM USEE700 WHERE site_code='SHP02' AND LOG_DATE between #9/10/2004# and #9/21/2004#

FLOW CODES:

WATER LEVEL FLAGS: D Dry

STATIC WATER LEVELS (USEE700) FOR SITE SHP01, Shiprock Disposal Site (Floodplain) REPORT DATE: 12/28/2004 3:27 pm

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT)	MEASURE DATE		DEPTH FROM TOP OF CASING (FT)	WATER ELEVATION (FT)	WATER LEVEL
						(())	T LAO
0608		4893.35	09/16/2004	12:27	7.32	4886.03	
0611		4895.62	09/17/2004	16:17	10.85	4884.77	
0614		4892.79	09/16/2004	11:00	8.90	4883.89	
0618		4891.51	09/16/2004	10:03	8.56	4882.95	
0619		4892.19	09/15/2004	17:15	9.57	4882.62	
0625		4891.23	09/17/2004	16:09	8.30	4882.93	
0626		4891.40	09/17/2004	16:05	8.11	4883.29	
0627		4889.41	09/17/2004	15:58	5.78	4883.63	
0628		4889.87	09/17/2004	15:59	6.29	4883.58	
0630		4887.62	09/17/2004	17:33	4.00	4883.62	
0734		4886.55	09/16/2004	13:52	7.35	4879.20	
0735		4895.85	09/16/2004	13:08	7.50	4888.35	
0766		4892.55	09/17/2004	15:44	11.39	4881.16	
0797		4908.04	09/15/2004	10:13	10.30	4897.74	
0850	В	4907.51	09/15/2004	11:16	10.10	4897.41	
1008		4890.80	09/16/2004	15:15	9.64	4881.16	
1075		4892.84	09/17/2004	15:48	12.36	4880.48	

RECORDS: SELECTED FROM USEE700 WHERE site_code='SHP01' AND LOG_DATE between #9/10/2004# and #9/21/2004#

FLOW CODES: B BACKGROUND

WATER LEVEL FLAGS:

Time Versus Concentration Graphs

Shiprock Disposal Site (Floodplain) (SHP01)

Selenium Concentration



Shiprock Disposal Site (Floodplain) (SHP01)

Uranium Concentration



Shiprock Disposal Site (Terrace) (SHP02)

Selenium Concentration



Shiprock Disposal Site (Terrace) (SHP02)

Uranium Concentration



Shiprock Disposal Site (Terrace) (SHP02)

Uranium Concentration



Attachment 3 Sampling and Analysis Work Order



established 1959

Task Order ST04-102 Control Number 1000-T04-1703

August 17, 2004

Arthur Kleinrath Program Manager U.S. Department of Energy Grand Junction Office 2597 B ³/₄ Road Grand Junction, CO 81503

SUBJECT: Contract No. DE-AC01-02GJ79491, Stoller September 2004 Environmental Sampling at Shiprock, New Mexico

Reference: FY 2004 LM Task Order No. ST04-102-S3

Dear Mr. Kleinrath:

The purpose of this letter is to inform you of the upcoming sampling event at Shiprock, New Mexico. Enclosed are the map and tables specifying sample locations and analytes for routine monitoring. Water quality data will be collected from monitor wells and surface locations at this site as part of the routine environmental sampling scheduled to begin the week of September 13, 2004.

The following lists show the well and surface locations scheduled for sampling during this event.

Monitor Wells (filtered)*							
<u>SHP01</u>							
608 Km	615 Al	619 Al	735 Al	797 Al	1008 Al		
614 Al	618 Al	734 Al	736 Al	850 Al	1077 Al		
1089 Nr							
SHP02							
730 Al	832 Al	839 Al	1060 Al	1079 Al	1092 Nr		
817 Km	835 Al	841 Al	1070 Al	1087 Nr	1093 Nr		
818 Al	836 Al	846 Al	1071 Al	1088 Nr	1094 Nr		
830 Km	838 Al	1057 Al	1078 Al	1091 Nr			

*NOTE: Al = Alluvium; Km = Mancos Shale; Nr = No recovery of data for classifying

Art Kleinrath 1000-T04-1703 Page 2

Surface Wa <u>SHP01</u>	ter (filtered)					
655	897	940	957	959	965	1205
887	898	956				
<u>SHP02</u>						
425	786	889	934	936	938	942
426	884	932	935	937	939	
662	885	933				

Water levels will be collected from additional (non-sampled) wells as shown in the attachment. QA/QC samples will be collected as directed in the *Sampling and Analysis Plan for GJO Projects*. Access agreements are covered under the cooperative agreement.

If you have any questions, please call me at extension 6588 or Dave Miller at extension 6652.

Sincerely,

Signature on Original

Clay Carpenter Project Manager

CC/lcg/lac Enclosures (3)

- cc: S. E. Donivan, Stoller (e)
 - D. E. Miller, Stoller (e)
 - K. E. Miller, Stoller (e)
 - D. G. Traub, Stoller (e)

cc w/o enclosures:

Correspondence Control File (Thru V. Creagar) Working File – SHP Attachment 4 Trip Report



established 1959

DATE: October 27, 2004

TO: David E. Miller

FROM: Lauren C. Goodknight

SUBJECT: Sampling Trip Report

Site: Shiprock, New Mexico

Dates of Sampling Event: September 14 through 17, 2004.

Team Members: Dave Traub, Steve Hall, and 2 Stoller Corporate employees

Trip Summary: Water samples were collected from 30 wells and 19 surface water locations.

