

**August 2004 Water Sampling**

**Validation Data Package  
for  
Baseline Sampling at the  
Interim Action Configuration 2 Well  
Field, the Baseline Area, and  
Piezometer Locations  
Moab, Utah**

December 2004

# **MOAB, UTAH**

**August 5-6 and 17-20, 2004**

## **DATA PACKAGE CONTENTS**

This data package includes the following information:

<u>Item No.</u>	<u>Description of Contents</u>
1.	<b>Site Hydrologist Summary</b>
2.	<b>Data Assessment Summary</b> , which describes problems identified in the data validation process and summarizes the validator's findings.
3.	<b>Sampling Location Map</b>
4.	<b>Field Activities Verification Checklist</b> , which verifies that field activities were done according to the work plan.
5.	<b>Database Printouts.</b> a. Water Quality Data b. Water Level Data
6.	<b>Sampling Trip Report</b>

## Site Hydrologist Summary

**Site:** Moab, Utah

**Sampling Period:** August 5-6 and 17-20, 2004

The purpose of this sampling was to collect data that can be used to evaluate baseline conditions at the Configuration 2 well field, the Baseline Area near Moab Wash, and piezometer locations. This is the first sampling round conducted for Configuration 2, the Baseline Area, and piezometer locations. The piezometer locations are downgradient from the Configuration 1 and 2 well fields and at the Baseline Area.

Sampling and analysis was conducted in accordance with the *Operations, Maintenance, and Performance Monitoring Plan for the Interim Action Ground Water Treatment System, February 2004*. Ground water samples were collected at 10 extraction wells, 9 observation wells, and 11 piezometers. Piezometer locations 494, 496, 595, 562, 564, 566, and 567 could not be sampled as they were purged dry and never recharged. See the attached figure for well locations.

Analysis and interpretation of the validated data presented in this package will be reported as part of a performance evaluation report scheduled in 2005.



Ken Karp  
Site Lead

12-13-04

Date

# **DATA ASSESSMENT SUMMARY**

**MOAB, UTAH  
AUGUST 5-6 AND 17-20, 2004 SAMPLING EVENT  
DATA ASSESSMENT SUMMARY**

Paragon Analytics analyzed samples and reported results for this sampling event under requisition number 04070092 and work order number 0408073. Samples were analyzed for metals and inorganics (see Table 1).

*Table 1. Analytes and Methods*

Analyte	Line Item Code	Prep Method	Analytical Method
Uranium, U	GJO-01	SW-846 3005A	SW-846 6020
Chloride, Cl	MIS-A-039	SW-846 9056	SW-846 9056
Sulfate, SO <sub>4</sub>	MIS-A-044	SW-846 9056	SW-846 9056
Ammonia as N, NH <sub>3</sub> -N	WCH-A-005	MCAWW 350.1	MCAWW 350.1
Total Dissolved Solids, TDS	WCH-A-033	MCAWW 160.1	MCAWW 160.1

Data Qualifier Summary

The sample results for uranium are qualified as “U” or “J” for the samples listed in Table 2.

*Table 2. Data Qualifiers*

Sample Number	Location	Analyte	Flag	Reason
0408073-62	2386	Uranium	U	Blank greater than the MDL
0408073-21	0560-39	Uranium	J	Serial dilution failure
0408073-51	0497	Uranium	J	Serial dilution failure

Sample Shipping/Receiving

Paragon Analytics in Fort Collins, Colorado, received 62 samples with shipments arriving on August 7, 20, and 21, 2004. Sample shipments were accompanied by Chain of Custody (COC) forms. All COC forms were completed correctly.

Holding Times and Preservation

The sample shipments were received intact with a temperature within the coolers of 5.8° C, which is in compliance with requirements.

All of the bottles submitted for uranium analysis that were received on August 7, 2004, had a pH greater than 2. The laboratory adjusted the pH of these aliquots to 1.9 with nitric acid on August 7, 2004. Sufficient time elapsed between the pH adjustment and the sample analysis to allow equilibration. All of the bottles submitted for ammonia analysis that were received on August 7, 2004, had a pH greater than 2. The laboratory adjusted the pH of these aliquots to less

than 2 with sulfuric acid on August 9, 2004. Sufficient time elapsed between the pH adjustment and the sample analysis to allow equilibration. All samples were analyzed within the applicable holding times.

### Laboratory Instrument Calibration

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

Calibrations for method SW-846 6020 were performed on August 30 and September 2, 2004. The initial calibrations were performed using four calibration standards resulting in correlation coefficient ( $r^2$ ) values greater than 0.995. The absolute values of the intercepts were less than three times the method detection limit (MDL). Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification (CCV) checks were made at the required frequency resulting in 11 CCVs. A Reporting Limit Verification check was made at the required frequency to verify the linearity of the calibration curve near the practical quantitation limit.

