



UMON000212



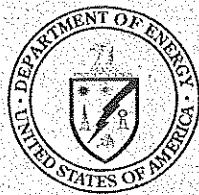
UMTRA GROUND WATER PROJECT

**DATA VALIDATION
FOR THE MONUMENT VALLEY, AZ.
UMTRA SITE**

**AUGUST 1998
Water Sampling**

Prepared by the

**U.S. Department of Energy
Grand Junction Office**



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MONUMENT VALLEY
Sampled August 1998

DATA PACKAGE CONTENTS

This data package includes the following information:

- | <u>Item No.</u> | <u>Description of Contents</u> |
|-----------------|--|
| 1. | Site Sampling Lead Summary |
| 2. | Data Package Assessment , which includes the following: <ul style="list-style-type: none">a. Field procedures verification checklistb. Confirmation that chain-of-custody was maintained.c. Confirmation that holding time requirements were met.d. Evaluation of the adequacy of the QC sample results. |
| 3. | Data Assessment Summary , which describes problems identified in the data validation process and summarizes the validators findings. |
| 5. | Anomalous Data Review Checksheets which list the subset of data from sampling event that merits explanation or follow-up action. The "disposition" column of this report describes the evaluators judgments on the listed anomalies. |
| 6. | UMTRA Database Printouts <ul style="list-style-type: none">a. Ground-Water Quality Data (included on disk)b. Surface-Water Quality Data (included on disk)c. Equipment Blank Data (included on disk)d. Time Versus Concentration Graphse. Water Level Data |
| 7. | Sampling and Analysis Work Order and Trip Report. |

Site Sampling Lead Summary

Site: Monument Valley

Sampling Period: August 1998

SUMMARY CRITERIA

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

The selenium concentration (0.0333 mg/L) in the sample collected from domestic well 200 exceeded the UMTRA ground water standard of 0.01 mg/L.

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

There are no point-of-compliance wells established at the Monument Valley Site.

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

The elevated uranium concentration of 0.0885 mg/l in well 407 is natural occurring due to evapotranspiration effects. The low sulfate-to chloride ration of 5.5 and the background level of nitrate (0.075 mg/L) support this interpretation. Furthermore, this well is located along Cane Valley Wash where this phenomena frequently occurs.

Wells 619 and 744 are located on-site adjacent to the paleovalley where slightly elevated uranium occurs in the De Chelly sandstone. The source of the uranium is belived to be from the alluvial water in the paleovalley. Former pumping on the De Chelly wells may have actively drawn water from the alluvial aquifer into the De Chelly Sandstone. Well 619 monitors the De Chelly bedrock aquifer. Uranium concentrations in this well increased to 0.078 mg/L from the 0.053 mg/L measured one year ago. De Chelly monitor well 776 is located 70-feet upgradient of well 619. Uranium concentrations in this well have decreased to 0.025 mg/L from the 0.037 mg/L measured one year ago. The uranium concentration of 0.070 mg/L in well 774 which monitors the alluvial water adjacent to the De Chelly wells has not changed from one year ago. This indicates that the uranium concentrations in the De Chelly are naturally flushing downgradient as expected. Dedicated low-flow sampling pumps were installed in the De Chelly wells after the sampling event one year ago. The purpose of installing the low-flow sampling pumps was to avoid drawing alluvial water that is slightly elevated in uranium into the De Chelly aquifer thereby allowing the bedrock formation to naturally flush the uranium downgradient.

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

There is no historical upstream ambient water quality data from Cane Valley Wash to provide comparison to downstream locations; therefore, surface water concentrations of UMTRA related contaminants were compared to a statistical benchmark derived from data obtained from upgradient alluvial well 602. Surface location 622 (frog pond) and 631 (Cane Valley Wash) exceeded the benchmark for uranium

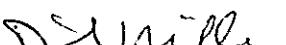
Wells with sample concentrations that exceeded UMTRA ground water standards are listed in Table 1.

Table 1. Monument Valley Wells with Samples that Exceeded UMTRA Standards in August 1998.

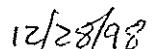
Analyte	Standard ¹	Wells Exceeding Standards (Concentration ¹)
Gross Alpha ²	15	659 (17.35), 407 (35.43)
Nitrate	44.27	771 (580), 669 (58.4), 770 (171), 655 (388), 606 (394), 662 (55), 656 (247), 777 (804), 762 (68.3), 653 (124), 765 (659), 761 (75.4), 764 (103)
Ra-226 + Ra-228	5	659 (6.98)
Selenium	0.01	662 (0.0116), 762 (0.0122), 200 (0.0333)
Uranium	0.044	774 (0.0698), 619 (0.0784), 407 (0.0885),

¹Units are in mg/L (inorganic) or pCi/L (radiological)

² Uranium activities were subtracted from the gross alpha results in order to compare to the standard, which excludes uranium and radon.



David Miller
Site Sampling Lead



Date

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DATA ASSESSMENT

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UGW Water Sampling Field Activities Verification Checklist

Project Monument Valley

Date(s) of Ground Water Sampling 8-25-98 to 8-28-98

Date(s) of Verification 11-17- 98

Name of Verifier Sam Campbell

	Response (Yes, No, N/A)	Comments
1. Is the SAP the primary document directing field procedures?	<u>Yes</u>	<u>Sampling Work order 8-21-98</u>
List other documents, SOPs, Instructions.		
2. Were the sampling locations specified in the planning documents sampled?	<u>Yes</u>	<u>Except surface locations 624 and 627-dry, and well 640 -obstructed</u>
3. Was field equipment calibrated as specified in the above named documents?	<u>Yes</u>	<u>YSI X14719 was out of range on conductivity op check (low end) and temperature probe op check.</u>
Were the number and types (alkalinity, temperature, conductivity pH, turbidity, DO, Eh) of field measurements taken as specified?	<u>Yes</u>	<u>Except no filtered alkalinity at well 200, no turbidity at well 402</u>
Were the standard solutions used for the calibration and operational checks of the field instruments brought to within 10°C of the temperature of the water to be sampled?	<u>Yes</u>	<u>Except at locations 772 and 615</u>
Was the calibration information recorded on the field data sheets?	<u>Yes</u>	
4. Was a duplicate alkalinity measurement conducted on a frequency of one duplicate per 20 samples?	<u>Yes</u>	<u>3 duplicates for 42 samples</u>
5. Was depth to water measured before purging?	<u>Yes</u>	
Was this information used to calculate the purge volume?	<u>Yes</u>	
6. 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?	<u>Yes</u>	
7. If low-flow purging was used, was the purge rate less than 0.125 gal/min, and was the drawdown less than 0.3 feet?	<u>Yes</u>	

8. Were duplicates taken at a frequency of one per 20 samples? Yes
9. Were equipment blanks taken at a frequency of one per 20 samples that were collected with nondedicated equipment? Yes
10. Were trip blanks prepared and included with each shipment of VOC samples? NA
11. Were QC samples assigned a fictitious site identification number? Yes
Was the true identity of the samples recorded in the field notes? Yes
12. Were samples collected in the containers specified? Yes
Were certified pre-cleaned containers used for the sampling? Yes
13. Were samples filtered and preserved as specified? Yes
14. Were the number and types of samples collected as specified? Yes *R9-226/228 and gross & not collected @ 402 - poor recovery*
15. Were chain of custody records completed and was sample custody maintained? No
16. Were sample ticket book numbers recorded on field data forms and on the chain of custody? Yes
17. Are field data sheets signed and dated by the field team leader? Yes
18. Was all other pertinent information documented on the field data sheets? Yes
19. Was the presence or absence of ice in the cooler documented at every sample location? Yes
20. Were water levels measured at the locations specified in the planning documents? Yes

DATA PACKAGE ASSESSMENT

REQUISITION NUMBERS: 16195 SITE: Monument Valley LABORATORY: GJO ANALYSIS DATES: 9-2-98 to 10-22-98
 REVIEWER: Sam Campbell SIGNATURE: Sam Campbell DATE: 11-16-98
 NAME (print) SIGNATURE DATE

	ICP-MS	ICP-AES	GFAA	FAA	NaBH ₄	AS	LSc	PC	IC	Gravimetric	Colorimetric	Other
CHAIN OF CUSTODY	①	①	NA	NA	①	NA	①	①	①	①	①	NA
HOLDING TIME	OK	OK			OK		OK	OK	OK	OK	OK	
CALIB. VERIFICATION (For AS, internal tracer)	OK	OK			OK		OK	OK	OK	NA	OK	
PREP. BLANKS (Only if digestion)	OK	③			OK	↓	OK	OK	NA	NA	②	
INT. CAL. BLANKS	OK	OK			OK	NA	NA	NA	④	NA	⑤	
CONT. CAL. BLANKS	OK	⑥	↓	↓	OK	NA	NA	NA	⑦	NA	⑧	
ICS (ICP only)	OK	OK	NA	NA	NA	NA	NA	NA	NA	NA	NA	
LAB. CONTROL SAMPLE	OK	OK			OK		OK	OK	OK	OK	OK	
DUPLICATES	OK	OK			OK	↓	OK	OK	OK	OK	OK	
POSTDIGEST. SPKS. (Only if MS fails)	NA	NA			NA	NA	NA	NA	NA	NA	NA	
MATRIX SPKS.	OK	OK			OK		NA	OK	OK	NA	OK	
OVERALL ASSESS.	OK	OK	↓	↓	OK	↓	OK	OK	OK	OK	OK	

REVIEWER COMMENTS: ① Chain of custody dated 8-27-98 was not signed as relinquished. Chain of custody dated 8-31-98 did not have time relinquished documented. ③ Na and Mg detected in the prep blank - no samples affected. ④ Cl, NO₃, SO₄ detected in the ICB - no samples affected. ⑤ NH₄ detected in the ICB - no samples affected.

ITEMS REQUIRING ATTENTION: ⑥ U flag NH₄ results 254073 and 254076 because of prep blank contamination. ⑥ U flag the following K results because of CCR contamination 254064 and 254073. ⑦ U flag the following results because of CCP contamination: Cl results 254048 and 254064; nitrate results 254032-254035, 254048, 259057, 254060, 254063, 254064, 254068-254074. ⑧ U flag the following NH₄ results because of CCP contamination: 254031, 254064, 254065, 254073, and 254076

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**MONUMENT VALLEY, AZ
AUGUST 1998 SAMPLING EVENT
DATA ASSESSMENT SUMMARY**

The DOE-GJO Analytical Laboratory analyzed samples and reported results for this sampling event under requisition number 16195 for the UMTRA ground water project.

RADIOCHEMICAL ANALYSIS

The determination of gross alpha was performed by gas proportional counting (PC). Radium-226, radium-228, and lead-210 were determined by liquid scintillation spectrometry (LSc). Although not requested, gross beta results are included in this report because gross beta activity is determined concurrently with gross alpha activity.

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

METALS/MAJOR CATIONS ANALYSIS

The determination of calcium, magnesium, potassium, sodium, strontium, and vanadium was performed by inductively coupled plasma-atomic emission spectrometer (ICP-AES). Cadmium and uranium were analyzed by inductively coupled plasma-mass spectrometry (ICP-MS), and selenium was determined by hydride generation atomic absorption spectrometry (NaBH_4).

Potassium results 254064 (equipment blank) and 254073 (equipment blank) were qualified with a "U" flag in the database because of continuing calibration blank (CCB) contamination.

INORGANIC ANALYSIS

Chloride, nitrate, and sulfate were determined by ion chromatography (IC), and ammonium was determined by spectrophotometry (Colorimetry).

Ammonium results 254073 and 254076 were qualified with a "U" flag in the database because of prep blank contamination. The following results were qualified with a "U" flag because of CCB contamination: ammonium results 254031 (657), 254064 (equipment blank), 254065 (650), 254073 (equipment blank), and 254076 (602); chloride results 254048 (equipment blank) and 254064 (equipment blank); nitrate results 254032 (621), 254033 (622), 254034 (623), 254035 (622 duplicate), 254048 (equipment blank), 254057 (407), 254060 (660), 254063 (767), 254064 (equipment blank), 254068 (654), 254069 (409), 254070 (402), 254071 (403), 254072 (631), 254073 (equipment blank), 254074 (400).

FIELD ANALYSIS/ACTIVITIES

Low-flow purging was used at wells 776 and 619; therefore, results from these wells were qualified with an F flag in the database. There were no wells with a measured pH greater than 9; therefore G flags indicating potential grout contamination were not required. Wells purged dry prior to removal of three casing volumes included 409, 402, 403, 400, 771, 669, 775, 774, 407, 655, 606, 657 and 764; therefore, results from these wells will be qualified with a L flag in the database indicating less than three casing volumes were removed prior to sampling.

Three equipment blanks were collected for the 38 locations where samples were collected using non-dedicated equipment. The equipment blanks were analyzed for the same constituents as the Monument Valley environmental samples. There were no UMTRA related contaminants detected in the equipment blank in concentrations above the contract required detection limit (CRDL), MDA, or 3 σ ; therefore, equipment blank results are considered acceptable.

Three field duplicates were collected for the 42 sampled locations. Duplicate samples were collected from wells 653 and 770, and surface location 622. There is no established regulatory criteria for the evaluation of field duplicate samples; therefore, EPA guidance for *laboratory* duplicates (which is conservative for field duplicates) was used to assess the precision of the field duplicates. With the exception of one magnesium result (181 relative percent), duplicate sample results met the laboratory duplicate criteria (20 relative percent difference); therefore, duplicate results are considered acceptable.

SAR

Because of technical constraints, a suspected anomalies report (SAR) could not be generated for the Monument Valley 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 from this sampling event 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. Data listed on the Checksheet will be compared to results of the next sampling round to make a final determination of validity.

SUMMARY

All analytical quality control criteria were met except as qualified on the Ground Water Quality Data by Parameter, Surface Water Quality Data by Parameter, or Equipment Blank database printouts. The meaning of data qualifiers is defined on the UMTRA data base printouts or 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 meet the validation criteria and may be treated as final results.

A electronic copy of the analytical data on a disk is included with this data validation package.

David Miller
David Miller
Data Validation Lead

11/24/98
Date

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DATA REVIEW CHECKSHEET

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ANOMALOUS DATA REVIEW CHECKSHEET

SITE: Monument Valley SAMPLING DATA: 8/98 Groundwater & Surface Water

REVIEWER(s): DAVID MILLER D. Miller 11/24/98
NAME (print) SIGNATURE DATE

SITE HYDROLOGIST: _____ **NAME (print)** _____ **SIGNATURE** _____ **DATE**

SITE GEOCHEMIST: _____ **NAME (print)** _____ **SIGNATURE** _____ **DATE**

DATE OF REVIEW: 11/24/98

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**ANALYTICAL
LABORATORY
RESULTS**

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GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:54

PARAMETER	UNITS	LOCATION ID	SAMPLE:	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE				LAB	DATA	QA	
Alkalinity as CaCO ₃	mg/L	0200	08/28/98	N001	AL	U	205		#	- -
	mg/L	0400	08/27/98	0001	AL	U	327	L	#	- -
	mg/L	0400	08/27/98	N001	AL	U	313	L	#	- -
	mg/L	0402	08/27/98	0001	AL	U	150	L	#	- -
	mg/L	0402	08/27/98	N001	AL	U	155	L	#	- -
	mg/L	0403	08/27/98	0001	AL	U	213	L	#	- -
	mg/L	0403	08/27/98	N001	AL	U	202	L	#	- -
	mg/L	0407	08/28/98	0001	AL	C	408	L	#	- -
	mg/L	0409	08/27/98	0001	AL	C	154	L	#	- -
	mg/L	0409	08/27/98	N001	AL	C	142	L	#	- -
	mg/L	0602	08/28/98	0001	AL	U	215		#	- -
	mg/L	0602	08/28/98	N001	AL	U	196		#	- -
	mg/L	0603	08/28/98	0001	AL	U	168		#	- -
	mg/L	0603	08/28/98	N001	AL	U	180		#	- -
	mg/L	0604	08/28/98	0001	AL	C	186		#	- -
	mg/L	0604	08/28/98	N001	AL	C	184		#	- -
	mg/L	0605	08/28/98	0001	AL	C	231		#	- -
	mg/L	0605	08/28/98	N001	AL	C	235		#	- -
	mg/L	0606	08/26/98	0001	AL	D	234	L	#	- -
	mg/L	0606	08/26/98	N001	AL	D	400	L	#	- -
	mg/L	0614	08/28/98	0001	SR	D	148		#	- -
	mg/L	0614	08/28/98	N001	SR	D	175		#	- -
	mg/L	0615	08/26/98	0001	SR	U	193		#	- -
	mg/L	0615	08/26/98	N001	SR	U	193		#	- -
	mg/L	0619	08/28/98	0001	DC	O	161	F	#	- -
	mg/L	0619	08/28/98	N001	DC	O	166	F	#	- -
	mg/L	0650	08/28/98	0001	AL	D	178		#	- -