Locations Not Sampled / Reason: Surface locations 0885, 0887, and 0932 did not have sufficient water to sample.

Field Variance: None.

RIN Numbers Assigned: Samples were shipped to Paragon Analytical on Thursday and Monday, September 16th and 20th. The RIN number for Paragon is 04090104.

Water Level Measurements: Water level measurements were taken in all sampled wells.

Well Inspection Summary: Well inspections were conducted on all sampled wells. All wells were in good condition.

Quality Control Sample Cross Reference: Three ground water sample duplicates were collected for quality control. One equipment blank was collected with the peristaltic pump used for sampling. The following table lists the identification numbers of the quality control samples.

False ID	True ID	Sample Type	Associated Matrix	Ticket Number
2483	884-02	Equipment Blank	Ground/Surface Water	NDX 191
2482	965-01	Duplicate	Ground water	NDX 193
2481	956-01	Duplicate	Ground water	NDX 198
2478	838-02	Duplicate	Ground water	NDW 248

Corrective Action: None.

David Miller October 27, 2004 Page 2

Location Specific Information:

Sample ID	Date	Location	Comment
NDX 180	9/14/04	0425	
NDX 176	9/14/04	0426	Clear flow; 650 mL/9.77 sec.
NDX 481	9/16/04	0608	
NDX 480	9/16/04	0614	
	9/16/04	0615	No sample or DTW; Pulled tubing – weeds/roots on it; had trouble getting dedicated tube back to depth; attempted pumping – no water.
NDX 479	9/16/04	0618	
NDX 478	9/15/04	0619	
	9/14/04	0655	DRY
NDX 181	9/14/04	0662	
		0730	DRY
	9/16/04	0734	No sample; pumped dry twice.
NDX 482	9/16/04	0735	
		0736	DRY
NDX 177	9/14/04	0786	Very slow drips along 50-60 feet of cliff face just west of bridge. Sample collected where drips filled 750 mL bottle in 5-8 minutes.
NDX 186	9/15/04	0797	
NDX 488	9/17/04	0817	
		0818	No sample; pump off for 19 hrs. Not enough water to fill flow cell.
		0830	DRY
NDX 476	9/15/04	0832	Water level below pump.
NDW 245	9/15/04	0835	
NDW 249	9/15/04	0836	Raised dedicated tubing ~ 6 in; cleaned out YSI
NDW 247	9/15/04	0838	Duplicate sample collected – 2478.
NDX 486	9/17/04	0839	Well recharge poor; standing water is < 3'
NDX 477	9/15/04	0841	
NDW 250	9/15/04	0846	
NDX 187	9/15/04	0850	Well obstructed at 9.4'; made hook and removed baseball-sized root mass.
NDX 190	9/14/04	0884	
		0885	DRY
		0887	DRY
NDX 196	9/16/04	0889	East side of wash, ~40' below former nickpoint; continuous, steady flow at seep, ~4' above GL
NDX 195	9/16/04	0897	
NDX 188	9/15/04	0898	
		0932	DRY
NDX 184	9/14/04	0933	Hard to find water; kicked around till found water. ~3" deep, solid cattails, very odiferous.
NDX 194	9/16/04	0934	
NDX 182	9/14/04	0935	Kicked hole in mud to collect water. Filled one 125 mL ~40 minutes later. Used 6 filters; could only get ~400 mL in metals bottle.
NDX 183	9/14/04	0936	
NDX 178	9/14/04	0940	Sample collected ~80' from stake; took GPS reading. Sample from ~4" deep, slight flow.

David Miller October 27, 2004 Page 3

Sample ID	Date	Location	Comment
NDX 199	9/17/04	0942	
NDX 197	9/16/04	0956	
NDX 189	9/15/04	0957	
NDX 185	9/14/04	0959	Pond is ~6" deep x 5' (N-S) x 50-60' (E-W); no connection to river; slight input from flow at ravine west of 0935.
NDX 192	9/16/04	0965	Duplicate sample – 2482 collected.
NDX 483	9/16/04	1008	
NDW 244	9/14/04	1057	
NDX 487	9/17/04	1060	Data logger; recharge slow and standing water < 3'.
NDW 242	9/14/04	1070	Titrator failed. Sterile samples for ESL.
NDW 240	9/14/04	1071	Sterile sample.
NDX 484	9/16/04	1077	
NDW 239	9/14/04	1078	Sampled for NO3, TOC before pumping dry; returned for Alk, Cl, SO4, metals, TDS
NDW 246	9/15/04	1079	
NDW 243	9/14/04	1087	Sterile samples for ESL.
NDW 238	9/14/04	1088	
NDX 485	9/16/04	1089	
NDW 234	9/14/04	1091	Flow rate < 100 mL/min
NDX 237	9/14/04	1092	
NDW 235	9/14/04	1093	
NDW 236	9/14/04	1094	Flow stopped at ~2 gal. Recorded parameters; returned to collect sample
NDX 179	9/14/04	1205	Sampled near concrete waste, ~ 12" deep; strong flow.

Regulatory: None.

Site Issues: None.

Additional Action Required / Taken: None.

(lcg)

cc: A. W. Kleinrath, LM–50 (e)
S. E. Donivan, Stoller (e)
K. E. Miller, Stoller
Working File – SHP

F:\HOME\L40048\My Documents\UGW\SHP\0409shp.trp.doc