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

Calibrations for method SW-845 9056 were performed for chloride and sulfate using five calibration standards on August 12, 21, and 23, 2004. The  $r^2$  values were greater than 0.995 and intercepts less than three times the MDL. Initial calibration and calibration check standards were prepared from independent sources. Initial and continuing calibration checks were made at the required frequency resulting in 25 CCVs that met the acceptance criteria.

The initial calibrations for ammonia as N were performed using six calibration standards on August 17 and 26, 2004, resulting in  $r^2$  values greater than 0.995. Initial and continuing calibration checks were made at the required frequency resulting in 11 CCVs. All initial and continuing calibration verifications were within the acceptance criteria.

### Method and Calibration Blanks

The method blanks and initial and continuing calibration blanks for method SW-846 6020 were below the practical quantitation limits. Sample 2386 had a uranium result that is less than five times the concentration of the associated continuing calibration blank and is qualified as "U".

The method blanks for all inorganic analytes were below the MDL. All initial and continuing calibration blanks were below the MDL.

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

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

### Matrix Spike Analysis

A matrix spike and matrix spike duplicate (MS/MSD) pair was analyzed for uranium with acceptable results.

A MS/MSD pair was analyzed for sulfate and ammonia as N with acceptable results. The MS/MSD pair that was analyzed for chloride, samples 0408073-14 and 0408073-34, could not be evaluated because the concentration of the unspiked samples was greater than four times the spike concentration.

### Laboratory Replicate Analysis

The Relative Percent Difference (RPD) value for the matrix spike duplicate sample results for uranium was less than 20 percent.

The RPD values for the MSD and laboratory duplicate sample results for chloride, sulfate, ammonia as N, and TDS were less than 20 percent.

### Laboratory Control Sample

Laboratory control samples were analyzed at the correct frequency with acceptable results for all analysis categories.

### Metals Serial Dilution

Serial dilutions were performed during the uranium analysis. The serial dilution results for samples 0408073-21L and 0408073-51L did not meet the acceptance criteria. This failure is likely due to the excessively high dilution factors used leading to instrument measurements at or near the practical quantitation limit. Samples other than 0408073-21L and 0408073-51L are not qualified because this failure does not indicate a matrix effect.

### Detection Limits/Dilutions

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

### Chromatography Peak Integration

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

Electronic Data Deliverable (EDD) File

A correct EDD file arrived on September 17, 2004.

Field Activities

All monitoring well results were qualified with an "F" flag in the database indicating the wells were purged and sampled using the low-flow sampling method. Extraction wells are not sampled using the low-flow sampling method.

An equipment blank was collected and analyzed for the same constituents as the Moab Project environmental samples. Concentrations measured in the equipment blank were below their respective contract required detection limit; therefore, equipment blank results are considered acceptable. One duplicate sample was collected from well 576. There are no established regulatory criteria for the evaluation of field duplicate samples; therefore, EPA guidance for laboratory duplicates (which is conservative for field duplicates) was used to assess the precision of the field duplicates. Duplicate results met the laboratory duplicate criteria of +/- 20 relative percent difference and are considered acceptable.

