

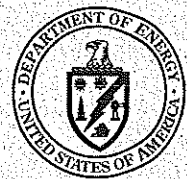
USHP000531



**DATA VALIDATION  
SHIPROCK, NM  
UMTRA**

**June 2000  
Water Sampling**

Prepared by the  
U.S. Department of Energy  
Grand Junction Office



**RECORD COPY**

## SHIPROCK, NEW MEXICO

Sampled June 2000

### DATA PACKAGE CONTENTS

This data package includes the following information:

<u>Item No.</u>	<u>Description of Contents</u>
1.	<b>Site Hydrologist Summary</b>
2.	<b>Data Package Assessment, which includes the following:</b> <ul style="list-style-type: none"><li>a. Field procedures verification checklist</li><li>b. Confirmation that chain-of-custody was maintained.</li><li>c. Confirmation that holding time requirements were met.</li><li>d. Evaluation of the adequacy of the QC sample results.</li></ul>
3.	<b>Data Assessment Summary, which describes problems identified in the data validation process and summarizes the validator's findings.</b>
4.	<b>Anomalous Data Review Checksheets</b> which list the subset of data that merits explanation or follow-up action. The "Disposition" column of this report describes the evaluator's judgments on the listed anomalies.
5.	<b>UMTRA Database Printouts</b> of analytical data organized as follows: <ul style="list-style-type: none"><li>a. Ground Water Quality Data (included on disk)</li><li>b. Surface Water Quality Data (included on disk)</li><li>c. Equipment Blank Data (included on disk)</li><li>d. Time Versus Concentration Graphs</li><li>e. Static Ground Water Level Measurement Data</li></ul>
6.	<b>Sampling and Analysis Work Order and Trip Reports.</b>

Site: Shiprock

Sampling Period: June 12 - 26, 2000

### SUMMARY CRITERIA

- 1. Did concentrations in water from any domestic wells sampled exceed a ground water standard, a primary drinking water standard, or health advisory?**

The selenium concentration from well 847 (0.0381 mg/L) exceeded the UMTRA ground water standard. The nitrate (698 mg/L) and selenium (1.110 mg/L) concentrations from well 848 exceeded UMTRA ground water and primary drinking water standards, and the uranium concentration (0.0448 mg/L) in well 848 exceeded the UMTRA ground water standard. Well 848 was installed for irrigation purposes and currently is inactive, and well 847 is being used for irrigation only; both wells are located on the Shiprock High School property. Graphs that show nitrate, selenium, and uranium concentrations versus time for wells 847 and 848 are included with the analytical data. These plots show consistently elevated concentrations of selenium in well 847 and elevated nitrate, selenium, and uranium in well 848.

- 2. Were standards exceeded at any point-of-compliance wells?**

There are no point-of-compliance wells established at the Shiprock site.

- 3. As a result of this sampling round, is there any indication of unexpected contaminated ground water movement?**

The distribution and rate of movement of contaminated ground water at the site was assessed in the draft Final Site Observation 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 UMTRA ground water standards are listed in Table 1. Graphs that show nitrate and uranium concentrations versus time for selected wells are included with the analytical data.

- 4. Is there statistical evidence that UMTRA Project related contaminants were detected in a surface body of water in greater concentrations than upstream ambient water quality?**

Surface water concentrations were compared to benchmark values derived using data from sampling locations 888 and 898, which are located upstream of the site on the San Juan River. At location 887, values of gross alpha, nitrate, selenium, and uranium exceeded benchmark values (Table 2). This location is from a distributary channel of the San Juan River through which San Juan River water flows when the river stage is high. At the time of this sampling, the river stage was low and no river water was flowing through the distributary channel. Therefore, the exceedances at 887 reflect contaminated water

emerging in seeps from the terrace system immediately to the south. Benchmark values were exceeded at location 939 for the same analytes as at 887. Location 939 is farther downstream on the same distributary channel as 887, and exceedances similarly reflect seeps from the contaminated terrace system. Concentrations from the other two San Juan River locations (894 and 940) were below benchmark values.

Benchmark values were exceeded at additional surface water locations listed in Table 2. These locations receive discharge from contaminated alluvial or terrace aquifers and elevated concentrations are expected.

Table 1. Shiprock Wells Exceeding UMTRA standards in June 2000.

Analyte	Standard <sup>1</sup>	Site code	Wells exceeding standard
Cadmium	0.01	SHP02	603 (0.0162)
Net Alpha <sup>2</sup>	15	SHP01	1009 (35.41)
Nitrate	44.27	SHP01	608 (2280), 610 (3240), 614 (3440), 620 (143), 624 (79.9), 732 (86.6), 735 (1190), 766 (991), 768 (56), 773 (1640), 775 (987), 779 (180), 854 (1520), 855 (74.8), 862 (63.4), 1008 (1250), 1009 (959), 1009 (986)
Nitrate	44.27	SHP02	600 (568), 602 (123), 603 (4890), 726 (87.4), 727 (1650), 728 (693), 730 (616), 812 (5920), 813 (8680), 814 (4170), 815 (3000), 816 (238), 819 (402), 826 (115), 827 (415), 830 (102), 832 (2030), 833 (1460), 835 (61.1), 836 (62.2), 839 (2300), 841 (1990), 844 (1400), 846 (527), 848 (698), 1007 (930), 1048 (3070), 1049 (3050), 1057 (5540), 1058 (52.1), 1059 (1140), 1060 (2420), 0824 (188)
Radium-226+228	5	SHP01	1062 (8.97)
Radium-226+228	5	SHP02	602 (15.38), 727 (9.52)
Selenium	0.01	SHP01	608 (0.0114), 610 (0.0213), 614 (0.0602), 620 (0.169), 624 (0.176), 626 (0.0198), 734 (0.0249), 735 (0.0687), 768 (0.253), 773 (0.0191), 775 (0.124), 854 (0.0129), 855 (0.12), 1008 (0.0224), 1009 (0.0707), 1009 (0.0683)
Selenium	0.01	SHP02	603 (0.283), 726 (0.129), 725 (0.0159), 728 (0.0412), 730 (0.0156), 812 (6.96), 813 (0.0334), 814 (2.73), 815 (0.633), 816 (0.0767), 819 (0.0123), 826 (0.0281), 827 (0.0508), 830 (0.0224), 832 (2.62), 833 (0.61), 835 (0.0679), 836 (0.134), 837 (0.0254), 838 (0.039), 841 (2.55), 844 (1.21), 846 (0.906), 847 (0.0381), 848 (1.11), 1007 (0.0476), 1048 (2.01), 1049 (2.19), 1057 (0.493), 1059 (0.0575), 1060 (4.66)
Uranium	0.044	SHP01	608 (1.96), 610 (1.95), 614 (2.56), 620 (0.863), 624 (0.498), 626 (0.1), 734 (0.528), 735 (0.113), 736 (0.309), 766 (3.62), 768 (0.972), 773 (0.697), 775 (1.59), 779 (0.515), 854 (3.4), 855 (0.145), 857 (0.304), 1008 (3.32), 1009 (0.749), 1010 (0.353), 1013 (0.216)
Uranium	0.044	SHP02	600 (1.11), 602 (0.74), 725 (0.0473), 728 (0.255), 727 (0.396), 812 (0.116), 813 (0.141), 814 (0.126), 815 (0.295), 819 (1.89), 824 (0.11), 826 (2.95), 827 (0.687), 828 (0.449), 832 (0.0949), 833 (0.146), 836 (0.0529), 837 (0.0446), 839 (0.418), 841 (0.0962), 844 (0.084), 846 (0.0456), 848 (0.0448), 1007 (1.02), 1048 (0.144), 1049 (0.144), 1057 (0.109), 1059 (0.0747), 1060 (0.187)

<sup>1</sup> Units are in mg/l except for net alpha and Ra-226/228, which are pCi/l.

<sup>2</sup> Uranium activities were subtracted from the gross alpha results in order to compare to the standard, which excludes uranium and radon. Uranium concentrations were converted to activity using a conversion factor of 687 pCi/mg.

Table 2. Locations that Exceeded Surface Water Benchmarks in January 2000 compared to June 2000

LOCATION_CODE	SITE_CODE	LOCATION_COMMENTS	ANALYTE	BENCH-MARK <sup>2</sup>	JAN 2000	JUNE 2000
655	SHP01	Ditch in NW end of floodplain	Gross Alpha <sup>1</sup>	8.4	66.37	52.23U
			Molybdenum	0.0075	0.0097	0.0097
			Nitrate	3.63	103	18.6
			Selenium	0.0018	0.0836	0.0329
			Uranium	0.0038	0.111	0.0446
658	SHP01	Floodplain wetland	Nitrate	3.63	5.63	0.0314U
			Radium-226	0.14	0.34	0.38
			Selenium	0.0018	0.0119	0.0016
			Uranium	0.0038	0.0632	0.0134
887	SHP01	Distributary channel of San Juan River; Adjusted 100 Ft. North of GPS Location	Gross Alpha	8.4	45.31	15.36U
			Nitrate	3.63	203	116
			Selenium	0.0018	0.152	0.0881
			Uranium	0.0038	0.0496	0.0174
894	SHP01	S. bank San Juan River, just E of US Hwy 666 bridge	Molybdenum	0.0075	0.0099	0.0019U
			Nitrate	3.63	104	0.391
			Selenium	0.0018	0.0787	0.00032
			Uranium	0.0038	0.112	0.001
939	SHP01	Distributary channel of San Juan River	Gross Alpha	8.4	32.77	10.04U
			Nitrate	3.63	98.2	5.92
			Selenium	0.0018	0.114	0.0155
			Uranium	0.0038	0.0393	0.0085
940	SHP01	S. bank San Juan River about 2500 ft E of US Hwy 666 bridge	Gross Alpha	8.4	30.67	3.89U
			Nitrate	3.63	22.5	0.781
			Uranium	0.0038	0.0469	0.0035
425	SHP02	Escarpment seep N of millsite	Gross Alpha	8.4	231.5	287.13
			Nitrate	3.63	180	178
			Radium-226	0.14	0.49	0.57
			Selenium	0.0018	0.0446	0.0443
			Uranium	0.0038	0.345	0.341
426	SHP02	Escarpment seep just E of Bob Lee Wash mouth	Gross Alpha	8.4	200.17	172.73
			Molybdenum	0.0075	0.0124	0.0121
			Nitrate	3.63	129	182
			Radium-226	0.14	0.45	0.43
			Selenium	0.0018	0.11	0.137
662	SHP02	Bob Lee Wash, just below outflow ditch confluence	Gross Alpha	8.4	45.78	29.97U
			Molybdenum	0.0075	0.0085	0.0065
			Nitrate	3.63	18.2	0.745
			Radium-226	0.14	0.36	0.23
			Selenium	0.0018	0.0138	0.0027
786	SHP02	Escarpment seep at US Hwy 666 bridge	Uranium	0.0038	0.077	0.0058
			Nitrate	3.63	281	319
			Radium-226	0.14	0.68	0.48
			Selenium	0.0018	0.16	0.161
			Uranium	0.0038	0.0433	0.0434
885	SHP02	Bob Lee Wash, just above confluence of well 648 outflow ditch	Gross Alpha	8.4	957.83	1198.89
			Molybdenum	0.0075	0.0205	0.0316
			Nitrate	3.63	134	34.7
			Radium-226	0.14	0.67	0.78
			Selenium	0.0018	0.0293	0.01
886	SHP02	Many Devils Wash, above knickpoint	Uranium	0.0038	1.71	2.05
			Molybdenum	0.0075	0.0195	0.0243
			Nitrate	3.63	2930	3150
			Radium-226	0.14	0.15	0.29
			Selenium	0.0018	1.89	1.57
			Uranium	0.0038	0.144	0.152

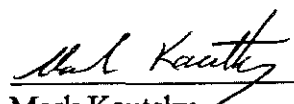
Table 2 (continued). Locations that Exceeded Surface Water Benchmarks in January 2000 compared to June 2000

LOCATION CODE	SITE CODE	LOCATION COMMENTS	ANALYTE	BENCH-MARK	JAN 2000	JUNE 2000
889	SHP02	Many Devils Wash, just below knickpoint	Molybdenum	0.0075	0.0341	0.0718
			Nitrate	3.63	3520	6750
			Radium-226	0.14	0.25	0.52
			Selenium	0.0018	2.32	3.95
			Uranium	0.0038	0.171	0.265
933	SHP02	1st wash, W of US Hwy 666	Nitrate	3.63	376	500
			Radium-226	0.14	0.16	0.42
			Selenium	0.0018	0.226	0.258
			Uranium	0.0038	0.0706	0.0784
934	SHP02	Upper part of 2nd wash, W of US Hwy 666	Gross Alpha	8.4	32.84	24.28U
			Nitrate	3.63	74.5	90
			Selenium	0.0018	0.101	0.0872
			Uranium	0.0038	0.0329	0.0313
935	SHP02	Seep just upstream from 1st wash confluence with distributary channel	Gross Alpha	8.4	92.85	79.69
			Molybdenum	0.0075	0.0197	0.0121
			Nitrate	3.63	515	451
			Radium-226	0.14	0.83	0.93
			Selenium	0.0018	0.428	0.241
936	SHP02	Seep between 1st wash and 2nd wash, W of US Hwy 666	Uranium	0.0038	0.102	0.0667
			Gross Alpha	8.4	63.16	44.38
			Nitrate	3.63	218	234
			Radium-226	0.14	0.56	0.55
			Selenium	0.0018	0.172	0.203
942	SHP02	Pond N of Shiprock high School and US Hwy 64	Uranium	0.0038	0.0486	0.0493
			Gross Alpha	8.4	27.8	35.16
			Nitrate	3.63	105	91.3
			Selenium	0.0018	0.19	0.156
			Uranium	0.0038	0.0339	0.0332

<sup>1</sup> Units of gross alpha were used instead of net alpha because the data are not being compared to a standard but rather to an upstream benchmark value. Uranium and radon activities have not been subtracted.

<sup>2</sup> Units are in mg/l except for gross alpha and radium-226 which are in pCi/l.

 12/20/00  
 Craig Goodknight Date  
 Project Lead

 12-20-00  
 Mark Kautsky Date  
 Site Hydrologist

# **DATA ASSESSMENT**

## UGW Water Sampling Field Activities Verification Checklist

Project Shiprock  
 Date(s) of Verification 10/9/00

Date(s) of Water Sampling JUNE ~~July~~, 2000  
 Name of Verifier JEFF PRICE

Response Comments  
 (Yes, No, N/A)

1. Is the SAP the primary document directing field procedures?

YES

List other documents, SOP's, instructions.

WORK ORDER

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

YES

3. Was field equipment calibrated as specified in the above named documents?

YES

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

YES

Were the standard solutions used for the calibration and operational checks of the field instruments brought to within 10 degrees C of the temperature of the water to be sampled?

YES

816, 728, 631, 732, 735  
Except for: 855, 426, 604, 824, 1003, 727

Was the calibration information recorded on the field data sheets?

YES

4. Was depth to water measured before purging?

YES

Was this information used to calculate purge volume?

YES

5. If conventional purging was used, were the wells purged until parameters stabilized and 3 casing volumes were removed, until the well was purged dry, or until 10 casing volumes were removed?

YES

6. If low-flow purging was used, was the purge rate less than 0.125 gal/min, and was the drawdown less than 0.3 ft?

NA



7. Were duplicates taken at a frequency of one per 20 samples?

YES

8. Were equipment blanks taken at a frequency of one per 20 samples that were collected with nondedicated equipment?

No

5 were required, 4 were taken.

9. Were trip blanks prepared and included with each shipment of VOC samples?

NA

10. Were QC samples assigned a fictitious site identification number?

YES

Was the true identity of the samples recorded in the field notes?

YES

11. Were samples collected in the containers specified?

YES

Were certified pre-cleaned containers used for the sampling?

YES

12. Were samples filtered and preserved as specified?

YES

Except for NO<sub>3</sub>/NH<sub>4</sub> sample from 830; also metals and U isotopes ~~from~~ samples from 827.

13. Were the number and types of samples collected as specified?

YES

Except for cases where insufficient water volume, where

14. Were chain of custody records completed and was sample custody maintained?

YES

15. Were sample ticket book numbers recorded on field data forms and on the chain of custody?

YES

16. Are field data sheets signed and dated by the team leader?

YES

Except for location 837

17. Was all other pertinent information documented on the field data sheets?

YES

18. Was the presence or absence of ice in the cooler documented at every sample location?

YES

19. Were water levels measured at the locations specified in the planning documents?

YES

### DATA PACKAGE ASSESSMENT

REQUISITION NUMBERS: 17054 SITE: Shiprock LABORATORY: 650 ANALYSIS DATES: 6/19 → 7/19/00

REVIEWER: JEFF PRICE A.E. Price October 5, 00.

	NAME (print) Sb, Cd, Mo, U		NAME (print) Ca, Fe, Mg, Mn, K, Ni, Sr		SIGNATURE		DATE		As, Se		Pb-210 U-235		Ra		gα		Cl, F, NO <sub>3</sub> SO <sub>4</sub>		TDS		NH <sub>4</sub>	
	ICP-MS	ICP-AES	GFAA	FAA	NaBH <sub>4</sub>	AS	LSc	PC	IC	Gravimetric	Colorimetric	Other										
CHAIN OF CUSTODY	OK	OK	NA	NA	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	NA	NA
HOLDING TIME	OK	OK			OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		
CALIB. VERIFICATION (For AS, internal tracer)	OK	OK			OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		
PREP. BLANKS (Only if digestion)	NA	NA			NA	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		
INT/CONT CAL. BLANKS	②	②			OK	NA	NA	NA	NA	OK	NA	NA	NA	OK	NA	NA	OK	NA	OK	NA		
ICP SERIAL DILUTION	OK	OK	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
ICS (ICP only)	OK	OK	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
LAB. CONTROL SAMPLE	OK	OK			OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		
DUPLICATES	OK	OK			OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		
POSTDIGEST. SPKS. (Only if MS fails)	NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
MATRIX SPKS.	OK	OK			OK	NA	NA	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		
OVERALL ASSESS.	OK	OK	↓	↓	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	↓	↓

REVIEWER COMMENTS: ① Hold time expired for 268287 (832), 269254 (942), 268255 (887), 268256 (940), 269257 (886), 268258 (889), 269259 (662), 268260 (2001), 268261 (885), 268262 (2002), 268263 (631), 268270 (610), 268271 (775), 268285 (604), 268286 (841), 268287 (832), 268288 (730), 268289 (812), 268299 (939), 268300 (957), 268301 (836), all get "J" flags. ② All antimony results get "L" flags for blank contamination, except for ~~267945~~ 268293 (1002). Cadmium results for 267941 (1000), 267944 (1008).

ITEMS REQUIRING ATTENTION: ~~267945 (1000)~~, ~~267946 (1008)~~ all sampler except for 267949 (603), 267966 (850), 267967 (735), 267968 (773), 267969 (2003), 267970 (655), 267971 (786), 267994 (1062), 267995 (958), 426, 658, 894

267996 (934) get "L" flags for blank cont. Iron results from 267941 (1000), 267942 (1008), 267948 (600), 267962 (1001), 267963 (1000), 267996 (934), 268255 (1048), 268258 (889), 268259 (662), 268260 (2001), 268264 (1049), 268265 (1048), get "L" flags. Manganese result from (786) 267971, 267995 (958), 267954 (734), 268393 (816) get "L" flags. Molybdenum results from 267949 (603), 267950 (813),

# DATA FLAGS CONTINUED

(no flags cont.) 267969 (894), 267994 (1062), 267995 (958), 267996 (934), 268001 (956), 268256 (940), 268262 (2002), 268300 (957) get "U" flags.

Uranium results from samples 268262 (2002), ~~268277 (2004)~~, 268277 (2004), 268285 (604), 268371 (899), 268378 (100) get "U" flags.

③ Chemical recoveries ~~for~~ for U-isotope standard were too low for samples 267953 (854), 267958 (768), 268261 (885),  
                        $\uparrow$                        $\uparrow$                        $\uparrow$   
                       "J" Flag                      "J" Flag                      "R" Flag  
 268372 (602) "J" flag, 268373 (898) "J" flag, 268386 (827) "J" flag.

④ Holding time for nitrate and ammonium from sample 268385 (830) was expired and will get "J" flags.

**SHIPROCK, NEW MEXICO  
JUNE 2000 SAMPLING  
DATA ASSESSMENT SUMMARY**

The DOE-GJO Analytical Laboratory analyzed samples and reported results for this sampling event under requisition number 17054 for the UMTRA ground water project.

**RADIOCHEMICAL ANALYSIS**

The determination of gross alpha was performed using gas proportional counting. Although not requested, gross beta results are included in this report because gross beta activity is determined concurrently with gross alpha activity. The detection limits for gross alpha are higher than those specified in the planning documents due to high TDS in the samples. Polonium-210 and the uranium isotopes were analyzed by alpha spectrometry. Radium-226/228 were analyzed using liquid scintillation.

Radiological results that were less than the minimum detectable activity (MDA) and/or the 3-sigma counting statistic range were qualified with a "U" flag (non-detect) in the database, as reflected on the database printouts.

Chemical recoveries for the following uranium isotopic samples were below 30% and were given a "J" flag: 267958 (768), 268372 (602), 268373 (898), 268386 (827), 267953 (854) and 268261 (885).

**METALS AND MAJOR CATIONS ANALYSIS**

The determination of calcium, chromium, iron, magnesium, manganese, potassium, sodium and strontium were performed by inductively coupled plasma-atomic emission spectrometry (ICP-AES). Antimony, cadmium, molybdenum, and uranium were analyzed by inductively coupled plasma-mass spectrometry (ICP-MS). Arsenic and selenium were determined by hydride generation atomic absorption spectroscopy (NaBH<sub>4</sub>).

All antimony results, except for 268293 (1002), get "U" flags for blank contamination problems. All cadmium results, except for 267949 (603), 267966 (850), 267967 (426), 267968 (658), 267969 (894), 267970 (655), 267971 (786), 267994 (1062), 267995 (958) and 267996 (934) get "U" flags for blank contamination problems. Iron results from samples 267941 (1010), 267942 (1008), 267996 (934), 268255 (1048), 268258 (889), 268259 (662), 268260 (2001), 268264 (1049), and 268265 (1048); manganese results from samples 267971 (786), 267995 (958), 267954 (734) and 268383 (816); molybdenum results from samples 267949 (603), 267950 (813), 267969 (894), 267994 (1062), 267995 (958), 267996 (934), 268001 (956), 268256 (940), 268262 (2002) and 268300 (957); and uranium results from samples 268262 (2002), 228277 (2004), 268285 (604), 268371 (899) and 268378 (100) get "U" flags for blank contamination problems.

## INORGANIC ANALYSIS

Chloride, fluoride, nitrate, and sulfate were determined by ion chromatography (IC). TDS was determined gravimetrically, and ammonium was determined by spectrophotometry (colorimetry).

TDS results from samples 268287 (832), 268254 (942), 268255 (887), 268256 (940), 268257 (886), 268258 (889), 268259 (662), 268260 (2001), 268261 (885), 268262 (2002), 268263 (631), 268270 (610), 268271 (775), 268285 (604), 268286 (841), 268288 (730), 268289 (812), 268299 (939), 268300 (957) and 268301 (836) were qualified with "J" flags because the holding times were exceeded.

The ammonium and nitrate hold times were exceeded for sample 268385 (830) and therefore were given "J" flags.

## FIELD ANALYSIS/ACTIVITIES

There were no wells with a measured pH greater than 9; therefore, "G" flags indicating potential grout contamination were not required. The following wells were qualified with an "L" flag in the database indicating that less than three casing volumes were removed prior to sampling: 267948 (600), 267951 (826), 267953 (854), 267954 (734), 267962 (1001), 267994 (1062), 268265 (1048), 268270 (610), 268271 (775), 268273 (862), 268281 (815), 268284 (1060), 268285 (604), 268287 (832), 268288 (730), 268289 (812), 268290 (1007), 268291 (824), 268292 (1003), 268293 (1002), 268381 (1058), 268382 (1059), 268385 (830), 268386 (827) and 268389 (814).

Four equipment blanks were collected and analyzed for the same constituents as the Shiprock environmental samples. With the exception of one nitrate sample, which has a concentration of 2 times the contract required detection limit (CRDL), there were no UMTRA related contaminants detected in the equipment blanks in concentrations above the CRDL or MDA/3-sigma; therefore, equipment blank results are considered acceptable.

Nine field duplicates were collected during the sampling event. Although there is no established regulatory criteria for the evaluation of field duplicates, the EPA guidance for *laboratory* duplicates was used. The duplicate sample results met these criteria and should be considered acceptable.

## SAR

Because of technical constraints, a suspected anomalies report (SAR) could not be generated for the Shiprock site and is not included in this data package. **Instead, historical data were reviewed as part of the evaluation of suspected anomalous data.** 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.

## SUMMARY

All analytical quality control criteria were met except as qualified on the Ground Water Quality Data by Parameter, Surface Water Quality by Parameter, or equipment blank/trip blank database printouts. The meaning of data qualifiers is as defined on the UMTRA database printout or as defined in the USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, Multi-Media Multi-Concentration, Document Number ILMO2.0, 1991. All data in this package are considered validated and may be treated as final results.

A disk copy of the ground water, surface water, and equipment blank database printouts with the qualifiers incorporated are included in this package.

J.E. Price                      11/27/00  
Jeff Price                              Date  
Data Validation Lead

Craig Goodknight                      11/27/00  
Craig Goodknight                              Date  
Project Lead

# **DATA REVIEW CHECKSHEET**

### ANOMALOUS DATA REVIEW CHECKSHEET

SITE: Shiprock SAMPLING DATA: JUNE, 2000

REVIEWER(s): JEFF PRICE J. E. Price 10/16/00  
NAME (print) SIGNATURE DATE

SITE HYDROLOGIST: Mark Kautsky Mark Kautsky 12-04-00  
NAME (print) SIGNATURE DATE

DATE OF REVIEW: 10/16/00

LOC. NO.	ANALYTE	TYPE OF ANOMALY	DISPOSITION	
655	Mg	Low	Compare to next round (Useable data) ↓	
734	Mn	Low		
736	NO <sub>3</sub>	Low		
854	Se	High		
855	NO <sub>3</sub>	High		
862	NO <sub>3</sub>	High		
816	Se	Low		
844	NO <sub>3</sub>	High		
844	Se	High		
844	TDS	High		
844	U	High		
885	NO <sub>3</sub>	Low		
889	Ra-228	High		
* 604	NH <sub>4</sub>	Very Low		Highly questionable data (Shouldn't use)
	Mn			↓
	NO <sub>3</sub>			
	Se			
	SO <sub>4</sub>			
	TDS		↓	
	U			

\* - Sampling error is suspected here. The well was initially purged dry (very slow recovering well), the sampling crew then removed the pump and left to do other sampling work. The sampling crew then returned later and collected a sample without first purging out the de-ionized water which was in the pump tubing.



# **WATER QUALITY DATA**

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity as CaCO3	mg/L	0608	06/15/2000	0001	KM		1066	#	-	-
	mg/L	0608	06/15/2000	N001	KM		1132	#	-	-
	mg/L	0610	06/21/2000	0001	AL		652	L #	-	-
	mg/L	0610	06/21/2000	N001	AL		762	L #	-	-
	mg/L	0614	06/13/2000	0001	AL		688	#	-	-
	mg/L	0614	06/13/2000	N001	AL		685	#	-	-
	mg/L	0620	06/14/2000	0001	AL		1010	#	-	-
	mg/L	0620	06/14/2000	N001	AL		994	#	-	-
	mg/L	0624	06/14/2000	0001	AL		622	#	-	-
	mg/L	0624	06/14/2000	N001	AL		652	#	-	-
	mg/L	0626	06/14/2000	0001	AL		492	#	-	-
	mg/L	0626	06/14/2000	N001	AL		490	#	-	-
	mg/L	0628	06/14/2000	0001	AL		238	#	-	-
	mg/L	0628	06/14/2000	N001	AL		234	#	-	-
	mg/L	0631	06/20/2000	0001	AL		465	#	-	-
	mg/L	0631	06/20/2000	N001	AL		464	#	-	-
	mg/L	0732	06/21/2000	0001	AL		188	#	-	-
	mg/L	0732	06/21/2000	N001	AL		205	#	-	-
	mg/L	0734	06/14/2000	0001	AL		1092	L #	-	-
	mg/L	0734	06/14/2000	N001	AL		1128	L #	-	-
	mg/L	0735	06/21/2000	0001	AL		493	#	-	-
	mg/L	0735	06/21/2000	N001	AL		562	#	-	-
	mg/L	0736	06/22/2000	N001	AL		492	#	-	-
	mg/L	0766	06/12/2000	0001	AL		1424	#	-	-
	mg/L	0766	06/12/2000	N001	AL		1407	#	-	-
	mg/L	0768	06/14/2000	0001	AL		970	#	-	-
	mg/L	0768	06/14/2000	N001	AL		980	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity as CaCO3	mg/L	0773	06/21/2000	0001	AL		325	#	-	-
	mg/L	0773	06/21/2000	N001	AL		339	#	-	-
	mg/L	0775	06/21/2000	0001	AL		869	L #	-	-
	mg/L	0775	06/21/2000	N001	AL		861	L #	-	-
	mg/L	0779	06/14/2000	0001	AL		410	#	-	-
	mg/L	0779	06/14/2000	N001	AL		388	#	-	-
	mg/L	0782	06/22/2000	0001	AL		133	#	-	-
	mg/L	0782	06/22/2000	N001	AL		137	#	-	-
	mg/L	0783	06/22/2000	0001	AL		153	#	-	-
	mg/L	0783	06/22/2000	N001	AL		126	#	-	-
	mg/L	0784	06/22/2000	0001	AL		185	#	-	-
	mg/L	0784	06/22/2000	N001	AL		177	#	-	-
	mg/L	0850	06/13/2000	0001	AL	B	325	#	-	-
	mg/L	0850	06/13/2000	N001	AL	B	323	#	-	-
	mg/L	0854	06/13/2000	0001	AL		1230	L #	-	-
	mg/L	0854	06/13/2000	N001	AL		1164	L #	-	-
	mg/L	0855	06/13/2000	0001	AL		300	#	-	-
	mg/L	0855	06/13/2000	N001	AL		348	#	-	-
	mg/L	0857	06/14/2000	0001	AL		350	#	-	-
	mg/L	0857	06/14/2000	N001	AL		320	#	-	-
	mg/L	0862	06/22/2000	N001	KM		1226	L #	-	-
	mg/L	1000	06/14/2000	0001	KM		308	#	-	-
	mg/L	1000	06/14/2000	N001	KM		334	#	-	-
	mg/L	1001	06/15/2000	0001	KM		364	L #	-	-
	mg/L	1001	06/15/2000	N001	KM		500	L #	-	-
	mg/L	1008	06/12/2000	0001	AL		1054	#	-	-
	mg/L	1008	06/12/2000	N001	AL		1004	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity as CaCO3	mg/L	1009	06/13/2000	0001	AL		370	#	-	-
	mg/L	1009	06/13/2000	N001	AL		396	#	-	-
	mg/L	1010	06/12/2000	0001	AL		345	#	-	-
	mg/L	1010	06/12/2000	N001	AL		335	#	-	-
	mg/L	1013	06/13/2000	0001	AL		271	#	-	-
	mg/L	1013	06/13/2000	N001	AL		266	#	-	-
	mg/L	1062	06/16/2000	0001	KM		282	L #	-	-
	mg/L	1062	06/16/2000	N001	KM		264	L #	-	-
Ammonium	mg/L	0614	06/13/2000	0001	AL		63.500	#	0.0047	-
	mg/L	0782	06/22/2000	0001	AL		0.0355	B #	0.0047	-
	mg/L	0783	06/22/2000	0001	AL		0.0243	B #	0.0047	-
	mg/L	0784	06/22/2000	0001	AL		0.190	#	0.0047	-
	mg/L	0850	06/13/2000	0001	AL	B	0.0873	B #	0.0047	-
	mg/L	1000	06/14/2000	0001	KM		7.080	#	0.0047	-
	mg/L	1001	06/15/2000	0001	KM		1.100	L #	0.0047	-
	mg/L	1008	06/12/2000	0001	AL		66.200	#	0.0047	-
	mg/L	1009	06/13/2000	0001	AL		38.000	#	0.0047	-
	mg/L	1009	06/13/2000	0002	AL		38.500	#	0.0047	-
	mg/L	1010	06/12/2000	0001	AL		18.100	#	0.0047	-
	mg/L	1013	06/13/2000	0001	AL		24.400	#	0.0047	-
	mg/L	1062	06/16/2000	0001	KM		7.120	L #	0.0047	-
Antimony	mg/L	0614	06/13/2000	0001	AL		0.0013	B U #	0.0001	-
	mg/L	0850	06/13/2000	0001	AL	B	0.00039	B U #	0.0001	-
	mg/L	1000	06/14/2000	0001	KM		0.0016	B U #	0.0001	-
	mg/L	1001	06/15/2000	0001	KM		0.0021	B UL #	0.0001	-
	mg/L	1008	06/12/2000	0001	AL		0.00098	B U #	0.0001	-
	mg/L	1009	06/13/2000	0001	AL		0.00055	B U #	0.0001	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA			DETECTION LIMIT	UN-CERTAINTY
Antimony	mg/L	1009	06/13/2000	0002	AL		0.00055	B	U	#	0.0001	-
	mg/L	1010	06/12/2000	0001	AL		0.0013	B	U	#	0.0001	-
	mg/L	1013	06/13/2000	0001	AL		0.00047	B	U	#	0.0001	-
	mg/L	1062	06/16/2000	0001	KM		0.00084	B	UL	#	0.0001	-
Arsenic	mg/L	0614	06/13/2000	0001	AL		0.00046	B		#	0.0003	-
	mg/L	0850	06/13/2000	0001	AL	B	0.0013	B		#	0.0003	-
	mg/L	1000	06/14/2000	0001	KM		0.0034	B		#	0.0003	-
	mg/L	1001	06/15/2000	0001	KM		0.0033	B	L	#	0.0003	-
	mg/L	1008	06/12/2000	0001	AL		0.00041	B		#	0.0003	-
	mg/L	1009	06/13/2000	0001	AL		0.0003	U		#	0.0003	-
	mg/L	1009	06/13/2000	0002	AL		0.0003	U		#	0.0003	-
	mg/L	1010	06/12/2000	0001	AL		0.0003	U		#	0.0003	-
	mg/L	1013	06/13/2000	0001	AL		0.00031	B		#	0.0003	-
	mg/L	1062	06/16/2000	0001	KM		0.00039	B	L	#	0.0003	-
Cadmium	mg/L	0614	06/13/2000	0001	AL		0.00087	B	U	#	0.0002	-
	mg/L	0850	06/13/2000	0001	AL	B	0.00022	B		#	0.0002	-
	mg/L	1000	06/14/2000	0001	KM		0.00028	B	U	#	0.0002	-
	mg/L	1001	06/15/2000	0001	KM		0.00032	B	UL	#	0.0002	-
	mg/L	1008	06/12/2000	0001	AL		0.0012		U	#	0.0002	-
	mg/L	1009	06/13/2000	0001	AL		0.00058	B	U	#	0.0002	-
	mg/L	1009	06/13/2000	0002	AL		0.00061	B	U	#	0.0002	-
	mg/L	1010	06/12/2000	0001	AL		0.00064	B	U	#	0.0002	-
	mg/L	1013	06/13/2000	0001	AL		0.00022	B	U	#	0.0002	-
	mg/L	1062	06/16/2000	0001	KM		0.00035	B	L	#	0.0002	-
Calcium	mg/L	0614	06/13/2000	0001	AL		479.000			#	0.0504	-
	mg/L	0850	06/13/2000	0001	AL	B	178.000			#	0.0504	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Calcium	mg/L	1000	06/14/2000	0001	KM		36.800	#	0.0504	-
	mg/L	1001	06/15/2000	0001	KM		5.690	L #	0.0504	-
	mg/L	1008	06/12/2000	0001	AL		408.000	#	0.0504	-
	mg/L	1009	06/13/2000	0001	AL		499.000	#	0.0504	-
	mg/L	1009	06/13/2000	0002	AL		497.000	#	0.0504	-
	mg/L	1010	06/12/2000	0001	AL		377.000	#	0.0504	-
	mg/L	1013	06/13/2000	0001	AL		316.000	#	0.0504	-
	mg/L	1062	06/16/2000	0001	KM		63.700	L #	0.0504	-
Chloride	mg/L	0614	06/13/2000	0001	AL		419.000	#	0.24	-
	mg/L	0850	06/13/2000	0001	AL	B	96.200	#	0.12	-
	mg/L	1000	06/14/2000	0001	KM		3150.000	#	0.24	-
	mg/L	1001	06/15/2000	0001	KM		529.000	L #	0.048	-
	mg/L	1008	06/12/2000	0001	AL		963.000	#	0.48	-
	mg/L	1009	06/13/2000	0001	AL		156.000	#	0.24	-
	mg/L	1009	06/13/2000	0002	AL		158.000	#	0.24	-
	mg/L	1010	06/12/2000	0001	AL		77.600	#	0.12	-
	mg/L	1013	06/13/2000	0001	AL		43.200	#	0.048	-
	mg/L	1062	06/16/2000	0001	KM		7940.000	L #	0.48	-
Fluoride	mg/L	0614	06/13/2000	0001	AL		1.470	#	0.125	-
	mg/L	0850	06/13/2000	0001	AL	B	1.120	#	0.0625	-
	mg/L	1000	06/14/2000	0001	KM		2.410	#	0.125	-
	mg/L	1001	06/15/2000	0001	KM		3.650	L #	0.025	-
	mg/L	1008	06/12/2000	0001	AL		0.459	B #	0.25	-
	mg/L	1009	06/13/2000	0001	AL		0.426	B #	0.125	-
	mg/L	1009	06/13/2000	0002	AL		0.650	B #	0.125	-
	mg/L	1010	06/12/2000	0001	AL		0.659	#	0.0625	-
	mg/L	1013	06/13/2000	0001	AL		0.447	#	0.025	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA			DETECTION LIMIT	UN-CERTAINTY
Fluoride	mg/L	1062	06/16/2000	0001	KM		1.370	B	L	#	0.25	-
Gross Alpha	pCi/L	0614	06/13/2000	0001	AL		1281.7			#	172.44	± 214.
	pCi/L	0850	06/13/2000	0001	AL	B	25.4	U		#	25.41	± 15.8
	pCi/L	1000	06/14/2000	0001	KM		69.83	U		#	69.83	± 40.0
	pCi/L	1001	06/15/2000	0001	KM		16.37	U	L	#	16.37	± 9.38
	pCi/L	1008	06/12/2000	0001	AL		1453.97			#	252.86	± 282.
	pCi/L	1009	06/13/2000	0001	AL		547.91			#	141.11	± 137.
	pCi/L	1009	06/13/2000	0002	AL		369			#	68.63	± 75.0
	pCi/L	1010	06/12/2000	0001	AL		215.92			#	40.45	± 44.1
	pCi/L	1013	06/13/2000	0001	AL		107.5			#	24.36	± 24.6
	pCi/L	1062	06/16/2000	0001	KM		138.04	U	L	#	138.04	± 71.3
Gross Beta	pCi/L	0614	06/13/2000	0001	AL		746.56			#	163.64	± 128.
	pCi/L	0850	06/13/2000	0001	AL	B	25.19	U		#	25.19	± 14.8
	pCi/L	1000	06/14/2000	0001	KM		63.71	U		#	63.71	± 37.3
	pCi/L	1001	06/15/2000	0001	KM		14.29	U	L	#	14.29	± 8.28
	pCi/L	1008	06/12/2000	0001	AL		1016.65			#	219.45	± 172.
	pCi/L	1009	06/13/2000	0001	AL		263.06			#	204.2	± 129.
	pCi/L	1009	06/13/2000	0002	AL		203.76			#	64.87	± 46.8
	pCi/L	1010	06/12/2000	0001	AL		131.79			#	42.57	± 30.6
	pCi/L	1013	06/13/2000	0001	AL		87.71			#	25.43	± 18.7
	pCi/L	1062	06/16/2000	0001	KM		126.99	U	L	#	126.99	± 73.8
Iron	mg/L	0614	06/13/2000	0001	AL		0.0091	U		#	0.0091	-
	mg/L	0850	06/13/2000	0001	AL	B	0.604			#	0.0091	-
	mg/L	1000	06/14/2000	0001	KM		0.0139	B		#	0.0091	-
	mg/L	1001	06/15/2000	0001	KM		0.0719		L	#	0.0091	-
	mg/L	1008	06/12/2000	0001	AL		0.020	B	U	#	0.0091	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Iron	mg/L	1009	06/13/2000	0001	AL		0.0091	U #	0.0091	-
	mg/L	1009	06/13/2000	0002	AL		0.0091	U #	0.0091	-
	mg/L	1010	06/12/2000	0001	AL		0.0414	U #	0.0091	-
	mg/L	1013	06/13/2000	0001	AL		0.842	#	0.0091	-
	mg/L	1062	06/16/2000	0001	KM		0.345	L #	0.0091	-
Magnesium	mg/L	0614	06/13/2000	0001	AL		2120.000	#	0.48	-
	mg/L	0850	06/13/2000	0001	AL	B	34.000	#	0.024	-
	mg/L	1000	06/14/2000	0001	KM		34.800	#	0.024	-
	mg/L	1001	06/15/2000	0001	KM		2.140	L #	0.024	-
	mg/L	1008	06/12/2000	0001	AL		2760.000	#	0.48	-
	mg/L	1009	06/13/2000	0001	AL		674.000	#	0.24	-
	mg/L	1009	06/13/2000	0002	AL		702.000	#	0.24	-
	mg/L	1010	06/12/2000	0001	AL		283.000	#	0.024	-
	mg/L	1013	06/13/2000	0001	AL		128.000	#	0.024	-
	mg/L	1062	06/16/2000	0001	KM		30.600	L #	0.024	-
Manganese	mg/L	0608	06/15/2000	0001	KM		7.640	#	0.0015	-
	mg/L	0608	06/15/2000	0002	KM		7.840	#	0.0015	-
	mg/L	0610	06/21/2000	0001	AL		3.710	L #	0.0015	-
	mg/L	0614	06/13/2000	0001	AL		5.940	#	0.0015	-
	mg/L	0620	06/14/2000	0001	AL		2.090	#	0.0015	-
	mg/L	0624	06/14/2000	0001	AL		3.030	#	0.0015	-
	mg/L	0626	06/14/2000	0001	AL		2.260	#	0.0015	-
	mg/L	0628	06/14/2000	0001	AL		2.000	#	0.0015	-
	mg/L	0631	06/20/2000	0001	AL		7.740	#	0.0015	-
	mg/L	0732	06/21/2000	0001	AL		0.0015	U #	0.0015	-
	mg/L	0734	06/14/2000	0001	AL		0.010	UL #	0.0015	-
	mg/L	0735	06/21/2000	0001	AL		1.850	#	0.0015	-



GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0735	06/21/2000	0002	AL		1.830	#	0.0015	-
	mg/L	0736	06/22/2000	0001	AL		3.360	#	0.0015	-
	mg/L	0766	06/12/2000	0001	AL		4.520	#	0.0015	-
	mg/L	0768	06/14/2000	0001	AL		6.000	#	0.0015	-
	mg/L	0773	06/21/2000	0001	AL		0.712	#	0.0015	-
	mg/L	0775	06/21/2000	0001	AL		1.130	L #	0.0015	-
	mg/L	0779	06/14/2000	0001	AL		4.520	#	0.0015	-
	mg/L	0782	06/22/2000	0001	AL		2.570	#	0.0015	-
	mg/L	0783	06/22/2000	0001	AL		0.576	#	0.0015	-
	mg/L	0784	06/22/2000	0001	AL		2.030	#	0.0015	-
	mg/L	0850	06/13/2000	0001	AL	B	1.800	#	0.0015	-
	mg/L	0854	06/13/2000	0001	AL		7.610	L #	0.0015	-
	mg/L	0855	06/13/2000	0001	AL		2.620	#	0.0015	-
	mg/L	0857	06/14/2000	0001	AL		4.290	#	0.0015	-
	mg/L	1000	06/14/2000	0001	KM		0.249	#	0.0015	-
	mg/L	1001	06/15/2000	0001	KM		0.0399	L #	0.0015	-
	mg/L	1008	06/12/2000	0001	AL		12.300	#	0.0015	-
	mg/L	1009	06/13/2000	0001	AL		4.400	#	0.0015	-
	mg/L	1009	06/13/2000	0002	AL		4.530	#	0.0015	-
	mg/L	1010	06/12/2000	0001	AL		2.720	#	0.0015	-
mg/L	1013	06/13/2000	0001	AL		1.570	#	0.0015	-	
mg/L	1062	06/16/2000	0001	KM		0.0705	L #	0.0015	-	
Molybdenum	mg/L	0614	06/13/2000	0001	AL		0.0097	B #	0.0003	-
	mg/L	0850	06/13/2000	0001	AL	B	0.0112	#	0.0003	-
	mg/L	1000	06/14/2000	0001	KM		0.0973	#	0.0003	-
	mg/L	1001	06/15/2000	0001	KM		0.0514	L #	0.0003	-
	mg/L	1008	06/12/2000	0001	AL		0.0126	#	0.0003	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	1009	06/13/2000	0001	AL		0.0069	B #	0.0003	-
	mg/L	1009	06/13/2000	0002	AL		0.007	B #	0.0003	-
	mg/L	1010	06/12/2000	0001	AL		0.0064	B #	0.0003	-
	mg/L	1013	06/13/2000	0001	AL		0.0035	B #	0.0003	-
	mg/L	1062	06/16/2000	0001	KM		0.0036	B UL #	0.0003	-
Nitrate	mg/L	0608	06/15/2000	0001	KM		2270.000	#	1.57	-
	mg/L	0608	06/15/2000	0002	KM		2280.000	#	1.57	-
	mg/L	0610	06/21/2000	0001	AL		3240.000	L #	1.57	-
	mg/L	0614	06/13/2000	0001	AL		3440.000	#	1.57	-
	mg/L	0620	06/14/2000	0001	AL		143.000	#	0.0628	-
	mg/L	0624	06/14/2000	0001	AL		79.900	#	0.0628	-
	mg/L	0626	06/14/2000	0001	AL		4.850	#	0.0314	-
	mg/L	0628	06/14/2000	0001	AL		0.258	B #	0.0314	-
	mg/L	0631	06/20/2000	0001	AL		0.0314	U #	0.0314	-
	mg/L	0732	06/21/2000	0001	AL		86.600	#	0.0314	-
	mg/L	0734	06/14/2000	0001	AL		10.400	L #	0.0314	-
	mg/L	0735	06/21/2000	0001	AL		1190.000	#	0.628	-
	mg/L	0735	06/21/2000	0002	AL		1150.000	#	0.628	-
	mg/L	0736	06/22/2000	0001	AL		0.0314	U #	0.0314	-
	mg/L	0766	06/12/2000	0001	AL		991.000	#	0.628	-
	mg/L	0768	06/14/2000	0001	AL		56.000	#	0.0628	-
	mg/L	0773	06/21/2000	0001	AL		1640.000	#	0.628	-
	mg/L	0775	06/21/2000	0001	AL		987.000	L #	0.628	-
	mg/L	0779	06/14/2000	0001	AL		180.000	#	0.0628	-
	mg/L	0782	06/22/2000	0001	AL		0.0385	B #	0.0314	-
mg/L	0783	06/22/2000	0001	AL		3.640	#	0.0314	-	
mg/L	0784	06/22/2000	0001	AL		0.147	B #	0.0314	-	

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Nitrate	mg/L	0850	06/13/2000	0001	AL	B	0.0314	U #	0.0314	-
	mg/L	0854	06/13/2000	0001	AL		1520.000	L #	0.628	-
	mg/L	0855	06/13/2000	0001	AL		74.800	#	0.0314	-
	mg/L	0857	06/14/2000	0001	AL		0.326	B #	0.0314	-
	mg/L	0862	06/22/2000	0001	KM		63.400	L #	0.628	-
	mg/L	1000	06/14/2000	0001	KM		0.177	B #	0.0314	-
	mg/L	1001	06/15/2000	0001	KM		0.500	B L #	0.0314	-
	mg/L	1008	06/12/2000	0001	AL		1250.000	#	0.628	-
	mg/L	1009	06/13/2000	0001	AL		959.000	#	0.628	-
	mg/L	1009	06/13/2000	0002	AL		986.000	#	0.628	-
	mg/L	1010	06/12/2000	0001	AL		3.040	#	0.0314	-
	mg/L	1013	06/13/2000	0001	AL		0.0314	U #	0.0314	-
	mg/L	1062	06/16/2000	0001	KM		0.0314	U L #	0.0314	-
	ORP of Zobell Solution	mV	0608	06/15/2000	N001	KM		241	#	-
mV		0610	06/21/2000	N001	AL		227	L #	-	-
mV		0614	06/13/2000	N001	AL		248	#	-	-
mV		0620	06/14/2000	N001	AL		240	#	-	-
mV		0624	06/14/2000	N001	AL		242	#	-	-
mV		0626	06/14/2000	N001	AL		242	#	-	-
mV		0628	06/14/2000	N001	AL		246	#	-	-
mV		0631	06/20/2000	N001	AL		216	#	-	-
mV		0732	06/21/2000	N001	AL		221	#	-	-
mV		0734	06/14/2000	N001	AL		235	L #	-	-
mV		0735	06/21/2000	N001	AL		222	#	-	-
mV		0736	06/22/2000	N001	AL		219	#	-	-
mV		0766	06/12/2000	N001	AL		239	#	-	-
mV		0768	06/14/2000	N001	AL		240	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
ORP of Zobell Solution	mV	0773	06/21/2000	N001	AL		227	#	-	-
	mV	0775	06/21/2000	N001	AL		220	L #	-	-
	mV	0779	06/14/2000	N001	AL		243	#	-	-
	mV	0782	06/22/2000	N001	AL		234	#	-	-
	mV	0783	06/22/2000	N001	AL		234	#	-	-
	mV	0784	06/22/2000	N001	AL		234	#	-	-
	mV	0850	06/13/2000	N001	AL	B	225	#	-	-
	mV	0854	06/13/2000	N001	AL		231	L #	-	-
	mV	0855	06/13/2000	N001	AL		231	#	-	-
	mV	0857	06/14/2000	N001	AL		240	#	-	-
	mV	0862	06/22/2000	N001	KM		227	L #	-	-
	mV	1000	06/14/2000	N001	KM		243	#	-	-
	mV	1001	06/15/2000	N001	KM		243	L #	-	-
	mV	1008	06/12/2000	N001	AL		246	#	-	-
	mV	1009	06/13/2000	N001	AL		245	#	-	-
	mV	1010	06/12/2000	N001	AL		242	#	-	-
	mV	1013	06/13/2000	N001	AL		255	#	-	-
	mV	1062	06/16/2000	N001	KM		243	L #	-	-
Oxidation Reduction Potenti	mV	0608	06/15/2000	N001	KM		227	#	-	-
	mV	0610	06/21/2000	N001	AL		203	L #	-	-
	mV	0614	06/13/2000	N001	AL		190	#	-	-
	mV	0620	06/14/2000	N001	AL		167	#	-	-
	mV	0624	06/14/2000	N001	AL		133	#	-	-
	mV	0626	06/14/2000	N001	AL		113	#	-	-
	mV	0628	06/14/2000	N001	AL		110	#	-	-
	mV	0631	06/20/2000	N001	AL		62	#	-	-
	mV	0732	06/21/2000	N001	AL		127	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Oxidation Reduction Potenti	mV	0734	06/14/2000	N001	AL		160	L	#	-	-	
	mV	0735	06/21/2000	N001	AL		188		#	-	-	
	mV	0736	06/22/2000	N001	AL		70		#	-	-	
	mV	0766	06/12/2000	N001	AL		206		#	-	-	
	mV	0768	06/14/2000	N001	AL		193		#	-	-	
	mV	0773	06/21/2000	N001	AL		186		#	-	-	
	mV	0775	06/21/2000	N001	AL		187	L	#	-	-	
	mV	0779	06/14/2000	N001	AL		193		#	-	-	
	mV	0782	06/22/2000	N001	AL		46		#	-	-	
	mV	0783	06/22/2000	N001	AL		29		#	-	-	
	mV	0784	06/22/2000	N001	AL		-105		#	-	-	
	mV	0850	06/13/2000	N001	AL	B	-67		#	-	-	
	mV	0854	06/13/2000	N001	AL		162	L	#	-	-	
	mV	0855	06/13/2000	N001	AL		125		#	-	-	
	mV	0857	06/14/2000	N001	AL		80		#	-	-	
	mV	0862	06/22/2000	N001	KM		176	L	#	-	-	
	mV	1000	06/14/2000	N001	KM		54		#	-	-	
	mV	1001	06/15/2000	N001	KM		114	L	#	-	-	
	mV	1008	06/12/2000	N001	AL		190		#	-	-	
	mV	1009	06/13/2000	N001	AL		183		#	-	-	
mV	1010	06/12/2000	N001	AL		171		#	-	-		
mV	1013	06/13/2000	N001	AL		-45		#	-	-		
mV	1062	06/16/2000	N001	KM		46	L	#	-	-		
pH	s.u.	0608	06/15/2000	N001	KM		6.65		#	-	-	
	s.u.	0610	06/21/2000	N001	AL		6.92	L	#	-	-	
	s.u.	0614	06/13/2000	N001	AL		6.92		#	-	-	
	s.u.	0620	06/14/2000	N001	AL		6.83		#	-	-	

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0624	06/14/2000	N001	AL		7.04	#	-	-
	s.u.	0626	06/14/2000	N001	AL		7.2	#	-	-
	s.u.	0628	06/14/2000	N001	AL		7.49	#	-	-
	s.u.	0631	06/20/2000	N001	AL		7.02	#	-	-
	s.u.	0732	06/21/2000	N001	AL		7.49	#	-	-
	s.u.	0734	06/14/2000	N001	AL		7.25	L #	-	-
	s.u.	0735	06/21/2000	N001	AL		7.16	#	-	-
	s.u.	0736	06/22/2000	N001	AL		7.25	#	-	-
	s.u.	0766	06/12/2000	N001	AL		7.17	#	-	-
	s.u.	0768	06/14/2000	N001	AL		7.28	#	-	-
	s.u.	0773	06/21/2000	N001	AL		6.94	#	-	-
	s.u.	0775	06/21/2000	N001	AL		7.3	L #	-	-
	s.u.	0779	06/14/2000	N001	AL		7.03	#	-	-
	s.u.	0782	06/22/2000	N001	AL		7.25	#	-	-
	s.u.	0783	06/22/2000	N001	AL		7.47	#	-	-
	s.u.	0784	06/22/2000	N001	AL		7.28	#	-	-
	s.u.	0850	06/13/2000	N001	AL	B	7.6	#	-	-
	s.u.	0854	06/13/2000	N001	AL		7.05	L #	-	-
	s.u.	0855	06/13/2000	N001	AL		7.13	#	-	-
	s.u.	0857	06/14/2000	N001	AL		7.06	#	-	-
	s.u.	0862	06/22/2000	N001	KM		7.32	L #	-	-
	s.u.	1000	06/14/2000	N001	KM		8.33	#	-	-
	s.u.	1001	06/15/2000	N001	KM		8.66	L #	-	-
	s.u.	1008	06/12/2000	N001	AL		6.94	#	-	-
	s.u.	1009	06/13/2000	N001	AL		6.98	#	-	-
	s.u.	1010	06/12/2000	N001	AL		7.11	#	-	-
	s.u.	1013	06/13/2000	N001	AL		7.06	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	1062	06/16/2000	N001	KM		7.6	L #		
Polonium-210	pCi/L	0614	06/13/2000	0001	AL		0	U #	0.37	± 0.35
	pCi/L	0850	06/13/2000	0001	AL	B	0.48	U #	0.48	± 0.45
	pCi/L	1000	06/14/2000	0001	KM		0.37	U #	0.37	± 0.32
	pCi/L	1001	06/15/2000	0001	KM		0.2	U L #	0.28	± 0.34
	pCi/L	1008	06/12/2000	0001	AL		0.20	U #	0.2	± 0.21
	pCi/L	1009	06/13/2000	0001	AL		0.30	U #	0.3	± 0.32
	pCi/L	1009	06/13/2000	0002	AL		0.36	U #	0.36	± 0.40
	pCi/L	1010	06/12/2000	0001	AL		0.3	U #	0.35	± 0.37
	pCi/L	1013	06/13/2000	0001	AL		0.38	U #	0.38	± 0.36
	pCi/L	1062	06/16/2000	0001	KM		0.24	U L #	0.24	± 0.25
Potassium	mg/L	0614	06/13/2000	0001	AL		118.000	#	0.0456	
	mg/L	0850	06/13/2000	0001	AL	B	4.510	#	0.0456	
	mg/L	1000	06/14/2000	0001	KM		16.900	#	0.0456	-
	mg/L	1001	06/15/2000	0001	KM		2.510	L #	0.0456	-
	mg/L	1008	06/12/2000	0001	AL		106.000	#	0.0456	-
	mg/L	1009	06/13/2000	0001	AL		44.600	#	0.0456	-
	mg/L	1009	06/13/2000	0002	AL		46.800	#	0.0456	-
	mg/L	1010	06/12/2000	0001	AL		37.100	#	0.0456	-
	mg/L	1013	06/13/2000	0001	AL		23.900	#	0.0456	-
	mg/L	1062	06/16/2000	0001	KM		13.800	L #	0.0456	-
Radium-226	pCi/L	0614	06/13/2000	0001	AL		0.15	U #	0.15	± 0.09
	pCi/L	0850	06/13/2000	0001	AL	B	0.1	U #	0.15	± 0.09
	pCi/L	1000	06/14/2000	0001	KM		0.57	#	0.09	± 0.08
	pCi/L	1008	06/12/2000	0001	AL		0.15	U #	0.15	± 0.09
	pCi/L	1009	06/13/2000	0001	AL		0.17	#	0.14	± 0.09

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Radium-226	pCi/L	1009	06/13/2000	0002	AL		0.16	U #	0.16	± 0.10
	pCi/L	1010	06/12/2000	0001	AL		0.15	U #	0.15	± 0.09
	pCi/L	1013	06/13/2000	0001	AL		0.15	U #	0.15	± 0.10
	pCi/L	1062	06/16/2000	0001	KM		4.83 - 4.14 = 0.79 ± L	U #	0.11	± 0.33
Radium-228	pCi/L	0614	06/13/2000	0001	AL		0.8	U #	0.88	± 0.52
	pCi/L	0850	06/13/2000	0001	AL	B	0.91	U #	0.91	± 0.54
	pCi/L	1000	06/14/2000	0001	KM		0.4	U #	0.47	± 0.28
	pCi/L	1008	06/12/2000	0001	AL		0.84	U #	0.84	± 0.50
	pCi/L	1009	06/13/2000	0001	AL		0.8	U #	0.83	± 0.49
	pCi/L	1009	06/13/2000	0002	AL		0.91	U #	0.91	± 0.55
	pCi/L	1010	06/12/2000	0001	AL		0.8	U #	0.86	± 0.51
	pCi/L	1013	06/13/2000	0001	AL		0.91	U #	0.91	± 0.54
	pCi/L	1062	06/16/2000	0001	KM		4.14	L #	0.44	± 0.34
Selenium	mg/L	0608	06/15/2000	0001	KM		0.0114	#	0.0001	-
	mg/L	0608	06/15/2000	0002	KM		0.0114	#	0.0001	-
	mg/L	0610	06/21/2000	0001	AL		0.0213	L #	0.0002	-
	mg/L	0614	06/13/2000	0001	AL		0.0602	#	0.0005	-
	mg/L	0620	06/14/2000	0001	AL		0.169	#	0.002	-
	mg/L	0624	06/14/2000	0001	AL		0.176	#	0.002	-
	mg/L	0626	06/14/2000	0001	AL		0.0198	#	0.0001	-
	mg/L	0628	06/14/2000	0001	AL		0.0015	B #	0.0001	-
	mg/L	0631	06/20/2000	0001	AL		0.0001	U #	0.0001	-
	mg/L	0732	06/21/2000	0001	AL		0.0042	B #	0.0001	-
	mg/L	0734	06/14/2000	0001	AL		0.0249	L #	0.0002	-
	mg/L	0735	06/21/2000	0001	AL		0.0674	#	0.001	-
	mg/L	0735	06/21/2000	0002	AL		0.0687	#	0.001	-
	mg/L	0736	06/22/2000	0001	AL		0.0083	#	0.0001	-



GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Selenium	mg/L	0766	06/12/2000	0001	AL		0.0048	B #	0.0001	-
	mg/L	0768	06/14/2000	0001	AL		0.253	#	0.002	-
	mg/L	0773	06/21/2000	0001	AL		0.0191	#	0.0001	-
	mg/L	0775	06/21/2000	0001	AL		0.124	L #	0.001	-
	mg/L	0779	06/14/2000	0001	AL		0.0041	B #	0.0001	-
	mg/L	0782	06/22/2000	0001	AL		0.0001	U #	0.0001	-
	mg/L	0783	06/22/2000	0001	AL		0.0016	B #	0.0001	-
	mg/L	0784	06/22/2000	0001	AL		0.0001	U #	0.0001	-
	mg/L	0850	06/13/2000	0001	AL	B	0.0001	U #	0.0001	-
	mg/L	0854	06/13/2000	0001	AL		0.0129	L #	0.0001	-
	mg/L	0855	06/13/2000	0001	AL		0.120	#	0.001	-
	mg/L	0857	06/14/2000	0001	AL		0.00018	B #	0.0001	-
	mg/L	1000	06/14/2000	0001	KM		0.0022	B #	0.0001	-
	mg/L	1001	06/15/2000	0001	KM		0.00029	B L #	0.0001	-
	mg/L	1008	06/12/2000	0001	AL		0.0224	#	0.0002	-
	mg/L	1009	06/13/2000	0001	AL		0.0707	#	0.0005	-
	mg/L	1009	06/13/2000	0002	AL		0.0683	#	0.0005	-
	mg/L	1010	06/12/2000	0001	AL		0.003	B #	0.0001	-
	mg/L	1013	06/13/2000	0001	AL		0.00041	B #	0.0001	-
	mg/L	1062	06/16/2000	0001	KM		0.0001	U L #	0.0001	-
Sodium	mg/L	0614	06/13/2000	0001	AL		2300.000	#	8.68	-
	mg/L	0850	06/13/2000	0001	AL	B	659.000	#	4.34	-
	mg/L	1000	06/14/2000	0001	KM		2400.000	#	8.68	-
	mg/L	1001	06/15/2000	0001	KM		579.000	L #	4.34	-
	mg/L	1008	06/12/2000	0001	AL		5110.000	#	8.68	-
	mg/L	1009	06/13/2000	0001	AL		727.000	#	4.34	-
	mg/L	1009	06/13/2000	0002	AL		754.000	#	4.34	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Sodium	mg/L	1010	06/12/2000	0001	AL		482.000	#	0.434	-
	mg/L	1013	06/13/2000	0001	AL		261.000	#	0.434	-
	mg/L	1062	06/16/2000	0001	KM		4670.000	L #	8.68	-
Specific Conductance	umhos/cm	0608	06/15/2000	N001	KM		15900	#	-	-
	umhos/cm	0610	06/21/2000	N001	AL		15510	L #	-	-
	umhos/cm	0614	06/13/2000	N001	AL		15650	#	-	-
	umhos/cm	0620	06/14/2000	N001	AL		11110	#	-	-
	umhos/cm	0624	06/14/2000	N001	AL		9350	#	-	-
	umhos/cm	0626	06/14/2000	N001	AL		5780	#	-	-
	umhos/cm	0628	06/14/2000	N001	AL		4440	#	-	-
	umhos/cm	0631	06/20/2000	N001	AL		5120	#	-	-
	umhos/cm	0732	06/21/2000	N001	AL		1575	#	-	-
	umhos/cm	0734	06/14/2000	N001	AL		14850	L #	-	-
	umhos/cm	0735	06/21/2000	N001	AL		7800	#	-	-
	umhos/cm	0736	06/22/2000	N001	AL		9080	#	-	-
	umhos/cm	0766	06/12/2000	N001	AL		23400	#	-	-
	umhos/cm	0768	06/14/2000	N001	AL		15000	#	-	-
	umhos/cm	0773	06/21/2000	N001	AL		9260	#	-	-
	umhos/cm	0775	06/21/2000	N001	AL		15930	L #	-	-
	umhos/cm	0779	06/14/2000	N001	AL		6260	#	-	-
	umhos/cm	0782	06/22/2000	N001	AL		800	#	-	-
	umhos/cm	0783	06/22/2000	N001	AL		920	#	-	-
	umhos/cm	0784	06/22/2000	N001	AL		810	#	-	-
	umhos/cm	0850	06/13/2000	N001	AL	B	3730	#	-	-
	umhos/cm	0854	06/13/2000	N001	AL		23400	L #	-	-
	umhos/cm	0855	06/13/2000	N001	AL		6370	#	-	-
	umhos/cm	0857	06/14/2000	N001	AL		4430	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:		DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA QA		
Specific Conductance	umhos/cm	0862	06/22/2000	N001	KM		12920	L	#	-	-
	umhos/cm	1000	06/14/2000	N001	KM		4350		#	-	-
	umhos/cm	1001	06/15/2000	N001	KM		2660	L	#	-	-
	umhos/cm	1008	06/12/2000	N001	AL		20800		#	-	-
	umhos/cm	1009	06/13/2000	N001	AL		7490		#	-	-
	umhos/cm	1010	06/12/2000	N001	AL		3680		#	-	-
	umhos/cm	1013	06/13/2000	N001	AL		2950		#	-	-
	umhos/cm	1062	06/16/2000	N001	KM		6300	L	#	-	-
Strontium	mg/L	0614	06/13/2000	0001	AL		11.600		#	0.002	-
	mg/L	0850	06/13/2000	0001	AL	B	2.420		#	0.0001	-
	mg/L	1000	06/14/2000	0001	KM		2.630		#	0.0001	-
	mg/L	1001	06/15/2000	0001	KM		0.192	L	#	0.0001	-
	mg/L	1008	06/12/2000	0001	AL		13.700		#	0.002	-
	mg/L	1009	06/13/2000	0001	AL		6.750		#	0.0001	-
	mg/L	1009	06/13/2000	0002	AL		6.880		#	0.0001	-
	mg/L	1010	06/12/2000	0001	AL		4.330		#	0.0001	-
	mg/L	1013	06/13/2000	0001	AL		3.040		#	0.0001	-
	mg/L	1062	06/16/2000	0001	KM		8.100	L	#	0.0001	-
Sulfate	mg/L	0608	06/15/2000	0001	KM		10700.000		#	1.178	-
	mg/L	0608	06/15/2000	0002	KM		10700.000		#	1.178	-
	mg/L	0610	06/21/2000	0001	AL		11300.000	L	#	1.178	-
	mg/L	0614	06/13/2000	0001	AL		11500.000		#	1.178	-
	mg/L	0620	06/14/2000	0001	AL		7920.000		#	0.589	-
	mg/L	0624	06/14/2000	0001	AL		5820.000		#	0.589	-
	mg/L	0626	06/14/2000	0001	AL		3040.000		#	0.2945	-
	mg/L	0628	06/14/2000	0001	AL		2800.000		#	0.2945	-
	mg/L	0631	06/20/2000	0001	AL		2830.000		#	0.2945	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Sulfate	mg/L	0732	06/21/2000	0001	AL		541.000			#	0.1178	-
	mg/L	0734	06/14/2000	0001	AL		8870.000	L		#	0.589	-
	mg/L	0735	06/21/2000	0001	AL		3930.000			#	0.2945	-
	mg/L	0735	06/21/2000	0002	AL		3890.000			#	0.2945	-
	mg/L	0736	06/22/2000	0001	AL		6310.000			#	0.589	-
	mg/L	0766	06/12/2000	0001	AL		23700.000			#	2.945	-
	mg/L	0768	06/14/2000	0001	AL		11100.000			#	1.178	-
	mg/L	0773	06/21/2000	0001	AL		5380.000			#	0.589	-
	mg/L	0775	06/21/2000	0001	AL		12800.000	L		#	1.178	-
	mg/L	0779	06/14/2000	0001	AL		3950.000			#	0.589	-
	mg/L	0782	06/22/2000	0001	AL		236.000			#	0.0589	-
	mg/L	0783	06/22/2000	0001	AL		302.000			#	0.0589	-
	mg/L	0784	06/22/2000	0001	AL		196.000			#	0.0589	-
	mg/L	0850	06/13/2000	0001	AL	B	1680.000			#	0.2945	-
	mg/L	0854	06/13/2000	0001	AL		21100.000	L		#	2.945	-
	mg/L	0855	06/13/2000	0001	AL		3740.000			#	0.2945	-
	mg/L	0857	06/14/2000	0001	AL		2780.000			#	0.2945	-
	mg/L	1000	06/14/2000	0001	KM		1260.000			#	0.589	-
	mg/L	1001	06/15/2000	0001	KM		272.000	L		#	0.1178	-
	mg/L	1008	06/12/2000	0001	AL		19100.000			#	1.178	-
	mg/L	1009	06/13/2000	0001	AL		4680.000			#	0.589	-
	mg/L	1009	06/13/2000	0002	AL		4690.000			#	0.589	-
	mg/L	1010	06/12/2000	0001	AL		2760.000			#	0.2945	-
mg/L	1013	06/13/2000	0001	AL		1650.000			#	0.1178	-	
mg/L	1062	06/16/2000	0001	KM		10.500	B	L	#	1.178	-	
Temperature	C	0608	06/15/2000	N001	KM		21			#	-	-
	C	0610	06/21/2000	N001	AL		22.8	L		#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Temperature	C	0614	06/13/2000	N001	AL		15.9	#	-	-
	C	0620	06/14/2000	N001	AL		13.5	#	-	-
	C	0624	06/14/2000	N001	AL		15.5	#	-	-
	C	0626	06/14/2000	N001	AL		14.5	#	-	-
	C	0628	06/14/2000	N001	AL		14	#	-	-
	C	0631	06/20/2000	N001	AL		16.2	#	-	-
	C	0732	06/21/2000	N001	AL		13.7	#	-	-
	C	0734	06/14/2000	N001	AL		16.1	L #	-	-
	C	0735	06/21/2000	N001	AL		13.5	#	-	-
	C	0736	06/22/2000	N001	AL		18.4	#	-	-
	C	0766	06/12/2000	N001	AL		21.7	#	-	-
	C	0768	06/14/2000	N001	AL		19	#	-	-
	C	0773	06/21/2000	N001	AL		23.3	#	-	-
	C	0775	06/21/2000	N001	AL		22.3	L #	-	-
	C	0779	06/14/2000	N001	AL		16.9	#	-	-
	C	0782	06/22/2000	N001	AL		18.3	#	-	-
	C	0783	06/22/2000	N001	AL		22.8	#	-	-
	C	0784	06/22/2000	N001	AL		20.4	#	-	-
	C	0850	06/13/2000	N001	AL	B	17.6	#	-	-
	C	0854	06/13/2000	N001	AL		19.9	L #	-	-
	C	0855	06/13/2000	N001	AL		11.9	#	-	-
	C	0857	06/14/2000	N001	AL		14.8	#	-	-
	C	0862	06/22/2000	N001	KM		18.1	L #	-	-
	C	1000	06/14/2000	N001	KM		17.3	#	-	-
	C	1001	06/15/2000	N001	KM		17.8	L #	-	-
	C	1008	06/12/2000	N001	AL		16.3	#	-	-
C	1009	06/13/2000	N001	AL		17	#	-	-	