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:54

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Alkalinity as CaCO ₃	mg/L	0650	08/28/98	N001	AL	D	180		#		-	-
	mg/L	0653	08/27/98	0001	AL	D	172		#		-	-
	mg/L	0653	08/27/98	N001	AL	D	185		#		-	-
	mg/L	0654	08/28/98	0001	AL	C	187		#		-	-
	mg/L	0654	08/28/98	N001	AL	C	208		#		-	-
	mg/L	0655	08/25/98	0001	AL	D	250	L	#		-	-
	mg/L	0655	08/25/98	N001	AL	D	300	L	#		-	-
	mg/L	0656	08/27/98	0001	AL	D	247		#		-	-
	mg/L	0656	08/27/98	N001	AL	D	253		#		-	-
	mg/L	0657	08/26/98	0001	DC	O	157	L	#		-	-
	mg/L	0657	08/26/98	N001	DC	O	159	L	#		-	-
	mg/L	0659	08/26/98	0001	SR	D	180		#		-	-
	mg/L	0659	08/26/98	N001	SR	D	145		#		-	-
	mg/L	0660	08/27/98	0001	SR	D	173		#		-	-
	mg/L	0660	08/27/98	N001	SR	D	171		#		-	-
	mg/L	0662	08/26/98	0001	AL	D	174		#		-	-
	mg/L	0662	08/26/98	N001	AL	D	114		#		-	-
	mg/L	0669	08/26/98	0001	AL	D	206	L	#		-	-
	mg/L	0669	08/26/98	N001	AL	D	197	L	#		-	-
	mg/L	0760	08/27/98	0001	AL	D	170		#		-	-
	mg/L	0760	08/27/98	N001	AL	D	173		#		-	-
	mg/L	0761	08/27/98	0001	AL	D	126		#		-	-
	mg/L	0761	08/27/98	N001	AL	D	120		#		-	-
	mg/L	0762	08/27/98	0001	AL	D	206		#		-	-
	mg/L	0762	08/27/98	N001	AL	D	199		#		-	-
	mg/L	0764	08/28/98	0001	AL	D	182	L	#		-	-
	mg/L	0764	08/28/98	N001	AL	D	157	L	#		-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:55

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Alkalinity as CaCO ₃	mg/L	0765	08/27/98	0001	AL	D	285			#	-	-
	mg/L	0765	08/27/98	N001	AL	D	296			#	-	-
	mg/L	0767	08/27/98	0001	AL	D	148			#	-	-
	mg/L	0767	08/27/98	N001	AL	D	123			#	-	-
	mg/L	0768	08/28/98	0001	AL	D	161			#	-	-
	mg/L	0768	08/28/98	N001	AL	D	168			#	-	-
	mg/L	0770	08/26/98	0001	AL	D	227			#	-	-
	mg/L	0770	08/26/98	N001	AL	D	229			#	-	-
	mg/L	0771	08/25/98	0001	AL	D	319	L		#	-	-
	mg/L	0771	08/25/98	N001	AL	D	315	L		#	-	-
	mg/L	0772	08/26/98	0001	AL	O	177			#	-	-
	mg/L	0772	08/26/98	N001	AL	O	186			#	-	-
	mg/L	0774	08/26/98	0001	AL	O	159	L		#	-	-
	mg/L	0774	08/26/98	N001	AL	O	170	L		#	-	-
	mg/L	0775	08/26/98	0001	DC	D	216	L		#	-	-
	mg/L	0775	08/26/98	N001	DC	D	200	L		#	-	-
	mg/L	0776	08/28/98	0001	DC	O	177	F		#	-	-
	mg/L	0776	08/28/98	N001	DC	O	171	F		#	-	-
	mg/L	0777	08/27/98	0001	AL	D	306			#	-	-
	mg/L	0777	08/27/98	N001	AL	D	299			#	-	-
Ammonia as NH ₄	mg/L	0200	08/28/98	0001	AL	U	0.0432	B		#	-	-
	mg/L	0400	08/27/98	0001	AL	U	0.780	L		#	-	-
	mg/L	0402	08/27/98	0001	AL	U	0.246	L		#	-	-
	mg/L	0403	08/27/98	0001	AL	U	0.0786	B	L	#	-	-
	mg/L	0407	08/28/98	0001	AL	C	0.0529	B	L	#	-	-
	mg/L	0409	08/27/98	0001	AL	C	0.0432	B	L	#	-	-
	mg/L	0602	08/28/98	0001	AL	U	0.0239	B	U	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:55

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Ammonia as NH4	mg/L	0603	08/28/98	0001	AL	U	0.114			#	-	-
	mg/L	0604	08/28/98	0001	AL	C	0.0754	B		#	-	-
	mg/L	0605	08/28/98	0001	AL	C	0.281			#	-	-
	mg/L	0606	08/26/98	0001	AL	D	270.000		L	#	-	-
	mg/L	0614	08/28/98	0001	SR	D	0.0400	B		#	-	-
	mg/L	0615	08/26/98	0001	SR	U	0.0175	B		#	-	-
	mg/L	0619	08/28/98	0001	DC	O	0.0915	B	F	#	-	-
	mg/L	0650	08/28/98	0001	AL	D	0.0175	B	U	#	-	-
	mg/L	0653	08/27/98	0001	AL	D	0.0368	B		#	-	-
	mg/L	0653	08/27/98	0002	AL	D	0.0336	B		#	-	-
	mg/L	0654	08/28/98	0001	AL	C	0.101			#	-	-
	mg/L	0655	08/25/98	0001	AL	D	93.700		L	#	-	-
	mg/L	0656	08/27/98	0001	AL	D	115.000			#	-	-
	mg/L	0657	08/26/98	0001	DC	O	0.0046	B	UL	#	-	-
	mg/L	0659	08/26/98	0001	SR	D	0.343			#	-	-
	mg/L	0660	08/27/98	0001	SR	D	0.0464	B		#	-	-
	mg/L	0662	08/26/98	0001	AL	D	0.0110	B		#	-	-
	mg/L	0669	08/26/98	0001	AL	D	1.160		L	#	-	-
	mg/L	0760	08/27/98	0001	AL	D	0.0915	B		#	-	-
	mg/L	0761	08/27/98	0001	AL	D	0.0400	B		#	-	-
	mg/L	0762	08/27/98	0001	AL	D	0.0561	B		#	-	-
	mg/L	0764	08/28/98	0001	AL	D	1.200		L	#	-	-
	mg/L	0765	08/27/98	0001	AL	D	198.000			#	-	-
	mg/L	0767	08/27/98	0001	AL	D	0.262			#	-	-
	mg/L	0768	08/28/98	0001	AL	D	0.587			#	-	-
	mg/L	0770	08/26/98	0001	AL	D	67.200			#	-	-
	mg/L	0770	08/26/98	0002	AL	D	66.200			#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:55

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Ammonia as NH4	mg/L	0771	08/25/98	0001	AL	D	327.000	L	#		-	-
	mg/L	0772	08/26/98	0001	AL	O	9.070		#		-	-
	mg/L	0774	08/26/98	0001	AL	O	0.0175	B	L	#	-	-
	mg/L	0775	08/26/98	0001	DC	D	0.0239	B	L	#	-	-
	mg/L	0776	08/28/98	0001	DC	O	0.0529	B	F	#	-	-
	mg/L	0777	08/27/98	0001	AL	D	229.000		#		-	-
Cadmium	mg/L	0200	08/28/98	0001	AL	U	0.0011	U		#	0.0011	-
	mg/L	0400	08/27/98	0001	AL	U	0.0010	U	L	#	0.001	-
	mg/L	0402	08/27/98	0001	AL	U	0.0010	U	L	#	0.001	-
	mg/L	0403	08/27/98	0001	AL	U	0.0010	U	L	#	0.001	-
	mg/L	0407	08/28/98	0001	AL	C	0.0010	U	L	#	0.001	-
	mg/L	0409	08/27/98	0001	AL	C	0.0010	U	L	#	0.001	-
	mg/L	0602	08/28/98	0001	AL	U	0.0010	U		#	0.001	-
	mg/L	0603	08/28/98	0001	AL	U	0.0010	U		#	0.001	-
	mg/L	0604	08/28/98	0001	AL	C	0.0010	U		#	0.001	-
	mg/L	0605	08/28/98	0001	AL	C	0.0010	U		#	0.001	-
	mg/L	0606	08/26/98	0001	AL	D	0.0010	U	L	#	0.001	-
	mg/L	0614	08/28/98	0001	SR	D	0.0010	U		#	0.001	-
	mg/L	0615	08/26/98	0001	SR	U	0.0010	U		#	0.001	-
	mg/L	0619	08/28/98	0001	DC	O	0.0010	U	F	#	0.001	-
	mg/L	0650	08/28/98	0001	AL	D	0.0010	U		#	0.001	-
	mg/L	0653	08/27/98	0001	AL	D	0.0010	U		#	0.001	-
	mg/L	0653	08/27/98	0002	AL	D	0.0010	U		#	0.001	-
	mg/L	0654	08/28/98	0001	AL	C	0.0010	U		#	0.001	-
	mg/L	0655	08/25/98	0001	AL	D	0.0010	U	L	#	0.001	-
	mg/L	0656	08/27/98	0001	AL	D	0.0010	U		#	0.001	-
	mg/L	0657	08/26/98	0001	DC	O	0.0010	U	L	#	0.001	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:55

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE	ID				LAB	DATA	QA	
Cadmium	mg/L	0659	08/26/98	0001	SR	D	0.0010	U		#	0.001
	mg/L	0660	08/27/98	0001	SR	D	0.0010	U		#	0.001
	mg/L	0662	08/26/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0669	08/26/98	0001	AL	D	0.0010	U	L	#	0.001
	mg/L	0760	08/27/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0761	08/27/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0762	08/27/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0764	08/28/98	0001	AL	D	0.0014		L	#	-
	mg/L	0765	08/27/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0767	08/27/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0768	08/28/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0770	08/26/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0770	08/26/98	0002	AL	D	0.0010	U		#	0.001
	mg/L	0771	08/25/98	0001	AL	D	0.0010	U	L	#	0.001
Calcium	mg/L	0772	08/26/98	0001	AL	O	0.0010	U		#	0.001
	mg/L	0774	08/26/98	0001	AL	O	0.0010	U	L	#	0.001
	mg/L	0775	08/26/98	0001	DC	D	0.0010	U	L	#	0.001
	mg/L	0776	08/28/98	0001	DC	O	0.0010	U	F	#	0.001
	mg/L	0777	08/27/98	0001	AL	D	0.0010	U		#	0.001
	mg/L	0200	08/28/98	0001	AL	U	73.400			#	-
	mg/L	0400	08/27/98	0001	AL	U	26.700		L	#	-
	mg/L	0402	08/27/98	0001	AL	U	10.700		L	#	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:55

PARAMETER	UNITS	LOCATION ID	SAMPLE DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
								LAB	DATA	QA	
Calcium	mg/L	0604	08/28/98	0001	AL	C	19.600		#		-
	mg/L	0605	08/28/98	0001	AL	C	129.000		#		-
	mg/L	0606	08/26/98	0001	AL	D	178.000	L	#		-
	mg/L	0614	08/28/98	0001	SR	D	81.800		#		-
	mg/L	0615	08/26/98	0001	SR	U	14.900		#		-
	mg/L	0619	08/28/98	0001	DC	O	41.800	F	#		-
	mg/L	0650	08/28/98	0001	AL	D	7.740		#		-
	mg/L	0653	08/27/98	0001	AL	D	252.000		#		-
	mg/L	0653	08/27/98	0002	AL	D	239.000		#		-
	mg/L	0654	08/28/98	0001	AL	C	37.400		#		-
	mg/L	0655	08/25/98	0001	AL	D	371.000	L	#		-
	mg/L	0656	08/27/98	0001	AL	D	50.000		#		-
	mg/L	0657	08/26/98	0001	DC	O	37.100	L	#		-
	mg/L	0659	08/26/98	0001	SR	D	27.000		#		-
	mg/L	0660	08/27/98	0001	SR	D	2.780		#		-
	mg/L	0662	08/26/98	0001	AL	D	242.000		#		-
	mg/L	0669	08/26/98	0001	AL	D	71.800	L	#		-
	mg/L	0760	08/27/98	0001	AL	D	20.700		#		-
	mg/L	0761	08/27/98	0001	AL	D	125.000		#		-
	mg/L	0762	08/27/98	0001	AL	D	115.000		#		-
	mg/L	0764	08/28/98	0001	AL	D	128.000	L	#		-
	mg/L	0765	08/27/98	0001	AL	D	161.000		#		-
	mg/L	0767	08/27/98	0001	AL	D	35.500		#		-
	mg/L	0768	08/28/98	0001	AL	D	83.800		#		-
	mg/L	0770	08/26/98	0001	AL	D	59.600		#		-
	mg/L	0770	08/26/98	0002	AL	D	59.600		#		-
	mg/L	0771	08/25/98	0001	AL	D	511.000	L	#		-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:55

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL.	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Calcium	mg/L	0772	08/26/98	0001	AL	O	16.600		#		-	-
	mg/L	0774	08/26/98	0001	AL	O	41.200	L	#		-	-
	mg/L	0775	08/26/98	0001	DC	D	13.900	L	#		-	-
	mg/L	0776	08/28/98	0001	DC	O	27.600	F	#		-	-
	mg/L	0777	08/27/98	0001	AL	D	167.000		#		-	-
Chloride	mg/L	0200	08/28/98	0001	AL	U	133.000		#		-	-
	mg/L	0400	08/27/98	0001	AL	U	31.800	L	#		-	-
	mg/L	0402	08/27/98	0001	AL	U	13.300	L	#		-	-
	mg/L	0403	08/27/98	0001	AL	U	14.400	L	#		-	-
	mg/L	0407	08/28/98	0001	AL	C	275.000	L	#		-	-
	mg/L	0409	08/27/98	0001	AL	C	7.140	L	#		-	-
	mg/L	0602	08/28/98	0001	AL	U	14.700		#		-	-
	mg/L	0603	08/28/98	0001	AL	U	11.800		#		-	-
	mg/L	0604	08/28/98	0001	AL	C	11.900		#		-	-
	mg/L	0605	08/28/98	0001	AL	C	175.000		#		-	-
	mg/L	0606	08/26/98	0001	AL	D	19.400	L	#		-	-
	mg/L	0614	08/28/98	0001	SR	D	26.300		#		-	-
	mg/L	0615	08/26/98	0001	SR	U	9.990		#		-	-
	mg/L	0619	08/28/98	0001	DC	O	5.770	F	#		-	-
	mg/L	0650	08/28/98	0001	AL	D	8.440		#		-	-
	mg/L	0653	08/27/98	0001	AL	D	34.300		#		-	-
	mg/L	0653	08/27/98	0002	AL	D	33.400		#		-	-
	mg/L	0654	08/28/98	0001	AL	C	5.340		#		-	-
	mg/L	0655	08/25/98	0001	AL	D	31.500	L	#		-	-
	mg/L	0656	08/27/98	0001	AL	D	18.000		#		-	-
	mg/L	0657	08/26/98	0001	DC	O	5.920	L	#		-	-
	mg/L	0659	08/26/98	0001	SR	D	10.700		#		-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:55

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Chloride	mg/L	0660	08/27/98	0001	SR	D	8.830			#	-	-
	mg/L	0662	08/26/98	0001	AL	D	9.100			#	-	-
	mg/L	0669	08/26/98	0001	AL	D	14.800	L		#	-	-
	mg/L	0760	08/27/98	0001	AL	D	10.300			#	-	-
	mg/L	0761	08/27/98	0001	AL	D	15.200			#	-	-
	mg/L	0762	08/27/98	0001	AL	D	63.200			#	-	-
	mg/L	0764	08/28/98	0001	AL	D	19.600	L		#	-	-
	mg/L	0765	08/27/98	0001	AL	D	21.200			#	-	-
	mg/L	0767	08/27/98	0001	AL	D	4.950			#	-	-
	mg/L	0768	08/28/98	0001	AL	D	98.600			#	-	-
	mg/L	0770	08/26/98	0001	AL	D	18.300			#	-	-
	mg/L	0770	08/26/98	0002	AL	D	18.200			#	-	-
	mg/L	0771	08/25/98	0001	AL	D	32.200	L		#	-	-
	mg/L	0772	08/26/98	0001	AL	O	18.300			#	-	-
	mg/L	0774	08/26/98	0001	AL	O	6.890	L		#	-	-
Gross Alpha	pCi/L	0200	08/28/98	0001	AL	U	13.47			#	11.77	± 8.19
	pCi/L	0400	08/27/98	0001	AL	U	7.03	U	L	#	7.03	± 4.34
	pCi/L	0403	08/27/98	0001	AL	U	5.01	U	L	#	5.01	± 2.43
	pCi/L	0407	08/28/98	0001	AL	C	96.23	L		#	28	± 26.8
	pCi/L	0409	08/27/98	0001	AL	C	2.80	U	L	#	2.8	± 1.59
	pCi/L	0602	08/28/98	0001	AL	U	6.38			#	4.56	± 3.32
	pCi/L	0603	08/28/98	0001	AL	U	5.21			#	3.95	± 2.84
	pCi/L	0604	08/28/98	0001	AL	C	3.82	U		#	3.82	± 2.54
	pCi/L	0605	08/28/98	0001	AL	C	20.06	U		#	20.06	± 11.7

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:56

PARAMETER	UNITS	LOCATION ID	SAMPLE DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
								LAB	DATA	QA	
Gross Alpha	pCi/L	0606	08/26/98	0001	AL	D	17.89	U	L	#	17.89 ± 10.4
	pCi/L	0614	08/28/98	0001	SR	D	17.78			#	6.14 ± 5.51
	pCi/L	0615	08/26/98	0001	SR	U	11.34			#	3.35 ± 3.17
	pCi/L	0619	08/28/98	0001	DC	O	30.87	F		#	3.75 ± 4.96
	pCi/L	0650	08/28/98	0001	AL	D	3.07	U		#	3.07 ± 1.84
	pCi/L	0653	08/27/98	0001	AL	D	22.51		U	#	22.51 ± 15.2
	pCi/L	0653	08/27/98	0002	AL	D	21.94	U		#	21.94 ± 13.5
	pCi/L	0654	08/28/98	0001	AL	C	3.04	U		#	3.04 ± 1.66
	pCi/L	0655	08/25/98	0001	AL	D	28.70	U	L	#	28.7 ± 17.0
	pCi/L	0656	08/27/98	0001	AL	D	6.78	U		#	6.78 ± 4.36
	pCi/L	0657	08/26/98	0001	DC	O	12.09		L	#	3.12 ± 3.10
	pCi/L	0659	08/26/98	0001	SR	D	18.38			#	4.38 ± 4.48
	pCi/L	0660	08/27/98	0001	SR	D	3.87			#	3.41 ± 2.37
	pCi/L	0662	08/26/98	0001	AL	D	34.62			#	14.29 ± 12.1
	pCi/L	0669	08/26/98	0001	AL	D	6.30	U	L	#	6.3 ± 4.00
	pCi/L	0760	08/27/98	0001	AL	D	3.57	U		#	3.57 ± 2.09
	pCi/L	0761	08/27/98	0001	AL	D	9.46			#	9.31 ± 6.30
	pCi/L	0762	08/27/98	0001	AL	D	14.28	U		#	14.28 ± 8.25
	pCi/L	0764	08/28/98	0001	AL	D	13.79		L	#	8.86 ± 6.63
	pCi/L	0765	08/27/98	0001	AL	D	18.09	U		#	18.09 ± 10.8
	pCi/L	0767	08/27/98	0001	AL	D	2.96	U		#	2.96 ± 1.66
	pCi/L	0768	08/28/98	0001	AL	D	13.19	U		#	13.19 ± 7.43
	pCi/L	0770	08/26/98	0001	AL	D	8.69			#	7.54 ± 5.24
	pCi/L	0770	08/26/98	0002	AL	D	7.55	U		#	7.55 ± 4.47
	pCi/L	0771	08/25/98	0001	AL	D	42.75	U	L	#	42.75 ± 26.5
	pCi/L	0772	08/26/98	0001	AL	O	8.43			#	5.79 ± 4.26
	pCi/L	0774	08/26/98	0001	AL	O	34.98		L	#	3.55 ± 5.08

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:56

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Gross Alpha	pCi/L	0775	08/26/98	0001	DC	D	3.00	U	L	#	3	± 1.90
	pCi/L	0776	08/28/98	0001	DC	O	13.77	F	#	#	3.45	± 3.48
	pCi/L	0777	08/27/98	0001	AL	D	18.49	U	#	#	18.49	± 11.0
Gross Beta	pCi/L	0200	08/28/98	0001	AL	U	12.11	U		#	12.11	± 6.88
	pCi/L	0400	08/27/98	0001	AL	U	8.00	U	L	#	8	± 4.61
	pCi/L	0403	08/27/98	0001	AL	U	5.96	U	L	#	5.96	± 3.42
	pCi/L	0407	08/28/98	0001	AL	C	30.53	U	L	#	30.53	± 18.4
	pCi/L	0409	08/27/98	0001	AL	C	3.00	U	L	#	3	± 1.81
	pCi/L	0602	08/28/98	0001	AL	U	4.07	U		#	4.07	± 2.50
	pCi/L	0603	08/28/98	0001	AL	U	4.04	U		#	4.04	± 2.39
	pCi/L	0604	08/28/98	0001	AL	C	4.02	U		#	4.02	± 2.43
	pCi/L	0605	08/28/98	0001	AL	C	20.13	U		#	20.13	± 11.3
	pCi/L	0606	08/26/98	0001	AL	D	20.00	U	L	#	20	± 11.9
	pCi/L	0614	08/28/98	0001	SR	D	14.80			#	6.12	± 4.21
	pCi/L	0615	08/26/98	0001	SR	U	6.35			#	3.08	± 2.07
	pCi/L	0619	08/28/98	0001	DC	O	29.05	F	#	#	4.17	± 3.64
	pCi/L	0650	08/28/98	0001	AL	D	3.02	U		#	3.02	± 1.79
	pCi/L	0653	08/27/98	0001	AL	D	24.14	U		#	24.14	± 13.6
	pCi/L	0653	08/27/98	0002	AL	D	24.05	U		#	24.05	± 14.0
	pCi/L	0654	08/28/98	0001	AL	C	3.02	U		#	3.02	± 1.81
	pCi/L	0655	08/25/98	0001	AL	D	30.11	U	L	#	30.11	± 18.0
	pCi/L	0656	08/27/98	0001	AL	D	7.52	U		#	7.52	± 4.61
	pCi/L	0657	08/26/98	0001	DC	O	7.98	L	#	#	3.08	± 2.14
	pCi/L	0659	08/26/98	0001	SR	D	10.94			#	4.12	± 2.88
	pCi/L	0660	08/27/98	0001	SR	D	4.01	U		#	4.01	± 2.33
	pCi/L	0662	08/26/98	0001	AL	D	15.21	U		#	15.21	± 9.17
	pCi/L	0669	08/26/98	0001	AL	D	6.06	U	L	#	6.06	± 3.73

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:56

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY	
			DATE	ID				LAB	DATA	QA		
Gross Beta	pCi/L	0760	08/27/98	0001	AL	D	4.00	U	#	4	± 2.40	
	pCi/L	0761	08/27/98	0001	AL	D	10.05	U	#	10.05	± 6.14	
	pCi/L	0762	08/27/98	0001	AL	D	15.05	U	#	15.05	± 8.83	
	pCi/L	0764	08/28/98	0001	AL	D	8.69	U	L	#	8.69	± 5.22
	pCi/L	0765	08/27/98	0001	AL	D	20.01	U	#	20.01	± 12.3	
	pCi/L	0767	08/27/98	0001	AL	D	3.01	U	#	3.01	± 1.79	
	pCi/L	0768	08/28/98	0001	AL	D	14.98	U	#	14.98	± 8.50	
	pCi/L	0770	08/26/98	0001	AL	D	7.70		#	7.57	± 4.72	
	pCi/L	0770	08/26/98	0002	AL	D	7.55	U	#	7.55	± 4.54	
	pCi/L	0771	08/25/98	0001	AL	D	46.28	U	L	#	46.28	± 28.1
	pCi/L	0772	08/26/98	0001	AL	O	6.06	U	#	6.06	± 3.66	
	pCi/L	0774	08/26/98	0001	AL	O	23.94		L	#	3.19	± 2.85
	pCi/L	0775	08/26/98	0001	DC	D	3.02	U	L	#	3.02	± 1.87
	pCi/L	0776	08/28/98	0001	DC	O	6.35		F	#	4.06	± 2.63
	pCi/L	0777	08/27/98	0001	AL	D	20.04	U	#	20.04	± 12.4	
Lead-210	pCi/L	0200	08/28/98	0001	AL	U	0.91	U	#	0.91	± 0.53	
	pCi/L	0400	08/27/98	0001	AL	U	0.89	U	L	#	0.89	± 0.51
	pCi/L	0402	08/27/98	0001	AL	U	0.93	U	L	#	0.93	± 0.54
	pCi/L	0403	08/27/98	0001	AL	U	0.95	U	L	#	0.95	± 0.56
	pCi/L	0407	08/28/98	0001	AL	C	0.96	U	L	#	0.96	± 0.56
	pCi/L	0409	08/27/98	0001	AL	C	0.89	U	L	#	0.89	± 0.53
	pCi/L	0602	08/28/98	0001	AL	U	0.91	U		#	0.91	± 0.55
	pCi/L	0603	08/28/98	0001	AL	U	0.89	U		#	0.89	± 0.52
	pCi/L	0604	08/28/98	0001	AL	C	0.96	U		#	0.96	± 0.56
	pCi/L	0605	08/28/98	0001	AL	C	1.04	U		#	1.04	± 0.59
	pCi/L	0606	08/26/98	0001	AL	D	0.89	U	L	#	0.89	± 0.52
	pCi/L	0614	08/28/98	0001	SR	D	1.44			#	0.98	± 0.60

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:56

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY	
			DATE	ID				LAB	DATA	QA		
Lead-210	pCi/L	0615	08/26/98	0001	SR	U	1.05		#	0.93	± 0.57	
	pCi/L	0619	08/28/98	0001	DC	O	1.02	U	F	#	1.02	± 0.59
	pCi/L	0650	08/28/98	0001	AL	D	0.97	U		#	0.97	± 0.56
	pCi/L	0653	08/27/98	0001	AL	D	0.93	U		#	0.93	± 0.53
	pCi/L	0653	08/27/98	0002	AL	D	0.97	U		#	0.97	± 0.56
	pCi/L	0654	08/28/98	0001	AL	C	0.94	U		#	0.94	± 0.54
	pCi/L	0655	08/25/98	0001	AL	D	0.91	U	L	#	0.91	± 0.52
	pCi/L	0656	08/27/98	0001	AL	D	0.90	U		#	0.9	± 0.52
	pCi/L	0657	08/26/98	0001	DC	O	0.87	U	L	#	0.87	± 0.50
	pCi/L	0659	08/26/98	0001	SR	D	0.91	U		#	0.91	± 0.55
	pCi/L	0660	08/27/98	0001	SR	D	0.99	U		#	0.99	± 0.57
	pCi/L	0662	08/26/98	0001	AL	D	0.90	U		#	0.9	± 0.52
	pCi/L	0669	08/26/98	0001	AL	D	0.94	U	L	#	0.94	± 0.56
	pCi/L	0760	08/27/98	0001	AL	D	0.99	U		#	0.99	± 0.57
	pCi/L	0761	08/27/98	0001	AL	D	0.95	U		#	0.95	± 0.54
	pCi/L	0762	08/27/98	0001	AL	D	0.99	U		#	0.99	± 0.57
	pCi/L	0764	08/28/98	0001	AL	D	0.95	U	L	#	0.95	± 0.54
	pCi/L	0765	08/27/98	0001	AL	D	1.04	U		#	1.04	± 0.60
	pCi/L	0767	08/27/98	0001	AL	D	1.00	U		#	1	± 0.58
	pCi/L	0768	08/28/98	0001	AL	D	1.02	U		#	1.02	± 0.59
	pCi/L	0770	08/26/98	0001	AL	D	1.04			#	0.94	± 0.58
	pCi/L	0770	08/26/98	0002	AL	D	1.05			#	0.9	± 0.56
	pCi/L	0771	08/25/98	0001	AL	D	0.93	U	L	#	0.93	± 0.55
	pCi/L	0772	08/26/98	0001	AL	O	0.90	U		#	0.9	± 0.53
	pCi/L	0774	08/26/98	0001	AL	O	0.89	U	L	#	0.89	± 0.53
	pCi/L	0775	08/26/98	0001	DC	D	0.87	U	L	#	0.87	± 0.51
	pCi/L	0776	08/28/98	0001	DC	O	1.01	U	F	#	1.01	± 0.58

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:56

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Lead-210	pCi/L	0777	08/27/98	0001	AL	D	0.91	U	#		0.91	± 0.52
Magnesium	mg/L	0200	08/28/98	0001	AL	U	72.200		#		-	-
	mg/L	0400	08/27/98	0001	AL	U	43.400	L	#		-	-
	mg/L	0402	08/27/98	0001	AL	U	36.900	L	#		-	-
	mg/L	0403	08/27/98	0001	AL	U	30.900	L	#		-	-
	mg/L	0407	08/28/98	0001	AL	C	189.000	L	#		-	-
	mg/L	0409	08/27/98	0001	AL	C	10.100	L	#		-	-
	mg/L	0602	08/28/98	0001	AL	U	18.900		#		-	-
	mg/L	0603	08/28/98	0001	AL	U	13.800		#		-	-
	mg/L	0604	08/28/98	0001	AL	C	11.500		#		-	-
	mg/L	0605	08/28/98	0001	AL	C	134.000		#		-	-
	mg/L	0606	08/26/98	0001	AL	D	96.100	L	#		-	-
	mg/L	0614	08/28/98	0001	SR	D	50.900		#		-	-
	mg/L	0615	08/26/98	0001	SR	U	20.200		#		-	-
	mg/L	0619	08/28/98	0001	DC	O	23.100	F	#		-	-
	mg/L	0650	08/28/98	0001	AL	D	5.110		#		-	-
	mg/L	0653	08/27/98	0001	AL	D	9.830		#		-	-
	mg/L	0653	08/27/98	0002	AL	D	198.000		#		-	-
	mg/L	0654	08/28/98	0001	AL	C	15.400		#		-	-
	mg/L	0655	08/25/98	0001	AL	D	274.000	L	#		-	-
	mg/L	0656	08/27/98	0001	AL	D	40.900		#		-	-
	mg/L	0657	08/26/98	0001	DC	O	24.600	L	#		-	-
	mg/L	0659	08/26/98	0001	SR	D	30.700		#		-	-
	mg/L	0660	08/27/98	0001	SR	D	1.590		#		-	-
	mg/L	0662	08/26/98	0001	AL	D	135.000		#		-	-
	mg/L	0669	08/26/98	0001	AL	D	50.400	L	#		-	-
	mg/L	0760	08/27/98	0001	AL	D	14.900		#		-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:56

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Magnesium	mg/L	0761	08/27/98	0001	AL	D	83.900		#		-	-
	mg/L	0762	08/27/98	0001	AL	D	104.000		#		-	-
	mg/L	0764	08/28/98	0001	AL	D	71.800	L	#		-	-
	mg/L	0765	08/27/98	0001	AL	D	135.000		#		-	-
	mg/L	0767	08/27/98	0001	AL	D	16.200		#		-	-
	mg/L	0768	08/28/98	0001	AL	D	113.000		#		-	-
	mg/L	0770	08/26/98	0001	AL	D	51.200		#		-	-
	mg/L	0770	08/26/98	0002	AL	D	51.200		#		-	-
	mg/L	0771	08/25/98	0001	AL	D	467.000	L	#		-	-
	mg/L	0772	08/26/98	0001	AL	O	9.920		#		-	-
	mg/L	0774	08/26/98	0001	AL	O	25.800	L	#		-	-
	mg/L	0775	08/26/98	0001	DC	D	12.800	L	#		-	-
	mg/L	0776	08/28/98	0001	DC	O	22.700	F	#		-	-
	mg/L	0777	08/27/98	0001	AL	D	152.000		#		-	-
Nitrate	mg/L	0200	08/28/98	0001	AL	U	12.900		#		-	-
	mg/L	0400	08/27/98	0001	AL	U	0.0165	B	UL	#	-	-
	mg/L	0402	08/27/98	0001	AL	U	0.0465	B	UL	#	-	-
	mg/L	0403	08/27/98	0001	AL	U	0.0237	B	UL	#	-	-
	mg/L	0407	08/28/98	0001	AL	C	0.0754	B	UL	#	-	-
	mg/L	0409	08/27/98	0001	AL	C	0.0261	B	UL	#	-	-
	mg/L	0602	08/28/98	0001	AL	U	3.460		#		-	-
	mg/L	0603	08/28/98	0001	AL	U	1.790		#		-	-
	mg/L	0604	08/28/98	0001	AL	C	0.124	B		#	-	-
	mg/L	0605	08/28/98	0001	AL	C	0.116	B		#	-	-
	mg/L	0606	08/26/98	0001	AL	D	394.000	L		#	-	-
	mg/L	0614	08/28/98	0001	SR	D	21.500			#	-	-
	mg/L	0615	08/26/98	0001	SR	U	0.169	B		#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:57

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Nitrate	mg/L	0619	08/28/98	0001	DC	O	11.800	F	#		-	-
	mg/L	0650	08/28/98	0001	AL	D	1.060		#		-	-
	mg/L	0653	08/27/98	0001	AL	D	124.000		#		-	-
	mg/L	0653	08/27/98	0002	AL	D	128.000		#		-	-
	mg/L	0654	08/28/98	0001	AL	C	0.0349	B	U	#	-	-
	mg/L	0655	08/25/98	0001	AL	D	388.000	L		#	-	-
	mg/L	0656	08/27/98	0001	AL	D	247.000		#		-	-
	mg/L	0657	08/26/98	0001	DC	O	12.100	L		#	-	-
	mg/L	0659	08/26/98	0001	SR	D	2.800		#		-	-
	mg/L	0660	08/27/98	0001	SR	D	0.0284	B	U	#	-	-
	mg/L	0662	08/26/98	0001	AL	D	55.000		#		-	-
	mg/L	0669	08/26/98	0001	AL	D	58.400	L		#	-	-
	mg/L	0760	08/27/98	0001	AL	D	0.135	B		#	-	-
	mg/L	0761	08/27/98	0001	AL	D	75.400		#		-	-
	mg/L	0762	08/27/98	0001	AL	D	68.300		#		-	-
	mg/L	0764	08/28/98	0001	AL	D	103.000	L		#	-	-
	mg/L	0765	08/27/98	0001	AL	D	659.000		#		-	-
	mg/L	0767	08/27/98	0001	AL	D	0.0302	B	U	#	-	-
	mg/L	0768	08/28/98	0001	AL	D	0.137	B		#	-	-
	mg/L	0770	08/26/98	0001	AL	D	171.000		#		-	-
	mg/L	0770	08/26/98	0002	AL	D	172.000		#		-	-
	mg/L	0771	08/25/98	0001	AL	D	580.000	L		#	-	-
	mg/L	0772	08/26/98	0001	AL	O	22.500		#		-	-
	mg/L	0774	08/26/98	0001	AL	O	12.900	L		#	-	-
	mg/L	0775	08/26/98	0001	DC	D	1.320	L		#	-	-
	mg/L	0776	08/28/98	0001	DC	O	4.160	F		#	-	-
	mg/L	0777	08/27/98	0001	AL	D	804.000		#		-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:57