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Temperature	C	1010	06/12/2000	N001	AL		16.5	#	-	-
	C	1013	06/13/2000	N001	AL		17.7	#	-	-
	C	1062	06/16/2000	N001	KM		17.6	L #	-	-
Temperature of Zobell Soluti	C	0608	06/15/2000	N001	KM		22	#	-	-
	C	0610	06/21/2000	N001	AL		21.7	L #	-	-
	C	0614	06/13/2000	N001	AL		15.3	#	-	-
	C	0620	06/14/2000	N001	AL		19.7	#	-	-
	C	0624	06/14/2000	N001	AL		16	#	-	-
	C	0626	06/14/2000	N001	AL		16	#	-	-
	C	0628	06/14/2000	N001	AL		14.1	#	-	-
	C	0631	06/20/2000	N001	AL		27.6	#	-	-
	C	0732	06/21/2000	N001	AL		24.5	#	-	-
	C	0734	06/14/2000	N001	AL		19.9	L #	-	-
	C	0735	06/21/2000	N001	AL		25.2	#	-	-
	C	0736	06/22/2000	N001	AL		25.5	#	-	-
	C	0766	06/12/2000	N001	AL		19.5	#	-	-
	C	0768	06/14/2000	N001	AL		19.7	#	-	-
	C	0773	06/21/2000	N001	AL		21.1	#	-	-
	C	0775	06/21/2000	N001	AL		25.9	L #	-	-
	C	0779	06/14/2000	N001	AL		16.9	#	-	-
	C	0782	06/22/2000	N001	AL		23.4	#	-	-
	C	0783	06/22/2000	N001	AL		23.4	#	-	-
	C	0784	06/22/2000	N001	AL		23.4	#	-	-
	C	0850	06/13/2000	N001	AL	B	23.3	#	-	-
	C	0854	06/13/2000	N001	AL		24	L #	-	-
	C	0855	06/13/2000	N001	AL		24	#	-	-
	C	0857	06/14/2000	N001	AL		17.1	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Temperature of Zobell Soluti	C	0862	06/22/2000	N001	KM		21.1	L #	-	-
	C	1000	06/14/2000	N001	KM		16.9	#	-	-
	C	1001	06/15/2000	N001	KM		16.9	L #	-	-
	C	1008	06/12/2000	N001	AL		17.3	#	-	-
	C	1009	06/13/2000	N001	AL		17	#	-	-
	C	1010	06/12/2000	N001	AL		17.3	#	-	-
	C	1013	06/13/2000	N001	AL		12.8	#	-	-
	C	1062	06/16/2000	N001	KM		18.7	L #	-	-
Total Dissoived Solids	mg/L	0608	06/15/2000	0001	KM		17100	#	10	-
	mg/L	0608	06/15/2000	0002	KM		17400	#	10	-
	mg/L	0610	06/21/2000	0001	AL		21100	JL #	10	-
	mg/L	0614	06/13/2000	0001	AL		21100	#	10	-
	mg/L	0620	06/14/2000	0001	AL		14000	#	10	-
	mg/L	0624	06/14/2000	0001	AL		9580	#	10	-
	mg/L	0626	06/14/2000	0001	AL		5150	#	10	-
	mg/L	0628	06/14/2000	0001	AL		4430	#	10	-
	mg/L	0631	06/20/2000	0001	AL		5050	J #	10	-
	mg/L	0732	06/21/2000	0001	AL		1210	#	10	-
	mg/L	0734	06/14/2000	0001	AL		15200	L #	10	-
	mg/L	0735	06/21/2000	0001	AL		8460	#	10	-
	mg/L	0735	06/21/2000	0002	AL		8360	#	10	-
	mg/L	0736	06/22/2000	0001	AL		9840	#	10	-
	mg/L	0766	06/12/2000	0001	AL		38300	#	10	-
	mg/L	0768	06/14/2000	0001	AL		18800	#	10	-
	mg/L	0773	06/21/2000	0001	AL		10200	#	10	-
	mg/L	0775	06/21/2000	0001	AL		22400	JL #	10	-
	mg/L	0779	06/14/2000	0001	AL		6590	#	10	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Total Dissolved Solids	mg/L	0782	06/22/2000	0001	AL		560	#	10	-
	mg/L	0783	06/22/2000	0001	AL		653	#	10	-
	mg/L	0784	06/22/2000	0001	AL		547	#	10	-
	mg/L	0850	06/13/2000	0001	AL	B	2950	#	10	-
	mg/L	0854	06/13/2000	0001	AL		37800	L #	10	-
	mg/L	0855	06/13/2000	0001	AL		6090	#	10	-
	mg/L	0857	06/14/2000	0001	AL		4610	#	10	-
	mg/L	1000	06/14/2000	0001	KM		7320	#	10	-
	mg/L	1001	06/15/2000	0001	KM		1660	L #	10	-
	mg/L	1008	06/12/2000	0001	AL		32000	#	10	-
	mg/L	1009	06/13/2000	0001	AL		8470	#	10	-
	mg/L	1009	06/13/2000	0002	AL		8630	#	10	-
	mg/L	1010	06/12/2000	0001	AL		4580	#	10	-
	mg/L	1013	06/13/2000	0001	AL		2700	#	10	-
	mg/L	1062	06/16/2000	0001	KM		13200	L #	10	-
Turbidity	NTU	0608	06/15/2000	N001	KM		23.3	#		
	NTU	0610	06/21/2000	N001	AL		20.4	L #	-	-
	NTU	0614	06/13/2000	N001	AL		1.74	#	-	-
	NTU	0620	06/14/2000	N001	AL		5.94	#	-	-
	NTU	0624	06/14/2000	N001	AL		9.58	#	-	-
	NTU	0626	06/14/2000	N001	AL		2.67	#	-	-
	NTU	0628	06/14/2000	N001	AL		2.9	#	-	-
	NTU	0631	06/20/2000	N001	AL		2.74	#	-	-
	NTU	0732	06/21/2000	N001	AL		0.93	#	-	-
	NTU	0734	06/14/2000	N001	AL		25.6	L #	-	-
	NTU	0735	06/21/2000	N001	AL		5.94	#	-	-
	NTU	0736	06/22/2000	N001	AL		0.67	#	-	-



GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0766	06/12/2000	N001	AL		4.56	#	-	-
	NTU	0768	06/14/2000	N001	AL		3.33	#	-	-
	NTU	0773	06/21/2000	N001	AL		84.1	#	-	-
	NTU	0775	06/21/2000	N001	AL		1.83	L #	-	-
	NTU	0779	06/14/2000	N001	AL		4.01	#	-	-
	NTU	0782	06/22/2000	N001	AL		86	#	-	-
	NTU	0783	06/22/2000	N001	AL		0.7	#	-	-
	NTU	0784	06/22/2000	N001	AL		0.85	#	-	-
	NTU	0850	06/13/2000	N001	AL	B	9.06	#	-	-
	NTU	0854	06/13/2000	N001	AL		1000	> L #	-	-
	NTU	0855	06/13/2000	N001	AL		1.76	#	-	-
	NTU	0857	06/14/2000	N001	AL		4.22	#	-	-
	NTU	0862	06/22/2000	N001	KM		1000	> L #	-	-
	NTU	1000	06/14/2000	N001	KM		259	#	-	-
	NTU	1001	06/15/2000	N001	KM		1000	> L #	-	-
	NTU	1008	06/12/2000	N001	AL		1000	> #	-	-
	NTU	1009	06/13/2000	N001	AL		3.94	#	-	-
	NTU	1010	06/12/2000	N001	AL		3.33	#	-	-
	NTU	1013	06/13/2000	N001	AL		1.48	#	-	-
	NTU	1062	06/16/2000	N001	KM		121	L #	-	-
Uranium	mg/L	0608	06/15/2000	0001	KM		1.950	#	0.001	-
	mg/L	0608	06/15/2000	0002	KM		1.960	#	0.001	-
	mg/L	0610	06/21/2000	0001	AL		1.950	L #	0.001	-
	mg/L	0614	06/13/2000	0001	AL		2.560	#	0.001	-
	mg/L	0620	06/14/2000	0001	AL		0.863	#	0.001	-
	mg/L	0624	06/14/2000	0001	AL		0.498	#	0.0001	-
	mg/L	0626	06/14/2000	0001	AL		0.100	#	0.0001	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0628	06/14/2000	0001	AL		0.020	#	0.0001	-
	mg/L	0631	06/20/2000	0001	AL		0.0185	#	0.0001	-
	mg/L	0732	06/21/2000	0001	AL		0.0077	#	0.0001	-
	mg/L	0734	06/14/2000	0001	AL		0.528	L #	0.001	-
	mg/L	0735	06/21/2000	0001	AL		0.112	#	0.0001	-
	mg/L	0735	06/21/2000	0002	AL		0.113	#	0.0001	-
	mg/L	0736	06/22/2000	0001	AL		0.309	#	0.0001	-
	mg/L	0766	06/12/2000	0001	AL		3.620	#	0.001	-
	mg/L	0768	06/14/2000	0001	AL		0.972	#	0.001	-
	mg/L	0773	06/21/2000	0001	AL		0.697	#	0.001	-
	mg/L	0775	06/21/2000	0001	AL		1.590	L #	0.001	-
	mg/L	0779	06/14/2000	0001	AL		0.515	#	0.001	-
	mg/L	0782	06/22/2000	0001	AL		0.0027	#	0.0001	-
	mg/L	0783	06/22/2000	0001	AL		0.0096	#	0.0001	-
	mg/L	0784	06/22/2000	0001	AL		0.0019	#	0.0001	-
	mg/L	0850	06/13/2000	0001	AL	B	0.0213	#	0.0001	-
	mg/L	0854	06/13/2000	0001	AL		3.400	L #	0.001	-
	mg/L	0855	06/13/2000	0001	AL		0.145	#	0.0001	-
	mg/L	0857	06/14/2000	0001	AL		0.304	#	0.0001	-
	mg/L	1000	06/14/2000	0001	KM		0.0274	#	0.0001	-
	mg/L	1001	06/15/2000	0001	KM		0.0069	L #	0.0001	-
	mg/L	1008	06/12/2000	0001	AL		3.320	#	0.001	-
	mg/L	1009	06/13/2000	0001	AL		0.746	#	0.001	-
	mg/L	1009	06/13/2000	0002	AL		0.749	#	0.001	-
	mg/L	1010	06/12/2000	0001	AL		0.353	#	0.0001	-
	mg/L	1013	06/13/2000	0001	AL		0.216	#	0.0001	-
	mg/L	1062	06/16/2000	0001	KM		0.0017	L #	0.0001	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Uranium-234	pCi/L	0768	06/14/2000	0001	AL		383.48 ± 34.7	L J #	0.19	± 43.8
	pCi/L	0854	06/13/2000	0001	AL		1134.5 ± 101.5	L JL #	-	± 250.
Uranium-235	pCi/L	0768	06/14/2000	0001	AL		17.62	L J #	0.16	± 2.57
	pCi/L	0854	06/13/2000	0001	AL		61.54	L JL #	0.5	± 14.8
Uranium-238	pCi/L	0768	06/14/2000	0001	AL		341.09	L J #	0.1	± 39.0
	pCi/L	0854	06/13/2000	0001	AL		1011	L JL #	-	± 223.

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 11:05

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
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RECORDS: SELECTED FROM USEE200 WHERE site\_code='SHP01' AND quality\_assurance = TRUE AND (NOT (data\_validation\_qualifiers LIKE "R" OR data\_validation\_qualifiers LIKE "X" ) OR IsNull(data\_validation\_qualifiers)) AND DATE\_SAMPLED between #6/10/2000# and #6/30/2000#

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.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- 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.
- I Increased detection limit due to required dilution.
- C Pesticide result confirmed by GC-MS.
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC)
- S Result determined by method of standard addition (MSA).
- U Analytical result below detection limit.
- 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.
- Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative
- > Result above upper detection limit.
- J Estimated

DATA QUALIFIERS:

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

QA QUALIFIER: # = validated according to Quality Assurance guidelines.

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:		DETECTION LIMIT	UN- CERTAINTY
			DATE	ID				LAB	DATA QA		
Alkalinity as CaCO3	mg/L	0600	06/13/2000	0001	KM		1258	L	#	-	-
	mg/L	0600	06/13/2000	N001	KM		1245	L	#	-	-
	mg/L	0602	06/23/2000	0001	KM		2088		#	-	-
	mg/L	0602	06/23/2000	N001	KM		2589		#	-	-
	mg/L	0603	06/13/2000	0001	AL		249		#	-	-
	mg/L	0603	06/13/2000	N001	AL		252		#	-	-
	mg/L	0604	06/20/2000	0001	KM		9	L	#	-	-
	mg/L	0604	06/20/2000	N001	KM		4	L	#	-	-
	mg/L	0725	06/23/2000	0001	AL		187		#	-	-
	mg/L	0725	06/23/2000	N001	AL		188		#	-	-
	mg/L	0727	06/24/2000	0001	KM		1335		#	-	-
	mg/L	0727	06/24/2000	N001	KM		1358		#	-	-
	mg/L	0728	06/25/2000	0001	AL		341		#	-	-
	mg/L	0728	06/25/2000	N001	AL		304		#	-	-
	mg/L	0730	06/21/2000	0001	AL		4	L	#	-	-
	mg/L	0730	06/21/2000	N001	AL		5	L	#	-	-
	mg/L	0812	06/21/2000	0001	AL		652	L	#	-	-
	mg/L	0812	06/21/2000	N001	AL		641	L	#	-	-
	mg/L	0813	06/13/2000	0001	AL		898		#	-	-
	mg/L	0813	06/13/2000	N001	AL		906		#	-	-
	mg/L	0814	06/26/2000	0001	AL		850	L	#	-	-
	mg/L	0814	06/26/2000	N001	AL		808	L	#	-	-
	mg/L	0815	06/22/2000	0001	AL		1350	L	#	-	-
	mg/L	0815	06/22/2000	N001	AL		1320	L	#	-	-
	mg/L	0816	06/25/2000	0001	AL		299		#	-	-
	mg/L	0816	06/25/2000	N001	AL		317		#	-	-
	mg/L	0819	06/24/2000	0001	KM		1614		#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)

REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity as CaCO3	mg/L	0819	06/24/2000	N001	KM		1552	#	-	-
	mg/L	0824	06/22/2000	0001	KM		180	L #	-	-
	mg/L	0824	06/22/2000	N001	KM		264	L #	-	-
	mg/L	0826	06/13/2000	0001	AL		1612	L #	-	-
	mg/L	0826	06/13/2000	N001	AL		1764	L #	-	-
	mg/L	0827	06/25/2000	0001	AL		1000	> L #	-	-
	mg/L	0827	06/25/2000	N001	AL		1103	L #	-	-
	mg/L	0828	06/24/2000	0001	AL		635	#	-	-
	mg/L	0828	06/24/2000	N001	AL		581	#	-	-
	mg/L	0830	06/25/2000	0001	KM		37	L #	-	-
	mg/L	0830	06/25/2000	N001	KM		15	L #	-	-
	mg/L	0832	06/21/2000	0001	AL		283	L #	-	-
	mg/L	0832	06/21/2000	N001	AL		420	L #	-	-
	mg/L	0833	06/22/2000	0001	AL		465	#	-	-
	mg/L	0833	06/22/2000	N001	AL		501	#	-	-
	mg/L	0835	06/22/2000	0001	AL		299	#	-	-
	mg/L	0835	06/22/2000	N001	AL		296	#	-	-
	mg/L	0836	06/20/2000	0001	AL		363	#	-	-
	mg/L	0836	06/20/2000	N001	AL		386	#	-	-
	mg/L	0837	06/23/2000	0001	AL		519	#	-	-
	mg/L	0837	06/23/2000	N001	AL		557	#	-	-
	mg/L	0838	06/22/2000	0001	AL		316	#	-	-
	mg/L	0838	06/22/2000	N001	AL		324	#	-	-
	mg/L	0839	06/22/2000	0001	AL		853	#	-	-
	mg/L	0841	06/20/2000	0001	AL		862	#	-	-
	mg/L	0841	06/20/2000	N001	AL		731	#	-	-
mg/L	0843	06/22/2000	0001	AL		462	#	-	-	

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity as CaCO3	mg/L	0843	06/22/2000	N001	AL		411	#	-	-
	mg/L	0844	06/22/2000	0001	AL		496	#	-	-
	mg/L	0844	06/22/2000	N001	AL		399	#	-	-
	mg/L	0846	06/22/2000	0001	AL		286	#	-	-
	mg/L	0846	06/22/2000	N001	AL		290	#	-	-
	mg/L	0847	06/23/2000	0001	AL		295	#	-	-
	mg/L	0847	06/23/2000	N001	AL		284	#	-	-
	mg/L	0848	06/23/2000	0001	AL		469	#	-	-
	mg/L	0848	06/23/2000	N001	AL		486	#	-	-
	mg/L	1002	06/22/2000	0001	KM		113	L #	-	-
	mg/L	1002	06/22/2000	N001	KM		118	L #	-	-
	mg/L	1007	06/22/2000	0001	FL		1125	L #	-	-
	mg/L	1007	06/22/2000	N001	FL		1289	L #	-	-
	mg/L	1048	06/21/2000	0001	QA		550	L #	-	-
	mg/L	1048	06/21/2000	N001	QA		610	L #	-	-
	mg/L	1049	06/21/2000	0001	QA		596	#	-	-
	mg/L	1049	06/21/2000	N001	QA		602	#	-	-
	mg/L	1057	06/24/2000	0001	QA		659	#	-	-
	mg/L	1057	06/24/2000	N001	QA		665	#	-	-
	mg/L	1058	06/25/2000	0001	KM		421	L #	-	-
	mg/L	1058	06/25/2000	N001	KM		269	L #	-	-
	mg/L	1059	06/25/2000	0001	KM		483	L #	-	-
	mg/L	1059	06/25/2000	N001	KM		376	L #	-	-
	mg/L	1060	06/23/2000	0001	QA		623	L #	-	-
Ammonium	mg/L	0600	06/13/2000	0001	KM		267.000	L #	0.0047	-
	mg/L	0602	06/23/2000	0001	KM		541.000	#	0.0047	-
	mg/L	0602	06/23/2000	0002	KM		530.000	#	0.0047	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Ammonium	mg/L	0603	06/13/2000	0001	AL		1700.000	#	0.0047	-
	mg/L	0604	06/20/2000	0001	KM		0.0047	U L #	0.0047	-
	mg/L	0725	06/23/2000	0001	AL		0.0235	B #	0.0047	-
	mg/L	0726	06/25/2000	0001	KM		0.0843	B #	0.0047	-
	mg/L	0726	06/25/2000	0002	KM		0.0843	B #	0.0047	-
	mg/L	0727	06/24/2000	0001	KM		42.400	#	0.0047	-
	mg/L	0728	06/25/2000	0001	AL		80.900	#	0.0047	-
	mg/L	0730	06/21/2000	0001	AL		204.000	L #	0.0047	-
	mg/L	0812	06/21/2000	0001	AL		0.0299	B L #	0.0047	-
	mg/L	0813	06/13/2000	0001	AL		83.700	#	0.0047	-
	mg/L	0814	06/26/2000	0001	AL		34.900	L #	0.0047	-
	mg/L	0815	06/22/2000	0001	AL		0.425	L #	0.0047	-
	mg/L	0816	06/25/2000	0001	AL		0.0047	U #	0.0047	-
	mg/L	0819	06/24/2000	0001	KM		672.000	#	0.0047	-
	mg/L	0819	06/24/2000	0002	KM		615.000	#	0.0047	-
	mg/L	0824	06/22/2000	0001	KM		35.700	L #	0.0047	-
	mg/L	0826	06/13/2000	0001	AL		103.000	L #	0.0047	-
	mg/L	0827	06/25/2000	0001	AL		8.480	L #	0.0047	-
	mg/L	0828	06/24/2000	0001	AL		1.190	#	0.0047	-
	mg/L	0830	06/25/2000	0001	KM		18.100	L #	0.0047	-
	mg/L	0832	06/21/2000	0001	AL		0.0159	B L #	0.0047	-
	mg/L	0833	06/22/2000	0001	AL		0.0279	B #	0.0047	-
	mg/L	0835	06/22/2000	0001	AL		0.0047	U #	0.0047	-
	mg/L	0836	06/20/2000	0001	AL		0.0047	U #	0.0047	-
	mg/L	0837	06/23/2000	0001	AL		0.010	B #	0.0047	-
	mg/L	0838	06/22/2000	0001	AL		0.0047	U #	0.0047	-
	mg/L	0838	06/22/2000	0002	AL		0.0047	U #	0.0047	-



GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Ammonium	mg/L	0839	06/22/2000	0001	AL		107.000	#	0.0047	-
	mg/L	0841	06/20/2000	0001	AL		0.0243	B #	0.0047	-
	mg/L	0843	06/22/2000	0001	AL		0.0159	B #	0.0047	-
	mg/L	0844	06/22/2000	0001	AL		0.0047	U #	0.0047	-
	mg/L	0846	06/22/2000	0001	AL		0.0047	U #	0.0047	-
	mg/L	0847	06/23/2000	0001	AL		0.193	#	0.0047	-
	mg/L	0848	06/23/2000	0001	AL		1.400	#	0.0047	-
	mg/L	1002	06/22/2000	0001	KM		0.0299	B L #	0.0047	-
	mg/L	1003	06/22/2000	0001	KM		1.700	L #	0.0047	-
	mg/L	1007	06/22/2000	0001	FL		36.500	L #	0.0047	-
	mg/L	1048	06/21/2000	0001	QA		0.025	B L #	0.0047	-
	mg/L	1049	06/21/2000	0001	QA		0.025	B #	0.0047	-
	mg/L	1057	06/24/2000	0001	QA		1950.000	#	0.0047	-
	mg/L	1058	06/25/2000	0001	KM		5.830	L #	0.0047	-
	mg/L	1059	06/25/2000	0001	KM		18.200	L #	0.0047	-
	mg/L	1060	06/23/2000	0001	QA		0.408	L #	0.0047	-
Antimony	mg/L	0600	06/13/2000	0001	KM		0.00076	B UL #	0.0001	-
	mg/L	0603	06/13/2000	0001	AL		0.00045	B U #	0.0001	-
	mg/L	0813	06/13/2000	0001	AL		0.00044	B U #	0.0001	-
	mg/L	0826	06/13/2000	0001	AL		0.00079	B UL #	0.0001	-
	mg/L	1002	06/22/2000	0001	KM		0.0069	L #	0.0001	-
	mg/L	1003	06/22/2000	0001	KM		0.0027	B UL #	0.0001	-
	mg/L	1007	06/22/2000	0001	FL		0.00073	B UL #	0.0001	-
	mg/L	1048	06/21/2000	0001	QA		0.00051	B UL #	0.0001	-
	mg/L	1049	06/21/2000	0001	QA		0.00055	B U #	0.0001	-
	mg/L	1057	06/24/2000	0001	QA		0.00046	B U #	0.0001	-
	mg/L	1058	06/25/2000	0001	KM		0.0025	B UL #	0.0001	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)

REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA			DETECTION LIMIT	UN-CERTAINTY
Antimony	mg/L	1059	06/25/2000	0001	KM		0.0012	B	UL	#	0.0001	-
	mg/L	1060	06/23/2000	0001	QA		0.00055	B	UL	#	0.0001	-
Arsenic	mg/L	0600	06/13/2000	0001	KM		0.00046	B	L	#	0.0003	-
	mg/L	0603	06/13/2000	0001	AL		0.0003	U		#	0.0003	-
	mg/L	0813	06/13/2000	0001	AL		0.00031	B		#	0.0003	-
	mg/L	0826	06/13/2000	0001	AL		0.0003	U	L	#	0.0003	-
	mg/L	1002	06/22/2000	0001	KM		0.0003	U	L	#	0.0003	-
	mg/L	1003	06/22/2000	0001	KM		0.001	B	L	#	0.0003	-
	mg/L	1007	06/22/2000	0001	FL		0.00045	B	L	#	0.0003	-
	mg/L	1048	06/21/2000	0001	QA		0.0003	U	L	#	0.0003	-
	mg/L	1049	06/21/2000	0001	QA		0.0003	U		#	0.0003	-
	mg/L	1057	06/24/2000	0001	QA		0.0003	U		#	0.0003	-
	mg/L	1058	06/25/2000	0001	KM		0.00031	B	L	#	0.0003	-
	mg/L	1059	06/25/2000	0001	KM		0.0003	U	L	#	0.0003	-
	mg/L	1060	06/23/2000	0001	QA		0.00033	B	L	#	0.0003	-
Cadmium	mg/L	0600	06/13/2000	0001	KM		0.00087	B	UL	#	0.0002	-
	mg/L	0603	06/13/2000	0001	AL		0.0162			#	0.0002	-
	mg/L	0813	06/13/2000	0001	AL		0.00039	B	U	#	0.0002	-
	mg/L	0826	06/13/2000	0001	AL		0.00066	B	UL	#	0.0002	-
	mg/L	1002	06/22/2000	0001	KM		0.00064	B	UL	#	0.0002	-
	mg/L	1003	06/22/2000	0001	KM		0.00028	B	UL	#	0.0002	-
	mg/L	1007	06/22/2000	0001	FL		0.00052	B	UL	#	0.0002	-
	mg/L	1048	06/21/2000	0001	QA		0.00026	B	UL	#	0.0002	-
	mg/L	1049	06/21/2000	0001	QA		0.00028	B	U	#	0.0002	-
	mg/L	1057	06/24/2000	0001	QA		0.0007	B	U	#	0.0002	-
	mg/L	1058	06/25/2000	0001	KM		0.00037	B	UL	#	0.0002	-
	mg/L	1059	06/25/2000	0001	KM		0.00045	B	UL	#	0.0002	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Cadmium	mg/L	1060	06/23/2000	0001	QA		0.00055	B UL #	0.0002	-
Calcium	mg/L	0600	06/13/2000	0001	KM		392.000	L #	0.0504	-
	mg/L	0603	06/13/2000	0001	AL		488.000	#	0.0504	-
	mg/L	0813	06/13/2000	0001	AL		604.000	#	1.008	-
	mg/L	0826	06/13/2000	0001	AL		416.000	L #	0.0504	-
	mg/L	1002	06/22/2000	0001	KM		48.000	L #	0.0504	-
	mg/L	1003	06/22/2000	0001	KM		26.100	L #	0.0504	-
	mg/L	1007	06/22/2000	0001	FL		433.000	L #	0.0504	-
	mg/L	1048	06/21/2000	0001	QA		420.000	L #	0.0504	-
	mg/L	1049	06/21/2000	0001	QA		408.000	#	0.0504	-
	mg/L	1057	06/24/2000	0001	QA		473.000	#	0.0504	-
	mg/L	1058	06/25/2000	0001	KM		75.900	L #	0.0504	-
	mg/L	1059	06/25/2000	0001	KM		382.000	L #	0.0504	-
	mg/L	1060	06/23/2000	0001	QA		492.000	L #	0.504	-
Chloride	mg/L	0600	06/13/2000	0001	KM		259.000	L #	0.48	-
	mg/L	0603	06/13/2000	0001	AL		321.000	#	0.48	-
	mg/L	0813	06/13/2000	0001	AL		753.000	#	0.48	-
	mg/L	0826	06/13/2000	0001	AL		658.000	L #	0.48	-
	mg/L	1002	06/22/2000	0001	KM		27.500	L #	0.12	-
	mg/L	1003	06/22/2000	0001	KM		893.000	L #	0.12	-
	mg/L	1007	06/22/2000	0001	FL		279.000	L #	0.24	-
	mg/L	1048	06/21/2000	0001	QA		1110.000	L #	0.48	-
	mg/L	1049	06/21/2000	0001	QA		1120.000	#	0.48	-
	mg/L	1057	06/24/2000	0001	QA		548.000	#	0.48	-
	mg/L	1058	06/25/2000	0001	KM		295.000	L #	0.12	-
	mg/L	1059	06/25/2000	0001	KM		306.000	L #	0.24	-
	mg/L	1060	06/23/2000	0001	QA		493.000	L #	0.48	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Fluoride	mg/L	0600	06/13/2000	0001	KM		0.528	B L #	0.25	-
	mg/L	0603	06/13/2000	0001	AL		0.250	U #	0.25	-
	mg/L	0813	06/13/2000	0001	AL		0.617	B #	0.25	-
	mg/L	0826	06/13/2000	0001	AL		0.428	B L #	0.25	-
	mg/L	1002	06/22/2000	0001	KM		0.856	L #	0.0625	-
	mg/L	1003	06/22/2000	0001	KM		2.670	L #	0.0625	-
	mg/L	1007	06/22/2000	0001	FL		0.700	B L #	0.125	-
	mg/L	1048	06/21/2000	0001	QA		0.714	B L #	0.25	-
	mg/L	1049	06/21/2000	0001	QA		0.811	B #	0.25	-
	mg/L	1057	06/24/2000	0001	QA		0.809	B #	0.25	-
	mg/L	1058	06/25/2000	0001	KM		1.940	L #	0.0625	-
	mg/L	1059	06/25/2000	0001	KM		0.682	B L #	0.125	-
	mg/L	1060	06/23/2000	0001	QA		0.836	B L #	0.25	-
Gross Alpha	pCi/L	0600	06/13/2000	0001	KM		539.4	L #	123.81	± 124.
	pCi/L	0603	06/13/2000	0001	AL		96.07	U #	96.07	± 52.7
	pCi/L	0813	06/13/2000	0001	AL		276.10	U #	276.1	± 172.
	pCi/L	0826	06/13/2000	0001	AL		1813.9	L #	195.27	± 267.
	pCi/L	1002	06/22/2000	0001	KM		3.81	U L #	3.81	± 2.26
	pCi/L	1048	06/21/2000	0001	QA		285.68	U L #	285.68	± 161.
	pCi/L	1049	06/21/2000	0001	QA		286.88	U #	286.88	± 184.
	pCi/L	1057	06/24/2000	0001	QA		195.29	U #	195.29	± 129.
	pCi/L	1059	06/25/2000	0001	KM		115.43	U L #	115.43	± 68.4
pCi/L	1060	06/23/2000	0001	QA		198.78	U L #	198.78	± 122.	
Gross Beta	pCi/L	0600	06/13/2000	0001	KM		389.85	L #	127.39	± 91.6
	pCi/L	0603	06/13/2000	0001	AL		128.15	#	103.32	± 65.5
	pCi/L	0813	06/13/2000	0001	AL		309.59	U #	309.59	± 183.