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE	ID				LAB	DATA	QA	
pH	s.u.	0200	08/28/98	N001	AL	U	7.64		#	-	-
	s.u.	0400	08/27/98	N001	AL	U	8.01	L	#	-	-
	s.u.	0402	08/27/98	N001	AL	U	8.17	L	#	-	-
	s.u.	0403	08/27/98	N001	AL	U	7.56	L	#	-	-
	s.u.	0407	08/28/98	N001	AL	C	6.64	L	#	-	-
	s.u.	0409	08/27/98	N001	AL	C	8.90	L	#	-	-
	s.u.	0602	08/28/98	N001	AL	U	7.96		#	-	-
	s.u.	0603	08/28/98	N001	AL	U	7.83		#	-	-
	s.u.	0604	08/28/98	N001	AL	C	8.11		#	-	-
	s.u.	0605	08/28/98	N001	AL	C	7.72		#	-	-
	s.u.	0606	08/26/98	N001	AL	D	7.12	L	#	-	-
	s.u.	0614	08/28/98	N001	SR	D	7.53		#	-	-
	s.u.	0615	08/26/98	N001	SR	U	7.35		#	-	-
	s.u.	0619	08/28/98	N001	DC	O	7.70	F	#	-	-
	s.u.	0650	08/28/98	N001	AL	D	8.22		#	-	-
	s.u.	0653	08/27/98	N001	AL	D	7.40		#	-	-
	s.u.	0654	08/28/98	N001	AL	C	7.68		#	-	-
	s.u.	0655	08/25/98	N001	AL	D	7.12	L	#	-	-
	s.u.	0656	08/27/98	N001	AL	D	7.65		#	-	-
	s.u.	0657	08/26/98	N001	DC	O	7.47	L	#	-	-
	s.u.	0659	08/26/98	N001	SR	D	7.4		#	-	-
	s.u.	0660	08/27/98	N001	SR	D	8.52		#	-	-
	s.u.	0662	08/26/98	N001	AL	D	7.06		#	-	-
	s.u.	0669	08/26/98	N001	AL	D	7.25	L	#	-	-
	s.u.	0760	08/27/98	N001	AL	D	8.34		#	-	-
	s.u.	0761	08/27/98	N001	AL	D	7.27		#	-	-
	s.u.	0762	08/27/98	N001	AL	D	7.68		#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:57

PARAMETER	UNITS	LOCATION ID	SAMPLE:	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE				LAB	DATA	QA	
pH	s.u.	0764	08/28/98	N001	AL	D	7.83	L	#	- -
	s.u.	0765	08/27/98	N001	AL	D	7.25		#	- -
	s.u.	0767	08/27/98	N001	AL	D	7.88		#	- -
	s.u.	0768	08/28/98	N001	AL	D	7.73		#	- -
	s.u.	0770	08/26/98	N001	AL	D	7.58		#	- -
	s.u.	0771	08/25/98	N001	AL	D	7.22	L	#	- -
	s.u.	0772	08/26/98	N001	AL	O	7.99		#	- -
	s.u.	0774	08/26/98	N001	AL	O	7.51	L	#	- -
	s.u.	0775	08/26/98	N001	DC	D	7.83	L	#	- -
	s.u.	0776	08/28/98	N001	DC	O	7.59	F	#	- -
	s.u.	0777	08/27/98	N001	AL	D	7.25		#	- -
Potassium	mg/L	0200	08/28/98	0001	AL	U	2.980		#	- -
	mg/L	0400	08/27/98	0001	AL	U	3.120	E	L	# -
	mg/L	0402	08/27/98	0001	AL	U	3.060	E	L	# -
	mg/L	0403	08/27/98	0001	AL	U	3.200	E	L	# -
	mg/L	0407	08/28/98	0001	AL	C	1.400		L	# -
	mg/L	0409	08/27/98	0001	AL	C	2.770		L	# -
	mg/L	0602	08/28/98	0001	AL	U	2.030	E		# -
	mg/L	0603	08/28/98	0001	AL	U	2.420	E		# -
	mg/L	0604	08/28/98	0001	AL	C	1.910			# -
	mg/L	0605	08/28/98	0001	AL	C	3.590			# -
	mg/L	0606	08/26/98	0001	AL	D	9.540	L		# -
	mg/L	0614	08/28/98	0001	SR	D	1.850			# -
	mg/L	0615	08/26/98	0001	SR	U	2.700			# -
	mg/L	0619	08/28/98	0001	DC	O	1.920	F		# -
	mg/L	0650	08/28/98	0001	AL	D	1.080			# -
	mg/L	0653	08/27/98	0001	AL	D	4.570			# -

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:57

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Potassium	mg/L	0653	08/27/98	0002	AL	D	4.450		#		-	-
	mg/L	0654	08/28/98	0001	AL	C	2.550		#		-	-
	mg/L	0655	08/25/98	0001	AL	D	21.900	L	#		-	-
	mg/L	0656	08/27/98	0001	AL	D	11.800		#		-	-
	mg/L	0657	08/26/98	0001	DC	O	1.850	L	#		-	-
	mg/L	0659	08/26/98	0001	SR	D	3.730		#		-	-
	mg/L	0660	08/27/98	0001	SR	D	0.869		#		-	-
	mg/L	0662	08/26/98	0001	AL	D	3.190		#		-	-
	mg/L	0669	08/26/98	0001	AL	D	3.020	L	#		-	-
	mg/L	0760	08/27/98	0001	AL	D	2.290		#		-	-
	mg/L	0761	08/27/98	0001	AL	D	0.923		#		-	-
	mg/L	0762	08/27/98	0001	AL	D	3.050		#		-	-
	mg/L	0764	08/28/98	0001	AL	D	2.370	L	#		-	-
	mg/L	0765	08/27/98	0001	AL	D	18.200		#		-	-
	mg/L	0767	08/27/98	0001	AL	D	2.530		#		-	-
	mg/L	0768	08/28/98	0001	AL	D	2.510		#		-	-
	mg/L	0770	08/26/98	0001	AL	D	6.430		#		-	-
	mg/L	0770	08/26/98	0002	AL	D	6.460		#		-	-
	mg/L	0771	08/25/98	0001	AL	D	62.600	L	#		-	-
	mg/L	0772	08/26/98	0001	AL	O	1.240		#		-	-
	mg/L	0774	08/26/98	0001	AL	O	1.920	L	#		-	-
	mg/L	0775	08/26/98	0001	DC	D	3.220	L	#		-	-
	mg/L	0776	08/28/98	0001	DC	O	2.380	F	#		-	-
	mg/L	0777	08/27/98	0001	AL	D	25.500		#		-	-
Radium-226	pCi/L	0200	08/28/98	0001	AL	U	0.12	U	#	0.12	± 0.07	
	pCi/L	0400	08/27/98	0001	AL	U	0.13	U	L	#	0.13	± 0.08
	pCi/L	0403	08/27/98	0001	AL	U	0.14	U	L	#	0.14	± 0.08

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:57

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE	ID				LAB	DATA	QA	
Radium-226	pCi/L	0409	08/27/98	0001	AL	C	0.13	U	L	#	0.13 ± 0.08
	pCi/L	0602	08/28/98	0001	AL	U	0.45			#	0.12 ± 0.10
	pCi/L	0603	08/28/98	0001	AL	U	0.21			#	0.12 ± 0.08
	pCi/L	0604	08/28/98	0001	AL	C	0.12	U		#	0.12 ± 0.07
	pCi/L	0605	08/28/98	0001	AL	C	0.12	U		#	0.12 ± 0.07
	pCi/L	0606	08/26/98	0001	AL	D	0.86		L	#	0.13 ± 0.13
	pCi/L	0614	08/28/98	0001	SR	D	0.52			#	0.12 ± 0.10
	pCi/L	0615	08/26/98	0001	SR	U	2.09			#	0.13 ± 0.20
	pCi/L	0619	08/28/98	0001	DC	O	0.13	U	F	#	0.13 ± 0.07
	pCi/L	0650	08/28/98	0001	AL	D	0.12	U		#	0.12 ± 0.07
	pCi/L	0653	08/27/98	0001	AL	D	0.13	U		#	0.13 ± 0.07
	pCi/L	0653	08/27/98	0002	AL	D	0.13	U		#	0.13 ± 0.07
	pCi/L	0654	08/28/98	0001	AL	C	0.23			#	0.13 ± 0.09
	pCi/L	0655	08/25/98	0001	AL	D	0.14	U	L	#	0.14 ± 0.08
	pCi/L	0656	08/27/98	0001	AL	D	0.14	U		#	0.14 ± 0.08
	pCi/L	0657	08/26/98	0001	DC	O	0.13	U	L	#	0.13 ± 0.07
	pCi/L	0659	08/26/98	0001	SR	D	5.51			#	0.13 ± 0.40
	pCi/L	0660	08/27/98	0001	SR	D	0.66			#	0.12 ± 0.11
	pCi/L	0662	08/26/98	0001	AL	D	0.15	U		#	0.15 ± 0.08
	pCi/L	0669	08/26/98	0001	AL	D	0.13	U	L	#	0.13 ± 0.08
	pCi/L	0760	08/27/98	0001	AL	D	0.13	U		#	0.13 ± 0.08
	pCi/L	0761	08/27/98	0001	AL	D	0.14	U		#	0.14 ± 0.09
	pCi/L	0762	08/27/98	0001	AL	D	0.14	U		#	0.14 ± 0.08
	pCi/L	0764	08/28/98	0001	AL	D	0.13	U	L	#	0.13 ± 0.08
	pCi/L	0765	08/27/98	0001	AL	D	0.26			#	0.13 ± 0.09
	pCi/L	0767	08/27/98	0001	AL	D	0.36			#	0.13 ± 0.10
	pCi/L	0768	08/28/98	0001	AL	D	0.13	U		#	0.13 ± 0.08

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:57

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Radium-226	pCi/L	0770	08/26/98	0001	AL	D	0.26		#		0.13	± 0.09
	pCi/L	0770	08/26/98	0002	AL	D	0.21		#		0.13	± 0.09
	pCi/L	0771	08/25/98	0001	AL	D	0.13	U	L	#	0.13	± 0.08
	pCi/L	0772	08/26/98	0001	AL	O	0.13	U		#	0.13	± 0.07
	pCi/L	0774	08/26/98	0001	AL	O	0.13	U	L	#	0.13	± 0.07
	pCi/L	0775	08/26/98	0001	DC	D	0.13	U	L	#	0.13	± 0.08
	pCi/L	0776	08/28/98	0001	DC	O	0.13	U	F	#	0.13	± 0.07
	pCi/L	0777	08/27/98	0001	AL	D	0.14	U		#	0.14	± 0.08
Radium-228	pCi/L	0200	08/28/98	0001	AL	U	0.62	U		#	0.62	± 0.37
	pCi/L	0400	08/27/98	0001	AL	U	0.68	U	L	#	0.68	± 0.41
	pCi/L	0403	08/27/98	0001	AL	U	0.69	U	L	#	0.69	± 0.41
	pCi/L	0409	08/27/98	0001	AL	C	0.66	U	L	#	0.66	± 0.39
	pCi/L	0602	08/28/98	0001	AL	U	0.61	U		#	0.61	± 0.36
	pCi/L	0603	08/28/98	0001	AL	U	0.63	U		#	0.63	± 0.38
	pCi/L	0604	08/28/98	0001	AL	C	0.62	U		#	0.62	± 0.37
	pCi/L	0605	08/28/98	0001	AL	C	0.62	U		#	0.62	± 0.37
	pCi/L	0606	08/26/98	0001	AL	D	0.67	U	L	#	0.67	± 0.40
	pCi/L	0614	08/28/98	0001	SR	D	0.64	U		#	0.64	± 0.38
	pCi/L	0615	08/26/98	0001	SR	U	0.69			#	0.64	± 0.39
	pCi/L	0619	08/28/98	0001	DC	O	0.64	U	F	#	0.64	± 0.39
	pCi/L	0650	08/28/98	0001	AL	D	0.61	U		#	0.61	± 0.36
	pCi/L	0653	08/27/98	0001	AL	D	0.63	U		#	0.63	± 0.38
	pCi/L	0653	08/27/98	0002	AL	D	0.65			#	0.63	± 0.38
	pCi/L	0654	08/28/98	0001	AL	C	0.63	U		#	0.63	± 0.38
	pCi/L	0655	08/25/98	0001	AL	D	1.05		L	#	0.65	± 0.40
	pCi/L	0656	08/27/98	0001	AL	D	0.91			#	0.66	± 0.41
	pCi/L	0657	08/26/98	0001	DC	O	0.63		L	#	0.62	± 0.37

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:57

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN- CERTAINTY	
			DATE	ID				LAB	DATA	QA		
Radium-228	pCi/L	0659	08/26/98	0001	SR	D	1.47		#	0.64	± 0.41	
	pCi/L	0660	08/27/98	0001	SR	D	0.62	U		#	0.62	± 0.37
	pCi/L	0662	08/26/98	0001	AL	D	0.87			#	0.67	± 0.41
	pCi/L	0669	08/26/98	0001	AL	D	0.65	U	L	#	0.65	± 0.39
	pCi/L	0760	08/27/98	0001	AL	D	0.65			#	0.62	± 0.38
	pCi/L	0761	08/27/98	0001	AL	D	0.68	U		#	0.68	± 0.40
	pCi/L	0762	08/27/98	0001	AL	D	1.17			#	0.64	± 0.40
	pCi/L	0764	08/28/98	0001	AL	D	0.68	U	L	#	0.68	± 0.40
	pCi/L	0765	08/27/98	0001	AL	D	0.71			#	0.65	± 0.40
	pCi/L	0767	08/27/98	0001	AL	D	0.66	U		#	0.66	± 0.39
	pCi/L	0768	08/28/98	0001	AL	D	0.65	U		#	0.65	± 0.39
	pCi/L	0770	08/26/98	0001	AL	D	0.79			#	0.64	± 0.39
	pCi/L	0770	08/26/98	0002	AL	D	1.04			#	0.62	± 0.39
	pCi/L	0771	08/25/98	0001	AL	D	0.64	U	L	#	0.64	± 0.39
	pCi/L	0772	08/26/98	0001	AL	O	0.63	U		#	0.63	± 0.37
	pCi/L	0774	08/26/98	0001	AL	O	0.61	U	L	#	0.61	± 0.37
	pCi/L	0775	08/26/98	0001	DC	D	0.63	U	L	#	0.63	± 0.38
	pCi/L	0776	08/28/98	0001	DC	O	0.64	U	F	#	0.64	± 0.38
	pCi/L	0777	08/27/98	0001	AL	D	0.67			#	0.66	± 0.40
Redox Potential	mV	0200	08/28/98	N001	AL	U	-38			#	-	-
	mV	0400	08/27/98	N001	AL	U	-216		L	#	-	-
	mV	0402	08/27/98	N001	AL	U	-324		L	#	-	-
	mV	0403	08/27/98	N001	AL	U	-339		L	#	-	-
	mV	0407	08/28/98	N001	AL	C	23		L	#	-	-
	mV	0409	08/27/98	N001	AL	C	-137		L	#	-	-
	mV	0602	08/28/98	N001	AL	U	-16			#	-	-
	mV	0603	08/28/98	N001	AL	U	3			#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:58

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Redox Potential	mV	0604	08/28/98	N001	AL	C	-153			#	-	-
	mV	0605	08/28/98	N001	AL	C	-166			#	-	-
	mV	0606	08/26/98	N001	AL	D	174	L		#	-	-
	mV	0614	08/28/98	N001	SR	D	134			#	-	-
	mV	0615	08/26/98	N001	SR	U	-106			#	-	-
	mV	0619	08/28/98	N001	DC	O	36	F		#	-	-
	mV	0650	08/28/98	N001	AL	D	73			#	-	-
	mV	0653	08/27/98	N001	AL	D	94			#	-	-
	mV	0654	08/28/98	N001	AL	C	-127			#	-	-
	mV	0655	08/25/98	N001	AL	D	122	L		#	-	-
	mV	0656	08/27/98	N001	AL	D	-113			#	-	-
	mV	0657	08/26/98	N001	DC	O	100	L		#	-	-
	mV	0659	08/26/98	N001	SR	D	-62			#	-	-
	mV	0660	08/27/98	N001	SR	D	-196			#	-	-
	mV	0662	08/26/98	N001	AL	D	100			#	-	-
	mV	0669	08/26/98	N001	AL	D	8	L		#	-	-
	mV	0760	08/27/98	N001	AL	D	-214			#	-	-
	mV	0761	08/27/98	N001	AL	D	109			#	-	-
	mV	0762	08/27/98	N001	AL	D	-33			#	-	-
	mV	0764	08/28/98	N001	AL	D	141	L		#	-	-
	mV	0765	08/27/98	N001	AL	D	115			#	-	-
	mV	0767	08/27/98	N001	AL	D	-78			#	-	-
	mV	0768	08/28/98	N001	AL	D	-197			#	-	-
	mV	0770	08/26/98	N001	AL	D	-71			#	-	-
	mV	0771	08/25/98	N001	AL	D	-30	L		#	-	-
	mV	0772	08/26/98	N001	AL	O	-57			#	-	-
	mV	0774	08/26/98	N001	AL	O	28	L		#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:58

PARAMETER	UNITS	LOCATION ID	SAMPLE:	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE				LAB	DATA	QA	
Redox Potential	mV	0775	08/26/98	N001	DC	D	-97	L	#	-
	mV	0776	08/28/98	N001	DC	O	25	F	#	-
	mV	0777	08/27/98	N001	AL	D	-15		#	-
Selenium	mg/L	0200	08/28/98	0001	AL	U	0.0333		#	-
	mg/L	0400	08/27/98	0001	AL	U	0.0010	U	L	# 0.001
	mg/L	0402	08/27/98	0001	AL	U	0.0010	U	L	# 0.001
	mg/L	0403	08/27/98	0001	AL	U	0.0010	U	L	# 0.001
	mg/L	0407	08/28/98	0001	AL	C	0.0010	U	L	# 0.001
	mg/L	0409	08/27/98	0001	AL	C	0.0010	U	L	# 0.001
	mg/L	0602	08/28/98	0001	AL	U	0.0025	B		-
	mg/L	0603	08/28/98	0001	AL	U	0.0014	B		-
	mg/L	0604	08/28/98	0001	AL	C	0.0010	U		# 0.001
	mg/L	0605	08/28/98	0001	AL	C	0.0020	B		-
	mg/L	0606	08/26/98	0001	AL	D	0.0010	U	L	# 0.001
	mg/L	0614	08/28/98	0001	SR	D	0.0088			-
	mg/L	0615	08/26/98	0001	SR	U	0.0010	U		# 0.001
	mg/L	0619	08/28/98	0001	DC	O	0.0032	B	F	# -
	mg/L	0650	08/28/98	0001	AL	D	0.0010	U		# 0.001
	mg/L	0653	08/27/98	0001	AL	D	0.0012	B		# -
	mg/L	0653	08/27/98	0002	AL	D	0.0013	B		# -
	mg/L	0654	08/28/98	0001	AL	C	0.0010	U		# 0.001
	mg/L	0655	08/25/98	0001	AL	D	0.0010	U	L	# 0.001
	mg/L	0656	08/27/98	0001	AL	D	0.0016	B		# -
	mg/L	0657	08/26/98	0001	DC	O	0.0032	B	L	# -
	mg/L	0659	08/26/98	0001	SR	D	0.0010	U		# 0.001
	mg/L	0660	08/27/98	0001	SR	D	0.0010	U		# 0.001
	mg/L	0662	08/26/98	0001	AL	D	0.0116			-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:58

PARAMETER	UNITS	LOCATION ID	SAMPLE:	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE				LAB	DATA	QA	
Selenium	mg/L	0669	08/26/98	0001	AL	D	0.0071	L	#	-
	mg/L	0760	08/27/98	0001	AL	D	0.0010	U	#	0.001
	mg/L	0761	08/27/98	0001	AL	D	0.0044	B	#	-
	mg/L	0762	08/27/98	0001	AL	D	0.0122		#	-
	mg/L	0764	08/28/98	0001	AL	D	0.0034	B	L	#
	mg/L	0765	08/27/98	0001	AL	D	0.0010	U	#	0.001
	mg/L	0767	08/27/98	0001	AL	D	0.0010	U	#	0.001
	mg/L	0768	08/28/98	0001	AL	D	0.0010	U	#	0.001
	mg/L	0770	08/26/98	0001	AL	D	0.0016	B	#	-
	mg/L	0770	08/26/98	0002	AL	D	0.0016	B	#	-
	mg/L	0771	08/25/98	0001	AL	D	0.0010	U	L	#
	mg/L	0772	08/26/98	0001	AL	O	0.0041	B	#	-
	mg/L	0774	08/26/98	0001	AL	O	0.0036	B	L	#
	mg/L	0775	08/26/98	0001	DC	D	0.0016	B	L	#
Sodium	mg/L	0776	08/28/98	0001	DC	O	0.0021	B	F	#
	mg/L	0777	08/27/98	0001	AL	D	0.0010	U	#	0.001
	mg/L	0200	08/28/98	0001	AL	U	259.000		#	-
	mg/L	0400	08/27/98	0001	AL	U	102.000	L	#	-
	mg/L	0402	08/27/98	0001	AL	U	54.600	L	#	-
	mg/L	0403	08/27/98	0001	AL	U	54.500	L	#	-
	mg/L	0407	08/28/98	0001	AL	C	589.000	L	#	-
	mg/L	0409	08/27/98	0001	AL	C	50.100	L	#	-
	mg/L	0602	08/28/98	0001	AL	U	106.000		#	-
	mg/L	0603	08/28/98	0001	AL	U	103.000		#	-
	mg/L	0604	08/28/98	0001	AL	C	99.400		#	-
	mg/L	0605	08/28/98	0001	AL	C	434.000		#	-
	mg/L	0606	08/26/98	0001	AL	D	91.000	L	#	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:58

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Sodium	mg/L	0614	08/28/98	0001	SR	D	36.900		#		-	-
	mg/L	0615	08/26/98	0001	SR	U	76.000		#		-	-
	mg/L	0619	08/28/98	0001	DC	O	16.700	F	#		-	-
	mg/L	0650	08/28/98	0001	AL	D	98.800		#		-	-
	mg/L	0653	08/27/98	0001	AL	D	253.000		#		-	-
	mg/L	0653	08/27/98	0002	AL	D	252.000		#		-	-
	mg/L	0654	08/28/98	0001	AL	C	24.900		#		-	-
	mg/L	0655	08/25/98	0001	AL	D	172.000	L	#		-	-
	mg/L	0656	08/27/98	0001	AL	D	105.000		#		-	-
	mg/L	0657	08/26/98	0001	DC	O	9.440	L	#		-	-
	mg/L	0659	08/26/98	0001	SR	D	82.700		#		-	-
	mg/L	0660	08/27/98	0001	SR	D	114.000		#		-	-
	mg/L	0662	08/26/98	0001	AL	D	36.100		#		-	-
	mg/L	0669	08/26/98	0001	AL	D	44.100	L	#		-	-
	mg/L	0760	08/27/98	0001	AL	D	73.700		#		-	-
	mg/L	0761	08/27/98	0001	AL	D	57.500		#		-	-
	mg/L	0762	08/27/98	0001	AL	D	255.000		#		-	-
	mg/L	0764	08/28/98	0001	AL	D	69.200	L	#		-	-
	mg/L	0765	08/27/98	0001	AL	D	123.000		#		-	-
	mg/L	0767	08/27/98	0001	AL	D	28.800		#		-	-
	mg/L	0768	08/28/98	0001	AL	D	211.000		#		-	-
	mg/L	0770	08/26/98	0001	AL	D	112.000		#		-	-
	mg/L	0770	08/26/98	0002	AL	D	111.000		#		-	-
	mg/L	0771	08/25/98	0001	AL	D	156.000	L	#		-	-
	mg/L	0772	08/26/98	0001	AL	O	172.000		#		-	-
	mg/L	0774	08/26/98	0001	AL	O	19.400	L	#		-	-
	mg/L	0775	08/26/98	0001	DC	D	70.000	L	#		-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:58

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Sodium	mg/L	0776	08/28/98	0001	DC	O	26.700	F	#		-	-
	mg/L	0777	08/27/98	0001	AL	D	146.000		#		-	-
Specific Conductance	umhos/	0200	08/28/98	N001	AL	U	1940		#		-	-
	umhos/	0400	08/27/98	N001	AL	U	801	L	#		-	-
	umhos/	0402	08/27/98	N001	AL	U	363	L	#		-	-
	umhos/	0403	08/27/98	N001	AL	U	444	L	#		-	-
	umhos/	0407	08/28/98	N001	AL	C	3790	L	#		-	-
	umhos/	0409	08/27/98	N001	AL	C	313	L	#		-	-
	umhos/	0602	08/28/98	N001	AL	U	734		#		-	-
	umhos/	0603	08/28/98	N001	AL	U	655		#		-	-
	umhos/	0604	08/28/98	N001	AL	C	516		#		-	-
	umhos/	0605	08/28/98	N001	AL	C	3120		#		-	-
	umhos/	0606	08/26/98	N001	AL	D	3310	L	#		-	-
	umhos/	0614	08/28/98	N001	SR	D	788		#		-	-
	umhos/	0615	08/26/98	N001	SR	U	603		#		-	-
	umhos/	0619	08/28/98	N001	DC	O	470	F	#		-	-
	umhos/	0650	08/28/98	N001	AL	D	4740		#		-	-
	umhos/	0653	08/27/98	N001	AL	D	2830		#		-	-
	umhos/	0654	08/28/98	N001	AL	C	408		#		-	-
	umhos/	0655	08/25/98	N001	AL	D	3780	L	#		-	-
	umhos/	0656	08/27/98	N001	AL	D	1726		#		-	-
	umhos/	0657	08/26/98	N001	DC	O	5530	L	#		-	-
	umhos/	0659	08/26/98	N001	SR	D	6930		#		-	-
	umhos/	0660	08/27/98	N001	SR	D	4820		#		-	-
	umhos/	0662	08/26/98	N001	AL	D	1437		#		-	-
	umhos/	0669	08/26/98	N001	AL	D	925	L	#		-	-
	umhos/	0760	08/27/98	N001	AL	D	491		#		-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:58

PARAMETER	UNITS	LOCATION ID	SAMPLE DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
								LAB	DATA	QA	
Specific Conductance	umhos/	0761	08/27/98	N001	AL	D	1254		#	-	-
	umhos/	0762	08/27/98	N001	AL	D	2140		#	-	-
	umhos/	0764	08/28/98	N001	AL	D	1365	L	#	-	-
	umhos/	0765	08/27/98	N001	AL	D	3130		#	-	-
	umhos/	0767	08/27/98	N001	AL	D	3940		#	-	-
	umhos/	0768	08/28/98	N001	AL	D	2040		#	-	-
	umhos/	0770	08/26/98	N001	AL	D	1420		#	-	-
	umhos/	0771	08/25/98	N001	AL	D	6740	L	#	-	-
	umhos/	0772	08/26/98	N001	AL	O	995		#	-	-
	umhos/	0774	08/26/98	N001	AL	O	500	L	#	-	-
	umhos/	0775	08/26/98	N001	DC	D	477	L	#	-	-
	umhos/	0776	08/28/98	N001	DC	O	368	F	#	-	-
	umhos/	0777	08/27/98	N001	AL	D	4110		#	-	-
Strontium	mg/L	0200	08/28/98	0001	AL	U	0.979		#	-	-
	mg/L	0400	08/27/98	0001	AL	U	0.511	L	#	-	-
	mg/L	0402	08/27/98	0001	AL	U	0.460	L	#	-	-
	mg/L	0403	08/27/98	0001	AL	U	0.453	L	#	-	-
	mg/L	0407	08/28/98	0001	AL	C	2.950	L	#	-	-
	mg/L	0409	08/27/98	0001	AL	C	0.289	L	#	-	-
	mg/L	0602	08/28/98	0001	AL	U	0.279		#	-	-
	mg/L	0603	08/28/98	0001	AL	U	0.223		#	-	-
	mg/L	0604	08/28/98	0001	AL	C	0.184		#	-	-
	mg/L	0605	08/28/98	0001	AL	C	1.800		#	-	-
	mg/L	0606	08/26/98	0001	AL	D	1.460	L	#	-	-
	mg/L	0614	08/28/98	0001	SR	D	0.649		#	-	-
	mg/L	0615	08/26/98	0001	SR	U	0.332		#	-	-
	mg/L	0619	08/28/98	0001	DC	O	0.338	F	#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:58

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE	ID				LAB	DATA	QA	
Strontium	mg/L	0650	08/28/98	0001	AL	D	0.0824		#	-	-
	mg/L	0653	08/27/98	0001	AL	D	1.930		#	-	-
	mg/L	0653	08/27/98	0002	AL	D	1.870		#	-	-
	mg/L	0654	08/28/98	0001	AL	C	0.335		#	-	-
	mg/L	0655	08/25/98	0001	AL	D	2.490	L	#	-	-
	mg/L	0656	08/27/98	0001	AL	D	0.501		#	-	-
	mg/L	0657	08/26/98	0001	DC	O	0.338	L	#	-	-
	mg/L	0659	08/26/98	0001	SR	D	0.291		#	-	-
	mg/L	0660	08/27/98	0001	SR	D	0.0391		#	-	-
	mg/L	0662	08/26/98	0001	AL	D	1.470		#	-	-
	mg/L	0669	08/26/98	0001	AL	D	0.548	L	#	-	-
	mg/L	0760	08/27/98	0001	AL	D	0.257		#	-	-
	mg/L	0761	08/27/98	0001	AL	D	0.889		#	-	-
	mg/L	0762	08/27/98	0001	AL	D	1.320		#	-	-
	mg/L	0764	08/28/98	0001	AL	D	1.490	L	#	-	-
	mg/L	0765	08/27/98	0001	AL	D	1.310		#	-	-
	mg/L	0767	08/27/98	0001	AL	D	0.334		#	-	-
	mg/L	0768	08/28/98	0001	AL	D	1.690		#	-	-
	mg/L	0770	08/26/98	0001	AL	D	0.605		#	-	-
	mg/L	0770	08/26/98	0002	AL	D	0.598		#	-	-
	mg/L	0771	08/25/98	0001	AL	D	4.640	L	#	-	-
	mg/L	0772	08/26/98	0001	AL	O	0.180		#	-	-
	mg/L	0774	08/26/98	0001	AL	O	0.375	L	#	-	-
	mg/L	0775	08/26/98	0001	DC	D	0.189	L	#	-	-
	mg/L	0776	08/28/98	0001	DC	O	0.321	F	#	-	-
	mg/L	0777	08/27/98	0001	AL	D	1.550		#	-	-
Sulfate	mg/L	0200	08/28/98	0001	AL	U	580.000		#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:59

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Sulfate	mg/L	0400	08/27/98	0001	AL	U	74.700	L	#		-	-
	mg/L	0402	08/27/98	0001	AL	U	17.000	L	#		-	-
	mg/L	0403	08/27/98	0001	AL	U	30.900	L	#		-	-
	mg/L	0407	08/28/98	0001	AL	C	1530.000	L	#		-	-
	mg/L	0409	08/27/98	0001	AL	C	30.600	L	#		-	-
	mg/L	0602	08/28/98	0001	AL	U	128.000		#		-	-
	mg/L	0603	08/28/98	0001	AL	U	109.000		#		-	-
	mg/L	0604	08/28/98	0001	AL	C	113.000		#		-	-
	mg/L	0605	08/28/98	0001	AL	C	1250.000		#		-	-
	mg/L	0606	08/26/98	0001	AL	D	631.000	L	#		-	-
	mg/L	0614	08/28/98	0001	SR	D	224.000		#		-	-
	mg/L	0615	08/26/98	0001	SR	U	71.500		#		-	-
	mg/L	0619	08/28/98	0001	DC	O	55.800	F	#		-	-
	mg/L	0650	08/28/98	0001	AL	D	26.300		#		-	-
	mg/L	0653	08/27/98	0001	AL	D	1590.000		#		-	-
	mg/L	0653	08/27/98	0002	AL	D	1530.000		#		-	-
	mg/L	0654	08/28/98	0001	AL	C	36.400		#		-	-
	mg/L	0655	08/25/98	0001	AL	D	2040.000	L	#		-	-
	mg/L	0656	08/27/98	0001	AL	D	331.000		#		-	-
	mg/L	0657	08/26/98	0001	DC	O	53.400	L	#		-	-
	mg/L	0659	08/26/98	0001	SR	D	167.000		#		-	-
	mg/L	0660	08/27/98	0001	SR	D	27.200		#		-	-
	mg/L	0662	08/26/98	0001	AL	D	953.000		#		-	-
	mg/L	0669	08/26/98	0001	AL	D	206.000	L	#		-	-
	mg/L	0760	08/27/98	0001	AL	D	91.300		#		-	-
	mg/L	0761	08/27/98	0001	AL	D	475.000		#		-	-
	mg/L	0762	08/27/98	0001	AL	D	869.000		#		-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:59

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Sulfate	mg/L	0764	08/28/98	0001	AL	D	430.000	L	#	-	-	-
	mg/L	0765	08/27/98	0001	AL	D	856.000		#	-	-	-
	mg/L	0767	08/27/98	0001	AL	D	27.900		#	-	-	-
	mg/L	0768	08/28/98	0001	AL	D	794.000		#	-	-	-
	mg/L	0770	08/26/98	0001	AL	D	362.000		#	-	-	-
	mg/L	0770	08/26/98	0002	AL	D	361.000		#	-	-	-
	mg/L	0771	08/25/98	0001	AL	D	3510.000	L	#	-	-	-
	mg/L	0772	08/26/98	0001	AL	O	150.000		#	-	-	-
	mg/L	0774	08/26/98	0001	AL	O	62.800	L	#	-	-	-
	mg/L	0775	08/26/98	0001	DC	D	40.800	L	#	-	-	-
	mg/L	0776	08/28/98	0001	DC	O	35.700	F	#	-	-	-
	mg/L	0777	08/27/98	0001	AL	D	1110.000		#	-	-	-
Temperature	C	0200	08/28/98	N001	AL	U	16.9		#	-	-	-
	C	0400	08/27/98	N001	AL	U	22.9	L	#	-	-	-
	C	0402	08/27/98	N001	AL	U	21.5	L	#	-	-	-
	C	0403	08/27/98	N001	AL	U	22.3	L	#	-	-	-
	C	0407	08/28/98	N001	AL	C	21.8	L	#	-	-	-
	C	0409	08/27/98	N001	AL	C	19.1	L	#	-	-	-
	C	0602	08/28/98	N001	AL	U	16.3		#	-	-	-
	C	0603	08/28/98	N001	AL	U	15.9		#	-	-	-
	C	0604	08/28/98	N001	AL	C	15.7		#	-	-	-
	C	0605	08/28/98	N001	AL	C	17.0		#	-	-	-
	C	0606	08/26/98	N001	AL	D	22.6	L	#	-	-	-
	C	0614	08/28/98	N001	SR	D	20.7		#	-	-	-
	C	0615	08/26/98	N001	SR	U	15.9		#	-	-	-
	C	0619	08/28/98	N001	DC	O	18.5	F	#	-	-	-
	C	0650	08/28/98	N001	AL	D	17.3		#	-	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:59