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Gross Beta	pCi/L	0826	06/13/2000	0001	AL		892.45	L #	215.88	± 164.
	pCi/L	1002	06/22/2000	0001	KM		4.14	U L #	4.14	± 2.39
	pCi/L	1048	06/21/2000	0001	QA		310.30	U L #	310.3	± 178.
	pCi/L	1049	06/21/2000	0001	QA		311.36	U #	311.36	± 175.
	pCi/L	1057	06/24/2000	0001	QA		318.33	#	207.8	± 134.
	pCi/L	1059	06/25/2000	0001	KM		124.35	U L #	124.35	± 72.2
	pCi/L	1060	06/23/2000	0001	QA		208.17	U L #	208.17	± 123.
Iron	mg/L	0600	06/13/2000	0001	KM		0.0098	B L #	0.0091	-
	mg/L	0603	06/13/2000	0001	AL		0.0091	U #	0.0091	-
	mg/L	0813	06/13/2000	0001	AL		0.0091	U #	0.0091	-
	mg/L	0826	06/13/2000	0001	AL		0.0091	U L #	0.0091	-
	mg/L	1002	06/22/2000	0001	KM		0.0091	U L #	0.0091	-
	mg/L	1003	06/22/2000	0001	KM		0.0886	L #	0.0091	-
	mg/L	1007	06/22/2000	0001	FL		4.160	L #	0.0091	-
	mg/L	1048	06/21/2000	0001	QA		0.0301	UL #	0.0091	-
	mg/L	1049	06/21/2000	0001	QA		0.0139	B U #	0.0091	-
	mg/L	1057	06/24/2000	0001	QA		0.0136	B #	0.0091	-
	mg/L	1058	06/25/2000	0001	KM		0.0121	B L #	0.0091	-
	mg/L	1059	06/25/2000	0001	KM		0.0091	U L #	0.0091	-
	mg/L	1060	06/23/2000	0001	QA		0.0091	U L #	0.0091	-
Magnesium	mg/L	0600	06/13/2000	0001	KM		662.000	L #	0.48	-
	mg/L	0603	06/13/2000	0001	AL		851.000	#	0.24	-
	mg/L	0813	06/13/2000	0001	AL		3100.000	#	0.48	-
	mg/L	0826	06/13/2000	0001	AL		2350.000	L #	0.48	-
	mg/L	1002	06/22/2000	0001	KM		8.250	L #	0.024	-
	mg/L	1003	06/22/2000	0001	KM		5.970	L #	0.024	-
	mg/L	1007	06/22/2000	0001	FL		1270.000	L #	0.24	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Magnesium	mg/L	1048	06/21/2000	0001	QA		995.000	L #	0.48	-
	mg/L	1049	06/21/2000	0001	QA		987.000	#	0.48	-
	mg/L	1057	06/24/2000	0001	QA		2360.000	#	0.24	-
	mg/L	1058	06/25/2000	0001	KM		65.700	L #	0.024	-
	mg/L	1059	06/25/2000	0001	KM		540.000	L #	0.24	-
	mg/L	1060	06/23/2000	0001	QA		1040.000	L #	0.24	-
Manganese	mg/L	0600	06/13/2000	0001	KM		1.200	L #	0.0015	-
	mg/L	0602	06/23/2000	0001	KM		2.000	#	0.0015	-
	mg/L	0602	06/23/2000	0002	KM		2.000	#	0.0015	-
	mg/L	0603	06/13/2000	0001	AL		28.600	#	0.015	-
	mg/L	0604	06/20/2000	0001	KM		0.0079	B L #	0.0015	-
	mg/L	0725	06/23/2000	0001	AL		0.0352	#	0.0015	-
	mg/L	0726	06/25/2000	0001	KM		0.0419	#	0.0015	-
	mg/L	0726	06/25/2000	0002	KM		0.0421	#	0.0015	-
	mg/L	0727	06/24/2000	0001	KM		1.500	#	0.0015	-
	mg/L	0728	06/25/2000	0001	AL		0.769	#	0.0015	-
	mg/L	0730	06/21/2000	0001	AL		22.200	L #	0.015	-
	mg/L	0812	06/21/2000	0001	AL		0.0219	L #	0.0015	-
	mg/L	0813	06/13/2000	0001	AL		0.198	#	0.0015	-
	mg/L	0814	06/26/2000	0001	AL		1.460	L #	0.0015	-
	mg/L	0815	06/22/2000	0001	AL		1.340	L #	0.0015	-
	mg/L	0816	06/25/2000	0001	AL		0.0021	B #	0.0015	-
	mg/L	0819	06/24/2000	0001	KM		2.530	#	0.0015	-
	mg/L	0819	06/24/2000	0002	KM		2.500	#	0.0015	-
	mg/L	0824	06/22/2000	0001	KM		0.816	L #	0.0015	-
	mg/L	0826	06/13/2000	0001	AL		2.610	L #	0.0015	-
mg/L	0827	06/25/2000	0001	AL		1.220	L #	0.0015	-	

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0828	06/24/2000	0001	AL		0.671	#	0.0015	-
	mg/L	0830	06/25/2000	0001	KM		2.650	L #	0.0015	-
	mg/L	0832	06/21/2000	0001	AL		0.0015	U L #	0.0015	-
	mg/L	0833	06/22/2000	0001	AL		0.0015	U #	0.0015	-
	mg/L	0835	06/22/2000	0001	AL		0.0015	U #	0.0015	-
	mg/L	0836	06/20/2000	0001	AL		1.610	#	0.0015	-
	mg/L	0837	06/23/2000	0001	AL		3.160	U #	0.0015	-
	mg/L	0838	06/22/2000	0001	AL		0.0015	U #	0.0015	-
	mg/L	0838	06/22/2000	0002	AL		0.0015	U #	0.0015	-
	mg/L	0839	06/22/2000	0001	AL		0.687	#	0.0015	-
	mg/L	0841	06/20/2000	0001	AL		0.030	#	0.0015	-
	mg/L	0843	06/22/2000	0001	AL		3.780	#	0.0015	-
	mg/L	0844	06/22/2000	0001	AL		0.0441	#	0.0015	-
	mg/L	0846	06/22/2000	0001	AL		0.0015	U #	0.0015	-
	mg/L	0847	06/23/2000	0001	AL		0.0145	#	0.0015	-
	mg/L	0848	06/23/2000	0001	AL		0.412	#	0.0015	-
	mg/L	1002	06/22/2000	0001	KM		0.0187	L #	0.0015	-
	mg/L	1003	06/22/2000	0001	KM		0.0141	L #	0.0015	-
	mg/L	1007	06/22/2000	0001	FL		2.270	L #	0.0015	-
	mg/L	1048	06/21/2000	0001	QA		0.0015	U L #	0.0015	-
mg/L	1049	06/21/2000	0001	QA		0.0015	U #	0.0015	-	
mg/L	1057	06/24/2000	0001	QA		9.760	#	0.0015	-	
mg/L	1058	06/25/2000	0001	KM		0.121	L #	0.0015	-	
mg/L	1059	06/25/2000	0001	KM		0.778	L #	0.0015	-	
mg/L	1060	06/23/2000	0001	QA		0.152	L #	0.0015	-	
Molybdenum	mg/L	0600	06/13/2000	0001	KM		0.0036	B L #	0.0003	-
	mg/L	0603	06/13/2000	0001	AL		0.0033	B U #	0.0003	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Molybdenum	mg/L	0813	06/13/2000	0001	AL		0.0032	B U #	0.0003	-
	mg/L	0826	06/13/2000	0001	AL		0.0044	B L #	0.0003	-
	mg/L	1002	06/22/2000	0001	KM		0.0053	B L #	0.0003	-
	mg/L	1003	06/22/2000	0001	KM		0.063	L #	0.0003	-
	mg/L	1007	06/22/2000	0001	FL		0.010	L #	0.0003	-
	mg/L	1048	06/21/2000	0001	QA		0.023	L #	0.0003	-
	mg/L	1049	06/21/2000	0001	QA		0.0206	#	0.0003	-
	mg/L	1057	06/24/2000	0001	QA		0.0056	B #	0.0003	-
	mg/L	1058	06/25/2000	0001	KM		0.0618	L #	0.0003	-
	mg/L	1059	06/25/2000	0001	KM		0.0278	L #	0.0003	-
	mg/L	1060	06/23/2000	0001	QA		0.0145	L #	0.0003	-
Nitrate	mg/L	0600	06/13/2000	0001	KM		568.000	L #	0.314	-
	mg/L	0602	06/23/2000	0001	KM		119.000	#	0.0628	-
	mg/L	0602	06/23/2000	0002	KM		123.000	#	0.0628	-
	mg/L	0603	06/13/2000	0001	AL		4890.000	#	3.14	-
	mg/L	0604	06/20/2000	0001	KM		0.0314	U L #	0.0314	-
	mg/L	0725	06/23/2000	0001	AL		15.000	#	0.0314	-
	mg/L	0726	06/25/2000	0001	KM		86.500	#	0.0628	-
	mg/L	0726	06/25/2000	0002	KM		87.400	#	0.0628	-
	mg/L	0727	06/24/2000	0001	KM		1650.000	#	0.628	-
	mg/L	0728	06/25/2000	0001	AL		693.000	#	0.314	-
	mg/L	0730	06/21/2000	0001	AL		616.000	L #	0.314	-
	mg/L	0812	06/21/2000	0001	AL		5920.000	L #	3.14	-
	mg/L	0813	06/13/2000	0001	AL		8680.000	#	6.28	-
	mg/L	0814	06/26/2000	0001	AL		4170.000	L #	1.57	-
	mg/L	0815	06/22/2000	0001	AL		3000.000	L #	1.57	-
	mg/L	0816	06/25/2000	0001	AL		238.000	#	0.157	-



GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Nitrate	mg/L	0819	06/24/2000	0001	KM		377.000	#	0.157	-
	mg/L	0819	06/24/2000	0002	KM		402.000	#	0.157	-
	mg/L	0824	06/22/2000	0001	KM		188.000	L #	0.0628	-
	mg/L	0826	06/13/2000	0001	AL		115.000	L #	0.0628	-
	mg/L	0827	06/25/2000	0001	AL		415.000	L #	0.157	-
	mg/L	0828	06/24/2000	0001	AL		30.100	#	0.0314	-
	mg/L	0830	06/25/2000	0001	KM		102.000	L #	0.0628	-
	mg/L	0832	06/21/2000	0001	AL		2030.000	L #	1.57	-
	mg/L	0833	06/22/2000	0001	AL		1460.000	#	0.628	-
	mg/L	0835	06/22/2000	0001	AL		61.100	#	0.0314	-
	mg/L	0836	06/20/2000	0001	AL		62.200	#	0.0314	-
	mg/L	0837	06/23/2000	0001	AL		4.790	#	0.0314	-
	mg/L	0838	06/22/2000	0001	AL		15.600	#	0.0314	-
	mg/L	0838	06/22/2000	0002	AL		15.700	#	0.0314	-
	mg/L	0839	06/22/2000	0001	AL		2300.000	#	1.57	-
	mg/L	0841	06/20/2000	0001	AL		1990.000	#	0.628	-
	mg/L	0843	06/22/2000	0001	AL		0.0616	B #	0.0314	-
	mg/L	0844	06/22/2000	0001	AL		1400.000	#	0.628	-
	mg/L	0846	06/22/2000	0001	AL		527.000	#	0.314	-
	mg/L	0847	06/23/2000	0001	AL		17.500	#	0.0314	-
	mg/L	0848	06/23/2000	0001	AL		698.000	#	0.314	-
	mg/L	1002	06/22/2000	0001	KM		1.320	L #	0.0314	-
	mg/L	1003	06/22/2000	0001	KM		0.189	B L #	0.0314	-
	mg/L	1007	06/22/2000	0001	FL		930.000	L #	0.314	-
	mg/L	1048	06/21/2000	0001	QA		3070.000	L #	1.57	-
	mg/L	1049	06/21/2000	0001	QA		3050.000	#	1.57	-
	mg/L	1057	06/24/2000	0001	QA		5540.000	#	3.14	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Nitrate	mg/L	1058	06/25/2000	0001	KM		52.100	L #	0.0314	-
	mg/L	1059	06/25/2000	0001	KM		1140.000	L #	0.628	-
	mg/L	1060	06/23/2000	0001	QA		2420.000	L #	1.57	-
ORP of Zobell Solution	mV	0600	06/13/2000	N001	KM		240	L #	-	-
	mV	0602	06/23/2000	N001	KM		230	#	-	-
	mV	0603	06/13/2000	N001	AL		253	#	-	-
	mV	0604	06/20/2000	N001	KM		232	L #	-	-
	mV	0725	06/23/2000	N001	AL		231	#	-	-
	mV	0726	06/25/2000	N001	KM		217	#	-	-
	mV	0727	06/24/2000	N001	KM		205	#	-	-
	mV	0728	06/25/2000	N001	AL		208	#	-	-
	mV	0730	06/21/2000	N001	AL		231	L #	-	-
	mV	0812	06/21/2000	N001	AL		231	L #	-	-
	mV	0813	06/13/2000	N001	AL		243	#	-	-
	mV	0814	06/26/2000	N001	AL		208	L #	-	-
	mV	0815	06/22/2000	N001	AL		230	L #	-	-
	mV	0816	06/25/2000	N001	AL		207	#	-	-
	mV	0819	06/24/2000	N001	KM		230	#	-	-
	mV	0824	06/22/2000	N001	KM		240	L #	-	-
	mV	0826	06/13/2000	N001	AL		236	L #	-	-
	mV	0827	06/25/2000	N001	AL		227	L #	-	-
	mV	0828	06/24/2000	N001	AL		215	#	-	-
	mV	0830	06/25/2000	N001	KM		220	L #	-	-
	mV	0832	06/21/2000	N001	AL		220	L #	-	-
mV	0833	06/22/2000	N001	AL		230	#	-	-	
mV	0835	06/22/2000	N001	AL		239	#	-	-	
mV	0836	06/20/2000	N001	AL		240	#	-	-	

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
ORP of Zobell Solution	mV	0837	06/23/2000	N001	AL		232	#	-	-
	mV	0838	06/22/2000	N001	AL		230	#	-	-
	mV	0839	06/22/2000	N001	AL		227	#	-	-
	mV	0841	06/20/2000	N001	AL		235	#	-	-
	mV	0843	06/22/2000	N001	AL		231	#	-	-
	mV	0844	06/22/2000	N001	AL		219	#	-	-
	mV	0846	06/22/2000	N001	AL		232	#	-	-
	mV	0847	06/23/2000	N001	AL		230	#	-	-
	mV	0848	06/23/2000	N001	AL		231	#	-	-
	mV	1002	06/22/2000	N001	KM		238	L #	-	-
	mV	1003	06/22/2000	N001	KM		225	L #	-	-
	mV	1007	06/22/2000	N001	FL		210	L #	-	-
	mV	1048	06/21/2000	N001	QA		220	L #	-	-
	mV	1049	06/21/2000	N001	QA		220	#	-	-
	mV	1057	06/24/2000	N001	QA		213	#	-	-
	mV	1058	06/25/2000	N001	KM		217	L #	-	-
	mV	1059	06/25/2000	N001	KM		210	L #	-	-
	mV	1060	06/23/2000	N001	QA		230	L #	-	-
Oxidation Reduction Potenti	mV	0600	06/13/2000	N001	KM		217	L #	-	-
	mV	0602	06/23/2000	N001	KM		168	#	-	-
	mV	0603	06/13/2000	N001	AL		284	#	-	-
	mV	0604	06/20/2000	N001	KM		85	L #	-	-
	mV	0725	06/23/2000	N001	AL		136	#	-	-
	mV	0726	06/25/2000	N001	KM		152	#	-	-
	mV	0727	06/24/2000	N001	KM		207	#	-	-
	mV	0728	06/25/2000	N001	AL		159	#	-	-
	mV	0730	06/21/2000	N001	AL		160	L #	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Oxidation Reduction Potenti	mV	0812	06/21/2000	N001	AL		196	L #	-	-
	mV	0813	06/13/2000	N001	AL		210	#	-	-
	mV	0814	06/26/2000	N001	AL		189	L #	-	-
	mV	0815	06/22/2000	N001	AL		199	L #	-	-
	mV	0816	06/25/2000	N001	AL		193	#	-	-
	mV	0819	06/24/2000	N001	KM		170	#	-	-
	mV	0824	06/22/2000	N001	KM		114	L #	-	-
	mV	0826	06/13/2000	N001	AL		197	L #	-	-
	mV	0827	06/25/2000	N001	AL		114	L #	-	-
	mV	0828	06/24/2000	N001	AL		81	#	-	-
	mV	0830	06/25/2000	N001	KM		233	L #	-	-
	mV	0832	06/21/2000	N001	AL		156	L #	-	-
	mV	0833	06/22/2000	N001	AL		180	#	-	-
	mV	0835	06/22/2000	N001	AL		168	#	-	-
	mV	0836	06/20/2000	N001	AL		64	#	-	-
	mV	0837	06/23/2000	N001	AL		149	#	-	-
	mV	0838	06/22/2000	N001	AL		167	#	-	-
	mV	0839	06/22/2000	N001	AL		195	#	-	-
	mV	0841	06/20/2000	N001	AL		114	#	-	-
	mV	0843	06/22/2000	N001	AL		63	#	-	-
	mV	0844	06/22/2000	N001	AL		149	#	-	-
	mV	0846	06/22/2000	N001	AL		172	#	-	-
	mV	0847	06/23/2000	N001	AL		-15	#	-	-
	mV	0848	06/23/2000	N001	AL		55	#	-	-
	mV	1002	06/22/2000	N001	KM		24	L #	-	-
	mV	1003	06/22/2000	N001	KM		35	L #	-	-
	mV	1007	06/22/2000	N001	FL		98	L #	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Oxidation Reduction Potenti	mV	1048	06/21/2000	N001	QA		182	L #	-	-
	mV	1049	06/21/2000	N001	QA		196	#	-	-
	mV	1057	06/24/2000	N001	QA		179	#	-	-
	mV	1058	06/25/2000	N001	KM		97	L #	-	-
	mV	1059	06/25/2000	N001	KM		171	L #	-	-
	mV	1060	06/23/2000	N001	QA		160	L #	-	-
pH	s.u.	0600	06/13/2000	N001	KM		6.54	L #	-	-
	s.u.	0602	06/23/2000	N001	KM		6.3	#	-	-
	s.u.	0603	06/13/2000	N001	AL		6.32	#	-	-
	s.u.	0604	06/20/2000	N001	KM		6.95	L #	-	-
	s.u.	0725	06/23/2000	N001	AL		6.91	#	-	-
	s.u.	0726	06/25/2000	N001	KM		6.6	#	-	-
	s.u.	0727	06/24/2000	N001	KM		6.17	#	-	-
	s.u.	0728	06/25/2000	N001	AL		6.41	#	-	-
	s.u.	0730	06/21/2000	N001	AL		5.14	L #	-	-
	s.u.	0812	06/21/2000	N001	AL		6.9	L #	-	-
	s.u.	0813	06/13/2000	N001	AL		6.62	#	-	-
	s.u.	0814	06/26/2000	N001	AL		6.68	L #	-	-
	s.u.	0815	06/22/2000	N001	AL		6.66	L #	-	-
	s.u.	0816	06/25/2000	N001	AL		6.9	#	-	-
	s.u.	0819	06/24/2000	N001	KM		6.43	#	-	-
	s.u.	0824	06/22/2000	N001	KM		7.25	L #	-	-
	s.u.	0826	06/13/2000	N001	AL		6.49	L #	-	-
	s.u.	0827	06/25/2000	N001	AL		6.22	L #	-	-
	s.u.	0828	06/24/2000	N001	AL		6.8	#	-	-
	s.u.	0830	06/25/2000	N001	KM		4.97	L #	-	-
s.u.	0832	06/21/2000	N001	AL		7.33	L #	-	-	

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0833	06/22/2000	N001	AL		7	#	-	-
	s.u.	0835	06/22/2000	N001	AL		7.06	#	-	-
	s.u.	0836	06/20/2000	N001	AL		6.83	#	-	-
	s.u.	0837	06/23/2000	N001	AL		7	#	-	-
	s.u.	0838	06/22/2000	N001	AL		7.01	#	-	-
	s.u.	0839	06/22/2000	N001	AL		6.74	#	-	-
	s.u.	0841	06/20/2000	N001	AL		7.13	#	-	-
	s.u.	0843	06/22/2000	N001	AL		6.66	#	-	-
	s.u.	0844	06/22/2000	N001	AL		6.81	#	-	-
	s.u.	0846	06/22/2000	N001	AL		7.07	#	-	-
	s.u.	0847	06/23/2000	N001	AL		6.61	#	-	-
	s.u.	0848	06/23/2000	N001	AL		6.51	#	-	-
	s.u.	1002	06/22/2000	N001	KM		7.46	L #	-	-
	s.u.	1003	06/22/2000	N001	KM		7.23	L #	-	-
	s.u.	1007	06/22/2000	N001	FL		6.49	L #	-	-
	s.u.	1048	06/21/2000	N001	QA		7.38	L #	-	-
	s.u.	1049	06/21/2000	N001	QA		7.69	#	-	-
	s.u.	1057	06/24/2000	N001	QA		6.82	#	-	-
	s.u.	1058	06/25/2000	N001	KM		7.66	L #	-	-
	s.u.	1059	06/25/2000	N001	KM		7.15	L #	-	-
s.u.	1060	06/23/2000	N001	QA		7.37	L #	-	-	
Polonium-210	pCi/L	0600	06/13/2000	0001	KM		0.36	U L #	0.36	± 0.40
	pCi/L	0603	06/13/2000	0001	AL		0.36	U #	0.36	± 0.35
	pCi/L	0813	06/13/2000	0001	AL		0.2	U #	0.28	± 0.30
	pCi/L	0826	06/13/2000	0001	AL		0.59	U L #	0.59	± 0.60
	pCi/L	1002	06/22/2000	0001	KM		0.33	U L #	0.33	± 0.30
	pCi/L	1048	06/21/2000	0001	QA		0.19	U L #	0.19	± 0.22

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Polonium-210	pCi/L	1049	06/21/2000	0001	QA		0.14	U #	0.14	± 0.14
	pCi/L	1057	06/24/2000	0001	QA		0.26	U #	0.26	± 0.25
	pCi/L	1059	06/25/2000	0001	KM		0.29	U L #	0.29	± 0.26
	pCi/L	1060	06/23/2000	0001	QA		0.42	U L #	0.42	± 0.44
Potassium	mg/L	0600	06/13/2000	0001	KM		75.100	L #	0.0456	-
	mg/L	0603	06/13/2000	0001	AL		196.000	#	0.0456	-
	mg/L	0813	06/13/2000	0001	AL		116.000	#	0.0456	-
	mg/L	0826	06/13/2000	0001	AL		116.000	L #	0.0456	-
	mg/L	1002	06/22/2000	0001	KM		3.070	L #	0.0456	-
	mg/L	1003	06/22/2000	0001	KM		5.710	L #	0.0456	-
	mg/L	1007	06/22/2000	0001	FL		77.300	L #	0.0456	-
	mg/L	1048	06/21/2000	0001	QA		42.900	L #	0.0456	-
	mg/L	1049	06/21/2000	0001	QA		40.200	#	0.0456	-
	mg/L	1057	06/24/2000	0001	QA		342.000	#	0.0456	-
	mg/L	1058	06/25/2000	0001	KM		16.200	L #	0.0456	-
	mg/L	1059	06/25/2000	0001	KM		25.700	L #	0.0456	-
	mg/L	1060	06/23/2000	0001	QA		32.300	L #	0.0456	-
Radium-226	pCi/L	0600	06/13/2000	0001	KM		0.95	L #	0.18	± 0.15
	pCi/L	0602	06/23/2000	0001	KM		4.51	#	0.25	± 0.38
	pCi/L	0602	06/23/2000	0002	KM		4.69	#	0.27	± 0.40
	pCi/L	0603	06/13/2000	0001	AL		0.25	#	0.17	± 0.11
	pCi/L	0727	06/24/2000	0001	KM		3.49	#	0.22	± 0.32
	pCi/L	0813	06/13/2000	0001	AL		0.84	#	0.16	± 0.14
	pCi/L	0826	06/13/2000	0001	AL		0.89	L #	0.15	± 0.14
	pCi/L	0839	06/22/2000	0001	AL		2.09	#	0.12	± 0.20
	pCi/L	1002	06/22/2000	0001	KM		0.15	L #	0.12	± 0.07
	pCi/L	1007	06/22/2000	0001	FL		0.84	L #	0.16	± 0.15

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Radium-226	pCi/L	1048	06/21/2000	0001	QA		0.21	L #	0.11	± 0.08
	pCi/L	1049	06/21/2000	0001	QA		0.22	#	0.11	± 0.08
	pCi/L	1057	06/24/2000	0001	QA		0.17	U #	0.17	± 0.10
	pCi/L	1059	06/25/2000	0001	KM		1.04	L #	0.15	± 0.16
	pCi/L	1060	06/23/2000	0001	QA		1.36	L #	0.11	± 0.15
Radium-228	pCi/L	0600	06/13/2000	0001	KM		3.91	L #	0.89	± 0.59
	pCi/L	0602	06/23/2000	0001	KM		9.57	#	0.66	± 0.62
	pCi/L	0602	06/23/2000	0002	KM		10.69	#	0.72	± 0.68
	pCi/L	0603	06/13/2000	0001	AL		2.37	#	0.89	± 0.56
	pCi/L	0727	06/24/2000	0001	KM		6.03	#	0.72	± 0.56
	pCi/L	0813	06/13/2000	0001	AL		1.47	#	0.94	± 0.57
	pCi/L	0826	06/13/2000	0001	AL		1.7	L #	0.87	± 0.54
	pCi/L	0839	06/22/2000	0001	AL		1.85	#	0.6	± 0.39
	pCi/L	1002	06/22/2000	0001	KM		0.69	U L #	0.69	± 0.40
	pCi/L	1007	06/22/2000	0001	FL		1.01	L #	0.9	± 0.54
	pCi/L	1048	06/21/2000	0001	QA		0.6	U L #	0.67	± 0.39
	pCi/L	1049	06/21/2000	0001	QA		0.62	U #	0.62	± 0.36
	pCi/L	1057	06/24/2000	0001	QA		2.21	#	0.71	± 0.46
	pCi/L	1059	06/25/2000	0001	KM		0.9	L #	0.73	± 0.44
	pCi/L	1060	06/23/2000	0001	QA		0.71	L #	0.6	± 0.36
Selenium	mg/L	0600	06/13/2000	0001	KM		0.0017	B L #	0.0001	-
	mg/L	0602	06/23/2000	0001	KM		0.0021	B #	0.0001	-
	mg/L	0602	06/23/2000	0002	KM		0.0042	B #	0.0001	-
	mg/L	0603	06/13/2000	0001	AL		0.283	#	0.0025	-
	mg/L	0604	06/20/2000	0001	KM		0.0001	U L #	0.0001	-
	mg/L	0725	06/23/2000	0001	AL		0.0159	#	0.0001	-
	mg/L	0726	06/25/2000	0001	KM		0.129	#	0.002	-



GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Selenium	mg/L	0726	06/25/2000	0002	KM		0.128	#	0.002	-
	mg/L	0727	06/24/2000	0001	KM		0.0012	B #	0.0001	-
	mg/L	0728	06/25/2000	0001	AL		0.0412	#	0.0005	-
	mg/L	0730	06/21/2000	0001	AL		0.0156	L #	0.0001	-
	mg/L	0812	06/21/2000	0001	AL		6.960	L #	0.05	-
	mg/L	0813	06/13/2000	0001	AL		0.0334	#	0.0005	-
	mg/L	0814	06/26/2000	0001	AL		2.730	L #	0.02	-
	mg/L	0815	06/22/2000	0001	AL		0.633	L #	0.01	-
	mg/L	0816	06/25/2000	0001	AL		0.0767	#	0.001	-
	mg/L	0819	06/24/2000	0001	KM		0.0096	#	0.0001	-
	mg/L	0819	06/24/2000	0002	KM		0.0123	#	0.0001	-
	mg/L	0824	06/22/2000	0001	KM		0.0036	B L #	0.0001	-
	mg/L	0826	06/13/2000	0001	AL		0.0281	L #	0.0002	-
	mg/L	0827	06/25/2000	0001	AL		0.0508	L #	0.001	-
	mg/L	0828	06/24/2000	0001	AL		0.0083	#	0.0001	-
	mg/L	0830	06/25/2000	0001	KM		0.0224	L #	0.0002	-
	mg/L	0832	06/21/2000	0001	AL		2.620	L #	0.02	-
	mg/L	0833	06/22/2000	0001	AL		0.610	#	0.01	-
	mg/L	0835	06/22/2000	0001	AL		0.0679	#	0.0005	-
	mg/L	0836	06/20/2000	0001	AL		0.134	#	0.002	-
	mg/L	0837	06/23/2000	0001	AL		0.0254	#	0.0005	-
	mg/L	0838	06/22/2000	0001	AL		0.0389	#	0.0005	-
	mg/L	0838	06/22/2000	0002	AL		0.039	#	0.0005	-
	mg/L	0839	06/22/2000	0001	AL		0.0041	B #	0.0001	-
	mg/L	0841	06/20/2000	0001	AL		2.550	#	0.02	-
	mg/L	0843	06/22/2000	0001	AL		0.00013	B #	0.0001	-
	mg/L	0844	06/22/2000	0001	AL		1.210	#	0.02	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Selenium	mg/L	0846	06/22/2000	0001	AL		0.906	#	0.01	-
	mg/L	0847	06/23/2000	0001	AL		0.0381	#	0.0005	-
	mg/L	0848	06/23/2000	0001	AL		1.110	#	0.01	-
	mg/L	1002	06/22/2000	0001	KM		0.00045	B L #	0.0001	-
	mg/L	1003	06/22/2000	0001	KM		0.0001	U L #	0.0001	-
	mg/L	1007	06/22/2000	0001	FL		0.0476	L #	0.0005	-
	mg/L	1048	06/21/2000	0001	QA		2.010	L #	0.02	-
	mg/L	1049	06/21/2000	0001	QA		2.190	#	0.02	-
	mg/L	1057	06/24/2000	0001	QA		0.493	#	0.005	-
	mg/L	1058	06/25/2000	0001	KM		0.001	B L #	0.0001	-
	mg/L	1059	06/25/2000	0001	KM		0.0575	L #	0.001	-
	mg/L	1060	06/23/2000	0001	QA		4.660	L #	0.03	-
Sodium	mg/L	0600	06/13/2000	0001	KM		2500.000	L #	8.68	-
	mg/L	0603	06/13/2000	0001	AL		1090.000	#	4.34	-
	mg/L	0813	06/13/2000	0001	AL		2510.000	#	8.68	-
	mg/L	0826	06/13/2000	0001	AL		2180.000	L #	8.68	-
	mg/L	1002	06/22/2000	0001	KM		43.600	L #	0.434	-
	mg/L	1003	06/22/2000	0001	KM		843.000	L #	4.34	-
	mg/L	1007	06/22/2000	0001	FL		1920.000	L #	4.34	-
	mg/L	1048	06/21/2000	0001	QA		7050.000	L #	8.68	-
	mg/L	1049	06/21/2000	0001	QA		7010.000	#	8.68	-
	mg/L	1057	06/24/2000	0001	QA		1720.000	#	4.34	-
	mg/L	1058	06/25/2000	0001	KM		872.000	L #	4.34	-
	mg/L	1059	06/25/2000	0001	KM		2510.000	L #	4.34	-
mg/L	1060	06/23/2000	0001	QA		4000.000	L #	4.34	-	
Specific Conductance	umhos/cm	0600	06/13/2000	N001	KM		12960	L #	-	-
	umhos/cm	0602	06/23/2000	N001	KM		20100	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0603	06/13/2000	N001	AL		17460		#	-
	umhos/cm	0604	06/20/2000	N001	KM		3990	L	#	-
	umhos/cm	0725	06/23/2000	N001	AL		571		#	-
	umhos/cm	0726	06/25/2000	N001	KM		7230		#	-
	umhos/cm	0727	06/24/2000	N001	KM		16090		#	-
	umhos/cm	0728	06/25/2000	N001	AL		6720		#	-
	umhos/cm	0730	06/21/2000	N001	AL		4650	L	#	-
	umhos/cm	0812	06/21/2000	N001	AL		19210	L	#	-
	umhos/cm	0813	06/13/2000	N001	AL		16320		#	-
	umhos/cm	0814	06/26/2000	N001	AL		18500	L	#	-
	umhos/cm	0815	06/22/2000	N001	AL		1878	L	#	-
	umhos/cm	0816	06/25/2000	N001	AL		6110		#	-
	umhos/cm	0819	06/24/2000	N001	KM		17640		#	-
	umhos/cm	0824	06/22/2000	N001	KM		22600	L	#	-
	umhos/cm	0826	06/13/2000	N001	AL		15170	L	#	-
	umhos/cm	0827	06/25/2000	N001	AL		9250	L	#	-
	umhos/cm	0828	06/24/2000	N001	AL		3560		#	-
	umhos/cm	0830	06/25/2000	N001	KM		2890	L	#	-
	umhos/cm	0832	06/21/2000	N001	AL		13000	L	#	-
	umhos/cm	0833	06/22/2000	N001	AL		7790		#	-
	umhos/cm	0835	06/22/2000	N001	AL		2260		#	-
	umhos/cm	0836	06/20/2000	N001	AL		3980		#	-
	umhos/cm	0837	06/23/2000	N001	AL		2590		#	-
	umhos/cm	0838	06/22/2000	N001	AL		2070		#	-
	umhos/cm	0839	06/22/2000	N001	AL		14680		#	-
	umhos/cm	0841	06/20/2000	N001	AL		18300		#	-
	umhos/cm	0843	06/22/2000	N001	AL		377		#	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0844	06/22/2000	N001	AL		7360	#	-	-
	umhos/cm	0846	06/22/2000	N001	AL		4710	#	-	-
	umhos/cm	0847	06/23/2000	N001	AL		2680	#	-	-
	umhos/cm	0848	06/23/2000	N001	AL		9990	#	-	-
	umhos/cm	1002	06/22/2000	N001	KM		5400	L #	-	-
	umhos/cm	1003	06/22/2000	N001	KM		6200	L #	-	-
	umhos/cm	1007	06/22/2000	N001	FL		12810	L #	-	-
	umhos/cm	1048	06/21/2000	N001	QA		21600	L #	-	-
	umhos/cm	1049	06/21/2000	N001	QA		21000	#	-	-
	umhos/cm	1057	06/24/2000	N001	QA		23800	#	-	-
	umhos/cm	1058	06/25/2000	N001	KM		4490	L #	-	-
	umhos/cm	1059	06/25/2000	N001	KM		9490	L #	-	-
umhos/cm	1060	06/23/2000	N001	QA		15810	L #	-	-	
Strontium	mg/L	0600	06/13/2000	0001	KM		8.420	L #	0.0001	-
	mg/L	0603	06/13/2000	0001	AL		2.730	#	0.0001	-
	mg/L	0813	06/13/2000	0001	AL		18.000	#	0.002	-
	mg/L	0826	06/13/2000	0001	AL		11.700	L #	0.002	-
	mg/L	1002	06/22/2000	0001	KM		0.592	L #	0.0001	-
	mg/L	1003	06/22/2000	0001	KM		0.770	L #	0.0001	-
	mg/L	1007	06/22/2000	0001	FL		7.730	L #	0.0001	-
	mg/L	1048	06/21/2000	0001	QA		9.250	L #	0.0001	-
	mg/L	1049	06/21/2000	0001	QA		9.040	#	0.0001	-
	mg/L	1057	06/24/2000	0001	QA		9.330	#	0.0001	-
	mg/L	1058	06/25/2000	0001	KM		2.690	L #	0.0001	-
	mg/L	1059	06/25/2000	0001	KM		11.700	L #	0.001	-
mg/L	1060	06/23/2000	0001	QA		9.580	L #	0.0001	-	
Sulfate	mg/L	0600	06/13/2000	0001	KM		8300.000	L #	1.178	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Sulfate	mg/L	0602	06/23/2000	0001	KM		16700.000			#	1.178	-
	mg/L	0602	06/23/2000	0002	KM		16900.000			#	1.178	-
	mg/L	0603	06/13/2000	0001	AL		7590.000			#	1.178	-
	mg/L	0604	06/20/2000	0001	KM		1.590	L		#	0.0589	-
	mg/L	0725	06/23/2000	0001	AL		3360.000			#	0.2945	-
	mg/L	0726	06/25/2000	0001	KM		4520.000			#	0.2945	-
	mg/L	0726	06/25/2000	0002	KM		4540.000			#	0.2945	-
	mg/L	0727	06/24/2000	0001	KM		10900.000			#	1.178	-
	mg/L	0728	06/25/2000	0001	AL		3960.000			#	0.2945	-
	mg/L	0730	06/21/2000	0001	AL		2510.000	L		#	0.2945	-
	mg/L	0812	06/21/2000	0001	AL		15300.000	L		#	1.178	-
	mg/L	0813	06/13/2000	0001	AL		15100.000			#	1.178	-
	mg/L	0814	06/26/2000	0001	AL		13500.000	L		#	1.178	-
	mg/L	0815	06/22/2000	0001	AL		14400.000	L		#	1.178	-
	mg/L	0816	06/25/2000	0001	AL		3440.000			#	0.2945	-
	mg/L	0819	06/24/2000	0001	KM		12100.000			#	1.178	-
	mg/L	0819	06/24/2000	0002	KM		11200.000			#	1.178	-
	mg/L	0824	06/22/2000	0001	KM		7460.000	L		#	1.178	-
	mg/L	0826	06/13/2000	0001	AL		13000.000	L		#	1.178	-
	mg/L	0827	06/25/2000	0001	AL		6780.000	L		#	0.589	-
	mg/L	0828	06/24/2000	0001	AL		1380.000			#	0.2945	-
	mg/L	0830	06/25/2000	0001	KM		1810.000	L		#	0.2945	-
	mg/L	0832	06/21/2000	0001	AL		8070.000	L		#	0.589	-
	mg/L	0833	06/22/2000	0001	AL		6140.000			#	0.589	-
	mg/L	0835	06/22/2000	0001	AL		1410.000			#	0.1178	-
	mg/L	0836	06/20/2000	0001	AL		2920.000			#	0.2945	-
	mg/L	0837	06/23/2000	0001	AL		1950.000			#	0.1178	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL	RESULT	QUALIFIERS:		DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA QA		
Sulfate	mg/L	0838	06/22/2000	0001	AL		1540.000		#	0.1178	-
	mg/L	0838	06/22/2000	0002	AL		1530.000		#	0.1178	-
	mg/L	0839	06/22/2000	0001	AL		10400.000		#	1.178	-
	mg/L	0841	06/20/2000	0001	AL		13800.000		#	1.178	-
	mg/L	0843	06/22/2000	0001	AL		2260.000		#	0.2945	-
	mg/L	0844	06/22/2000	0001	AL		4650.000		#	0.2945	-
	mg/L	0846	06/22/2000	0001	AL		2920.000		#	0.2945	-
	mg/L	0847	06/23/2000	0001	AL		1350.000		#	0.2945	-
	mg/L	0848	06/23/2000	0001	AL		5670.000		#	0.589	-
	mg/L	1002	06/22/2000	0001	KM		89.300	L	#	0.2945	-
	mg/L	1003	06/22/2000	0001	KM		605.000	L	#	0.2945	-
	mg/L	1007	06/22/2000	0001	FL		8820.000	L	#	0.589	-
	mg/L	1048	06/21/2000	0001	QA		17500.000	L	#	1.178	-
	mg/L	1049	06/21/2000	0001	QA		17600.000		#	1.178	-
	mg/L	1057	06/24/2000	0001	QA		15600.000		#	1.178	-
	mg/L	1058	06/25/2000	0001	KM		1770.000	L	#	0.2945	-
	mg/L	1059	06/25/2000	0001	KM		7380.000	L	#	0.589	-
	mg/L	1060	06/23/2000	0001	QA		10800.000	L	#	1.178	-
Temperature	C	0600	06/13/2000	N001	KM		18.8	L	#	-	-
	C	0602	06/23/2000	N001	KM		16.9		#	-	-
	C	0603	06/13/2000	N001	AL		16.8		#	-	-
	C	0604	06/20/2000	N001	KM		29.7	L	#	-	-
	C	0725	06/23/2000	N001	AL		17.7		#	-	-
	C	0726	06/25/2000	N001	KM		15.8		#	-	-
	C	0727	06/24/2000	N001	KM		16.3		#	-	-
	C	0728	06/25/2000	N001	AL		15.6		#	-	-
	C	0730	06/21/2000	N001	AL		15.7	L	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Temperature	C	0812	06/21/2000	N001	AL		17.4	L	#		-	-
	C	0813	06/13/2000	N001	AL		18.8		#		-	-
	C	0814	06/26/2000	N001	AL		27.3	L	#		-	-
	C	0815	06/22/2000	N001	AL		17.8	L	#		-	-
	C	0816	06/25/2000	N001	AL		15.7		#		-	-
	C	0819	06/24/2000	N001	KM		16.9		#		-	-
	C	0824	06/22/2000	N001	KM		20.3	L	#		-	-
	C	0826	06/13/2000	N001	AL		17.6	L	#		-	-
	C	0827	06/25/2000	N001	AL		20.2	L	#		-	-
	C	0828	06/24/2000	N001	AL		21.9		#		-	-
	C	0830	06/25/2000	N001	KM		23.7	L	#		-	-
	C	0832	06/21/2000	N001	AL		18.6	L	#		-	-
	C	0833	06/22/2000	N001	AL		15.3		#		-	-
	C	0835	06/22/2000	N001	AL		15.5		#		-	-
	C	0836	06/20/2000	N001	AL		14.7		#		-	-
	C	0837	06/23/2000	N001	AL		13.9		#		-	-
	C	0838	06/22/2000	N001	AL		15.6		#		-	-
	C	0839	06/22/2000	N001	AL		19.8		#		-	-
	C	0841	06/20/2000	N001	AL		19.5		#		-	-
	C	0843	06/22/2000	N001	AL		13.2		#		-	-
	C	0844	06/22/2000	N001	AL		15.4		#		-	-
	C	0846	06/22/2000	N001	AL		15.2		#		-	-
	C	0847	06/23/2000	N001	AL		16.1		#		-	-
	C	0848	06/23/2000	N001	AL		17.1		#		-	-
	C	1002	06/22/2000	N001	KM		18.1	L	#		-	-
	C	1003	06/22/2000	N001	KM		22.3	L	#		-	-
C	1007	06/22/2000	N001	FL		17.7	L	#		-	-	

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Temperature	C	1048	06/21/2000	N001	QA		19.4	L	#	-	-	
	C	1049	06/21/2000	N001	QA		19.2		#	-	-	
	C	1057	06/24/2000	N001	QA		15.4		#	-	-	
	C	1058	06/25/2000	N001	KM		16.7	L	#	-	-	
	C	1059	06/25/2000	N001	KM		21	L	#	-	-	
	C	1060	06/23/2000	N001	QA		21.3	L	#	-	-	
Temperature of Zobell Soluti	C	0600	06/13/2000	N001	KM		18.9	L	#	-	-	
	C	0602	06/23/2000	N001	KM		26.6		#	-	-	
	C	0603	06/13/2000	N001	AL		13		#	-	-	
	C	0604	06/20/2000	N001	KM		12.4	L	#	-	-	
	C	0725	06/23/2000	N001	AL		18.4		#	-	-	
	C	0726	06/25/2000	N001	KM		23		#	-	-	
	C	0727	06/24/2000	N001	KM		28.3		#	-	-	
	C	0728	06/25/2000	N001	AL		26.3		#	-	-	
	C	0730	06/21/2000	N001	AL		15.2	L	#	-	-	
	C	0812	06/21/2000	N001	AL		15.2	L	#	-	-	
	C	0813	06/13/2000	N001	AL		17.3		#	-	-	
	C	0814	06/26/2000	N001	AL		26.3	L	#	-	-	
	C	0815	06/22/2000	N001	AL		19.8	L	#	-	-	
	C	0816	06/25/2000	N001	AL		27		#	-	-	
	C	0819	06/24/2000	N001	KM		26.6		#	-	-	
	C	0824	06/22/2000	N001	KM		10	L	#	-	-	
	C	0826	06/13/2000	N001	AL		20.6	L	#	-	-	
	C	0827	06/25/2000	N001	AL		22.8	L	#	-	-	
	C	0828	06/24/2000	N001	AL		21.4		#	-	-	
	C	0830	06/25/2000	N001	KM		20.2	L	#	-	-	
C	0832	06/21/2000	N001	AL		6	L	#	-	-		



GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Temperature of Zobell Soluti	C	0833	06/22/2000	N001	AL		20.3	#	-	-
	C	0835	06/22/2000	N001	AL		14	#	-	-
	C	0836	06/20/2000	N001	AL		19.5	#	-	-
	C	0837	06/23/2000	N001	AL		18.4	#	-	-
	C	0838	06/22/2000	N001	AL		20.3	#	-	-
	C	0839	06/22/2000	N001	AL		21.2	#	-	-
	C	0841	06/20/2000	N001	AL		11	#	-	-
	C	0843	06/22/2000	N001	AL		18.2	#	-	-
	C	0844	06/22/2000	N001	AL		25.3	#	-	-
	C	0846	06/22/2000	N001	AL		18.3	#	-	-
	C	0847	06/23/2000	N001	AL		22	#	-	-
	C	0848	06/23/2000	N001	AL		29.6	#	-	-
	C	1002	06/22/2000	N001	KM		25	L #	-	-
	C	1003	06/22/2000	N001	KM		9.6	L #	-	-
	C	1007	06/22/2000	N001	FL		17.7	L #	-	-
	C	1048	06/21/2000	N001	QA		23.7	L #	-	-
	C	1049	06/21/2000	N001	QA		23.7	#	-	-
	C	1057	06/24/2000	N001	QA		22.5	#	-	-
	C	1058	06/25/2000	N001	KM		20	L #	-	-
	C	1059	06/25/2000	N001	KM		25.6	L #	-	-
C	1060	06/23/2000	N001	QA		19.9	L #	-	-	
Total Dissolved Solids	mg/L	0600	06/13/2000	0001	KM		14100	L #	10	-
	mg/L	0602	06/23/2000	0001	KM		26700	#	10	-
	mg/L	0602	06/23/2000	0002	KM		27500	#	10	-
	mg/L	0603	06/13/2000	0001	AL		12600	#	10	-
	mg/L	0604	06/20/2000	0001	KM		15	JL #	10	-
	mg/L	0725	06/23/2000	0001	AL		5320	#	10	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Total Dissolved Solids	mg/L	0726	06/25/2000	0001	KM		7260	#	10	-
	mg/L	0726	06/25/2000	0002	KM		7390	#	10	-
	mg/L	0727	06/24/2000	0001	KM		20600	#	10	-
	mg/L	0728	06/25/2000	0001	AL		6740	#	10	-
	mg/L	0730	06/21/2000	0001	AL		3720	JL #	10	-
	mg/L	0812	06/21/2000	0001	AL		34400	JL #	10	-
	mg/L	0813	06/13/2000	0001	AL		29100	#	10	-
	mg/L	0814	06/26/2000	0001	AL		26200	L #	10	-
	mg/L	0815	06/22/2000	0001	AL		27400	L #	10	-
	mg/L	0816	06/25/2000	0001	AL		6180	#	10	-
	mg/L	0819	06/24/2000	0001	KM		19800	#	10	-
	mg/L	0819	06/24/2000	0002	KM		19800	#	10	-
	mg/L	0824	06/22/2000	0001	KM		20900	L #	10	-
	mg/L	0826	06/13/2000	0001	AL		21100	L #	10	-
	mg/L	0827	06/25/2000	0001	AL		12300	L #	10	-
	mg/L	0828	06/24/2000	0001	AL		3030	#	10	-
	mg/L	0830	06/25/2000	0001	KM		2880	L #	10	-
	mg/L	0832	06/21/2000	0001	AL		16100	JL #	10	-
	mg/L	0833	06/22/2000	0001	AL		12000	#	10	-
	mg/L	0835	06/22/2000	0001	AL		2540	#	10	-
	mg/L	0836	06/20/2000	0001	AL		4900	J #	10	-
	mg/L	0837	06/23/2000	0001	AL		3480	#	10	-
	mg/L	0838	06/22/2000	0001	AL		2660	#	10	-
	mg/L	0838	06/22/2000	0002	AL		2640	#	10	-
	mg/L	0839	06/22/2000	0001	AL		18300	#	10	-
	mg/L	0841	06/20/2000	0001	AL		24500	J #	10	-
	mg/L	0843	06/22/2000	0001	AL		3870	#	10	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Total Dissolved Solids	mg/L	0844	06/22/2000	0001	AL		9960	#	10	-
	mg/L	0846	06/22/2000	0001	AL		5660	#	10	-
	mg/L	0847	06/23/2000	0001	AL		2590	#	10	-
	mg/L	0848	06/23/2000	0001	AL		10500	#	10	-
	mg/L	1002	06/22/2000	0001	KM		320	L #	10	-
	mg/L	1003	06/22/2000	0001	KM		2690	L #	10	-
	mg/L	1007	06/22/2000	0001	FL		15300	L #	10	-
	mg/L	1048	06/21/2000	0001	QA		33500	L #	10	-
	mg/L	1049	06/21/2000	0001	QA		32600	#	10	-
	mg/L	1057	06/24/2000	0001	QA		25300	#	10	-
	mg/L	1058	06/25/2000	0001	KM		3430	L #	10	-
	mg/L	1059	06/25/2000	0001	KM		13100	L #	10	-
	mg/L	1060	06/23/2000	0001	QA		21300	L #	10	-
Turbidity	NTU	0600	06/13/2000	N001	KM		3.25	L #	-	-
	NTU	0602	06/23/2000	N001	KM		4.15	#	-	-
	NTU	0603	06/13/2000	N001	AL		1.17	#	-	-
	NTU	0604	06/20/2000	N001	KM		4.56	L #	-	-
	NTU	0725	06/23/2000	N001	AL		3.02	#	-	-
	NTU	0726	06/25/2000	N001	KM		5.18	#	-	-
	NTU	0727	06/24/2000	N001	KM		54.4	#	-	-
	NTU	0728	06/25/2000	N001	AL		9.21	#	-	-
	NTU	0730	06/21/2000	N001	AL		0.44	L #	-	-
	NTU	0812	06/21/2000	N001	AL		0.91	L #	-	-
	NTU	0813	06/13/2000	N001	AL		8.11	#	-	-
	NTU	0815	06/22/2000	N001	AL		6.91	L #	-	-
	NTU	0816	06/25/2000	N001	AL		50.1	#	-	-
	NTU	0819	06/24/2000	N001	KM		4.25	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Turbidity	NTU	0824	06/22/2000	N001	KM		1000	>	L	#	-	-
	NTU	0826	06/13/2000	N001	AL		23.1		L	#	-	-
	NTU	0827	06/25/2000	N001	AL		93.4		L	#	-	-
	NTU	0828	06/24/2000	N001	AL		1.51			#	-	-
	NTU	0830	06/25/2000	N001	KM		1000	>	L	#	-	-
	NTU	0832	06/21/2000	N001	AL		1000	>	L	#	-	-
	NTU	0833	06/22/2000	N001	AL		5.73			#	-	-
	NTU	0835	06/22/2000	N001	AL		3.72			#	-	-
	NTU	0836	06/20/2000	N001	AL		118			#	-	-
	NTU	0837	06/23/2000	N001	AL		7.4			#	-	-
	NTU	0838	06/22/2000	N001	AL		1.61			#	-	-
	NTU	0839	06/22/2000	N001	AL		17.5			#	-	-
	NTU	0841	06/20/2000	N001	AL		93			#	-	-
	NTU	0843	06/22/2000	N001	AL		2.57			#	-	-
	NTU	0844	06/22/2000	N001	AL		4.57			#	-	-
	NTU	0846	06/22/2000	N001	AL		1.76			#	-	-
	NTU	0847	06/23/2000	N001	AL		0.63			#	-	-
	NTU	0848	06/23/2000	N001	AL		1.52			#	-	-
	NTU	1002	06/22/2000	N001	KM		71.5		L	#	-	-
	NTU	1003	06/22/2000	N001	KM		113		L	#	-	-
	NTU	1007	06/22/2000	N001	FL		1000	>	L	#	-	-
	NTU	1048	06/21/2000	N001	QA		528		L	#	-	-
	NTU	1049	06/21/2000	N001	QA		76.2			#	-	-
	NTU	1057	06/24/2000	N001	QA		3.01			#	-	-
	NTU	1058	06/25/2000	N001	KM		74.9		L	#	-	-
	NTU	1059	06/25/2000	N001	KM		466		L	#	-	-
	NTU	1060	06/23/2000	N001	QA		1000	>	L	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0600	06/13/2000	0001	KM		1.110	L #	0.001	-
	mg/L	0602	06/23/2000	0001	KM		0.733	#	0.001	-
	mg/L	0602	06/23/2000	0002	KM		0.740	#	0.001	-
	mg/L	0603	06/13/2000	0001	AL		0.010	#	0.0001	-
	mg/L	0604	06/20/2000	0001	KM		0.00016	B UL #	0.0001	-
	mg/L	0725	06/23/2000	0001	AL		0.0473	#	0.0001	-
	mg/L	0726	06/25/2000	0001	KM		0.021	#	0.0001	-
	mg/L	0726	06/25/2000	0002	KM		0.021	#	0.0001	-
	mg/L	0727	06/24/2000	0001	KM		0.396	#	0.0001	-
	mg/L	0728	06/25/2000	0001	AL		0.255	#	0.0001	-
	mg/L	0730	06/21/2000	0001	AL		0.0021	L #	0.0001	-
	mg/L	0812	06/21/2000	0001	AL		0.116	L #	0.0001	-
	mg/L	0813	06/13/2000	0001	AL		0.141	#	0.0001	-
	mg/L	0814	06/26/2000	0001	AL		0.126	L #	0.0001	-
	mg/L	0815	06/22/2000	0001	AL		0.295	L #	0.0001	-
	mg/L	0816	06/25/2000	0001	AL		0.0344	#	0.0001	-
	mg/L	0819	06/24/2000	0001	KM		1.890	#	0.001	-
	mg/L	0819	06/24/2000	0002	KM		1.810	#	0.001	-
	mg/L	0824	06/22/2000	0001	KM		0.110	L #	0.0001	-
	mg/L	0826	06/13/2000	0001	AL		2.950	L #	0.001	-
	mg/L	0827	06/25/2000	0001	AL		0.687	L #	0.001	-
	mg/L	0828	06/24/2000	0001	AL		0.449	#	0.0001	-
	mg/L	0830	06/25/2000	0001	KM		0.0094	L #	0.0001	-
	mg/L	0832	06/21/2000	0001	AL		0.0949	L #	0.0001	-
	mg/L	0833	06/22/2000	0001	AL		0.146	#	0.0001	-
	mg/L	0835	06/22/2000	0001	AL		0.0264	#	0.0001	-
	mg/L	0836	06/20/2000	0001	AL		0.0529	#	0.0001	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0837	06/23/2000	0001	AL		0.0446	#	0.0001	-
	mg/L	0838	06/22/2000	0001	AL		0.0297	#	0.0001	-
	mg/L	0838	06/22/2000	0002	AL		0.0293	#	0.0001	-
	mg/L	0839	06/22/2000	0001	AL		0.418	#	0.0001	-
	mg/L	0841	06/20/2000	0001	AL		0.0962	#	0.0001	-
	mg/L	0843	06/22/2000	0001	AL		0.0305	#	0.0001	-
	mg/L	0844	06/22/2000	0001	AL		0.084	#	0.0001	-
	mg/L	0846	06/22/2000	0001	AL		0.0456	#	0.0001	-
	mg/L	0847	06/23/2000	0001	AL		0.0238	#	0.0001	-
	mg/L	0848	06/23/2000	0001	AL		0.0448	#	0.0001	-
	mg/L	1002	06/22/2000	0001	KM		0.002	L #	0.0001	-
	mg/L	1003	06/22/2000	0001	KM		0.0079	L #	0.0001	-
	mg/L	1007	06/22/2000	0001	FL		1.020	L #	0.001	-
	mg/L	1048	06/21/2000	0001	QA		0.144	L #	0.0001	-
	mg/L	1049	06/21/2000	0001	QA		0.144	#	0.0001	-
	mg/L	1057	06/24/2000	0001	QA		0.109	#	0.0001	-
	mg/L	1058	06/25/2000	0001	KM		0.0093	L #	0.0001	-
	mg/L	1059	06/25/2000	0001	KM		0.0747	L #	0.0001	-
mg/L	1060	06/23/2000	0001	QA		0.187	L #	0.0001	-	
Uranium-234	pCi/L	0602	06/23/2000	0001	KM		329.3	L J #	0.16	± 44.9
	pCi/L	0602	06/23/2000	0002	KM		335.16	L J #	0.21	± 43.1
	pCi/L	0604	06/20/2000	0001	KM		0.06	U L #	0.06	± 0.06
	pCi/L	0726	06/25/2000	0001	KM		17.79	#	0.06	± 1.68
	pCi/L	0726	06/25/2000	0002	KM		18.19	#	0.06	± 1.60
	pCi/L	0727	06/24/2000	0001	KM		208.16	#	0.14	± 24.4
	pCi/L	0730	06/21/2000	0001	AL		0.6	L #	0.07	± 0.21
	pCi/L	0812	06/21/2000	0001	AL		122.38	L #	0.11	± 10.8

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Uranium-234	pCi/L	0827	06/25/2000	0001	AL		254.15	L JL #	0.17	± 32.7
	pCi/L	0828	06/24/2000	0001	AL		147.8	#	0.2	± 17.6
	pCi/L	0830	06/25/2000	0001	KM		3.23	L #	0.04	± 0.50
	pCi/L	0832	06/21/2000	0001	AL		51.24	L #	0.07	± 4.32
	pCi/L	0841	06/20/2000	0001	AL		69.68	#	0.04	± 4.93
	pCi/L	0847	06/23/2000	0001	AL		13.11	#	0.06	± 1.39
	pCi/L	0848	06/23/2000	0001	AL		30.92	#	0.08	± 3.04
	pCi/L	1049	06/21/2000	0001	QA		113.47	#	0.06	± 8.98
	pCi/L	1057	06/24/2000	0001	QA		58.19	#	0.06	± 4.72
	pCi/L	1059	06/25/2000	0001	KM		61.7	L #	0.06	± 4.63
	pCi/L	1060	06/23/2000	0001	QA		126.09	L #	0.08	± 10.6
	Uranium-235	pCi/L	0602	06/23/2000	0001	KM		10.82	L J #	0.16
pCi/L		0602	06/23/2000	0002	KM		13.1	L J #	0.18	± 2.30
pCi/L		0604	06/20/2000	0001	KM		0.04	U L #	0.04	± 0.04
pCi/L		0726	06/25/2000	0001	KM		0.5	#	0.03	± 0.18
pCi/L		0726	06/25/2000	0002	KM		0.41	#	0.04	± 0.16
pCi/L		0727	06/24/2000	0001	KM		6.99	#	0.12	± 1.32
pCi/L		0730	06/21/2000	0001	AL		0.04	UL #	0.03	± 0.05
pCi/L		0812	06/21/2000	0001	AL		2.82	L #	0.07	± 0.55
pCi/L		0827	06/25/2000	0001	AL		9.9	L JL #	0.16	± 1.86
pCi/L		0828	06/24/2000	0001	AL		6.27	#	0.14	± 1.24
pCi/L		0830	06/25/2000	0001	KM		0.15	L #	0.04	± 0.10
pCi/L		0832	06/21/2000	0001	AL		1.17	L #	0.05	± 0.30
pCi/L		0841	06/20/2000	0001	AL		1.44	#	0.01	± 0.29
pCi/L		0847	06/23/2000	0001	AL		0.36	#	0.04	± 0.16
pCi/L		0848	06/23/2000	0001	AL		0.67	#	0.09	± 0.25
pCi/L		1049	06/21/2000	0001	QA		2.35	#	0.05	± 0.44

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA			DETECTION LIMIT	UN-CERTAINTY
Uranium-235	pCi/L	1057	06/24/2000	0001	QA		2.03			#	0.04	± 0.39
	pCi/L	1059	06/25/2000	0001	KM		1.41	L		#	0.05	± 0.30
	pCi/L	1060	06/23/2000	0001	QA		2.96	L		#	0.05	± 0.54
Uranium-238	pCi/L	0602	06/23/2000	0001	KM		236.85	L	J	#	0.13	± 32.5
	pCi/L	0602	06/23/2000	0002	KM		242.58	L	J	#	0.13	± 31.4
	pCi/L	0604	06/20/2000	0001	KM		0.04	U	L	#	0.04	± 0.04
	pCi/L	0726	06/25/2000	0001	KM		7.22			#	0.05	± 0.86
	pCi/L	0726	06/25/2000	0002	KM		6.62			#	0.04	± 0.76
	pCi/L	0727	06/24/2000	0001	KM		119.37			#	0.1	± 14.2
	pCi/L	0730	06/21/2000	0001	AL		0.54		L	#	0.04	± 0.19
	pCi/L	0812	06/21/2000	0001	AL		52.9		L	#	0.06	± 4.97
	pCi/L	0827	06/25/2000	0001	AL		218.33	L	JL	#	0.14	± 28.2
	pCi/L	0828	06/24/2000	0001	AL		142.61			#	0.07	± 17.0
	pCi/L	0830	06/25/2000	0001	KM		2.86		L	#	0.04	± 0.47
	pCi/L	0832	06/21/2000	0001	AL		27.42		L	#	0.04	± 2.50
	pCi/L	0841	06/20/2000	0001	AL		30.51			#	0.04	± 2.35
	pCi/L	0847	06/23/2000	0001	AL		7.79			#	0.04	± 0.95
	pCi/L	0848	06/23/2000	0001	AL		14.99			#	0.04	± 1.68
	pCi/L	1049	06/21/2000	0001	QA		48.29			#	0.05	± 4.06
	pCi/L	1057	06/24/2000	0001	QA		40.1			#	0.04	± 3.37
	pCi/L	1059	06/25/2000	0001	KM		23.14		L	#	0.03	± 1.96
	pCi/L	1060	06/23/2000	0001	QA		63.77		L	#	0.06	± 5.60



GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:04

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
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RECORDS: SELECTED FROM USEE200 WHERE site\_code='SHP02' AND quality\_assurance = TRUE AND (NOT (data\_validation\_qualifiers LIKE "R" OR data\_validation\_qualifiers LIKE "X" ) OR IsNull(data\_validation\_qualifiers)) AND DATE\_SAMPLED between #6/10/2000# and #6/30/2000#

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.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- 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.
- I Increased detection limit due to required dilution.
- C Pesticide result confirmed by GC-MS.
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- S Result determined by method of standard addition (MSA).
- U Analytical result below detection limit.
- 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.
- Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- > Result above upper detection limit.
- J Estimated

DATA QUALIFIERS:

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

QA QUALIFIER: # = validated according to Quality Assurance guidelines.

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:06 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Alkalinity as CaCO3	mg/L	0655	06/13/2000	0001	185	#	-	-
	mg/L	0655	06/13/2000	N001	182	#	-	-
	mg/L	0658	06/13/2000	0001	126	#	-	-
	mg/L	0658	06/13/2000	N001	133	#	-	-
	mg/L	0887	06/19/2000	0001	135	#	-	-
	mg/L	0887	06/19/2000	N001	131	#	-	-
	mg/L	0894	06/13/2000	0001	83	#	-	-
	mg/L	0894	06/13/2000	N001	93	#	-	-
	mg/L	0939	06/19/2000	0001	156	#	-	-
	mg/L	0939	06/19/2000	N001	152	#	-	-
	mg/L	0940	06/20/2000	0001	98	#	-	-
	mg/L	0940	06/20/2000	N001	97	#	-	-
	mg/L	0956	06/16/2000	0001	113	#	-	-
	mg/L	0956	06/16/2000	N001	102	#	-	-
	mg/L	0957	06/19/2000	0001	95	#	-	-
	mg/L	0957	06/19/2000	N001	90	#	-	-
Ammonium	mg/L	0655	06/13/2000	0001	0.107	#	0.0047	-
	mg/L	0658	06/13/2000	0001	0.144	#	0.0047	-
	mg/L	0887	06/19/2000	0001	0.024 B	#	0.0047	-
	mg/L	0894	06/13/2000	0001	0.0047 U	#	0.0047	-
	mg/L	0939	06/19/2000	0001	0.0131 B	#	0.0047	-
	mg/L	0940	06/20/2000	0001	0.0082 B	#	0.0047	-
	mg/L	0956	06/16/2000	0001	0.0056 B	#	0.0047	-
	mg/L	0957	06/19/2000	0001	0.0075 B	#	0.0047	-
Antimony	mg/L	0655	06/13/2000	0001	0.0007 B	U #	0.0001	-
	mg/L	0658	06/13/2000	0001	0.0006 B	U #	0.0001	-
	mg/L	0887	06/19/2000	0001	0.0006 B	U #	0.0001	-
	mg/L	0894	06/13/2000	0001	0.0004 B	U #	0.0001	-
	mg/L	0939	06/19/2000	0001	0.0006 B	U #	0.0001	-
	mg/L	0940	06/20/2000	0001	0.0005 B	U #	0.0001	-
	mg/L	0956	06/16/2000	0001	0.0005 B	U #	0.0001	-
	mg/L	0957	06/19/2000	0001	0.0005 B	U #	0.0001	-
Arsenic	mg/L	0655	06/13/2000	0001	0.0003 U	#	0.0003	-
	mg/L	0658	06/13/2000	0001	0.0012 B	#	0.0003	-
	mg/L	0887	06/19/2000	0001	0.0003 B	#	0.0003	-
	mg/L	0894	06/13/2000	0001	0.0004 B	#	0.0003	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:06 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Arsenic	mg/L	0939	06/19/2000	0001	0.0003	B #	0.0003	-
	mg/L	0940	06/20/2000	0001	0.0004	B #	0.0003	-
	mg/L	0956	06/16/2000	0001	0.0004	B #	0.0003	-
	mg/L	0957	06/19/2000	0001	0.0003	U #	0.0003	-
Cadmium	mg/L	0655	06/13/2000	0001	0.0002	B #	0.0002	-
	mg/L	0658	06/13/2000	0001	0.0002	B #	0.0002	-
	mg/L	0887	06/19/2000	0001	0.0002	B U #	0.0002	-
	mg/L	0894	06/13/2000	0001	0.0002	B #	0.0002	-
	mg/L	0939	06/19/2000	0001	0.0002	B U #	0.0002	-
	mg/L	0940	06/20/2000	0001	0.0002	B U #	0.0002	-
	mg/L	0956	06/16/2000	0001	0.0002	B U #	0.0002	-
	mg/L	0957	06/19/2000	0001	0.0002	B U #	0.0002	-
Calcium	mg/L	0655	06/13/2000	0001	370.000	#	0.0504	-
	mg/L	0658	06/13/2000	0001	187.000	#	0.0504	-
	mg/L	0887	06/19/2000	0001	201.000	#	0.0504	-
	mg/L	0894	06/13/2000	0001	40.900	#	0.0504	-
	mg/L	0939	06/19/2000	0001	164.000	#	0.0504	-
	mg/L	0940	06/20/2000	0001	56.700	#	0.0504	-
	mg/L	0956	06/16/2000	0001	50.800	#	0.0504	-
	mg/L	0957	06/19/2000	0001	54.700	#	0.0504	-
Chloride	mg/L	0655	06/13/2000	0001	106.000	#	0.24	-
	mg/L	0658	06/13/2000	0001	72.700	#	0.24	-
	mg/L	0887	06/19/2000	0001	45.600	#	0.048	-
	mg/L	0894	06/13/2000	0001	8.060	#	0.024	-
	mg/L	0939	06/19/2000	0001	19.600	#	0.048	-
	mg/L	0940	06/20/2000	0001	13.200	#	0.024	-
	mg/L	0956	06/16/2000	0001	11.000	#	0.024	-
	mg/L	0957	06/19/2000	0001	12.600	#	0.024	-
Fluoride	mg/L	0655	06/13/2000	0001	1.660	#	0.125	-
	mg/L	0658	06/13/2000	0001	2.450	#	0.125	-
	mg/L	0887	06/19/2000	0001	0.323	#	0.025	-
	mg/L	0894	06/13/2000	0001	0.235	#	0.0125	-
	mg/L	0939	06/19/2000	0001	0.385	#	0.025	-
	mg/L	0940	06/20/2000	0001	0.314	#	0.0125	-
	mg/L	0956	06/16/2000	0001	0.307	#	0.0125	-
	mg/L	0957	06/19/2000	0001	0.310	#	0.0125	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:06 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Gross Alpha	pCi/L	0655	06/13/2000	0001	52.23	U #	52.23	± 28.8
	pCi/L	0658	06/13/2000	0001	38.21	U #	38.21	± 20.5
	pCi/L	0887	06/19/2000	0001	15.36	U #	15.36	± 10.2
	pCi/L	0894	06/13/2000	0001	3.27	U #	3.27	± 1.74
	pCi/L	0939	06/19/2000	0001	10.04	U #	10.04	± 6.07
	pCi/L	0940	06/20/2000	0001	3.89	U #	3.89	± 2.35
	pCi/L	0956	06/16/2000	0001	3.60	U #	3.6	± 2.17
	pCi/L	0957	06/19/2000	0001	3.72	U #	3.72	± 2.11
Gross Beta	pCi/L	0655	06/13/2000	0001	52.25	U #	52.25	± 30.9
	pCi/L	0658	06/13/2000	0001	41.35	U #	41.35	± 23.9
	pCi/L	0887	06/19/2000	0001	15.69	U #	15.69	± 9.44
	pCi/L	0894	06/13/2000	0001	4.07	U #	4.07	± 2.31
	pCi/L	0939	06/19/2000	0001	10.42	U #	10.42	± 6.14
	pCi/L	0940	06/20/2000	0001	4.15	U #	4.15	± 2.45
	pCi/L	0956	06/16/2000	0001	4.11	U #	4.11	± 2.50
	pCi/L	0957	06/19/2000	0001	4.13	U #	4.13	± 2.44
Iron	mg/L	0655	06/13/2000	0001	0.0091	U #	0.0091	-
	mg/L	0658	06/13/2000	0001	0.0756	#	0.0091	-
	mg/L	0887	06/19/2000	0001	0.0228	B U #	0.0091	-
	mg/L	0894	06/13/2000	0001	0.0091	U #	0.0091	-
	mg/L	0939	06/19/2000	0001	0.0091	U #	0.0091	-
	mg/L	0940	06/20/2000	0001	0.0091	U #	0.0091	-
	mg/L	0956	06/16/2000	0001	0.0091	U #	0.0091	-
	mg/L	0957	06/19/2000	0001	0.0091	U #	0.0091	-
Magnesium	mg/L	0655	06/13/2000	0001	235.000	#	0.024	-
	mg/L	0658	06/13/2000	0001	40.900	#	0.024	-
	mg/L	0887	06/19/2000	0001	101.000	#	0.024	-
	mg/L	0894	06/13/2000	0001	7.340	#	0.024	-
	mg/L	0939	06/19/2000	0001	51.400	#	0.024	-
	mg/L	0940	06/20/2000	0001	11.600	#	0.024	-
	mg/L	0956	06/16/2000	0001	8.640	#	0.024	-
	mg/L	0957	06/19/2000	0001	9.910	#	0.024	-
Manganese	mg/L	0655	06/13/2000	0001	0.0364	#	0.0015	-
	mg/L	0658	06/13/2000	0001	0.0781	#	0.0015	-
	mg/L	0887	06/19/2000	0001	0.0068	B #	0.0015	-
	mg/L	0894	06/13/2000	0001	0.0108	#	0.0015	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:06 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE DATE	SAMPLE ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Manganese	mg/L	0939	06/19/2000	0001	0.193	#	0.0015	-
	mg/L	0940	06/20/2000	0001	0.0052 B	#	0.0015	-
	mg/L	0956	06/16/2000	0001	0.0152	#	0.0015	-
	mg/L	0957	06/19/2000	0001	0.0036 B	#	0.0015	-
Molybdenum	mg/L	0655	06/13/2000	0001	0.0097 B	#	0.0003	-
	mg/L	0658	06/13/2000	0001	0.005 B	#	0.0003	-
	mg/L	0887	06/19/2000	0001	0.0066 B	#	0.0003	-
	mg/L	0894	06/13/2000	0001	0.0019 B	U #	0.0003	-
	mg/L	0939	06/19/2000	0001	0.0045 B	#	0.0003	-
	mg/L	0940	06/20/2000	0001	0.0024 B	U #	0.0003	-
	mg/L	0956	06/16/2000	0001	0.0022 B	U #	0.0003	-
	mg/L	0957	06/19/2000	0001	0.0022 B	U #	0.0003	-
Nitrate	mg/L	0655	06/13/2000	0001	18.600	#	0.0314	-
	mg/L	0658	06/13/2000	0001	0.0314 U	#	0.0314	-
	mg/L	0887	06/19/2000	0001	116.000	#	0.0628	-
	mg/L	0894	06/13/2000	0001	0.391 B	#	0.0314	-
	mg/L	0939	06/19/2000	0001	5.920	#	0.0314	-
	mg/L	0940	06/20/2000	0001	0.781 B	#	0.0314	-
	mg/L	0956	06/16/2000	0001	0.394 B	#	0.0314	-
	mg/L	0957	06/19/2000	0001	0.0708 B	#	0.0314	-
ORP of Zobell Solution	mV	0655	06/13/2000	N001	216	#	-	-
	mV	0658	06/13/2000	N001	221	#	-	-
	mV	0887	06/19/2000	N001	223	#	-	-
	mV	0894	06/13/2000	N001	216	#	-	-
	mV	0939	06/19/2000	N001	238	#	-	-
	mV	0940	06/20/2000	N001	222	#	-	-
	mV	0956	06/16/2000	N001	222	#	-	-
	mV	0957	06/19/2000	N001	238	#	-	-
Oxidation Reduction Potenti	mV	0655	06/13/2000	N001	178	#	-	-
	mV	0658	06/13/2000	N001	-260	#	-	-
	mV	0887	06/19/2000	N001	193	#	-	-
	mV	0894	06/13/2000	N001	116	#	-	-
	mV	0939	06/19/2000	N001	53	#	-	-
	mV	0940	06/20/2000	N001	199	#	-	-
	mV	0956	06/16/2000	N001	154	#	-	-
	mV	0957	06/19/2000	N001	56	#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:06 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
pH	s.u.	0655	06/13/2000	N001	8.15	#	-	-
	s.u.	0658	06/13/2000	N001	8.13	#	-	-
	s.u.	0887	06/19/2000	N001	7.93	#	-	-
	s.u.	0894	06/13/2000	N001	8.4	#	-	-
	s.u.	0939	06/19/2000	N001	7.76	#	-	-
	s.u.	0940	06/20/2000	N001	8.62	#	-	-
	s.u.	0956	06/16/2000	N001	8.17	#	-	-
	s.u.	0957	06/19/2000	N001	8.58	#	-	-
Polonium-210	pCi/L	0655	06/13/2000	0001	0.16	U #	0.16	± 0.19
	pCi/L	0658	06/13/2000	0001	0.29	U #	0.29	± 0.22
	pCi/L	0887	06/19/2000	0001	0.26	U #	0.26	± 0.26
	pCi/L	0894	06/13/2000	0001	0.21	U #	0.21	± 0.16
	pCi/L	0939	06/19/2000	0001	0.33	U #	0.33	± 0.32
	pCi/L	0940	06/20/2000	0001	0.39	U #	0.39	± 0.36
	pCi/L	0956	06/16/2000	0001	0.27	U #	0.27	± 0.25
	pCi/L	0957	06/19/2000	0001	0.25	U #	0.25	± 0.23
Potassium	mg/L	0655	06/13/2000	0001	17.200	#	0.0456	-
	mg/L	0658	06/13/2000	0001	11.400	#	0.0456	-
	mg/L	0887	06/19/2000	0001	5.390	#	0.0456	-
	mg/L	0894	06/13/2000	0001	1.840	#	0.0456	-
	mg/L	0939	06/19/2000	0001	4.110	#	0.0456	-
	mg/L	0940	06/20/2000	0001	2.160	#	0.0456	-
	mg/L	0956	06/16/2000	0001	2.000	#	0.0456	-
	mg/L	0957	06/19/2000	0001	2.200	#	0.0456	-
Radium-226	pCi/L	0655	06/13/2000	0001	0.14	U #	0.14	± 0.08
	pCi/L	0658	06/13/2000	0001	0.38	#	0.15	± 0.11
	pCi/L	0887	06/19/2000	0001	0.12	U #	0.12	± 0.07
	pCi/L	0894	06/13/2000	0001	0.15	U #	0.15	± 0.09
	pCi/L	0939	06/19/2000	0001	0.13	#	0.12	± 0.08
	pCi/L	0940	06/20/2000	0001	0.11	U #	0.11	± 0.07
	pCi/L	0956	06/16/2000	0001	0.14	U #	0.14	± 0.08
	pCi/L	0957	06/19/2000	0001	0.13	U #	0.13	± 0.08
Radium-228	pCi/L	0655	06/13/2000	0001	0.95	U #	0.95	± 0.56
	pCi/L	0658	06/13/2000	0001	0.94	U #	0.94	± 0.55
	pCi/L	0887	06/19/2000	0001	0.66	U #	0.66	± 0.39
	pCi/L	0894	06/13/2000	0001	0.95	U #	0.95	± 0.56