PARAMETER	UNITS	LOCATION ID	SAMPLE:	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE				LAB	DATA	QA	
Temperature	C	0653	08/27/98	N001	AL	D	17.3		#	-
	C	0654	08/28/98	N001	AL	C	16.8		#	-
	C	0655	08/25/98	N001	AL	D	18.9	L	#	-
	C	0656	08/27/98	N001	AL	D	18.5		#	-
	C	0657	08/26/98	N001	DC	O	18.2	L	#	-
	C	0659	08/26/98	N001	SR	D	17.5		#	-
	C	0660	08/27/98	N001	SR	D	17.5		#	-
	C	0662	08/26/98	N001	AL	D	18.6		#	-
	C	0669	08/26/98	N001	AL	D	18.3	L	#	-
	C	0760	08/27/98	N001	AL	D	16.7		#	-
	C	0761	08/27/98	N001	AL	D	17.8		#	-
	C	0762	08/27/98	N001	AL	D	16.6		#	-
	C	0764	08/28/98	N001	AL	D	21.0	L	#	-
	C	0765	08/27/98	N001	AL	D	18.0		#	-
	C	0767	08/27/98	N001	AL	D	16.2		#	-
	C	0768	08/28/98	N001	AL	D	15.7		#	-
	C	0770	08/26/98	N001	AL	D	16.5		#	-
	C	0771	08/25/98	N001	AL	D	19.9	L	#	-
	C	0772	08/26/98	N001	AL	O	16.5		#	-
	C	0774	08/26/98	N001	AL	O	18.2	L	#	-
	C	0775	08/26/98	N001	DC	D	19.7	L	#	-
	C	0776	08/28/98	N001	DC	O	17.0	F	#	-
	C	0777	08/27/98	N001	AL	D	16.5		#	-
Total Dissolved Solids	mg/L	0200	08/28/98	0001	AL	U	1300		#	-
	mg/L	0400	08/27/98	0001	AL	U	490	L	#	-
	mg/L	0402	08/27/98	0001	AL	U	185	L	#	-
	mg/L	0403	08/27/98	0001	AL	U	325	L	#	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:59

PARAMETER	UNITS	LOCATION ID	SAMPLE:	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE				LAB	DATA	QA	
Total Dissolved Solids	mg/L	0407	08/28/98	0001	AL	C	3070	L	#	- -
	mg/L	0409	08/27/98	0001	AL	C	237	L	#	- -
	mg/L	0602	08/28/98	0001	AL	U	447		#	- -
	mg/L	0603	08/28/98	0001	AL	U	385		#	- -
	mg/L	0604	08/28/98	0001	AL	C	395		#	- -
	mg/L	0605	08/28/98	0001	AL	C	2490		#	- -
	mg/L	0606	08/26/98	0001	AL	D	2160	L	#	- -
	mg/L	0614	08/28/98	0001	SR	D	600		#	- -
	mg/L	0615	08/26/98	0001	SR	U	345		#	- -
	mg/L	0619	08/28/98	0001	DC	O	272	F	#	- -
	mg/L	0650	08/28/98	0001	AL	D	290		#	- -
	mg/L	0653	08/27/98	0001	AL	D	2830		#	- -
	mg/L	0653	08/27/98	0002	AL	D	2750		#	- -
	mg/L	0654	08/28/98	0001	AL	C	237		#	- -
	mg/L	0655	08/25/98	0001	AL	D	3670	L	#	- -
	mg/L	0656	08/27/98	0001	AL	D	847		#	- -
	mg/L	0657	08/26/98	0001	DC	O	270	L	#	- -
	mg/L	0659	08/26/98	0001	SR	D	432		#	- -
	mg/L	0660	08/27/98	0001	SR	D	300		#	- -
	mg/L	0662	08/26/98	0001	AL	D	1710		#	- -
	mg/L	0669	08/26/98	0001	AL	D	398	L	#	- -
	mg/L	0760	08/27/98	0001	AL	D	315		#	- -
	mg/L	0761	08/27/98	0001	AL	D	1050		#	- -
	mg/L	0762	08/27/98	0001	AL	D	1780		#	- -
	mg/L	0764	08/28/98	0001	AL	D	1020	L	#	- -
	mg/L	0765	08/27/98	0001	AL	D	2100		#	- -
	mg/L	0767	08/27/98	0001	AL	D	235		#	- -

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:59

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE	ID				LAB	DATA	QA	
Total Dissolved Solids	mg/L	0768	08/28/98	0001	AL	D	1510		#	-	-
	mg/L	0770	08/26/98	0001	AL	D	890		#	-	-
	mg/L	0770	08/26/98	0002	AL	D	890		#	-	-
	mg/L	0771	08/25/98	0001	AL	D	5410	L	#	-	-
	mg/L	0772	08/26/98	0001	AL	O	598		#	-	-
	mg/L	0774	08/26/98	0001	AL	O	298	L	#	-	-
	mg/L	0775	08/26/98	0001	DC	D	302	L	#	-	-
	mg/L	0776	08/28/98	0001	DC	O	235	F	#	-	-
	mg/L	0777	08/27/98	0001	AL	D	2200		#	-	-
Turbidity	NTU	0200	08/28/98	N001	AL	U	1.30		#	-	-
	NTU	0400	08/27/98	N001	AL	U	15.0	L	#	-	-
	NTU	0403	08/27/98	N001	AL	U	9.12	L	#	-	-
	NTU	0407	08/28/98	N001	AL	C	347	L	#	-	-
	NTU	0409	08/27/98	N001	AL	C	28.5	L	#	-	-
	NTU	0602	08/28/98	N001	AL	U	5.79		#	-	-
	NTU	0603	08/28/98	N001	AL	U	2.47		#	-	-
	NTU	0604	08/28/98	N001	AL	C	4.87		#	-	-
	NTU	0605	08/28/98	N001	AL	C	0.88		#	-	-
	NTU	0606	08/26/98	N001	AL	D	1000	>	L	#	-
	NTU	0614	08/28/98	N001	SR	D	7.26		#	-	-
	NTU	0615	08/26/98	N001	SR	U	0.56		#	-	-
	NTU	0619	08/28/98	N001	DC	O	1.50	F	#	-	-
	NTU	0650	08/28/98	N001	AL	D	0.47		#	-	-
	NTU	0653	08/27/98	N001	AL	D	0.72		#	-	-
	NTU	0654	08/28/98	N001	AL	C	0.57		#	-	-
	NTU	0655	08/25/98	N001	AL	D	64.1	L	#	-	-
	NTU	0656	08/27/98	N001	AL	D	7.06		#	-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:12:59

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Turbidity	NTU	0657	08/26/98	N001	DC	O	33.8	L	#		-	-
	NTU	0659	08/26/98	N001	SR	D	6.8		#		-	-
	NTU	0660	08/27/98	N001	SR	D	0.53		#		-	-
	NTU	0662	08/26/98	N001	AL	D	8.76		#		-	-
	NTU	0669	08/26/98	N001	AL	D	14.1	L	#		-	-
	NTU	0760	08/27/98	N001	AL	D	1.86		#		-	-
	NTU	0761	08/27/98	N001	AL	D	6.90		#		-	-
	NTU	0762	08/27/98	N001	AL	D	4.69		#		-	-
	NTU	0764	08/28/98	N001	AL	D	1000	>	L	#	-	-
	NTU	0765	08/27/98	N001	AL	D	8.82		#		-	-
	NTU	0767	08/27/98	N001	AL	D	0.53		#		-	-
	NTU	0768	08/28/98	N001	AL	D	5.04		#		-	-
	NTU	0770	08/26/98	N001	AL	D	2.27		#		-	-
	NTU	0771	08/25/98	N001	AL	D	372	L	#		-	-
	NTU	0772	08/26/98	N001	AL	O	8.07		#		-	-
Uranium	mg/L	0200	08/28/98	0001	AL	U	0.0111		#		-	-
	mg/L	0400	08/27/98	0001	AL	U	0.0010	U	L	#	0.001	-
	mg/L	0402	08/27/98	0001	AL	U	0.0010	U	L	#	0.001	-
	mg/L	0403	08/27/98	0001	AL	U	0.0010	U	L	#	0.001	-
	mg/L	0407	08/28/98	0001	AL	C	0.0885	L	#		-	-
	mg/L	0409	08/27/98	0001	AL	C	0.0010	U	L	#	0.001	-
	mg/L	0602	08/28/98	0001	AL	U	0.0040		#		-	-
	mg/L	0603	08/28/98	0001	AL	U	0.0028		#		-	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:00

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
			DATE	ID				LAB	DATA	QA	
Uranium	mg/L	0604	08/28/98	0001	AL	C	0.0025		#		-
	mg/L	0605	08/28/98	0001	AL	C	0.0053		#		-
	mg/L	0606	08/26/98	0001	AL	D	0.0090	L	#		-
	mg/L	0614	08/28/98	0001	SR	D	0.0337		#		-
	mg/L	0615	08/26/98	0001	SR	U	0.0074		#		-
	mg/L	0619	08/28/98	0001	DC	O	0.0784	F	#		-
	mg/L	0650	08/28/98	0001	AL	D	0.0017		#		-
	mg/L	0653	08/27/98	0001	AL	D	0.0110		#		-
	mg/L	0653	08/27/98	0002	AL	D	0.0107		#		-
	mg/L	0654	08/28/98	0001	AL	C	0.0010	U	#	0.001	-
	mg/L	0655	08/25/98	0001	AL	D	0.0210	L	#		-
	mg/L	0656	08/27/98	0001	AL	D	0.0067		#		-
	mg/L	0657	08/26/98	0001	DC	O	0.0230	L	#		-
	mg/L	0659	08/26/98	0001	SR	D	0.0015		#		-
	mg/L	0660	08/27/98	0001	SR	D	0.0010	U	#	0.001	-
	mg/L	0662	08/26/98	0001	AL	D	0.0356		#		-
	mg/L	0669	08/26/98	0001	AL	D	0.0103	L	#		-
	mg/L	0760	08/27/98	0001	AL	D	0.0010	U	#	0.001	-
	mg/L	0761	08/27/98	0001	AL	D	0.0243		#		-
	mg/L	0762	08/27/98	0001	AL	D	0.0081		#		-
	mg/L	0764	08/28/98	0001	AL	D	0.0164	L	#		-
	mg/L	0765	08/27/98	0001	AL	D	0.0128		#		-
	mg/L	0767	08/27/98	0001	AL	D	0.0010	U	#	0.001	-
	mg/L	0768	08/28/98	0001	AL	D	0.0015		#		-
	mg/L	0770	08/26/98	0001	AL	D	0.0072		#		-
	mg/L	0770	08/26/98	0002	AL	D	0.0072		#		-
	mg/L	0771	08/25/98	0001	AL	D	0.0325	L	#		-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:00

PARAMETER	UNITS	LOCATION ID	SAMPLE:		ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
			DATE	ID				LAB	DATA	QA		
Uranium	mg/L	0772	08/26/98	0001	AL	O	0.0112			#	-	-
	mg/L	0774	08/26/98	0001	AL	O	0.0698	L		#	-	-
	mg/L	0775	08/26/98	0001	DC	D	0.0026	L		#	-	-
	mg/L	0776	08/28/98	0001	DC	O	0.0252	F		#	-	-
	mg/L	0777	08/27/98	0001	AL	D	0.0141			#	-	-
Vanadium	mg/L	0200	08/28/98	0001	AL	U	0.0028	B		#	-	-
	mg/L	0400	08/27/98	0001	AL	U	0.0020	U	L	#	0.002	-
	mg/L	0402	08/27/98	0001	AL	U	0.0020	U	L	#	0.002	-
	mg/L	0403	08/27/98	0001	AL	U	0.0020	U	L	#	0.002	-
	mg/L	0407	08/28/98	0001	AL	C	0.0020	U	L	#	0.002	-
	mg/L	0409	08/27/98	0001	AL	C	0.0020	U	L	#	0.002	-
	mg/L	0602	08/28/98	0001	AL	U	0.0020	U		#	0.002	-
	mg/L	0603	08/28/98	0001	AL	U	0.0020	U		#	0.002	-
	mg/L	0604	08/28/98	0001	AL	C	0.0028	B		#	-	-
	mg/L	0605	08/28/98	0001	AL	C	0.0020	U		#	0.002	-
	mg/L	0606	08/26/98	0001	AL	D	0.0020	U	L	#	0.002	-
	mg/L	0614	08/28/98	0001	SR	D	0.0025	B		#	-	-
	mg/L	0615	08/26/98	0001	SR	U	0.0020	U		#	0.002	-
	mg/L	0619	08/28/98	0001	DC	O	0.0214		F	#	-	-
	mg/L	0650	08/28/98	0001	AL	D	0.0046	B		#	-	-
	mg/L	0653	08/27/98	0001	AL	D	0.0069	B		#	-	-
	mg/L	0653	08/27/98	0002	AL	D	0.0073	B		#	-	-
	mg/L	0654	08/28/98	0001	AL	C	0.0020	U		#	0.002	-
	mg/L	0655	08/25/98	0001	AL	D	0.0048	B	L	#	-	-
	mg/L	0656	08/27/98	0001	AL	D	0.0020	U		#	0.002	-
	mg/L	0657	08/26/98	0001	DC	O	0.0702		L	#	-	-
	mg/L	0659	08/26/98	0001	SR	D	0.0020	U		#	0.002	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:00

PARAMETER	UNITS	LOCATION ID	SAMPLE DATE	ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS:			UN-CERTAINTY
								LAB	DATA	QA	
Vanadium	mg/L	0660	08/27/98	0001	SR	D	0.0020	U		#	0.002
	mg/L	0662	08/26/98	0001	AL	D	0.0203			#	-
	mg/L	0669	08/26/98	0001	AL	D	0.0502	L		#	-
	mg/L	0760	08/27/98	0001	AL	D	0.0020	U		#	0.002
	mg/L	0761	08/27/98	0001	AL	D	0.0027	B		#	-
	mg/L	0762	08/27/98	0001	AL	D	0.0071	B		#	-
	mg/L	0764	08/28/98	0001	AL	D	0.0099	B	L	#	-
	mg/L	0765	08/27/98	0001	AL	D	0.0054	B		#	-
	mg/L	0767	08/27/98	0001	AL	D	0.0020	U		#	0.002
	mg/L	0768	08/28/98	0001	AL	D	0.0020	U		#	0.002
	mg/L	0770	08/26/98	0001	AL	D	0.0020	U		#	0.002
	mg/L	0770	08/26/98	0002	AL	D	0.0020	U		#	0.002
	mg/L	0771	08/25/98	0001	AL	D	0.0053	B	L	#	-
	mg/L	0772	08/26/98	0001	AL	O	0.0429			#	-
	mg/L	0774	08/26/98	0001	AL	O	0.0189	L		#	-
	mg/L	0775	08/26/98	0001	DC	D	0.0020	U	L	#	0.002
	mg/L	0776	08/28/98	0001	DC	O	0.0124	F		#	-
	mg/L	0777	08/27/98	0001	AL	D	0.0114			#	-

GROUND WATER QUALITY DATA BY PARAMETER (USEE200) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:00

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE	ZONE ID	FLOW COMPL	RESULT	QUALIFIERS: LAB	DETECTION LIMIT	UN-CERTAINTY
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RECORDS: SELECTED FROM USEE200 WHERE site_code='MON01' AND quality_assurance = TRUE AND DATE_SAMPLED between #8/1/98# and #9/30/98#

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.

DATA QUALIFIERS:

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

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

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SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:46 PM

PARAMETER	UNITS	LOCATION		SAMPLE:		QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
		ID	DATE	ID	RESULT	LAB	DATA	QA		
Alkalinity as CaCO ₃	mg/L	0621	08/26/98	0001	355		#		-	-
	mg/L	0621	08/26/98	N001	334		#		-	-
	mg/L	0622	08/26/98	0001	482		#		-	-
	mg/L	0622	08/26/98	N001	472		#		-	-
	mg/L	0623	08/26/98	0001	244		#		-	-
	mg/L	0623	08/26/98	N001	243		#		-	-
	mg/L	0631	08/27/98	0001	815		#		-	-
	mg/L	0631	08/27/98	N001	850		#		-	-
Ammonia as NH ₄	mg/L	0621	08/26/98	0001	0.0432 B		#		-	-
	mg/L	0622	08/26/98	0001	0.0625 B		#		-	-
	mg/L	0622	08/26/98	0002	0.0625 B		#		-	-
	mg/L	0623	08/26/98	0001	0.0207 B		#		-	-
	mg/L	0631	08/27/98	0001	0.832		#		-	-
Cadmium	mg/L	0621	08/26/98	0001	0.0010 U		#	0.001	-	-
	mg/L	0622	08/26/98	0001	0.0010 U		#	0.001	-	-
	mg/L	0622	08/26/98	0002	0.0010 U		#	0.001	-	-
	mg/L	0623	08/26/98	0001	0.0010 U		#	0.001	-	-
	mg/L	0631	08/27/98	0001	0.0010 U		#	0.001	-	-
Calcium	mg/L	0621	08/26/98	0001	82.300		#	-	-	-
	mg/L	0622	08/26/98	0001	21.600		#	-	-	-
	mg/L	0622	08/26/98	0002	21.100		#	-	-	-
	mg/L	0623	08/26/98	0001	42.100		#	-	-	-
	mg/L	0631	08/27/98	0001	32.700		#	-	-	-
Chloride	mg/L	0621	08/26/98	0001	6.370		#	-	-	-
	mg/L	0622	08/26/98	0001	25.700		#	-	-	-
	mg/L	0622	08/26/98	0002	25.400		#	-	-	-
	mg/L	0623	08/26/98	0001	11.300		#	-	-	-
	mg/L	0631	08/27/98	0001	204.000		#	-	-	-
Gross Alpha	pCi/L	0621	08/26/98	0001	5.61	U	#	5.61	± 3.68	
	pCi/L	0622	08/26/98	0001	10.90		#	7.32	± 5.37	
	pCi/L	0622	08/26/98	0002	14.12		#	7.36	± 5.78	
	pCi/L	0623	08/26/98	0001	4.15	U	#	4.15	± 2.58	
	pCi/L	0631	08/27/98	0001	16.55	U	#	16.55	± 10.5	
Gross Beta	pCi/L	0621	08/26/98	0001	5.07	U	#	5.07	± 3.12	
	pCi/L	0622	08/26/98	0001	27.56		#	6.13	± 4.78	
	pCi/L	0622	08/26/98	0002	25.69		#	6.15	± 4.71	