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:06 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Radium-228	pCi/L	0939	06/19/2000	0001	0.68	U	# 0.68	± 0.40
	pCi/L	0940	06/20/2000	0001	0.63	U	# 0.63	± 0.37
	pCi/L	0956	06/16/2000	0001	0.78	U	# 0.78	± 0.45
	pCi/L	0957	06/19/2000	0001	0.74	U	# 0.74	± 0.43
Selenium	mg/L	0655	06/13/2000	0001	0.0329		# 0.0002	-
	mg/L	0658	06/13/2000	0001	0.0016	B	# 0.0001	-
	mg/L	0887	06/19/2000	0001	0.0881		# 0.001	-
	mg/L	0894	06/13/2000	0001	0.0003	B	# 0.0001	-
	mg/L	0939	06/19/2000	0001	0.0155		# 0.0001	-
	mg/L	0940	06/20/2000	0001	0.0006	B	# 0.0001	-
	mg/L	0956	06/16/2000	0001	0.0004	B	# 0.0001	-
	mg/L	0957	06/19/2000	0001	0.0001	U	# 0.0001	-
Sodium	mg/L	0655	06/13/2000	0001	1180.000		# 4.34	-
	mg/L	0658	06/13/2000	0001	1040.000		# 4.34	-
	mg/L	0887	06/19/2000	0001	162.000		# 0.434	-
	mg/L	0894	06/13/2000	0001	19.600		# 0.434	-
	mg/L	0939	06/19/2000	0001	77.400		# 0.434	-
	mg/L	0940	06/20/2000	0001	34.800		# 0.434	-
	mg/L	0956	06/16/2000	0001	25.700		# 0.434	-
	mg/L	0957	06/19/2000	0001	31.100		# 0.434	-
Specific Conductance	umhos/cm	0655	06/13/2000	N001	5810		# -	-
	umhos/cm	0658	06/13/2000	N001	5140		# -	-
	umhos/cm	0887	06/19/2000	N001	2110		# -	-
	umhos/cm	0894	06/13/2000	N001	411		# -	-
	umhos/cm	0939	06/19/2000	N001	1460		# -	-
	umhos/cm	0940	06/20/2000	N001	594		# -	-
	umhos/cm	0956	06/16/2000	N001	456		# -	-
	umhos/cm	0957	06/19/2000	N001	510		# -	-
Strontium	mg/L	0655	06/13/2000	0001	11.200		# 0.001	-
	mg/L	0658	06/13/2000	0001	11.100		# 0.001	-
	mg/L	0887	06/19/2000	0001	2.310		# 0.0001	-
	mg/L	0894	06/13/2000	0001	0.472		# 0.0001	-
	mg/L	0939	06/19/2000	0001	1.770		# 0.0001	-
	mg/L	0940	06/20/2000	0001	0.696		# 0.0001	-
	mg/L	0956	06/16/2000	0001	0.583		# 0.0001	-
	mg/L	0957	06/19/2000	0001	0.666		# 0.0001	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:06 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0655	06/13/2000	0001	4100.000	#	0.589	-
	mg/L	0658	06/13/2000	0001	2710.000	#	0.589	-
	mg/L	0887	06/19/2000	0001	947.000	#	0.1178	-
	mg/L	0894	06/13/2000	0001	73.500	#	0.0589	-
	mg/L	0939	06/19/2000	0001	592.000	#	0.1178	-
	mg/L	0940	06/20/2000	0001	138.000	#	0.0589	-
	mg/L	0956	06/16/2000	0001	102.000	#	0.0589	-
	mg/L	0957	06/19/2000	0001	119.000	#	0.0589	-
Temperature	C	0655	06/13/2000	N001	19.4	#	-	-
	C	0658	06/13/2000	N001	34.5	#	-	-
	C	0887	06/19/2000	N001	29.3	#	-	-
	C	0894	06/13/2000	N001	20.5	#	-	-
	C	0939	06/19/2000	N001	24.5	#	-	-
	C	0940	06/20/2000	N001	20.3	#	-	-
	C	0956	06/16/2000	N001	20	#	-	-
	C	0957	06/19/2000	N001	24	#	-	-
Temperature of Zobell Soluti	C	0655	06/13/2000	N001	28.6	#	-	-
	C	0658	06/13/2000	N001	26	#	-	-
	C	0887	06/19/2000	N001	24.3	#	-	-
	C	0894	06/13/2000	N001	28.6	#	-	-
	C	0939	06/19/2000	N001	17.9	#	-	-
	C	0940	06/20/2000	N001	24.5	#	-	-
	C	0956	06/16/2000	N001	24	#	-	-
	C	0957	06/19/2000	N001	17.9	#	-	-
Total Dissolved Solids	mg/L	0655	06/13/2000	0001	6500	#	10	-
	mg/L	0658	06/13/2000	0001	4260	#	10	-
	mg/L	0887	06/19/2000	0001	1830	J	10	-
	mg/L	0894	06/13/2000	0001	210	#	10	-
	mg/L	0939	06/19/2000	0001	1120	J	10	-
	mg/L	0940	06/20/2000	0001	362	J	10	-
	mg/L	0956	06/16/2000	0001	297	#	10	-
	mg/L	0957	06/19/2000	0001	330	J	10	-
Turbidity	NTU	0939	06/19/2000	N001	6.36	#	-	-
	NTU	0957	06/19/2000	N001	6.75	#	-	-
Uranium	mg/L	0655	06/13/2000	0001	0.0446	#	0.0001	-
	mg/L	0658	06/13/2000	0001	0.0134	#	0.0001	-



SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:06 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Uranium	mg/L	0887	06/19/2000	0001	0.0174	#	0.0001	-
	mg/L	0894	06/13/2000	0001	0.001	#	0.0001	-
	mg/L	0939	06/19/2000	0001	0.0085	#	0.0001	-
	mg/L	0940	06/20/2000	0001	0.0035	#	0.0001	-
	mg/L	0956	06/16/2000	0001	0.0015	#	0.0001	-
	mg/L	0957	06/19/2000	0001	0.0016	#	0.0001	-
Uranium-234	pCi/L	0939	06/19/2000	0001	4.83	#	0.06	± 0.66
	pCi/L	0956	06/16/2000	0001	0.69	#	0.05	± 0.19
Uranium-235	pCi/L	0939	06/19/2000	0001	0.16	U	0.04	± 0.11
	pCi/L	0956	06/16/2000	0001	0.04	U	0.04	± 0.05
Uranium-238	pCi/L	0939	06/19/2000	0001	2.95	#	0.03	± 0.49
	pCi/L	0956	06/16/2000	0001	0.39	#	0.04	± 0.15

RECORDS: SELECTED FROM USEE800 WHERE site\_code='SHP01' AND quality\_assurance = TRUE AND (NOT (data\_validation\_qualifiers LIKE "R" OR data\_validation\_qualifiers LIKE "X" ) OR IsNull(data\_validation\_qualifiers)) AND DATE\_SAMPLED between #6/10/2000# and #6/30/2000#

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.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- 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.
- I Increased detection limit due to required dilution.
- C Pesticide result confirmed by GC-MS.
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- S Result determined by method of standard addition (MSA).
- U Analytical result below detection limit.
- 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.
- Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- > Result above upper detection limit.
- J Estimated

DATA QUALIFIERS:

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

QA QUALIFIER: # = validated according to Quality Assurance guidelines.

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY	
Alkalinity as CaCO3	mg/L	0425	06/16/2000	0001	390	#	-	-	
	mg/L	0425	06/16/2000	N001	376	#	-	-	
	mg/L	0426	06/13/2000	0001	378	#	-	-	
	mg/L	0426	06/13/2000	N001	374	#	-	-	
	mg/L	0662	06/20/2000	0001	80	#	-	-	
	mg/L	0662	06/20/2000	N001	86	#	-	-	
	mg/L	0786	06/13/2000	0001	332	#	-	-	
	mg/L	0786	06/13/2000	N001	332	#	-	-	
	mg/L	0885	06/20/2000	0001	360	#	-	-	
	mg/L	0885	06/20/2000	N001	358	#	-	-	
	mg/L	0886	06/20/2000	0001	665	#	-	-	
	mg/L	0886	06/20/2000	N001	645	#	-	-	
	mg/L	0889	06/20/2000	0001	542	#	-	-	
	mg/L	0889	06/20/2000	N001	530	#	-	-	
	mg/L	0933	06/15/2000	0001	380	#	-	-	
	mg/L	0933	06/15/2000	N001	400	#	-	-	
	mg/L	0934	06/15/2000	0001	278	#	-	-	
	mg/L	0934	06/15/2000	N001	391	#	-	-	
	mg/L	0935	06/15/2000	0001	284	#	-	-	
	mg/L	0935	06/15/2000	N001	286	#	-	-	
	mg/L	0936	06/15/2000	0001	451	#	-	-	
	mg/L	0936	06/15/2000	N001	375	#	-	-	
	mg/L	0942	06/19/2000	0001	285	#	-	-	
	mg/L	0942	06/19/2000	N001	275	#	-	-	
	mg/L	0958	06/15/2000	0001	87	#	-	-	
	mg/L	0958	06/15/2000	N001	82	#	-	-	
	Ammonium	mg/L	0425	06/16/2000	0001	0.116	#	0.0047	-
		mg/L	0425	06/16/2000	0002	0.106	#	0.0047	-
mg/L		0426	06/13/2000	0001	0.0054 B	#	0.0047	-	
mg/L		0662	06/20/2000	0001	0.0082 B	#	0.0047	-	
mg/L		0662	06/20/2000	0002	0.0082 B	#	0.0047	-	
mg/L		0786	06/13/2000	0001	0.0047 U	#	0.0047	-	
mg/L		0885	06/20/2000	0001	0.261	#	0.0047	-	
mg/L		0886	06/20/2000	0001	0.169	#	0.0047	-	
mg/L		0889	06/20/2000	0001	1.140	#	0.0047	-	
mg/L		0933	06/15/2000	0001	0.0713 B	#	0.0047	-	
mg/L		0934	06/15/2000	0001	0.397	#	0.0047	-	

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE:		RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID		LAB	DATA	QA		
Ammonium	mg/L	0935	06/15/2000	0001	0.045	B		#	0.0047	-
	mg/L	0936	06/15/2000	0001	0.0266	B		#	0.0047	-
	mg/L	0942	06/19/2000	0001	0.106			#	0.0047	-
	mg/L	0958	06/15/2000	0001	0.0047	U		#	0.0047	-
Antimony	mg/L	0425	06/16/2000	0001	0.0005	B	U	#	0.0001	-
	mg/L	0425	06/16/2000	0002	0.0004	B	U	#	0.0001	-
	mg/L	0426	06/13/2000	0001	0.0004	B	U	#	0.0001	-
	mg/L	0662	06/20/2000	0001	0.0004	B	U	#	0.0001	-
	mg/L	0662	06/20/2000	0002	0.0005	B	U	#	0.0001	-
	mg/L	0786	06/13/2000	0001	0.0006	B	U	#	0.0001	-
	mg/L	0885	06/20/2000	0001	0.0009	B	U	#	0.0001	-
	mg/L	0886	06/20/2000	0001	0.0008	B	U	#	0.0001	-
	mg/L	0889	06/20/2000	0001	0.0026	B	U	#	0.0001	-
	mg/L	0933	06/15/2000	0001	0.0014	B	U	#	0.0001	-
	mg/L	0934	06/15/2000	0001	0.0007	B	U	#	0.0001	-
	mg/L	0935	06/15/2000	0001	0.0007	B	U	#	0.0001	-
	mg/L	0936	06/15/2000	0001	0.0007	B	U	#	0.0001	-
	mg/L	0942	06/19/2000	0001	0.0004	B	U	#	0.0001	-
mg/L	0958	06/15/2000	0001	0.0005	B	U	#	0.0001	-	
Arsenic	mg/L	0425	06/16/2000	0001	0.0003	U		#	0.0003	-
	mg/L	0425	06/16/2000	0002	0.0003	U		#	0.0003	-
	mg/L	0426	06/13/2000	0001	0.0003	U		#	0.0003	-
	mg/L	0662	06/20/2000	0001	0.0005	B		#	0.0003	-
	mg/L	0662	06/20/2000	0002	0.0005	B		#	0.0003	-
	mg/L	0786	06/13/2000	0001	0.0003	U		#	0.0003	-
	mg/L	0885	06/20/2000	0001	0.0007	B		#	0.0003	-
	mg/L	0886	06/20/2000	0001	0.0003	B		#	0.0003	-
	mg/L	0889	06/20/2000	0001	0.0003	U		#	0.0003	-
	mg/L	0933	06/15/2000	0001	0.0003	B		#	0.0003	-
	mg/L	0934	06/15/2000	0001	0.0003	B		#	0.0003	-
	mg/L	0935	06/15/2000	0001	0.0003	U		#	0.0003	-
	mg/L	0936	06/15/2000	0001	0.0003	U		#	0.0003	-
	mg/L	0942	06/19/2000	0001	0.0003	U		#	0.0003	-
mg/L	0958	06/15/2000	0001	0.0003	B		#	0.0003	-	
Cadmium	mg/L	0425	06/16/2000	0001	0.0005	B	U	#	0.0002	-
	mg/L	0425	06/16/2000	0002	0.0006	B	U	#	0.0002	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE:		RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID		LAB	DATA	QA		
Cadmium	mg/L	0426	06/13/2000	0001	0.0003 B			#	0.0002	-
	mg/L	0662	06/20/2000	0001	0.0002 B	U		#	0.0002	-
	mg/L	0662	06/20/2000	0002	0.0002 B	U		#	0.0002	-
	mg/L	0786	06/13/2000	0001	0.0003 B			#	0.0002	-
	mg/L	0885	06/20/2000	0001	0.0003 B	U		#	0.0002	-
	mg/L	0886	06/20/2000	0001	0.0004 B	U		#	0.0002	-
	mg/L	0889	06/20/2000	0001	0.0003 B	U		#	0.0002	-
	mg/L	0933	06/15/2000	0001	0.0003 B	U		#	0.0002	-
	mg/L	0934	06/15/2000	0001	0.0002 B			#	0.0002	-
	mg/L	0935	06/15/2000	0001	0.0005 B	U		#	0.0002	-
	mg/L	0936	06/15/2000	0001	0.0005 B	U		#	0.0002	-
	mg/L	0942	06/19/2000	0001	0.0003 B	U		#	0.0002	-
	mg/L	0958	06/15/2000	0001	0.0002 B			#	0.0002	-
Calcium	mg/L	0425	06/16/2000	0001	492.000			#	0.0504	-
	mg/L	0425	06/16/2000	0002	494.000			#	0.0504	-
	mg/L	0426	06/13/2000	0001	442.000			#	0.0504	-
	mg/L	0662	06/20/2000	0001	160.000			#	0.0504	-
	mg/L	0662	06/20/2000	0002	152.000			#	0.0504	-
	mg/L	0786	06/13/2000	0001	459.000			#	0.0504	-
	mg/L	0885	06/20/2000	0001	410.000			#	0.0504	-
	mg/L	0886	06/20/2000	0001	446.000			#	0.0504	-
	mg/L	0889	06/20/2000	0001	491.000			#	0.504	-
	mg/L	0933	06/15/2000	0001	505.000			#	0.504	-
	mg/L	0934	06/15/2000	0001	451.000			#	0.0504	-
	mg/L	0935	06/15/2000	0001	483.000			#	0.0504	-
	mg/L	0936	06/15/2000	0001	524.000			#	0.504	-
mg/L	0942	06/19/2000	0001	521.000			#	0.504	-	
mg/L	0958	06/15/2000	0001	49.400			#	0.0504	-	
Chloride	mg/L	0425	06/16/2000	0001	127.000			#	0.12	-
	mg/L	0425	06/16/2000	0002	127.000			#	0.12	-
	mg/L	0426	06/13/2000	0001	162.000			#	0.24	-
	mg/L	0662	06/20/2000	0001	58.400			#	0.12	-
	mg/L	0662	06/20/2000	0002	58.600			#	0.12	-
	mg/L	0786	06/13/2000	0001	171.000			#	0.24	-
	mg/L	0885	06/20/2000	0001	234.000			#	0.24	-
	mg/L	0886	06/20/2000	0001	1210.000			#	0.48	-
	mg/L	0889	06/20/2000	0001	2250.000			#	1.2	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Chloride	mg/L	0933	06/15/2000	0001	199.000	#	0.12	-
	mg/L	0934	06/15/2000	0001	40.200	#	0.12	-
	mg/L	0935	06/15/2000	0001	175.000	#	0.12	-
	mg/L	0936	06/15/2000	0001	77.900	#	0.12	-
	mg/L	0942	06/19/2000	0001	43.900	#	0.12	-
	mg/L	0958	06/15/2000	0001	10.000	#	0.024	-
Fluoride	mg/L	0425	06/16/2000	0001	0.675	#	0.0625	-
	mg/L	0425	06/16/2000	0002	0.614	#	0.0625	-
	mg/L	0426	06/13/2000	0001	1.330	#	0.125	-
	mg/L	0662	06/20/2000	0001	2.550	#	0.0625	-
	mg/L	0662	06/20/2000	0002	2.600	#	0.0625	-
	mg/L	0786	06/13/2000	0001	0.531 B	#	0.125	-
	mg/L	0885	06/20/2000	0001	1.160	#	0.125	-
	mg/L	0886	06/20/2000	0001	0.563 B	#	0.25	-
	mg/L	0889	06/20/2000	0001	0.938 B	#	0.625	-
	mg/L	0933	06/15/2000	0001	0.571	#	0.0625	-
	mg/L	0934	06/15/2000	0001	0.549	#	0.0625	-
	mg/L	0935	06/15/2000	0001	0.639	#	0.0625	-
	mg/L	0936	06/15/2000	0001	0.475 B	#	0.0625	-
	mg/L	0942	06/19/2000	0001	1.570	#	0.0625	-
	mg/L	0958	06/15/2000	0001	0.269	#	0.0125	-
Gross Alpha	pCi/L	0425	06/16/2000	0001	287.13	#	51.03	± 56.8
	pCi/L	0425	06/16/2000	0002	222.97	#	50.29	± 51.2
	pCi/L	0426	06/13/2000	0001	172.73	#	62.15	± 53.7
	pCi/L	0662	06/20/2000	0001	29.83 U	#	29.83	± 17.4
	pCi/L	0662	06/20/2000	0002	29.97 U	#	29.97	± 16.1
	pCi/L	0786	06/13/2000	0001	58.21 U	#	58.21	± 32.8
	pCi/L	0885	06/20/2000	0001	1198.89	#	89.75	± 143.
	pCi/L	0886	06/20/2000	0001	303.39 U	#	303.39	± 171.
	pCi/L	0889	06/20/2000	0001	598.35 U	#	598.35	± 350.
	pCi/L	0933	06/15/2000	0001	58.34 U	#	58.34	± 35.3
	pCi/L	0934	06/15/2000	0001	24.28 U	#	24.28	± 15.7
	pCi/L	0935	06/15/2000	0001	79.69	#	59.28	± 42.2
	pCi/L	0936	06/15/2000	0001	44.38	#	39.48	± 27.0
	pCi/L	0942	06/19/2000	0001	35.16	#	31.05	± 21.2
	pCi/L	0958	06/15/2000	0001	3.43 U	#	3.43	± 1.82

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION		SAMPLE:		RESULT	QUALIFIERS:		DETECTION LIMIT	UN-CERTAINTY
		ID	DATE	ID	DATE		LAB	DATA QA		
Gross Beta	pCi/L	0425	06/16/2000	0001		146.26		#	53.36	± 37.5
	pCi/L	0425	06/16/2000	0002		109.68		#	53	± 35.7
	pCi/L	0426	06/13/2000	0001		137		#	63.3	± 42.9
	pCi/L	0662	06/20/2000	0001		31.20	U	#	31.2	± 18.3
	pCi/L	0662	06/20/2000	0002		31.18	U	#	31.18	± 17.8
	pCi/L	0786	06/13/2000	0001		62.15	U	#	62.15	± 37.3
	pCi/L	0885	06/20/2000	0001		690.67		#	94.9	± 84.2
	pCi/L	0886	06/20/2000	0001		312.18	U	#	312.18	± 190.
	pCi/L	0889	06/20/2000	0001		624.16	U	#	624.16	± 367.
	pCi/L	0933	06/15/2000	0001		62.28	U	#	62.28	± 36.4
	pCi/L	0934	06/15/2000	0001		25.07	U	#	25.07	± 14.5
	pCi/L	0935	06/15/2000	0001		62.6	U	#	62.66	± 35.9
	pCi/L	0936	06/15/2000	0001		41.73	U	#	41.73	± 23.7
	pCi/L	0942	06/19/2000	0001		31.44	U	#	31.44	± 19.4
	pCi/L	0958	06/15/2000	0001		4.09	U	#	4.09	± 2.33
Iron	mg/L	0425	06/16/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0425	06/16/2000	0002		0.0091	U	#	0.0091	-
	mg/L	0426	06/13/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0662	06/20/2000	0001		0.0342	U	#	0.0091	-
	mg/L	0662	06/20/2000	0002		0.0218	B U	#	0.0091	-
	mg/L	0786	06/13/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0885	06/20/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0886	06/20/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0889	06/20/2000	0001		0.0436	U	#	0.0091	-
	mg/L	0933	06/15/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0934	06/15/2000	0001		0.0448	U	#	0.0091	-
	mg/L	0935	06/15/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0936	06/15/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0942	06/19/2000	0001		0.0091	U	#	0.0091	-
	mg/L	0958	06/15/2000	0001		0.0091	U	#	0.0091	-
Magnesium	mg/L	0425	06/16/2000	0001		315.000		#	0.024	-
	mg/L	0425	06/16/2000	0002		321.000		#	0.024	-
	mg/L	0426	06/13/2000	0001		284.000		#	0.024	-
	mg/L	0662	06/20/2000	0001		21.900		#	0.024	-
	mg/L	0662	06/20/2000	0002		21.700		#	0.024	-
	mg/L	0786	06/13/2000	0001		455.000		#	0.024	-
	mg/L	0885	06/20/2000	0001		554.000		#	0.24	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Magnesium	mg/L	0886	06/20/2000	0001	1010.000	#	0.48	-
	mg/L	0889	06/20/2000	0001	2180.000	#	0.24	-
	mg/L	0933	06/15/2000	0001	474.000	#	0.024	-
	mg/L	0934	06/15/2000	0001	128.000	#	0.024	-
	mg/L	0935	06/15/2000	0001	485.000	#	0.24	-
	mg/L	0936	06/15/2000	0001	275.000	#	0.024	-
	mg/L	0942	06/19/2000	0001	182.000	#	0.024	-
	mg/L	0958	06/15/2000	0001	7.720	#	0.024	-
Manganese	mg/L	0425	06/16/2000	0001	0.0479	#	0.0015	-
	mg/L	0425	06/16/2000	0002	0.0448	#	0.0015	-
	mg/L	0426	06/13/2000	0001	0.0988	#	0.0015	-
	mg/L	0662	06/20/2000	0001	0.0106	#	0.0015	-
	mg/L	0662	06/20/2000	0002	0.0125	#	0.0015	-
	mg/L	0786	06/13/2000	0001	0.0043 B	U	#	0.0015
	mg/L	0885	06/20/2000	0001	0.0447	#	0.0015	-
	mg/L	0886	06/20/2000	0001	0.0264	#	0.0015	-
	mg/L	0889	06/20/2000	0001	0.0196	#	0.0015	-
	mg/L	0933	06/15/2000	0001	0.130	#	0.0015	-
	mg/L	0934	06/15/2000	0001	0.015	#	0.0015	-
	mg/L	0935	06/15/2000	0001	0.0099 B	#	0.0015	-
	mg/L	0936	06/15/2000	0001	0.0223	#	0.0015	-
	mg/L	0942	06/19/2000	0001	0.0644	#	0.0015	-
	mg/L	0958	06/15/2000	0001	0.0053 B	U	#	0.0015
	Molybdenum	mg/L	0425	06/16/2000	0001	0.0069 B	#	0.0003
mg/L		0425	06/16/2000	0002	0.0061 B	#	0.0003	-
mg/L		0426	06/13/2000	0001	0.0121	#	0.0003	-
mg/L		0662	06/20/2000	0001	0.0065 B	#	0.0003	-
mg/L		0662	06/20/2000	0002	0.0063 B	#	0.0003	-
mg/L		0786	06/13/2000	0001	0.0053 B	#	0.0003	-
mg/L		0885	06/20/2000	0001	0.0316	#	0.0003	-
mg/L		0886	06/20/2000	0001	0.0243	#	0.0003	-
mg/L		0889	06/20/2000	0001	0.0718	#	0.0003	-
mg/L		0933	06/15/2000	0001	0.0082 B	#	0.0003	-
mg/L		0934	06/15/2000	0001	0.0039 B	U	#	0.0003
mg/L		0935	06/15/2000	0001	0.0121	#	0.0003	-
mg/L		0936	06/15/2000	0001	0.008 B	#	0.0003	-
mg/L		0942	06/19/2000	0001	0.0074 B	#	0.0003	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY	
Molybdenum	mg/L	0958	06/15/2000	0001	0.002	B U #	0.0003	-	
Nitrate	mg/L	0425	06/16/2000	0001	178.000	#	0.157	-	
	mg/L	0425	06/16/2000	0002	178.000	#	0.157	-	
	mg/L	0426	06/13/2000	0001	182.000	#	0.0628	-	
	mg/L	0662	06/20/2000	0001	0.731	B #	0.0314	-	
	mg/L	0662	06/20/2000	0002	0.745	B #	0.0314	-	
	mg/L	0786	06/13/2000	0001	319.000	#	0.157	-	
	mg/L	0885	06/20/2000	0001	34.700	#	0.0314	-	
	mg/L	0886	06/20/2000	0001	3150.000	#	1.57	-	
	mg/L	0889	06/20/2000	0001	6750.000	#	3.14	-	
	mg/L	0933	06/15/2000	0001	500.000	#	0.314	-	
	mg/L	0934	06/15/2000	0001	90.000	#	0.0628	-	
	mg/L	0935	06/15/2000	0001	451.000	#	0.314	-	
	mg/L	0936	06/15/2000	0001	234.000	#	0.157	-	
	mg/L	0942	06/19/2000	0001	91.300	#	0.0628	-	
	mg/L	0958	06/15/2000	0001	0.517	B #	0.0314	-	
ORP of Zobell Solution	mV	0425	06/16/2000	N001	223	#	-	-	
	mV	0426	06/13/2000	N001	221	#	-	-	
	mV	0662	06/20/2000	N001	219	#	-	-	
	mV	0786	06/13/2000	N001	217	#	-	-	
	mV	0885	06/20/2000	N001	218	#	-	-	
	mV	0886	06/20/2000	N001	222	#	-	-	
	mV	0889	06/20/2000	N001	222	#	-	-	
	mV	0933	06/15/2000	N001	227	#	-	-	
	mV	0934	06/15/2000	N001	219	#	-	-	
	mV	0935	06/15/2000	N001	227	#	-	-	
	mV	0936	06/15/2000	N001	227	#	-	-	
	mV	0942	06/19/2000	N001	223	#	-	-	
	mV	0958	06/15/2000	N001	218	#	-	-	
	Oxidation Reduction Potenti	mV	0425	06/16/2000	N001	211	#	-	-
		mV	0426	06/13/2000	N001	192	#	-	-
mV		0662	06/20/2000	N001	137	#	-	-	
mV		0786	06/13/2000	N001	173	#	-	-	
mV		0885	06/20/2000	N001	202	#	-	-	
mV		0886	06/20/2000	N001	187	#	-	-	
mV		0889	06/20/2000	N001	187	#	-	-	



SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Oxidation Reduction Potenti	mV	0933	06/15/2000	N001	178	#	-	-
	mV	0934	06/15/2000	N001	177	#	-	-
	mV	0935	06/15/2000	N001	157	#	-	-
	mV	0936	06/15/2000	N001	187	#	-	-
	mV	0942	06/19/2000	N001	175	#	-	-
	mV	0958	06/15/2000	N001	167	#	-	-
pH	s.u.	0425	06/16/2000	N001	7.07	#	-	-
	s.u.	0426	06/13/2000	N001	7.22	#	-	-
	s.u.	0662	06/20/2000	N001	8.25	#	-	-
	s.u.	0786	06/13/2000	N001	7.87	#	-	-
	s.u.	0885	06/20/2000	N001	8.16	#	-	-
	s.u.	0886	06/20/2000	N001	7.94	#	-	-
	s.u.	0889	06/20/2000	N001	8.19	#	-	-
	s.u.	0933	06/15/2000	N001	7.7	#	-	-
	s.u.	0934	06/15/2000	N001	7.09	#	-	-
	s.u.	0935	06/15/2000	N001	7.55	#	-	-
	s.u.	0936	06/15/2000	N001	7.13	#	-	-
	s.u.	0942	06/19/2000	N001	7.7	#	-	-
	s.u.	0958	06/15/2000	N001	8.41	#	-	-
Polonium-210	pCi/L	0425	06/16/2000	0001	0.29	U	#	0.29 ± 0.29
	pCi/L	0425	06/16/2000	0002	0.23	U	#	0.23 ± 0.22
	pCi/L	0426	06/13/2000	0001	0.38	U	#	0.38 ± 0.34
	pCi/L	0662	06/20/2000	0001	0	U	#	0.18 ± 0.15
	pCi/L	0662	06/20/2000	0002	0.18	U	#	0.18 ± 0.18
	pCi/L	0786	06/13/2000	0001	0.14	U	#	0.14 ± 0.10
	pCi/L	0885	06/20/2000	0001	0.32	U	#	0.32 ± 0.36
	pCi/L	0886	06/20/2000	0001	0.42	U	#	0.42 ± 0.38
	pCi/L	0889	06/20/2000	0001	0.33	U	#	0.33 ± 0.34
	pCi/L	0933	06/15/2000	0001	0.35	U	#	0.35 ± 0.40
	pCi/L	0934	06/15/2000	0001	0.49	U	#	0.49 ± 0.54
	pCi/L	0935	06/15/2000	0001	0.36	U	#	0.36 ± 0.30
	pCi/L	0936	06/15/2000	0001	0.38	U	#	0.38 ± 0.35
	pCi/L	0942	06/19/2000	0001	0.47	U	#	0.47 ± 0.45
	pCi/L	0958	06/15/2000	0001	0	U	#	0.17 ± 0.16
Potassium	mg/L	0425	06/16/2000	0001	18.900		#	0.0456 -
	mg/L	0425	06/16/2000	0002	19.200		#	0.0456 -

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY	
Potassium	mg/L	0426	06/13/2000	0001	16.900	#	0.0456	-	
	mg/L	0662	06/20/2000	0001	8.430	#	0.0456	-	
	mg/L	0662	06/20/2000	0002	8.310	#	0.0456	-	
	mg/L	0786	06/13/2000	0001	20.300	#	0.0456	-	
	mg/L	0885	06/20/2000	0001	22.700	#	0.0456	-	
	mg/L	0886	06/20/2000	0001	56.800	#	0.0456	-	
	mg/L	0889	06/20/2000	0001	107.000	#	0.0456	-	
	mg/L	0933	06/15/2000	0001	15.200	#	0.0456	-	
	mg/L	0934	06/15/2000	0001	6.790	#	0.0456	-	
	mg/L	0935	06/15/2000	0001	17.400	#	0.0456	-	
	mg/L	0936	06/15/2000	0001	10.400	#	0.0456	-	
	mg/L	0942	06/19/2000	0001	7.480	#	0.0456	-	
	mg/L	0958	06/15/2000	0001	1.980	#	0.0456	-	
Radium-226	pCi/L	0425	06/16/2000	0001	0.57	#	0.12	± 0.11	
	pCi/L	0425	06/16/2000	0002	0.58	#	0.12	± 0.11	
	pCi/L	0426	06/13/2000	0001	0.43	#	0.15	± 0.11	
	pCi/L	0662	06/20/2000	0001	0.12	#	0.11	± 0.07	
	pCi/L	0662	06/20/2000	0002	0.23	#	0.12	± 0.08	
	pCi/L	0786	06/13/2000	0001	0.48	#	0.13	± 0.10	
	pCi/L	0885	06/20/2000	0001	0.78	#	0.15	± 0.13	
	pCi/L	0886	06/20/2000	0001	0.29	#	0.12	± 0.09	
	pCi/L	0889	06/20/2000	0001	0.52	#	0.16	± 0.12	
	pCi/L	0933	06/15/2000	0001	0.42	#	0.15	± 0.11	
	pCi/L	0934	06/15/2000	0001	0.19	#	0.14	± 0.09	
	pCi/L	0935	06/15/2000	0001	0.93	#	0.13	± 0.14	
	pCi/L	0936	06/15/2000	0001	0.55	#	0.12	± 0.11	
	pCi/L	0942	06/19/2000	0001	0.4	#	0.12	± 0.09	
pCi/L	0958	06/15/2000	0001	0.15	U	#	0.15	± 0.09	
Radium-228	pCi/L	0425	06/16/2000	0001	0.65	U	#	0.65	± 0.39
	pCi/L	0425	06/16/2000	0002	0.67	U	#	0.67	± 0.40
	pCi/L	0426	06/13/2000	0001	0.92	U	#	0.92	± 0.55
	pCi/L	0662	06/20/2000	0001	0.64	U	#	0.64	± 0.38
	pCi/L	0662	06/20/2000	0002	0.68	U	#	0.68	± 0.39
	pCi/L	0786	06/13/2000	0001	0.96	U	#	0.96	± 0.56
	pCi/L	0885	06/20/2000	0001	0.93	U	#	0.93	± 0.54
	pCi/L	0886	06/20/2000	0001	0.6	U	#	0.67	± 0.40
	pCi/L	0889	06/20/2000	0001	3.15		#	0.67	± 0.46