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:46 PM

PARAMETER	UNITS	LOCATION ID	SAMPLE:			LAB	QUALIFIERS: DATA QA	DETECTION LIMIT	UN-CERTAINTY
			DATE	ID	RESULT				
Gross Beta	pCi/L	0623	08/26/98	0001	4.04	U	#	4.04	± 2.41
	pCi/L	0631	08/27/98	0001	15.20	U	#	15.2	± 9.43
Lead-210	pCi/L	0621	08/26/98	0001	0.97	U	#	0.97	± 0.55
	pCi/L	0622	08/26/98	0001	0.95	U	#	0.95	± 0.55
	pCi/L	0622	08/26/98	0002	0.92	U	#	0.92	± 0.55
	pCi/L	0623	08/26/98	0001	0.98	U	#	0.98	± 0.56
	pCi/L	0631	08/27/98	0001	1.03	U	#	1.03	± 0.59
Magnesium	mg/L	0621	08/26/98	0001	36.700		#	-	-
	mg/L	0622	08/26/98	0001	51.600		#	-	-
	mg/L	0622	08/26/98	0002	51.900		#	-	-
	mg/L	0623	08/26/98	0001	27.000		#	-	-
	mg/L	0631	08/27/98	0001	39.300		#	-	-
Nitrate	mg/L	0621	08/26/98	0001	0.0246 B	U	#	-	-
	mg/L	0622	08/26/98	0001	0.0279 B	U	#	-	-
	mg/L	0622	08/26/98	0002	0.0138 B	U	#	-	-
	mg/L	0623	08/26/98	0001	0.0263 B	U	#	-	-
	mg/L	0631	08/27/98	0001	0.0398 B	U	#	-	-
pH	s.u.	0621	08/26/98	N001	7.86		#	-	-
	s.u.	0622	08/26/98	N001	9.06		#	-	-
	s.u.	0623	08/26/98	N001	8.61		#	-	-
	s.u.	0631	08/27/98	N001	8.86		#	-	-
Potassium	mg/L	0621	08/26/98	0001	1.960		#	-	-
	mg/L	0622	08/26/98	0001	24.400		#	-	-
	mg/L	0622	08/26/98	0002	24.400		#	-	-
	mg/L	0623	08/26/98	0001	3.080		#	-	-
	mg/L	0631	08/27/98	0001	19.900 E		#	-	-
Radium-226	pCi/L	0621	08/26/98	0001	0.52		#	0.14	± 0.12
	pCi/L	0622	08/26/98	0001	0.28		#	0.16	± 0.11
	pCi/L	0622	08/26/98	0002	0.18		#	0.14	± 0.09
	pCi/L	0623	08/26/98	0001	0.14	U	#	0.14	± 0.07
	pCi/L	0631	08/27/98	0001	0.16		#	0.16	± 0.10
Radium-228	pCi/L	0621	08/26/98	0001	0.69		#	0.68	± 0.41
	pCi/L	0622	08/26/98	0001	0.76	U	#	0.76	± 0.46
	pCi/L	0622	08/26/98	0002	0.80		#	0.68	± 0.41
	pCi/L	0623	08/26/98	0001	0.65	U	#	0.65	± 0.39

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:46 PM

PARAMETER	UNITS	LOCATION		SAMPLE:		RESULT	QUALIFIERS:		DETECTION LIMIT	UN-CERTAINTY
		ID	DATE	ID			LAB	DATA		
Radium-228	pCi/L	0631	08/27/98	0001		0.85	U	#	0.85	± 0.50
Redox Potential	mV	0621	08/26/98	N001		79		#	-	-
	mV	0622	08/26/98	N001		110		#	-	-
	mV	0623	08/26/98	N001		160		#	-	-
	mV	0631	08/27/98	N001		154		#	-	-
Selenium	mg/L	0621	08/26/98	0001		0.0010	U	#	0.001	-
	mg/L	0622	08/26/98	0001		0.0010	U	#	0.001	-
	mg/L	0622	08/26/98	0002		0.0010	U	#	0.001	-
	mg/L	0623	08/26/98	0001		0.0010	U	#	0.001	-
	mg/L	0631	08/27/98	0001		0.0010	U	#	0.001	-
Sodium	mg/L	0621	08/26/98	0001		43.000		#	-	-
	mg/L	0622	08/26/98	0001		128.000		#	-	-
	mg/L	0622	08/26/98	0002		129.000		#	-	-
	mg/L	0623	08/26/98	0001		40.500		#	-	-
	mg/L	0631	08/27/98	0001		547.000		#	-	-
Specific Conductance	umhos/	0621	08/26/98	N001		866		#	-	-
	umhos/	0622	08/26/98	N001		1014		#	-	-
	umhos/	0623	08/26/98	N001		590		#	-	-
	umhos/	0631	08/27/98	N001		5250		#	-	-
Strontium	mg/L	0621	08/26/98	0001		0.865		#	-	-
	mg/L	0622	08/26/98	0001		0.561		#	-	-
	mg/L	0622	08/26/98	0002		0.550		#	-	-
	mg/L	0623	08/26/98	0001		0.561		#	-	-
	mg/L	0631	08/27/98	0001		0.493		#	-	-
Sulfate	mg/L	0621	08/26/98	0001		85.800		#	-	-
	mg/L	0622	08/26/98	0001		38.700		#	-	-
	mg/L	0622	08/26/98	0002		38.500		#	-	-
	mg/L	0623	08/26/98	0001		34.700		#	-	-
	mg/L	0631	08/27/98	0001		305.000		#	-	-
Temperature	C	0621	08/26/98	N001		24.7		#	-	-
	C	0622	08/26/98	N001		29.4		#	-	-
	C	0623	08/26/98	N001		27.0		#	-	-
	C	0631	08/27/98	N001		22.7		#	-	-
Total Dissolved Solids	mg/L	0621	08/26/98	0001		520		#	-	-
	mg/L	0622	08/26/98	0001		673		#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:47 PM

PARAMETER	UNITS	LOCATION		SAMPLE:		RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
		ID	DATE	ID	LAB		DATA	QA			
Total Dissolved Solids	mg/L	0622	08/26/98	0002		673		#	-	-	-
	mg/L	0623	08/26/98	0001		355		#	-	-	-
	mg/L	0631	08/27/98	0001		1750		#	-	-	-
Turbidity	NTU	0621	08/26/98	N001		17.1		#	-	-	-
	NTU	0622	08/26/98	N001		12.4		#	-	-	-
	NTU	0623	08/26/98	N001		5.07		#	-	-	-
Uranium	mg/L	0621	08/26/98	0001		0.0054		#	-	-	-
	mg/L	0622	08/26/98	0001		0.0293		#	-	-	-
	mg/L	0622	08/26/98	0002		0.0294		#	-	-	-
	mg/L	0623	08/26/98	0001		0.0010 U		#	0.001	-	-
	mg/L	0631	08/27/98	0001		0.0133		#	-	-	-
Vanadium	mg/L	0621	08/26/98	0001		0.0020 U		#	0.002	-	-
	mg/L	0622	08/26/98	0001		0.0046 B		#	-	-	-
	mg/L	0622	08/26/98	0002		0.0046 B		#	-	-	-
	mg/L	0623	08/26/98	0001		0.0020 U		#	0.002	-	-
	mg/L	0631	08/27/98	0001		0.0146		#	-	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE MON01, MONUMENT VALLEY
 REPORT DATE: 11/24/98 5:13:47 PM

PARAMETER	UNITS	LOCATION ID	SAMPLE: DATE ID	QUALIFIERS:	DETECTION	UN-LIMIT	CERTAINTY
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RECORDS: SELECTED FROM USEE800 WHERE site_code='MON01' AND quality_assurance = TRUE AND DATE_SAMPLED between,
 #8/1/98# and #9/30/98#

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.

DATA QUALIFIERS:

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

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

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Equipment Blank Data for Monument Valley 8/98 Sampling Event

11/24/98

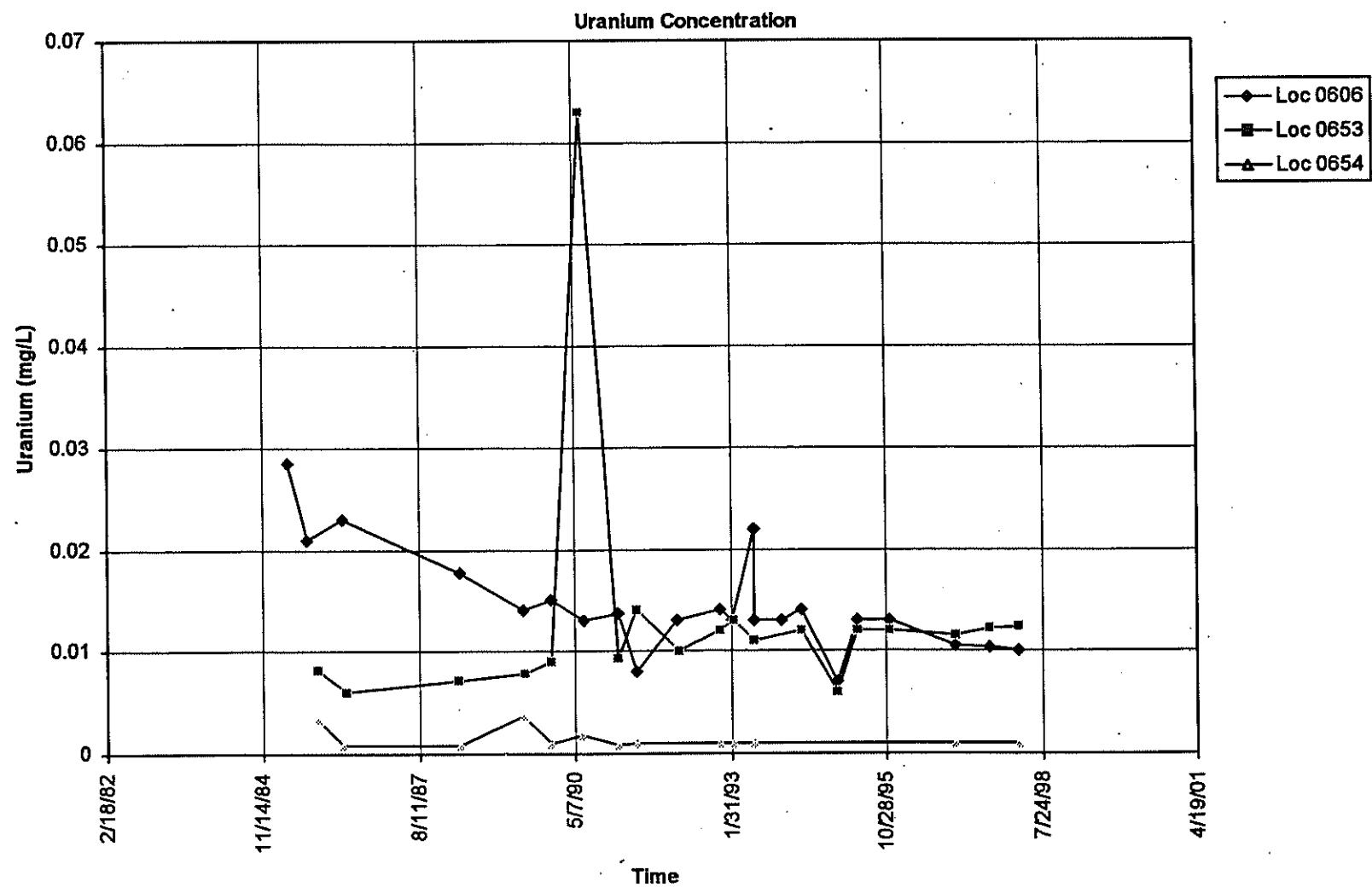
ANALYTE	SITE CODE	LOCATION CODE	DATE	SAMPLE ID	UNIT	RESULT	LAB QUALIFIERS	DATA VAL QUALIFIERS	DETECTION LIMIT	UNCERTAINTY
Ammonia as NH4	MON01	0999		8/27/980001	mg/L	0.011	B			
Ammonia as NH4	MON01	0999		8/27/980002	mg/L	0.0303	B	U		
Ammonia as NH4	MON01	0999		8/27/980003	mg/L	0.0303	B	U		
Cadmium	MON01	0999		8/27/980001	mg/L	0.001	U			0.001
Cadmium	MON01	0999		8/27/980002	mg/L	0.001	U			0.001
Cadmium	MON01	0999		8/27/980003	mg/L	0.001	U			0.001
Calcium	MON01	0999		8/27/980001	mg/L	0.0983	B			
Calcium	MON01	0999		8/27/980002	mg/L	0.063	U			0.063
Calcium	MON01	0999		8/27/980003	mg/L	0.0753	B			
Chloride	MON01	0999		8/27/980001	mg/L	0.124	B	U		
Chloride	MON01	0999		8/27/980002	mg/L	0.704				
Chloride	MON01	0999		8/27/980003	mg/L	0.105	B	U		
Gross Alpha	MON01	0999		8/27/980001	pCi/L	1.27	U			1.27
Gross Alpha	MON01	0999		8/27/980002	pCi/L	1.42	U			1.42
Gross Alpha	MON01	0999		8/27/980003	pCi/L	1.14	U			1.14
Gross Beta	MON01	0999		8/27/980001	pCi/L	2.34	U			2.34
Gross Beta	MON01	0999		8/27/980002	pCi/L	2.36	U			2.36
Gross Beta	MON01	0999		8/27/980003	pCi/L	2.33	U			2.33
Lead-210	MON01	0999		8/27/980001	pCi/L	0.95	U			0.95
Lead-210	MON01	0999		8/27/980002	pCi/L	0.87	U			0.87
Lead-210	MON01	0999		8/27/980003	pCi/L	1.01	U			1.01
Magnesium	MON01	0999		8/27/980001	mg/L	0.0237	B			
Magnesium	MON01	0999		8/27/980002	mg/L	0.021	U			0.021
Magnesium	MON01	0999		8/27/980003	mg/L	0.021	U			0.021
Nitrate	MON01	0999		8/27/980001	mg/L	0.128	B	U		
Nitrate	MON01	0999		8/27/980002	mg/L	0.0153	B	U		
Nitrate	MON01	0999		8/27/980003	mg/L	0.0619	B	U		
Potassium	MON01	0999		8/27/980001	mg/L	0.157				
Potassium	MON01	0999		8/27/980002	mg/L	0.15	E	U		
Potassium	MON01	0999		8/27/980003	mg/L	0.201		U		
Radium-226	MON01	0999		8/27/980001	pCi/L	0.13	U			0.13
Radium-226	MON01	0999		8/27/980002	pCi/L	0.13	U			0.13
Radium-226	MON01	0999		8/27/980003	pCi/L	0.14	U			0.14
Radium-228	MON01	0999		8/27/980001	pCi/L	0.63	U			0.63
Radium-228	MON01	0999		8/27/980002	pCi/L	0.67	U			0.67
Radium-228	MON01	0999		8/27/980003	pCi/L	0.72	U			0.72
Selenium	MON01	0999		8/27/980001	mg/L	0.001	U			0.001
Selenium	MON01	0999		8/27/980002	mg/L	0.0037	B			
Selcnium	MON01	0999		8/27/980003	mg/L	0.001	U			0.001
Sodium	MON01	0999		8/27/980001	mg/L	0.672	U			0.672
Sodium	MON01	0999		8/27/980002	mg/L	23.5				
Sodium	MON01	0999		8/27/980003	mg/L	1.52				
Strontium	MON01	0999		8/27/980001	mg/L	0.001	U			0.001
Strontium	MON01	0999		8/27/980002	mg/L	0.001	U			0.001