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Radium-228	pCi/L	0933	06/15/2000	0001	0.81	U	# 0.81	± 0.48
	pCi/L	0934	06/15/2000	0001	0.88	U	# 0.88	± 0.52
	pCi/L	0935	06/15/2000	0001	0.69	U	# 0.69	± 0.41
	pCi/L	0936	06/15/2000	0001	0.65	U	# 0.65	± 0.38
	pCi/L	0942	06/19/2000	0001	0.66	U	# 0.66	± 0.39
	pCi/L	0958	06/15/2000	0001	0.95	U	# 0.95	± 0.55
Selenium	mg/L	0425	06/16/2000	0001	0.0443		# 0.0005	-
	mg/L	0425	06/16/2000	0002	0.0414		# 0.0005	-
	mg/L	0426	06/13/2000	0001	0.137		# 0.002	-
	mg/L	0662	06/20/2000	0001	0.0022	B	# 0.0001	-
	mg/L	0662	06/20/2000	0002	0.0027	B	# 0.0001	-
	mg/L	0786	06/13/2000	0001	0.161		# 0.002	-
	mg/L	0885	06/20/2000	0001	0.010		# 0.0001	-
	mg/L	0886	06/20/2000	0001	1.570		# 0.01	-
	mg/L	0889	06/20/2000	0001	3.950		# 0.02	-
	mg/L	0933	06/15/2000	0001	0.258		# 0.002	-
	mg/L	0934	06/15/2000	0001	0.0872		# 0.001	-
	mg/L	0935	06/15/2000	0001	0.241		# 0.002	-
	mg/L	0936	06/15/2000	0001	0.203		# 0.002	-
	mg/L	0942	06/19/2000	0001	0.156		# 0.002	-
	mg/L	0958	06/15/2000	0001	0.0002	B	# 0.0001	-
Sodium	mg/L	0425	06/16/2000	0001	604.000		# 4.34	-
	mg/L	0425	06/16/2000	0002	616.000		# 4.34	-
	mg/L	0426	06/13/2000	0001	1280.000		# 4.34	-
	mg/L	0662	06/20/2000	0001	831.000		# 4.34	-
	mg/L	0662	06/20/2000	0002	819.000		# 4.34	-
	mg/L	0786	06/13/2000	0001	719.000		# 4.34	-
	mg/L	0885	06/20/2000	0001	1340.000		# 4.34	-
	mg/L	0886	06/20/2000	0001	7710.000		# 8.68	-
	mg/L	0889	06/20/2000	0001	15900.000		# 21.7	-
	mg/L	0933	06/15/2000	0001	708.000		# 4.34	-
	mg/L	0934	06/15/2000	0001	178.000		# 0.434	-
	mg/L	0935	06/15/2000	0001	704.000		# 4.34	-
	mg/L	0936	06/15/2000	0001	357.000		# 0.434	-
	mg/L	0942	06/19/2000	0001	223.000		# 0.434	-
	mg/L	0958	06/15/2000	0001	23.200		# 0.434	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0425	06/16/2000	N001	4890	#	-	-
	umhos/cm	0426	06/13/2000	N001	7220	#	-	-
	umhos/cm	0662	06/20/2000	N001	4230	#	-	-
	umhos/cm	0786	06/13/2000	N001	6250	#	-	-
	umhos/cm	0885	06/20/2000	N001	7870	#	-	-
	umhos/cm	0886	06/20/2000	N001	20800	#	-	-
	umhos/cm	0889	06/20/2000	N001	30900	#	-	-
	umhos/cm	0933	06/15/2000	N001	6740	#	-	-
	umhos/cm	0934	06/15/2000	N001	2950	#	-	-
	umhos/cm	0935	06/15/2000	N001	6380	#	-	-
	umhos/cm	0936	06/15/2000	N001	4598	#	-	-
	umhos/cm	0942	06/19/2000	N001	3600	#	-	-
	umhos/cm	0958	06/15/2000	N001	431	#	-	-
Strontium	mg/L	0425	06/16/2000	0001	6.010	#	0.0001	-
	mg/L	0425	06/16/2000	0002	5.870	#	0.0001	-
	mg/L	0426	06/13/2000	0001	10.500	#	0.001	-
	mg/L	0662	06/20/2000	0001	9.820	#	0.0001	-
	mg/L	0662	06/20/2000	0002	9.610	#	0.0001	-
	mg/L	0786	06/13/2000	0001	7.020	#	0.0001	-
	mg/L	0885	06/20/2000	0001	8.680	#	0.0001	-
	mg/L	0886	06/20/2000	0001	9.640	#	0.0001	-
	mg/L	0889	06/20/2000	0001	12.200	#	0.001	-
	mg/L	0933	06/15/2000	0001	6.640	#	0.0001	-
	mg/L	0934	06/15/2000	0001	3.920	#	0.0001	-
	mg/L	0935	06/15/2000	0001	6.850	#	0.0001	-
	mg/L	0936	06/15/2000	0001	6.270	#	0.0001	-
mg/L	0942	06/19/2000	0001	5.760	#	0.0001	-	
mg/L	0958	06/15/2000	0001	0.558	#	0.0001	-	
Sulfate	mg/L	0425	06/16/2000	0001	3220.000	#	0.2945	-
	mg/L	0425	06/16/2000	0002	3230.000	#	0.2945	-
	mg/L	0426	06/13/2000	0001	4300.000	#	0.589	-
	mg/L	0662	06/20/2000	0001	2200.000	#	0.2945	-
	mg/L	0662	06/20/2000	0002	2210.000	#	0.2945	-
	mg/L	0786	06/13/2000	0001	3780.000	#	0.589	-
	mg/L	0885	06/20/2000	0001	5800.000	#	0.589	-
	mg/L	0886	06/20/2000	0001	19800.000	#	1.178	-
	mg/L	0889	06/20/2000	0001	35900.000	#	2.945	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE:		RESULT	QUALIFIERS:	DETECTION LIMIT	UN-CERTAINTY
			DATE	ID		LAB DATA QA		
Sulfate	mg/L	0933	06/15/2000	0001	3760.000		# 0.2945	-
	mg/L	0934	06/15/2000	0001	1600.000		# 0.2945	-
	mg/L	0935	06/15/2000	0001	4030.000		# 0.2945	-
	mg/L	0936	06/15/2000	0001	2640.000		# 0.2945	-
	mg/L	0942	06/19/2000	0001	2090.000		# 0.2945	-
	mg/L	0958	06/15/2000	0001	92.100		# 0.0589	-
Temperature	C	0425	06/16/2000	N001	15.8		# -	-
	C	0426	06/13/2000	N001	14.9		# -	-
	C	0662	06/20/2000	N001	27.4		# -	-
	C	0786	06/13/2000	N001	21.7		# -	-
	C	0885	06/20/2000	N001	26.5		# -	-
	C	0886	06/20/2000	N001	28.3		# -	-
	C	0889	06/20/2000	N001	24.8		# -	-
	C	0933	06/15/2000	N001	26		# -	-
	C	0934	06/15/2000	N001	19.7		# -	-
	C	0935	06/15/2000	N001	23.2		# -	-
	C	0936	06/15/2000	N001	18		# -	-
	C	0942	06/19/2000	N001	20.1		# -	-
	C	0958	06/15/2000	N001	19.1		# -	-
Temperature of Zobell Soluti	C	0425	06/16/2000	N001	23.5		# -	-
	C	0426	06/13/2000	N001	26		# -	-
	C	0662	06/20/2000	N001	25.9		# -	-
	C	0786	06/13/2000	N001	28.1		# -	-
	C	0885	06/20/2000	N001	26.7		# -	-
	C	0886	06/20/2000	N001	24.2		# -	-
	C	0889	06/20/2000	N001	24.2		# -	-
	C	0933	06/15/2000	N001	22.5		# -	-
	C	0934	06/15/2000	N001	27.8		# -	-
	C	0935	06/15/2000	N001	22.5		# -	-
	C	0936	06/15/2000	N001	22.5		# -	-
	C	0942	06/19/2000	N001	24.3		# -	-
	C	0958	06/15/2000	N001	27.6		# -	-
Total Dissolved Solids	mg/L	0425	06/16/2000	0001	5850		# 10	-
	mg/L	0425	06/16/2000	0002	5770		# 10	-
	mg/L	0426	06/13/2000	0001	7250		# 10	-
	mg/L	0662	06/20/2000	0001	3460	J	# 10	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Total Dissolved Solids	mg/L	0662	06/20/2000	0002	3400	J #	10	-
	mg/L	0786	06/13/2000	0001	6830	#	10	-
	mg/L	0885	06/20/2000	0001	9640	J #	10	-
	mg/L	0886	06/20/2000	0001	34700	J #	10	-
	mg/L	0889	06/20/2000	0001	65700	J #	10	-
	mg/L	0933	06/15/2000	0001	6770	#	10	-
	mg/L	0934	06/15/2000	0001	3070	#	10	-
	mg/L	0935	06/15/2000	0001	7320	#	10	-
	mg/L	0936	06/15/2000	0001	4710	#	10	-
	mg/L	0942	06/19/2000	0001	3810	J #	10	-
	mg/L	0958	06/15/2000	0001	280	#	10	-
Uranium	mg/L	0425	06/16/2000	0001	0.341	#	0.0001	-
	mg/L	0425	06/16/2000	0002	0.347	#	0.0001	-
	mg/L	0426	06/13/2000	0001	0.389	#	0.0001	-
	mg/L	0662	06/20/2000	0001	0.0056	#	0.0001	-
	mg/L	0662	06/20/2000	0002	0.0058	#	0.0001	-
	mg/L	0786	06/13/2000	0001	0.0434	#	0.0001	-
	mg/L	0885	06/20/2000	0001	2.050	#	0.001	-
	mg/L	0886	06/20/2000	0001	0.152	#	0.0001	-
	mg/L	0889	06/20/2000	0001	0.265	#	0.0001	-
	mg/L	0933	06/15/2000	0001	0.0784	#	0.0001	-
	mg/L	0934	06/15/2000	0001	0.0313	#	0.0001	-
	mg/L	0935	06/15/2000	0001	0.0667	#	0.0001	-
	mg/L	0936	06/15/2000	0001	0.0493	#	0.0001	-
	mg/L	0942	06/19/2000	0001	0.0332	#	0.0001	-
	mg/L	0958	06/15/2000	0001	0.0013	#	0.0001	-
Uranium-234	pCi/L	0885	06/20/2000	0001	647.2	L J #	0.54	± 130.
	pCi/L	0933	06/15/2000	0001	40.21	#	0.06	± 3.26
	pCi/L	0934	06/15/2000	0001	17.31	#	0.06	± 1.69
	pCi/L	0936	06/15/2000	0001	29.34	#	0.06	± 2.54
	pCi/L	0942	06/19/2000	0001	20.74	#	0.05	± 1.88
	pCi/L	0958	06/15/2000	0001	0.71	#	0.1	± 0.25
Uranium-235	pCi/L	0885	06/20/2000	0001	34.74	L J #	0.47	± 8.08
	pCi/L	0933	06/15/2000	0001	1.21	#	0.04	± 0.28
	pCi/L	0934	06/15/2000	0001	0.5	#	0.07	± 0.20
	pCi/L	0936	06/15/2000	0001	0.77	#	0.03	± 0.23

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:05 pm

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ID	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Uranium-235	pCi/L	0942	06/19/2000	0001	0.56		# 0.04	± 0.19
	pCi/L	0958	06/15/2000	0001	0.06	U	# 0.06	± 0.07
Uranium-238	pCi/L	0885	06/20/2000	0001	636.13	L J	# 0.34	± 127.
	pCi/L	0933	06/15/2000	0001	25.02		# 0.03	± 2.17
	pCi/L	0934	06/15/2000	0001	10.25		# 0.05	± 1.13
	pCi/L	0936	06/15/2000	0001	16.43		# 0.03	± 1.57
	pCi/L	0942	06/19/2000	0001	11.37		# 0.04	± 1.17
	pCi/L	0958	06/15/2000	0001	0.5		# 0.05	± 0.20

RECORDS: SELECTED FROM USEE800 WHERE site\_code='SHP02' AND quality\_assurance = TRUE AND (NOT (data\_validation\_qualifiers LIKE "R" OR data\_validation\_qualifiers LIKE "X" ) OR IsNull(data\_validation\_qualifiers)) AND DATE\_SAMPLED between #6/10/2000# and #6/30/2000#

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.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- 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.
- I Increased detection limit due to required dilution.
- C Pesticide result confirmed by GC-MS.
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- S Result determined by method of standard addition (MSA).
- U Analytical result below detection limit.
- 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.
- Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- > Result above upper detection limit.
- J Estimated

DATA QUALIFIERS:

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

QA QUALIFIER: # = validated according to Quality Assurance guidelines.

## Equipment Blank Data for Shiprock 6/2000 Sampling Event

10/12/2000

ANALYTE	SITE CODE	LOCATION CODE	DATE	SAMPLE ID	UNIT	RESULT	LAB QUALIFIERS	DATA VAL QUALIFIERS	DETECTION LIMIT	UNCERTAINTY
Ammonium	SHP02	0999	6/20/2000	0001	mg/L	0.0047	U		0.0047	
Ammonium	SHP02	0999	6/22/2000	0001	mg/L	0.0047	U		0.0047	
Ammonium	SHP02	0999	6/24/2000	0001	mg/L	0.0065	B		0.0047	
Ammonium	SHP02	0999	6/23/2000	0001	mg/L	0.0065	B		0.0047	
Antimony	SHP02	0999	6/20/2000	0001	mg/L	0.00037	B	U	0.0001	
Arsenic	SHP02	0999	6/20/2000	0001	mg/L	0.0003	U		0.0003	
Cadmium	SHP02	0999	6/20/2000	0001	mg/L	0.00024	B	U	0.0002	
Calcium	SHP02	0999	6/20/2000	0001	mg/L	0.13	B		0.0504	
Chloride	SHP02	0999	6/20/2000	0001	mg/L	0.024	U		0.024	
Fluoride	SHP02	0999	6/20/2000	0001	mg/L	0.0125	U		0.0125	
Gross Alpha	SHP02	0999	6/20/2000	0001	pCi/L	1.61	U		1.61	0.85
Gross Beta	SHP02	0999	6/20/2000	0001	pCi/L	2.94	U		2.94	1.65
Iron	SHP02	0999	6/20/2000	0001	mg/L	0.0091	U		0.0091	
Magnesium	SHP02	0999	6/20/2000	0001	mg/L	0.344			0.024	
Manganese	SHP02	0999	6/20/2000	0001	mg/L	0.0015	U		0.0015	
Manganese	SHP02	0999	6/22/2000	0001	mg/L	0.0015	U		0.0015	
Manganese	SHP02	0999	6/24/2000	0001	mg/L	0.0023	B		0.0015	
Manganese	SHP02	0999	6/23/2000	0001	mg/L	0.0019	B		0.0015	
Molybdenum	SHP02	0999	6/20/2000	0001	mg/L	0.0008	B	U	0.0003	
Nitrate	SHP02	0999	6/20/2000	0001	mg/L	0.0449	B		0.0314	
Nitrate	SHP02	0999	6/24/2000	0001	mg/L	0.83	B		0.0314	
Nitrate	SHP02	0999	6/23/2000	0001	mg/L	1.97			0.0314	
Nitrate	SHP02	0999	6/22/2000	0001	mg/L	0.0314	U		0.0314	
Polonium-210	SHP02	0999	6/20/2000	0001	pCi/L	0.16	U		0.16	0.13
Potassium	SHP02	0999	6/20/2000	0001	mg/L	0.0601	B		0.0456	
Radium-226	SHP02	0999	6/20/2000	0001	pCi/L	0.11	U		0.11	0.06
Radium-228	SHP02	0999	6/20/2000	0001	pCi/L	0.66	U		0.66	0.38
Selenium	SHP02	0999	6/20/2000	0001	mg/L	0.0001	U		0.0001	
Selenium	SHP02	0999	6/23/2000	0001	mg/L	0.0001	U		0.0001	
Selenium	SHP02	0999	6/24/2000	0001	mg/L	0.0001	U		0.0001	
Selenium	SHP02	0999	6/22/2000	0001	mg/L	0.0001	U		0.0001	
Sodium	SHP02	0999	6/20/2000	0001	mg/L	3.13			0.434	
Strontium	SHP02	0999	6/20/2000	0001	mg/L	0.0024	B		0.0001	
Sulfate	SHP02	0999	6/20/2000	0001	mg/L	0.0589	U		0.0589	
Sulfate	SHP02	0999	6/22/2000	0001	mg/L	0.414	B		0.0589	
Sulfate	SHP02	0999	6/23/2000	0001	mg/L	0.134	B		0.0589	
Sulfate	SHP02	0999	6/24/2000	0001	mg/L	0.151	B		0.0589	
Total Dissolved Solids	SHP02	0999	6/20/2000	0001	mg/L	10		J	10	
Total Dissolved Solids	SHP02	0999	6/24/2000	0001	mg/L	18			10	
Total Dissolved Solids	SHP02	0999	6/23/2000	0001	mg/L	17			10	
Total Dissolved Solids	SHP02	0999	6/22/2000	0001	mg/L	25			10	
Uranium	SHP02	0999	6/20/2000	0001	mg/L	0.0004	B	U	0.0001	
Uranium	SHP02	0999	6/24/2000	0001	mg/L	0.0008	B	U	0.0001	
Uranium	SHP02	0999	6/23/2000	0001	mg/L	0.00016	B	U	0.0001	



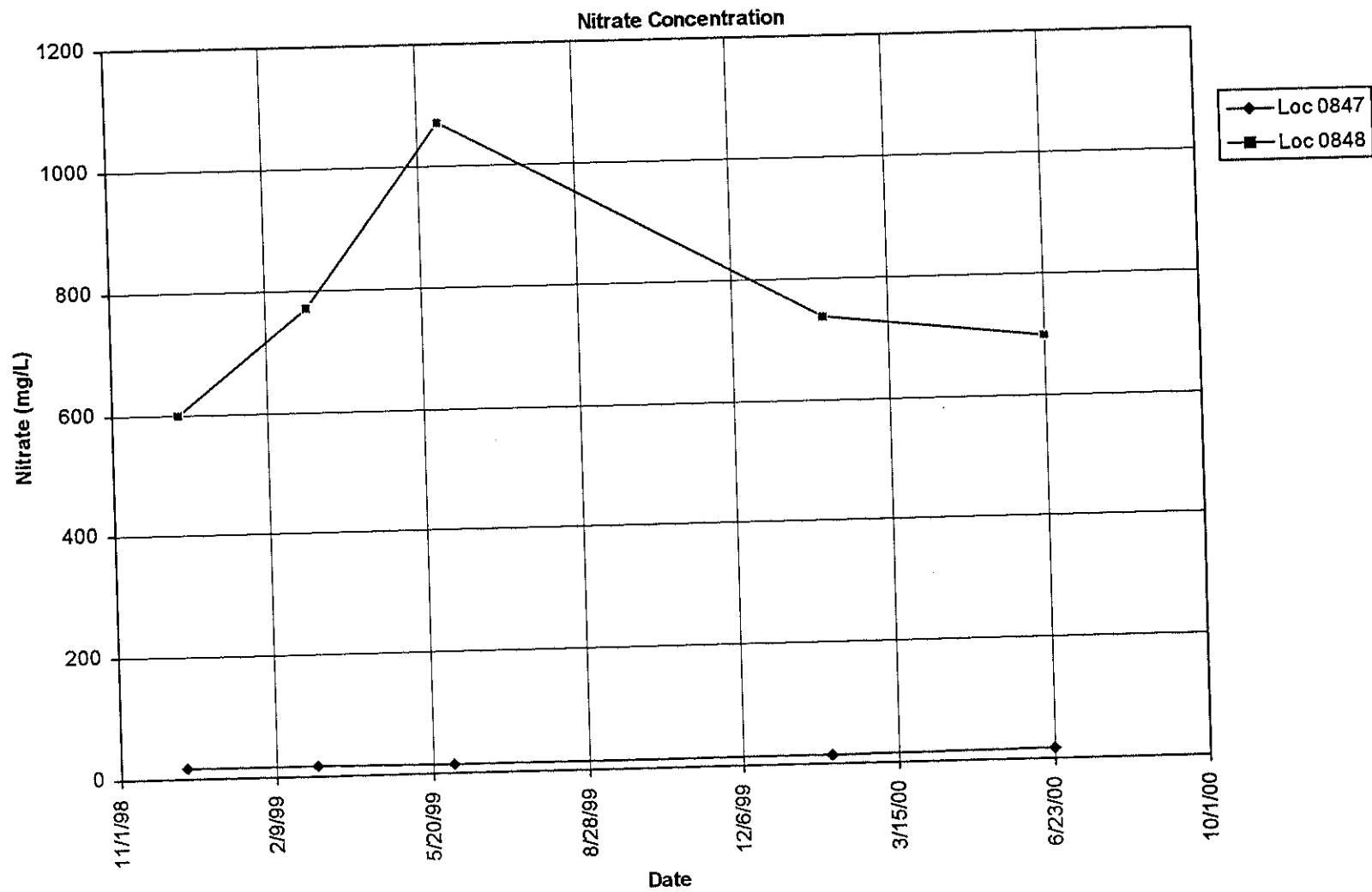
## Equipment Blank Data for Shiprock 6/2000 Sampling Event

10/12/2000

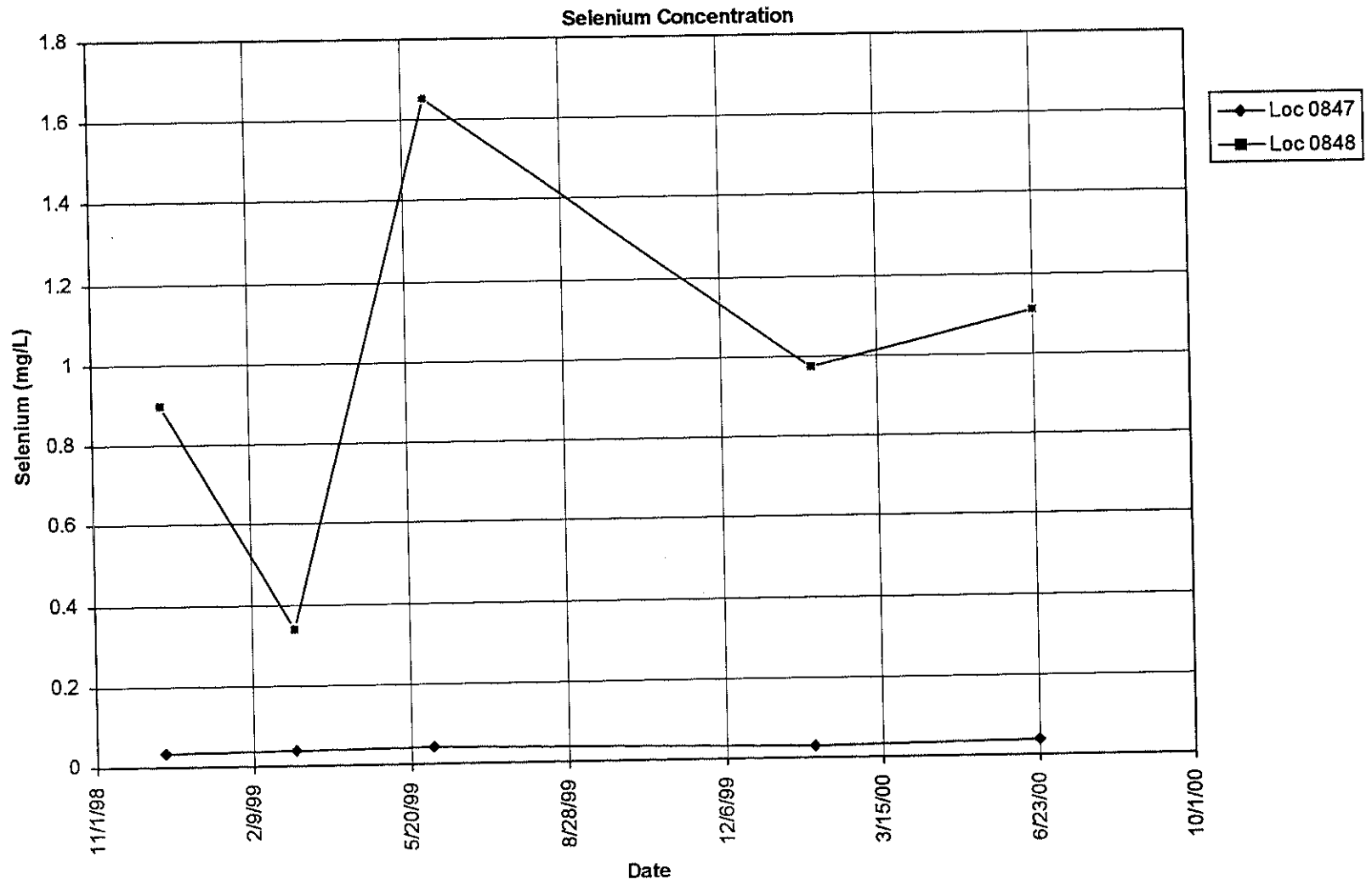
ANALYTE	SITE CODE	LOCATION CODE	DATE	SAMPLE ID	UNIT	RESULT	LAB QUALIFIERS	DATA VAL QUALIFIERS	DETECTION LIMIT	UNCERTAINTY
Uranium	SHP02	0999	6/22/2000	0001	mg/L	0.00015	B	U	0.0001	
Uranium-234	SHP02	0999	6/20/2000	0001	pCi/L	0.1	U		0.1	0.1
Uranium-234	SHP02	0999	6/23/2000	0001	pCi/L	0.08	U		0.08	0.1
Uranium-235	SHP02	0999	6/20/2000	0001	pCi/L	0.07	U		0.07	0.06
Uranium-235	SHP02	0999	6/23/2000	0001	pCi/L	0.07	U		0.07	0.06
Uranium-238	SHP02	0999	6/20/2000	0001	pCi/L	0.04		U	0.03	0.06
Uranium-238	SHP02	0999	6/23/2000	0001	pCi/L	0.07	U		0.07	0.09

# **TIME VERSUS CONCENTRATION GRAPHS**

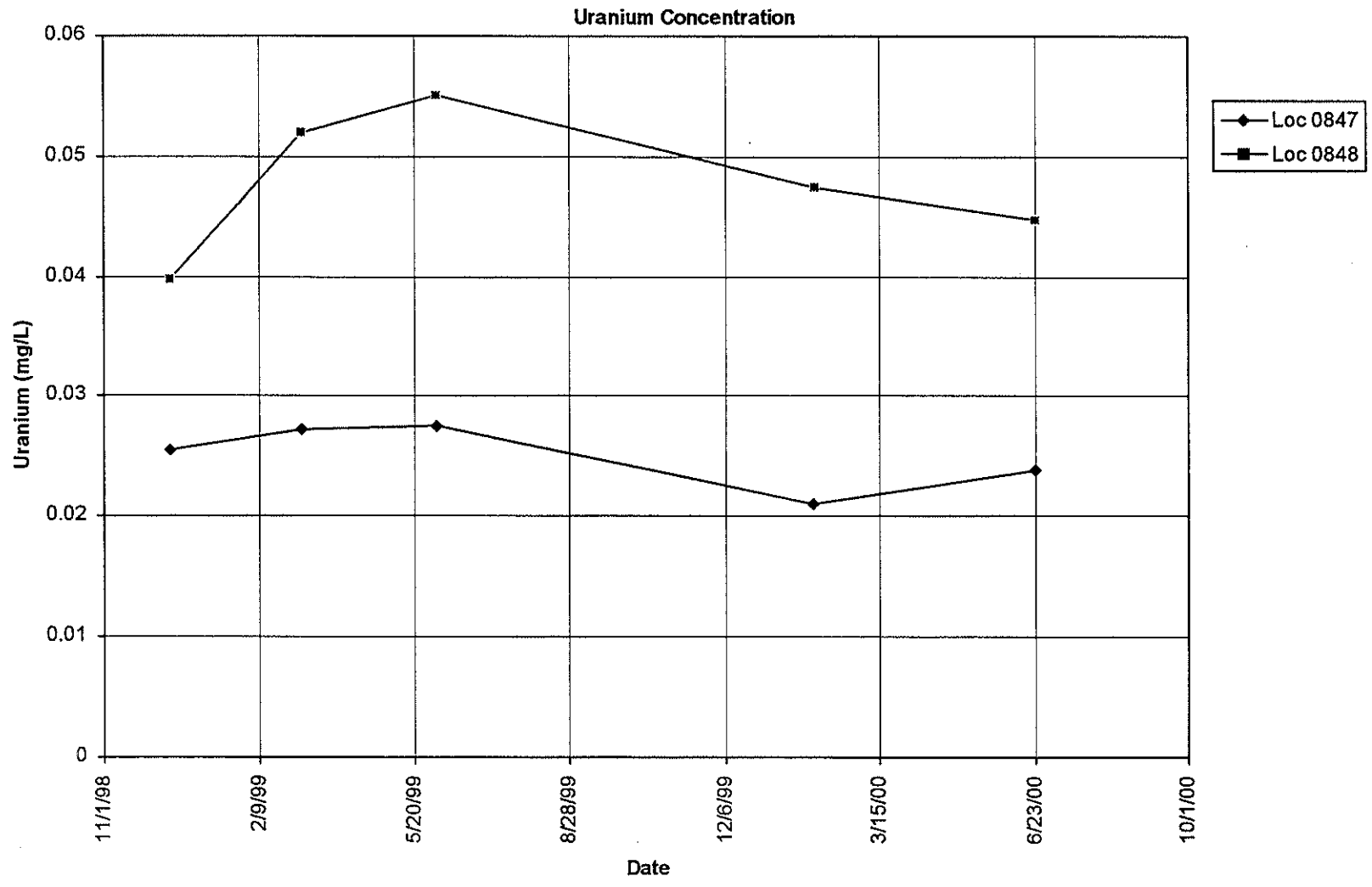
SHIPROCK (TAILINGS AREA) (SHP02)



SHIPROCK (TAILINGS AREA) (SHP02)

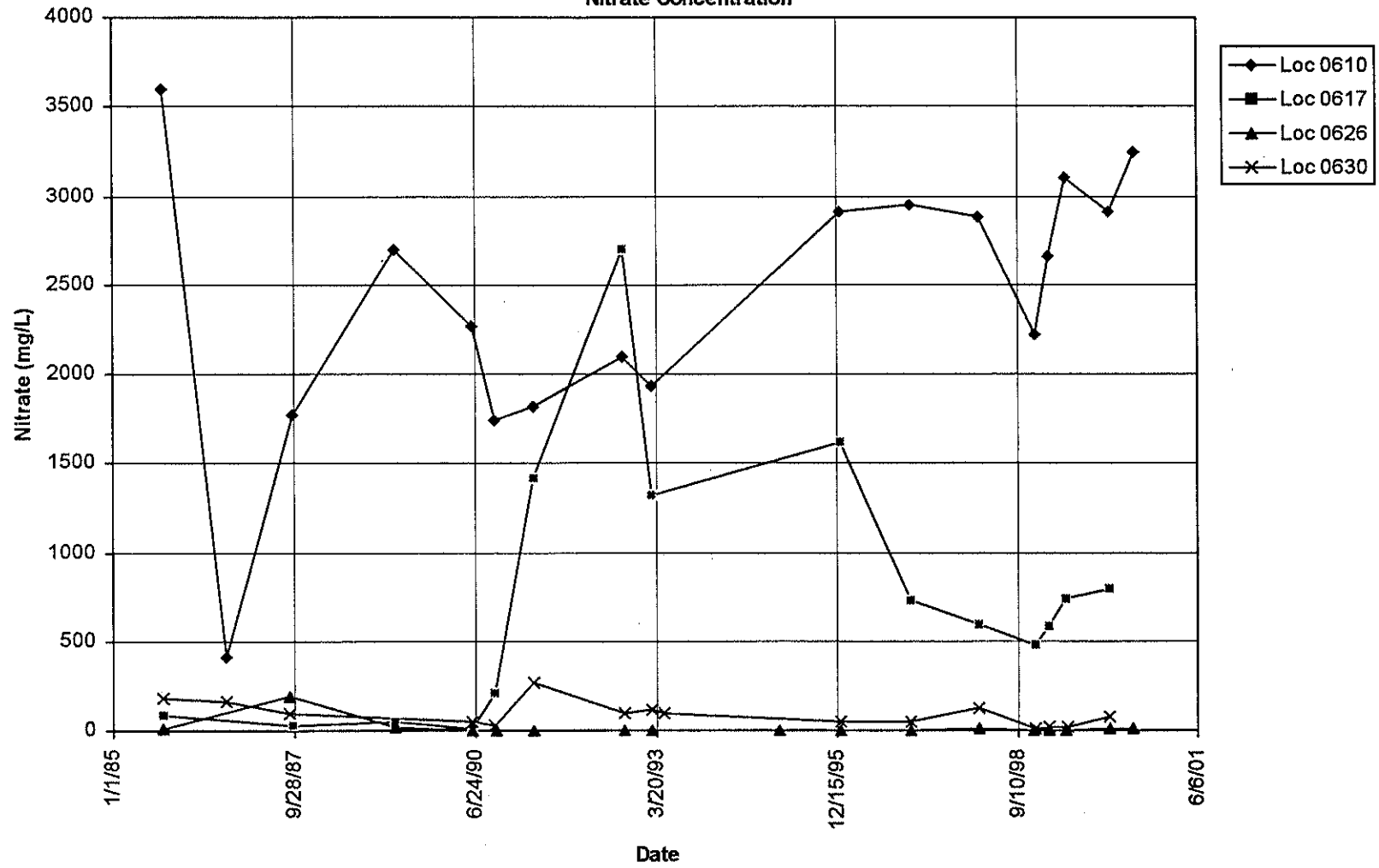


SHIPROCK (TAILINGS AREA) (SHP02)



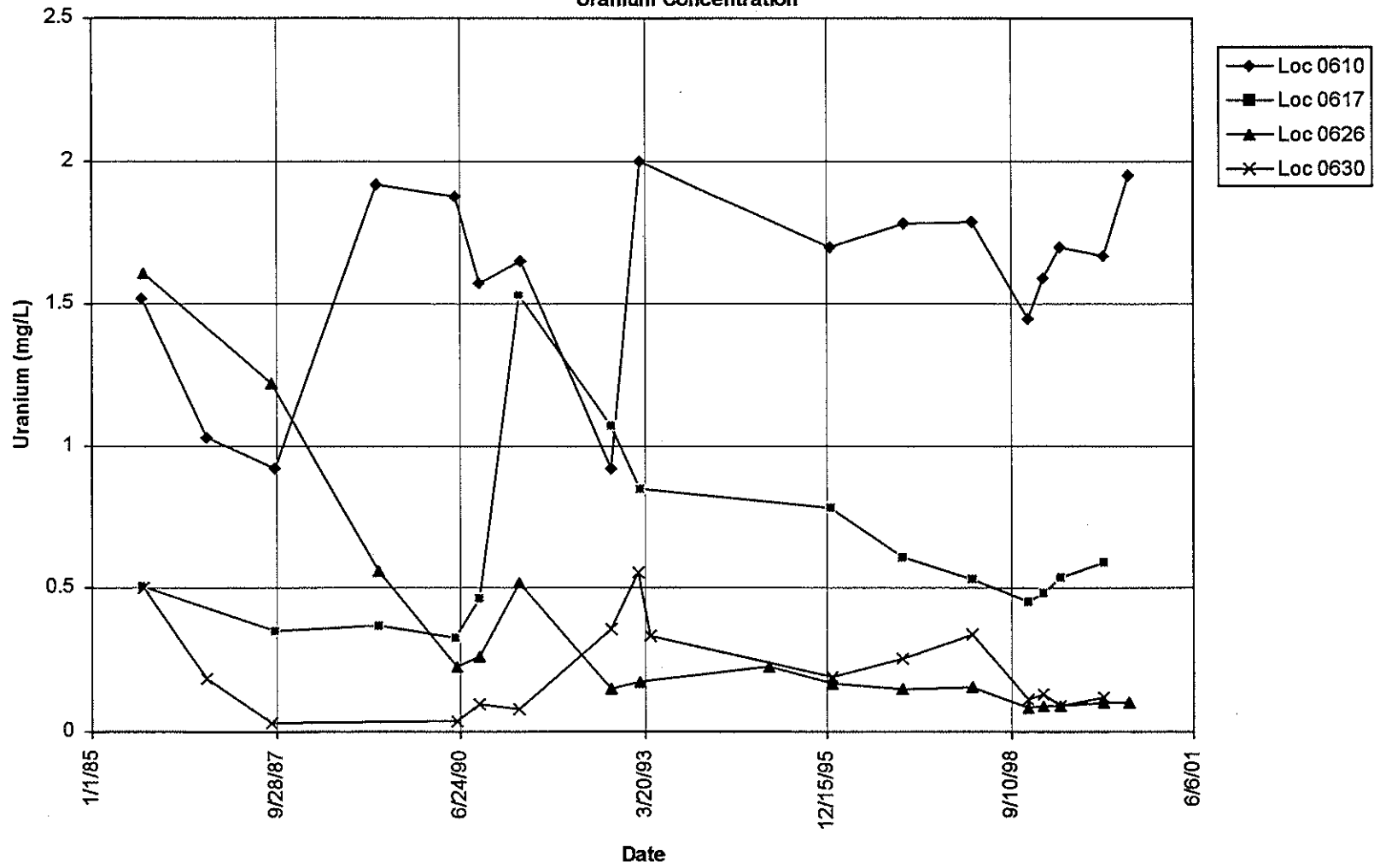
# SHIPROCK (SHP01)

## Nitrate Concentration

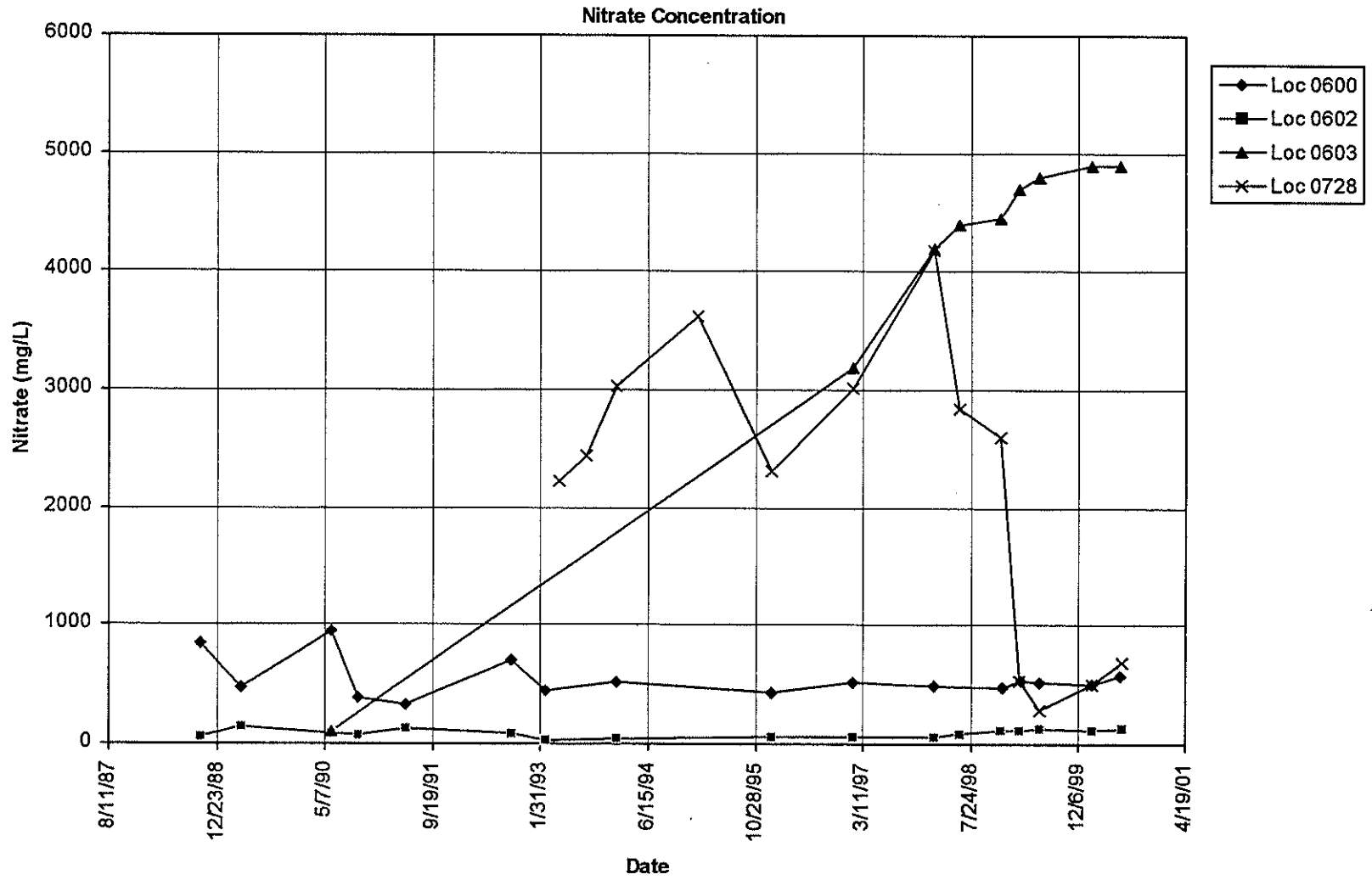


SHIPROCK (SHP01)

Uranium Concentration

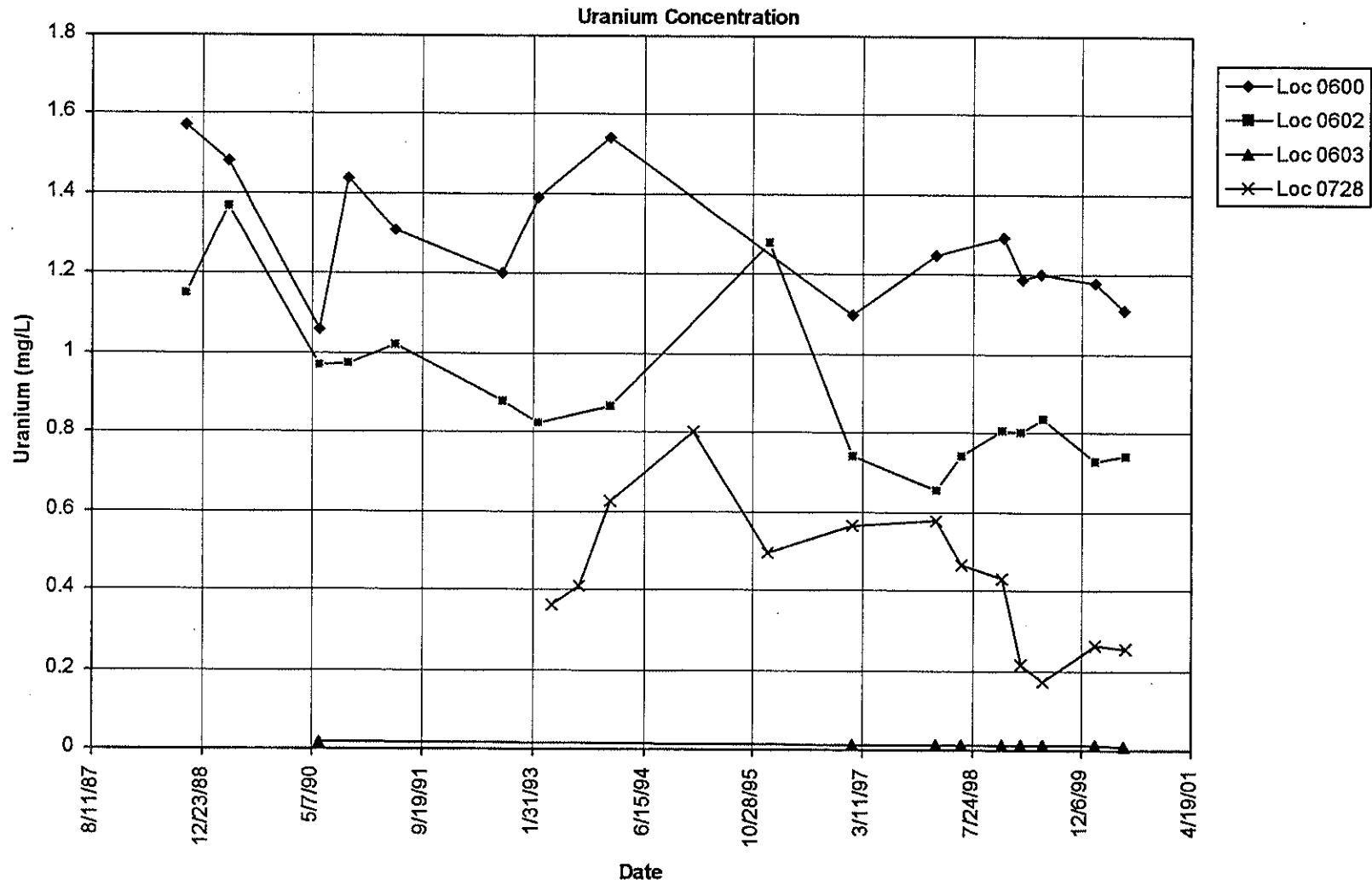


### SHIPROCK (TAILINGS AREA) (SHP02)





SHIPROCK (TAILINGS AREA) (SHP02)



# **WATER LEVELS**

STATIC GROUND WATER LEVELS (USEE700) FOR SITE SHP01, SHIPROCK  
 REPORT DATE: 10/12/2000 1:07 pm

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT NGVD)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	GROUND WATER ELEVATION (FT NGVD)	WATER LEVEL FLAG
			DATE	TIME			
0610		4895.70	06/21/2000	16:30	9.42	4886.28	
0614		4892.79	06/13/2000	10:24	6.95	4885.84	
0631		4889.95	06/20/2000	16:51	9.53	4880.42	
0732		4897.55	06/21/2000	12:40	7.84	4889.71	
0735		4895.85	06/21/2000	13:56	6.66	4889.19	
0738		4887.99	06/22/2000	08:48	6.37	4881.62	
		4887.99	06/24/2000		6.43	4881.56	
0766		4892.55	06/12/2000	18:34	9.00	4883.55	
0773		4894.87	06/21/2000	15:32	8.61	4886.26	
0775		4892.20	06/21/2000	17:45	8.69	4883.51	
0782		4885.68	06/22/2000	15:34	8.20	4877.48	
0783		4884.48	06/22/2000	15:08	7.57	4876.91	
0784		4882.21	06/22/2000	16:09	7.17	4875.04	
0850	B	4907.51	06/13/2000	10:49	8.08	4899.43	
0854		4890.75	06/13/2000	18:03	7.62	4883.13	
0855		4888.18	06/13/2000	17:27	5.64	4882.54	
0862		4893.83	06/21/2000	15:00	93.31	4800.52	
1008		4890.80	06/12/2000	17:41	7.11	4883.69	
1009		4892.10	06/13/2000	08:35	7.00	4885.10	
1010		4892.32	06/12/2000	16:46	7.26	4885.06	
1013		4890.89	06/13/2000	09:30	5.53	4885.36	
1062		4892.51	06/15/2000	10:30	7.01	4885.50	

RECORDS: SELECTED FROM USEE700 WHERE site\_code='SHP01' AND LOG\_DATE between #6/10/2000# and #6/30/2000#

FLOW CODES:  
 B BACKGROUND  
 WATER LEVEL FLAGS:

STATIC GROUND WATER LEVELS (USEE700) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:08 pm

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT NGVD)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	GROUND WATER ELEVATION (FT NGVD)	WATER LEVEL FLAG
			DATE	TIME			
0600		4955.87	06/13/2000	12:32	33.22	4922.65	
0602		4956.89	06/23/2000	16:00	21.42	4935.47	
0603		4978.62	06/13/2000	13:43	29.98	4948.64	
0604		4995.87	06/20/2000	11:28	51.55	4944.32	
0725		4908.58	06/23/2000	18:45	13.69	4894.89	
0726		4939.95	06/25/2000	18:11	21.12	4918.83	
0727		4940.65	06/24/2000	17:22	6.14	4934.51	
0728		4964.46	06/25/2000	14:10	24.32	4940.14	
0730		4979.74	06/20/2000	13:45	37.92	4941.82	
0812		5004.98	06/20/2000	14:30	60.96	4944.02	
0813		4984.37	06/13/2000	14:51	43.14	4941.23	
0814		4968.12	06/25/2000	13:36	31.30	4936.82	
0815		4953.67	06/22/2000	16:08	25.77	4927.90	
0816		4937.92	06/25/2000	12:31	24.72	4913.20	
0819		4955.76	06/23/2000	16:40	19.17	4936.59	
0820		4954.95	06/21/2000		152.70	4802.25	
0823		4957.65	06/21/2000		101.46	4856.19	
0824		4958.21	06/21/2000	13:20	189.91	4768.30	
0826		4950.73	06/13/2000	15:41	16.37	4934.36	
0827		4946.92	06/25/2000	16:32	26.31	4920.61	
0828		4949.34	06/24/2000	08:23	13.52	4935.82	
0830		4960.77	06/25/2000	15:01	10.40	4950.37	
0832		4964.65	06/20/2000	17:00	28.28	4936.37	
0833		4940.52	06/22/2000	15:12	28.11	4912.41	
0835		4930.48	06/22/2000	12:41	18.85	4911.63	
0836		4901.74	06/20/2000	09:46	24.42	4877.32	
0837		4889.54	06/23/2000	09:16	14.01	4875.53	
0838		4937.70	06/22/2000	14:30	25.61	4912.09	
0839		4943.21	06/22/2000	17:12	24.71	4918.50	

STATIC GROUND WATER LEVELS (USEE700) FOR SITE SHP02, SHIPROCK (TAILINGS AREA)  
 REPORT DATE: 10/12/2000 1:08 pm

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT NGVD)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	GROUND WATER ELEVATION (FT NGVD)	WATER LEVEL FLAG
			DATE	TIME			
0841		4984.05	06/20/2000	15:30	45.40	4938.65	
0843		4883.56	06/22/2000	17:36	11.59	4871.97	
0844		4948.46	06/22/2000	11:04	30.80	4917.66	
0846		4934.57	06/22/2000	13:30	23.86	4910.71	
0847		4924.35	06/23/2000	13:00	14.43	4909.92	
0848		4949.91	06/23/2000	08:06	38.20	4911.71	
1002		4957.63	06/21/2000	17:20	37.94	4919.69	
1003		4957.84	06/21/2000	17:00	65.86	4891.98	
1004		4957.61	06/21/2000		41.31	4916.30	
1006		4962.16	06/24/2000	11:30	40.22	4921.94	
1007		4962.01	06/21/2000	11:44	44.69	4917.32	
1048		4921.35	06/21/2000	10:18	6.15	4915.20	
1049		4923.89	06/21/2000	09:15	7.70	4916.19	
1057		4980.89	06/24/2000	10:15	32.76	4948.13	
1058		4973.58	06/24/2000	12:25	25.33	4948.25	
1059		4970.52	06/24/2000	15:16	22.79	4947.73	
1060		4970.62	06/23/2000	10:20	35.72	4934.90	

RECORDS: SELECTED FROM USEE700 WHERE site\_code='SHP02' AND LOG\_DATE between #6/10/2000# and #6/30/2000#

FLOW CODES:

WATER LEVEL FLAGS:

**SAMPLING WORK ORDER AND  
TRIP REPORT**

CONTRACT NO.: DE-AC13-96GJ87335  
 TASK ORDER NO.: MAC00-05  
 CONTROL NO.: 3100-T00-0670

May 30, 2000

Project Manager  
 Department of Energy  
 Grand Junction Office  
 2597 B3/4 Road  
 Grand Junction, CO 81503  
 ATTN: Donald Metzler

SUBJECT: Contract No. DE-AC13-96GJ87335—June 2000 UMTRA Ground Water Sampling at Shiprock, New Mexico

Dear Mr. Metzler:

Attached are the map and tables specifying the sampling locations and analytes for routine monitoring at the Shiprock, New Mexico, UMTRA site. Water quality data will be collected from monitor wells at this site as part of the routine UMTRA Ground Water sampling which is scheduled to begin the week of June 12, 2000.

The following lists show the Ground Water Project well locations (with associated zone of completion) and surface water locations that will be sampled during this sampling event.

**Ground Water Project Monitor Wells (filtered)\***

**SHP01**

608 Km	626 Al	735 Al	775 Al	850 Al	862 Km	1009 Al
610 Al	628 Al	736 Al	779 Al	854 Al	1000 Km	1010 Al
614 Al	631 Al	766 Al	782 Al	855 Al	1001 Km	1013 Al/Km
620 Al	732 Al/Km	768 Al	783 Al	857 Al	1008 Al	1062 Km
624 Al	734 Al	773 Al	784 Al	860 Km		

**SHP02**

600 Km	728 Al/Km	819 Km	830 Km	839 Al/Km	1002 Km	1048 Qa/Km
602 Km	730 Al/Km	820 Km	832 Al/Km	841 Al	1003 Km	1049 Qa/Km
603 Al/Km	812 Al/Km	823 Km	833 Al	843 Al	1004 Km	1057 Qa
604 Km	813 Al/Km	824 Km	835 Al	844 Al/Km	1006 Fl/Km	1058 Km
725 Al/Km	814 Al/Km	826 Al/Km	836 Al	846 Al/Km	1007 Fl/Km	1059 Km
726 Km	815 Al/Km	827 Al/Km	837 Al	847 Al/Km	1011 Qa/Km	1060 Qa/Km
727 Km	816 Al/Km	828 Al/Km	838 Al	848 Al/Km		

\*NOTE: Al = Alluvium; Fl = Fill material; Km = Mancos Shale; Qa = Quaternary

**RECORD COPY**

Donald Metzler  
May 30, 2000  
Page 2  
Control No.: 3100-T00-0670

Surface Water (filtered)

SHP01

655	657	887	939	940	956	957
656	658	894				

SHP02

425	662	884	886	933	935	942
426	786	885	889	934	936	958

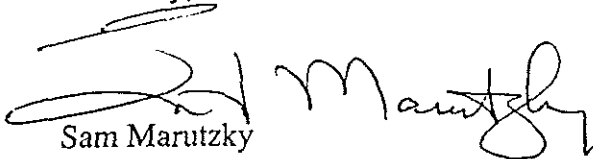
Data loggers will be downloaded from the following locations:

602	728	826	835	841	846	857
616	730	827	836	843	848	899
617	731	830	837	845		

QA/QC samples will be collected as directed in the *Sampling and Analysis Plan for the UMTRA Ground Water Project*. Samples collected for alkalinity will be filtered and unfiltered. Water level information will be collected from the sampled wells only. Monitor well inspections will be conducted and documented to confirm the status of all sampled wells. Access agreements are being reviewed and are expected to be completed by the beginning of fieldwork.

If you have any questions, please call me at extension 6059 or Dave Miller at extension 6652.

Sincerely,



Sam Marutzky  
Project Manager

SM/lcg/ld  
Attachments

cc w/o att: D. E. Miller, MACTEC  
K. Miller  
D. Traub  
Contract File (J. Dearborn)

cc w/att: C. Bahrke  
C. Goodknight  
R. Chessmore  
Project Record File GWSHP 14.06 thru P. Taylor



**Sampling Frequencies for Locations at  
Shiprock, New Mexico**

Location	Quarterly	Semi-annually	Annually	Biennially	Not Sampled	Notes
<b>Ground Water Project Monitor Wells</b>						
<b>SHP01</b>						
608		X				
610		X				
614		X				
616					X	DATA LOGGER
617					X	DATA LOGGER
620		X				
624		X				
626		X				
628		X				
631		X				North of river
732		X				North of river
734		X				
735		X				
736		X				
766		X				New well point 10/99
768		X				New well point 10/99
773		X				New well point 10/99
775		X				New well point 10/99
779		X				New well point 10/99
782		X				New well point 10/99; "Island Area"
783		X				New well point 10/99; "Island Area"
784		X				New well point 10/99; "Island Area"
850		X				
854		X				
855		X				
857		X				DATA LOGGER
860		X				
862		X				
1000		X				New well 4/00
1001		X				New well 4/00
1008		X				New well 4/00
1009		X				New well 4/00
1010		X				New well 4/00
1013		X				New well 4/00
1062		X				New well 4/00
<b>SHP02</b>						
600		X				
602		X				DATA LOGGER
603		X				
604		X				
725		X				
726		X				
727		X				
728		X				DATA LOGGER
730		X				DATA LOGGER

**Sampling Frequencies for Locations at  
Shiprock, New Mexico**

Location	Quarterly	Semi-annually	Annually	Biennially	Not Sampled	Notes
<b>SHP02</b>						
731					X	DATA LOGGER
812		X				
813		X				
814		X				
815		X				
816		X				
819		X				
820		X				
823		X				
824		X				
826		X				DATA LOGGER
827		X				DATA LOGGER
828		X				
830		X				DATA LOGGER
832		X				
833		X				
835		X				DATA LOGGER
836		X				DATA LOGGER
837		X				DATA LOGGER
838		X				
839		X				
841		X				DATA LOGGER
843		X				DATA LOGGER
844		X				
846		X				DATA LOGGER
847		X				
848		X				DATA LOGGER
1002		X				New well 4/00
1003		X				New well 4/00
1004		X				New well 4/00
1006		X				New well 4/00
1007		X				New well 4/00
1011		X				New well 4/00
1048		X				Many Devils Wash
1049		X				Many Devils Wash
1057		X				New well 4/00
1058		X				New well 4/00
1059		X				New well 4/00
1060		X				New well 4/00

**Sampling Frequencies for Locations at  
Shiprock, New Mexico**

Location	Quarterly	Semi-annually	Annually	Biennially	Not Sampled	Notes
<b>Surface Water/Sediment Locations</b>						
<b>SHP01</b>						
655	X					Drainage channel
656		X				Sample if enough water
657	X					Outflow ditch from wetland
658	X					Wetland
887	X					Distributary channel
894	X					San Juan River
939	X					Distributary channel
940	X					Just NE of 854, San Juan River
956		X				San Juan River at intake
957		X				San Juan River about 1500' below dist. Channel
<b>SHP02</b>						
425	X					Escarpment Seep
426	X					Escarpment Seep
662	X					Lower Bob Lee Wash
786	X					Seep below US Hwy 666 bridge
884	X					Irrigation return flow
885	X					Upper Bob Lee Wash
886	X					Many Devils Wash
889	X					Many Devils Wash
933	X					1st wash W of Highway 666
934	X					2nd wash W of Highway 666
935	X					Seep near 1st wash
936	X					Seep between 1st & 2nd washes
942	X					Pond NW of 847
958		X				Helium lateral canal where water comes into canal at pump station

**Constituent Sampling Breakdown  
For Individual UMTRA Sites**

Site	Shiprock	
	Ground Water	Surface Water
<b>Analyte</b>		
Approx. No. Samples/yr	182	80
<i>Field Measurements</i>	<i>GW</i>	<i>GW</i>
Alkalinity	X	X
Dissolved Oxygen	X	X
Redox Potential	X	X
pH	X	X
Specific Conductance	X	X
Turbidity	X	
Temperature	X	X
<i>Laboratory Measurements</i>	<i>GW</i>	<i>GW</i>
Aluminum		
Ammonium	X	X
Antimony	X	X
Arsenic	X	X
Barium		
Beryllium		
Bromide		
Cadmium	X	X
Calcium	X	X
Chloride	X	X
Chromium		
Cobalt		
Copper		
Fluoride	X	X
Gamma Spec		
Gross Alpha	X	X
Gross Beta		
Iron	X	X
Lead		
Lead-210		
Magnesium	X	X
Manganese	X	X
Molybdenum	X	X

**Constituent Sampling Breakdown  
For Individual UMTRA Sites**

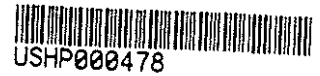
Site	Shiprock	
	Ground Water	Surface Water
<i>Laboratory Measurements (Continued)</i>	<i>GW</i>	<i>GW</i>
Nickel		
Nickel-63		
Nitrate	X	X
Organics		
PCBs		
Phosphate		
Polonium-210	X	X
Potassium	X	X
Radium-226	X	X
Radium-228	X	X
Selenium	X	X
Silica		
Sodium	X	X
Strontium	X	X
Sulfate	X	X
Sulfide		
Thallium		
Thorium-230		
Thorium-232		
Tin		
Total Dissolved Solids	X	X
Uranium	X	X
Vanadium		
Zinc		
<b>Total Analytes</b>	<b>23</b>	<b>23</b>

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

\* The left number represents Ground Water Project samples and the right number represents LTSM Project samples.

Shiprock Monitor Wells		
Site	Location	Analyses
SHP01	608	Mn, NO3, Se, SO4, U, TDS
SHP01	610	Mn, NO3, Se, SO4, U, TDS
SHP01	614	Entire suite
SHP01	620	Mn, NO3, Se, SO4, U, TDS
SHP01	624	Mn, NO3, Se, SO4, U, TDS
SHP01	626	Mn, NO3, Se, SO4, U, TDS
SHP01	628	Mn, NO3, Se, SO4, U, TDS
SHP01	631	Mn, NO3, Se, SO4, U, TDS
SHP01	732	Mn, NO3, Se, SO4, U, TDS
SHP01	734	Mn, NO3, Se, SO4, U, TDS
SHP01	735	Mn, NO3, Se, SO4, U, TDS
SHP01	736	Mn, NO3, Se, SO4, U, TDS
SHP01	766	Mn, NO3, Se, SO4, U, TDS
SHP01	768	Mn, NO3, Se, SO4, U, TDS
SHP01	773	Mn, NO3, Se, SO4, U, TDS
SHP01	775	Mn, NO3, Se, SO4, U, TDS
SHP01	779	Mn, NO3, Se, SO4, U, TDS
SHP01	782	Mn, NO3, Se, SO4, U, TDS
SHP01	783	Mn, NO3, Se, SO4, U, TDS
SHP01	784	Mn, NO3, Se, SO4, U, TDS
SHP01	850	Entire suite
SHP01	854	Mn, NO3, Se, SO4, U, TDS
SHP01	855	Mn, NO3, Se, SO4, U, TDS
SHP01	857	Mn, NO3, Se, SO4, U, TDS
SHP01	860	Mn, NO3, Se, SO4, U, TDS
SHP01	862	Mn, NO3, Se, SO4, U, TDS
SHP01	1000	Entire suite
SHP01	1001	Entire suite
SHP01	1008	Entire suite
SHP01	1009	Entire suite
SHP01	1010	Entire suite
SHP01	1013	Entire suite
SHP01	1062	Entire suite
SHP02	600	Entire suite
SHP02	602	NH4, Mn, NO3, Se, SO4, U, TDS, Ra-226&228
SHP02	603	Entire suite
SHP02	604	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	725	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	726	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	727	NH4, Mn, NO3, Se, SO4, U, TDS, Ra-226&228
SHP02	728	NH4, Mn, NO3, Se, SO4, U, TDS

Shiprock Monitor Wells		
Site	Location	Analytes
SHP02	730	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	812	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	813	Entire suite
SHP02	814	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	815	NH4, Mn, NO3, Se, SO4, U, TDS, Ra-226&228
SHP02	816	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	819	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	820	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	823	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	824	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	826	Entire suite
SHP02	827	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	828	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	830	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	832	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	833	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	835	NH4, Mn, NO3, Se, SO4, U, TDS
SH	836	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	837	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	838	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	839	NH4, Mn, NO3, Se, SO4, U, TDS, Ra-226&228
SHP02	841	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	843	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	844	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	846	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	847	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	848	NH4, Mn, NO3, Se, SO4, U, TDS
SHP02	1002	Entire suite
SHP02	1003	Entire suite
SHP02	1004	Entire suite
SHP02	1006	Entire suite
SHP02	1007	Entire suite
SHP02	1011	Entire suite
SHP02	1048	Entire suite
SHP02	1049	Entire suite
SHP02	1057	Entire suite
SHP02	1058	Entire suite
SHP02	1059	Entire suite
SHP02	1060	Entire suite



CONTRACT NO.: DE-AC13-96GJ87335  
TASK ORDER NO.: MAC00-05  
CONTROL NO.: 3100-N/A

MEMO TO: Sam Marutzky

FROM: Tony Franzone *TJ*

DATE: August 21, 2000

SUBJECT: *REVISED* UMTRA Ground Water Trip Report - Shiprock NM

Site: Shiprock, NM

Dates of Sampling Event: June 12 through June 16, and June 19 through June 26, 2000.

Team Members: Dave Traub, Joe Trevino, Jeff Price, Robert Lucero, and Tony Franzone.

**Number of Locations Sampled:** There were 21 surface and 74 wells sampled of the 104 locations scheduled for this event. Several of the wells and surface locations were dry. Table 1 lists each location and relevant information (i.e., requested sample to collect, any field variances or other comments).

Additional filtered water samples requested by Project Lead Craig Goodknight were collected at the following locations and analyzed for Uranium 234/238: 602, 604, 726, 727, 730, 768, 812, 827, 828, 830, 832, 841, 847, 848, 854, 885, 933, 934, 936, 939, 942, 956, 958, 1049, 1057, 1059, and 1060.

**Locations Not Sampled:** See Table 1.

**Location Specific Information:** See Table 1. Several locations (wells or surface locations) could not be sampled for the entire analyte list because they were dry or had an insufficient water after being purged and did not recover. Data loggers were downloaded at the following wells: 602, 617, 728, 730, 731, 826, 827, 830, 835, 836, 837, 841, 843, 845, 846, 848, 857, and 899. No data link could be established for data logger 826.

**Quality Control Sample Cross Reference:** The following are the false identifications assigned to the quality control samples submitted to the GJO analytical laboratory:

**RECORD COPY**  
*GWShp14.12*



Quality Control Sample Cross Reference				
False Location ID	True Location Number	Ticket Number	Sample Type	
Well 1100	1009	NDK 968	Duplicate	GROUND WATER
Well 1101	608	NDF 471	Duplicate	GROUND WATER
Well 2001	662	NDK 686	Duplicate	SURFACE WATER
Well 2003	735	NDK 695	Duplicate	GROUND WATER
Well 2005	838	NDF 943	Duplicate	GROUND WATER
Well 2000	425	NDK 680	Duplicate	SEEP
Well 0898	602	NDK 836	Duplicate	GROUND WATER
Well 0733	819	NDK 840	Duplicate	GROUND WATER
Well 0876	726	NDK 877	Duplicate	GROUND WATER
Well 2002	885	NDK 688	Equip. Blank- Peristaltic	
Well 2004	846	NDF 941	Equip. Blank- 12V Whale	
Well 0100	819	NDK 842	Equip. Blank- Peristaltic	
Well 0899	847	NDK 834	Equip. Blank- Grundfos	

**Requisition Numbers:** The requisition number for the samples is 17054.

**Water Level Measurements:** Water level measurements were completed on all wells scheduled for sampling.

**Well Inspection Summary:** Well inspections were made on all wells scheduled for sampling.

**Equipment:** None

**Regulatory Issues:** None

**Site Issues:** Wells 600, 603, 614, 813, 826, and 850 were sampled for microbes in addition to the required analytes normally sampled. Site Lead Craig Goodknight and Lutz Kindermann had requested this additional sampling. Samples were prepared according to direction, and shipped to Germany from Farmington, NM. Three new surface water locations (956, 957, and 958) were sited by Dave Traub. Location 956 is located near the intake structure at Nizhoni Park. Location 957 is on the west bank of the San Juan River, west of the highway bridge. Location 958 is at the concrete structure where water exits the siphon into the Helium Lateral Canal. Michele Dineyazhe was met on site and given the maps and figures she had requested.

Tim Fischer of IT/Albuquerque was on site 6/14/00 sampling floodplain vegetation, with assistance from Tony Franzone. Survey coordinates were taken using the global positioning system (GPS) at the vegetation sampling sites, and also the new wells and surface locations. New monitoring wells sampled were: 1000, 1001, 1002, 1003, 1004, 1006, 1007, 1008, 1009, 1010, 1013, 1057, 1058, 1059, 1060, and 1062. GPS continuous locations were taken on Highways 64 and 666 in order to verify existing site map coordinates.





Well Number	Ticket Number	Sample Analytes							VOCs	Comments/Notes
		METALS	Ra-226-Ra-228	Gross alpha	Po-210	ANIONS	NO3 / NH4	TDS		
Well 1048	NDK 691	X	X	X	X	X	X	X		Vehicle access is blocked, hike to well, dry @ 0.5 L
Well 1049	NDK 690	X	X	X	X	X	X	X		Vehicle access is blocked, hike to well, never went dry
Well 1057	NDK 843	X	X	X	X	X	X	X		Depth to water = 32.76, total depth = 38.77, extra purge for stabilization
Well 1058	NDK 845	X				X	X	X		Dry @ 3.35 gallons, bailed for samples after overnight recharge, limited water before going dry again.
Well 1059	NDK 846	X	X	X	X	X	X	X		Grundfos pumped 3 gallons to dry, returned after overnight recharge to collect samples, all 20' of water had recovered.
Well 1060	NDF 948	X	X	X	X	X	X	X		Suspect well not developed; purge dry and use bailer next time
Well 1062	NDF 472	X	X	X	X	X	X	X		Purged dry @ 5 gallons

### Surface Sample Locations

Surface Location Number	Ticket Number	Sample Analytes							VOCs	Comments/Notes
		METALS	Ra-226-Ra-228	Gross alpha	Po-210	ANIONS	NO3 / NH4	TDS		
0425	NDK 677	X	X	X	X	X	X	X		Seep has high flow, very audible, ~1 L/10 sec. Duplicate sample collected
0426	NDK 117	X	X	X	X	X	X	X		Flow from PVC tube ~0.5L/min., also flowing from soil
0655	NDK 120	X	X	X	X	X	X	X		
0658	NDK 118	X	X	X	X	X	X	X		Stagnant pond ~3 in. deep, baby toads present
0662	NDK 685	X	X	X	X	X	X	X		Good flow of water in wash, very audible. Duplicate sample collected
0786	NDK 121	X	X	X	X	X	X	X		Only enough fluid for 3-.125 L, 1-.500 L, 1-1 L, returned to fill the rest the next day.
0884										Dry. Some irrigation water nearby, but not from this channel.
0885	NDK 687	X	X	X	X	X	X	X		Stagnant pool, ~8"-10" deep, ~5' across
0886	NDK 683	X	X	X	X	X	X	X		Stagnant pool
0887	NDK 681	X	X	X	X	X	X	X		Water in channel not flowing, collected from pool ~6" deep near stake. Channel had flowed recently.
0889	NDK 684	X	X	X	X	X	X	X		Slight flow of water, pool at seep full of tumbleweeds.
0894	NDK 119	X	X	X	X	X	X	X		Intake ~4" below water level, ~1.5' from shore, strong current.
0933	NDK 124	X	X	X	X	X	X	X		Flow from pond < ~1.0 gal/min
0934	NDK 123	X	X	X	X	X	X	X		Collected 2" below water line, water 4" deep,
0935	NDK 676	X	X	X	X	X	X	X		Parameters 1 hour before samples collected, dug a hole, let it seep, collected samples, ~1.5gal/hr
0936	NDK 125	X	X	X	X	X	X	X		Boggy area. water 2"-3" deep

Surface Location Number	Ticket Number	Sample Analytes							Comments/Notes
		METALS	Ra-226-Ra-228	Gross alpha	Po-210	ANIONS	NO3/NH4	TDS	
0939	NDF 473	X	X	X	X	X	X	X	Surface water low but flowing, minnows in water
0940	NDK 682	X	X	X	X	X	X	X	Collected in river (very low today) ~40' from shore
0942	NDK 679	X	X	X	X	X	X	X	Original location dry, collected in large ditch by access road ~ 25 yards north in same drainage
0956	NDK 678	X	X	X	X	X	X	X	Collected using 40' tygon tube in river, ~ 2' from bank, ~ 12" deep in current. Nizhoni Park intake
0957	NDF 474	X	X	X	X	X	X	X	New location on river
0958	NDK 122	X	X	X	X	X	X	X	Collected at concrete structure, by siphon exit

TF/lcg

Distribution:

cc: C. Bahrke  
 R. Dayvault  
 C. Goodknight  
 D. Metzler  
 K. Miller  
 Project Record File GWSHP 14.12 thru P. Taylor