Equipment Blank Data for Monument Valley 8/98 Sampling Event

11/24/98

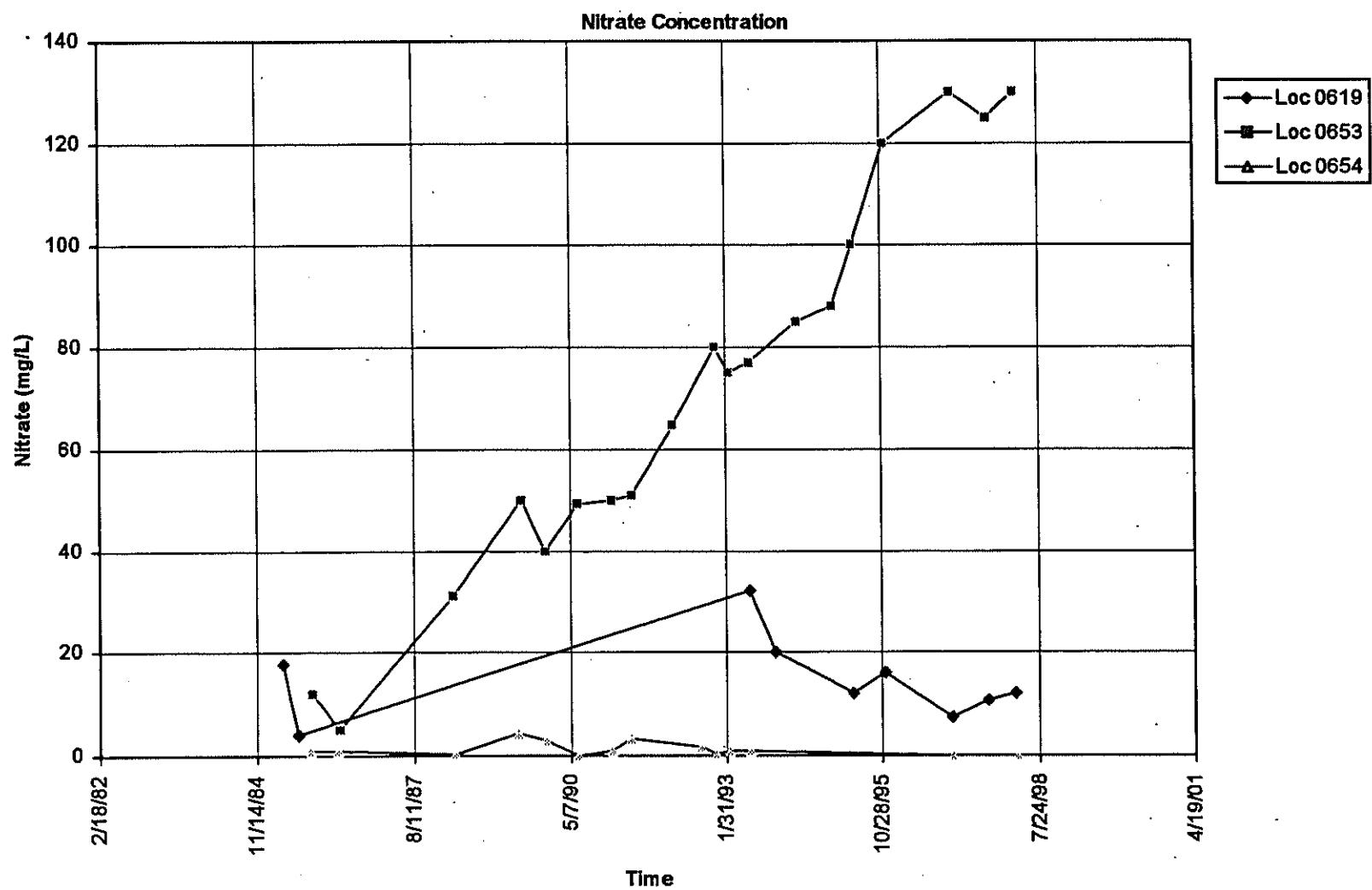
ANALYTE	SITE CODE	LOCATION CODE	DATE	SAMPLE ID	UNIT	RESULT	LAB QUALIFIERS	DATA VAL QUALIFIERS	DETECTION LIMIT	UNCERTAINTY
Strontium	MON01	0999		8/27/98 0003	mg/L	0.001	U			0.001
Sulfate	MON01	0999		8/27/98 0001	mg/L	0.057	8B			
Sulfate	MON01	0999		8/27/98 0002	mg/L	0.054	1B			
Sulfate	MON01	0999		8/27/98 0003	mg/L	0.04	U			0.04
Total Dissolved Solids	MON01	0999		8/27/98 0001	mg/L	53				
Total Dissolved Solids	MON01	0999		8/27/98 0002	mg/L	82				
Total Dissolved Solids	MON01	0999		8/27/98 0003	mg/L	10	U			10
Uranium	MON01	0999		8/27/98 0001	mg/L	0.001	U			0.001
Uranium	MON01	0999		8/27/98 0002	mg/L	0.001	U			0.001
Uranium	MON01	0999		8/27/98 0003	mg/L	0.001	U			0.001
Vanadium	MON01	0999		8/27/98 0001	mg/L	0.002	U			0.002
Vanadium	MON01	0999		8/27/98 0002	mg/L	0.002	U			0.002
Vanadium	MON01	0999		8/27/98 0003	mg/L	0.002	U			0.002

MONUMENT VALLEY (MON01)



11/20/98 8:12:32 AM

MONUMENT VALLEY (MON01)



11/20/98 8:11:34 AM

WATER LEVELS

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STATIC GROUND WATER LEVELS (USEE700) FOR SITE MON01, MONUMENT VALLE
 REPORT DATE: 11/24/98 5:33:15 PM

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT NGVD)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	GROUND WATER ELEVATION (FT NGVD)
			DATE	TIME		
0200	U	-	08/28/98	09:23		-17.88
0400	U	4870.41	08/27/98	14:52	3.10	4867.31
		4870.41	08/27/98	15:20	3.10	4867.31
0401	U	4870.38	08/27/98	14:54	3.08	4867.30
0402	U	4840.30	08/26/98	17:30	5.05	4835.25
		4840.30	08/27/98	11:29	5.06	4835.24
		4840.30	08/28/98	08:44	7.23	4833.07
0403	U	4836.19	08/26/98	17:24	1.97	4834.22
		4836.19	08/27/98	11:38	1.93	4834.26
0404	U	4837.66	08/26/98	17:28	4.01	4833.65
0405	U	4836.50	08/26/98	17:26	2.06	4834.44
0407	C	4820.07	08/28/98	14:45	6.68	4813.39
0408	C	4823.54	08/26/98	10:29	1.60	4821.94
0409	C	4821.54	08/26/98	10:23	0.77	4820.77
		4821.54	08/27/98	09:07	0.76	4820.78
0410	C	4823.41	08/26/98	10:26	5.70	4817.71
0411	C	4821.38	08/26/98	10:25	3.45	4817.93
0413	C	4783.86	08/26/98	09:28	4.64	4779.22
0414	C	4782.02	08/26/98	09:35	1.96	4780.06
0415	C	4783.80	08/26/98	09:41	3.59	4780.21
0416	C	4785.27	08/26/98	09:46	4.65	4780.62
0417	C	4782.15	08/26/98	09:36	1.85	4780.30
0601	U	4884.88	08/28/98	11:10	14.76	4870.12
0602	U	4864.43	08/28/98	11:19	9.85	4854.58
0603	U	4849.41	08/28/98	13:09	11.08	4838.33
0604	C	4840.42	08/28/98	13:45	8.77	4831.65
0605	C	4835.07	08/28/98	13:09	10.39	4824.68
0606	D	4864.73	08/26/98	09:27	35.47	4829.26
0607	D	4871.39	08/28/98	15:15		
0609	O	4879.99	08/28/98	15:34		

STATIC GROUND WATER LEVELS (USEE700) FOR SITE MON01, MONUMENT VALLE
 REPORT DATE: 11/24/98 5:33:15 PM

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT NGVD)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	GROUND WATER ELEVATION (FT NGVD)
			DATE	TIME		
0610	U	4863.21	08/28/98	11:21		-
0611	U	4849.31	08/28/98		0.00	4849.31
0612	U	5007.82	08/28/98	14:40	161.60	4846.22
0613	U	4864.28	08/28/98	11:19	0.00	4864.28
0614	D	4856.81	08/28/98	13:43	50.08	4806.73
0615	U	4850.16	08/26/98	15:22	11.40	4838.76
0618	O	4924.81	08/28/98	15:23	92.32	4832.49
0619	O	4888.63	08/28/98	11:06	57.60	4831.03
0625	C	4841.61	08/28/98	14:25	0.00	4841.61
0650	D	4794.28	08/28/98	09:16	19.65	4774.63
0651	C	4787.88	08/26/98	09:21	8.85	4779.03
0652	C	4808.93	08/26/98	10:08	19.10	4789.83
0653	D	4837.08	08/27/98	09:18	35.27	4801.81
0654	C	4824.36	08/28/98	14:46	1.76	4822.60
0655	D	4862.06	08/25/98	17:20	39.21	4822.85
0656	D	4856.33	08/27/98	09:18	35.90	4820.43
0657	O	4878.99	08/26/98	14:41	51.15	4827.84
0658	U	4879.96	08/27/98	14:45	10.05	4869.91
0659	D	4864.97	08/26/98	11:09	35.71	4829.26
0660	D	4836.32	08/27/98	10:26	90.77	4745.55
0661	U	5062.49	08/28/98	14:51	163.78	4898.71
0662	D	4878.56	08/26/98	13:19	48.94	4829.62
0668	D	4867.80	08/28/98	15:52	40.82	4826.98
0669	D	4867.19	08/26/98	09:22	49.37	4817.82
0760	D	4814.80	08/27/98	16:00	25.07	4789.73
0761	D	4835.02	08/27/98	14:38	42.45	4792.57
0762	D	4820.74	08/27/98	14:13	31.76	4788.98
0764	D	4851.53	08/28/98	11:20	49.13	4802.40

STATIC GROUND WATER LEVELS (USEE700) FOR SITE MON01, MONUMENT VALLE
 REPORT DATE: 11/24/98 5:33:16 PM

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT NGVD)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	GROUND WATER ELEVATION (FT NGVD)
			DATE	TIME		
0765	D	4848.45	08/27/98	12:30	34.87	4813.58
0766	D	4847.97	08/28/98	16:09	35.44	4812.53
0767	D	4808.25	08/27/98	16:47	6.85	4801.40
0768	D	4820.73	08/28/98	12:09	13.69	4807.04
0769	D	4861.30	08/28/98	16:00	39.14	4822.16
0770	D	4857.26	08/26/98	16:45	32.56	4824.70
0771	D	4863.26	08/25/98	17:35	41.95	4821.31
0772	O	4847.60	08/26/98	14:31	11.85	4835.75
0774	O	4880.14	08/26/98	13:25	48.80	4831.34
0775	D	4879.68	08/26/98	11:00	54.85	4824.83
0776	O	4883.33	08/28/98	10:15	52.89	4830.44
0777	D	4848.24	08/27/98	11:39	35.03	4813.21

RECORDS: SELECTED FROM USEE700 WHERE site_code='MON01' AND LOG_DATE between #8/1/98# and #9/30/98#

FLOW CODES:

C CROSS GRADIENT
 U UPGRADIENT

D DOWN GRADIENT

O ON-SITE

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TRIP REPORT/WORK ORDER

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CONTRACT NO.: DE-AC13-
96GJ87335
TASK ORDER NO.: MAC98-05
CONTROL NO.: 3100-T98-1551

August 21, 1998

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—Revised August 1998 UMTRA Ground Water Sampling at Monument Valley, Arizona

Dear Mr. Metzler:

Attached are the revised map and tables specifying the sampling locations and analytes for routine monitoring at the Monument Valley, Arizona, UMTRA site. Water quality data will be collected from monitoring wells at this site as part of the routine UMTRA Ground Water sampling which is scheduled to begin the week of August 24, 1998.

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

Ground Water Project Monitor Well (filtered)*

602 Al	614 Sr	654 Al	660 Sr	762 Al	768 Al	774 Al
603 Al	615 Sr	655 Al	662 Al	764 Al	770 Al	775 Dc
604 Al	619 Dc	656 Al	669 Al	765 Al	771 Al	776 Dc
605 Al	650 Al	657 Dc	760 Al	767 Al	772 Al	777 Al
606 Al	653 Al	659 Sr	761 Al			

Private Wells (unfiltered)

200 Al 640 Al

Well Points (filtered)*

400 Al 402 Al 403 Al 407 Al 409 Al

*NOTE: Al = Alluvium; Dc = DeChelly member of the Cutler Formation; Sr =Shinarump member of the Chinle Formation

RECORD COPY.

Donald Metzler
Page 2
August 21, 1998
Control No.: 3100-T98-1551

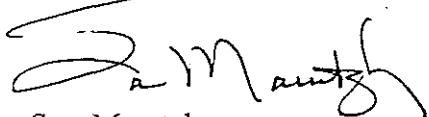
Surface Water (filtered)

621 622 623 624 627 631

One QA/QC sample will be collected for every 20 water samples. Samples collected for alkalinity will be both filtered and unfiltered. Access for the Monument Valley site is covered under the cooperative agreement. Water level information will be collected from all wells and the stakes in the frog ponds at the Monument Valley site. Monitor well inspections will be conducted and documented to confirm the status of all existing wells.

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: R. Bowen
 D. E. Miller
 K. E. Miller
 D. G. Traub
 Contract File (C. Spor)
cc w/att: GWMON 14.6
 K. Karp

**Sampling Frequencies for Locations at
Monument Valley, Arizona**

Wells	Quarterly	Semiannually	Annually	Biennially	Not Sampled	Notes
<i>Ground Water Project Monitor Wells</i>						
601					X	Not sampled per K. Karp 1/98
602		X				
603		X				
604		X				
605		X				
606		X				
610					X	
611					X	
612					X	Not sampled per K. Karp 1/98
614		X				
615		X				
618					X	
619		X				
650		X				
651					X	
652					X	Unable to locate 1/97
653		X				
654		X				
655		X				Added by K. Karp 7/97
656		X				
657		X				
658				Odd year		
659		X				
660		X				
661					X	Not sampled per K. Karp 1/98
662		X				
663				Odd year		
664					X	Not sampled per K. Karp 1/98
668				Odd year		
669		X				
760		X				Alluvial well added - 7/97
761		X				Alluvial well added - 7/97
762		X				Alluvial well added - 7/97
764		X				Alluvial well added - 7/97
765		X				Alluvial well added - 7/97
767		X				Alluvial well added - 7/97
768		X				Alluvial well added - 7/97
770		X				Alluvial well added - 7/97
771		X				Alluvial well added - 7/97
772		X				Alluvial well added - 7/97
774		X				Alluvial well added - 7/97
775		X				DeChelly well added - 7/97
776		X				DeChelly well added - 7/97
777		X				Alluvial well added - 7/97

**Sampling Frequencies for Locations at
Monument Valley, Arizona**

Wells	Quarterly	Semiannually	Annually	Biennially	Not Sampled	Notes
<i>Private Wells</i>						
200		X				Added by K. Karp 1/98
613					X	Not sampled per K. Karp 1/98
616					X	
640		X				Broken pump 1/97, couldn't sample
<i>Surface Water/Sediment Locations</i>						
620					X	SPRING DOWNGRADIENT
621		X				
622		X				
623		X				
624		X				
626					X	Frozen 1/97
627		X				Frozen 1/97
631		X				
632					X	Dry 1/97
Frog Ponds		X				Added 7/97
<i>Well Points</i>						
400		X				Added by K. Karp 1/98
402		X				Added by K. Karp 1/98
403		X				Added by K. Karp 1/98
407		X				Added by K. Karp 7/97
409		X				Added by K. Karp 7/97

**Constituent Sampling Breakdown
For Individual UMTRA Sites**

Site	Monument Valley	
Analyte	Ground Water	Surface Water
Laboratory Measurements <i>(Continued)</i>		
Nickel		
Nickel-63		
Nitrate	X	X
PCBs		
Phosphate		
Polonium-210		
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		
Tin		
Total Dissolved Solids	X	X
Total Organic Carbon		
Tritium		
Uranium	X	X
Vanadium	X	X
Zinc		
Total Analytes	18	18

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 identity of the private wells are available in the "Sampling Frequencies for Locations" worksheet.

All single numbers in the "Approximate No. Samples/yr" category are considered Ground Water Project samples.

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

**Constituent Sampling Breakdown
For Individual UMTRA Sites**

Site	Monument Valley	
Analyte	Ground Water	Surface Water
Approx. No. Samples/yr	70	8
<i>Field Measurements</i>		
Alkalinity	X	X
Dissolved Oxygen		
Redox Potential	X	X
pH	X	X
Specific Conductance	X	X
Turbidity	X	X
Temperature	X	X
<i>Laboratory Measurements</i>		
Aluminum		
Ammonium	X	X
Antimony		
Arsenic		
Barium		
Beryllium		
Bromide		
Cadmium	X	X
Calcium	X	X
Chloride	X	X
Chromium		
Cobalt		
Copper		
Fluoride		
Gamma Spec		
Gross Alpha	X	X
Gross Beta		
Iron		
Lead		
Lead-210	X	X
Magnesium	X	X
Manganese		
Molybdenum		

CONTRACT NO.: DE-AC13-96GJ87335
TASK ORDER NO.: MAC98-05
CONTROL NO.: 3100-N/A

MEMO TO: Sam Marutzky
FROM: Jeff Price *2c4 for SP*
DATE: September 1, 1998
SUBJECT: UGW Sampling Trip Report

Site: Monument Valley, Arizona

Dates of Sampling Event: August 25 through 29, 1998

Team Members: Joe Hiller, Dave Martz, Dave Traub, Rick Findley, Alan Salter, and Jeff Price

Number of Locations Sampled: 32 UGW monitoring wells, 1 private well, 5 UGW well points, 4 surface sites.

Locations Not Sampled/Reason: Private well 640 is obstructed at the top of the surface casing, therefore, pump access is not possible. Surface sites 624 and 627 were dry.

Field Variance: Well point 407 did not yield enough water for Ra-226/228.

Well point 402 had very poor recovery and did not yield enough water for Ra-226/228 and gross alpha. It is suggested that this location not be sampled in the future.

Locations purged dry prior to sampling were: 400, 402, 403, 407, 602, 606, 655, 657, 669, 764, 771, 774, and 775.

Surface location 631 was dry so a 10" hole was dug. Enough water had seeped into the hole by the next day to obtain samples.

Private well 200 did not have a filtered alkalinity collected.

Turbidity did not stabilize on well 662 even after 5 volumes were purged.

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

Sam Marutzky
Page 2
September 1, 1998
Control No.: 3100-N/A

False ID	True ID	Sample Type	Associated Matrix	Ticket Number
900	770	Duplicate	Groundwater	NDB-412
901	Equipment Blank	Equipment Blank	Groundwater	NDB-414
902	622	Duplicate	Surface water	NDB-396
903	Equipment Blank	Equipment Blank	Surface water	NDB-399
904	653	Duplicate	Groundwater	NDG-782
905	Equipment Blank	Equipment Blank	Groundwater	NDG-787

Water Level Measurements: Water level elevations were measured on all wells.

Well Inspection Summary: All wells inspected were in satisfactory conditions.

Requisition Number: 16195.

Equipment: All equipment operated properly.

Regulatory: None.

Site Issues: Getting vehicles stuck in the sand remains a problem.

JP/lcg

Distribution:

cc: R. Bowen
K. Karp
D. Metzler
K. Miller
GWMON 14.12