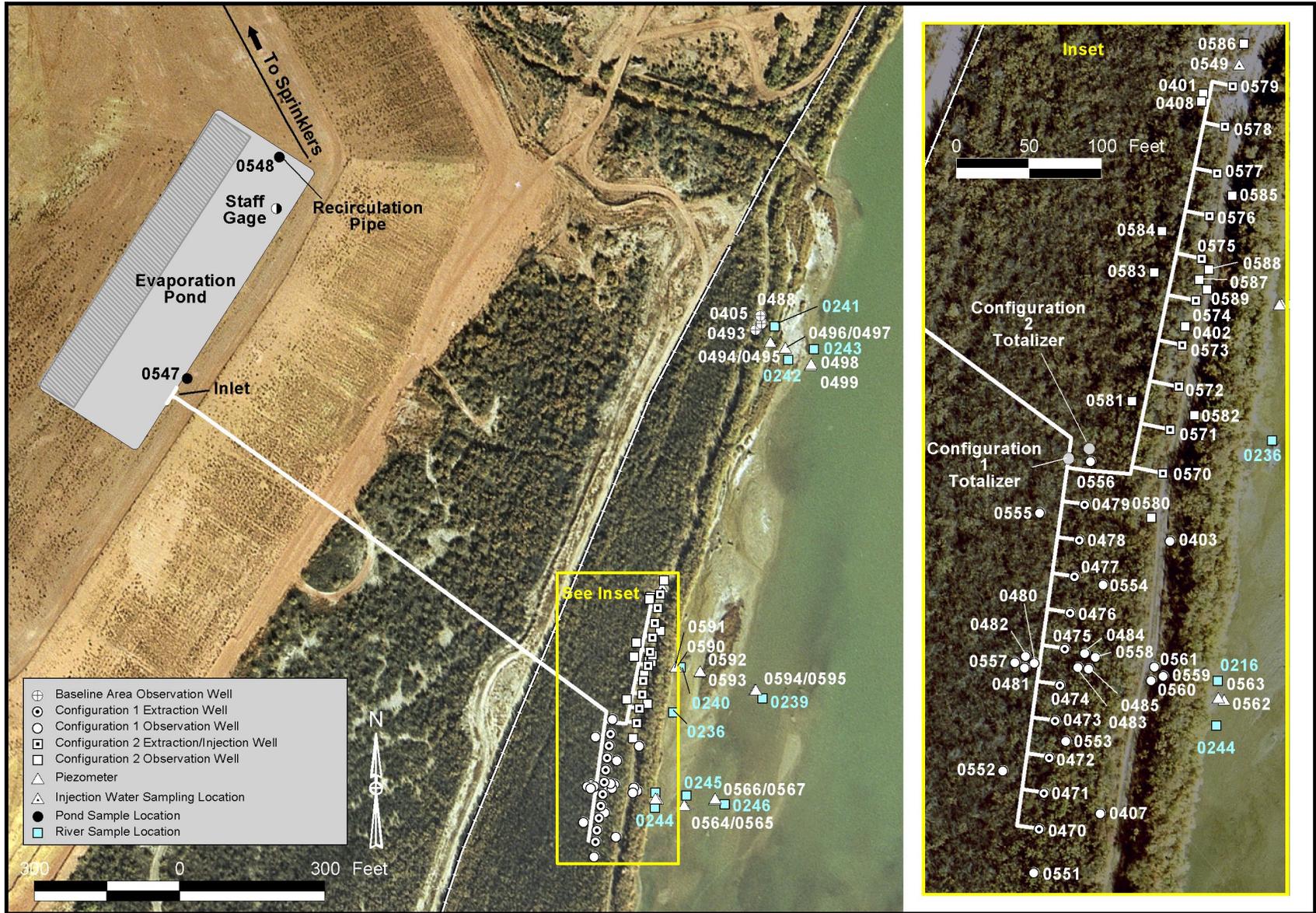
Summary

Results were reported in correct units for all analytes requested, appropriate contract-required laboratory qualifiers and target analyte lists were used, and the required detection limits were met when possible or an explanation of why they were not met was given in the laboratory case narrative. All analytical quality control criteria were met except as qualified on the Ground Water Quality Data by Parameter, Surface Water Quality by Parameter, or equipment/trip blank database printouts. The meaning of data qualifiers is defined on the database 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 are considered validated and may be treated as final results.

Laboratory Validation Lead: Steve Donovan 12-14-04  
Steve Donovan Date

Field Activities Validation Lead: W Price for 12/8/04  
Jeff Price Date

# **SAMPLING LOCATION MAP**



n:\moal\999\0005\01\004\00856\0085600.apr carverh 12/9/2004, 10:28

X0085600-01

Sample Locations at the Interim Action Well Field and Baseline Area (may include locations not sampled)

**FIELD ACTIVITIES  
VERIFICATION CHECKLIST**

## Water Sampling Field Activities Verification Checklist

Project	Moab, Utah	Date(s) of Water Sampling	August 5-6 & 17-20, 2004
Date(s) of Verification	09/30/04	Name of Verifier	Jeff Price

	Response (Yes, No, NA)	Comments
1. Is the SAP the primary document directing field procedures?  List other documents, SOP's, instructions.	Yes	
	NA	
2. Were the sampling locations specified in the planning documents sampled?	Yes	
3. Was a pre-trip calibration conducted as specified in the above named documents?	Yes	
4. Was an operational check of the field equipment conducted twice daily?  Did the operational checks meet criteria?	Yes	
	Yes	
5. Were the number and types (alkalinity, temperature, Ec, pH, turbidity, DO, ORP) of field measurements taken as specified?	Yes	
6. Was the Category of the well documented?	Yes	
7. Were the following conditions met when purging a Category I well:  Was one pump/tubing volume purged prior to sampling?	Yes	
Did the water level stabilize prior to sampling?	Yes	
Did pH, specific conductance, and turbidity measurements stabilize prior to sampling?	Yes	
Was the flow rate less than 500 mL/min?	Yes	
If a portable pump was used, was there a 4 hour delay between pump installation and sampling?	NA	

## Water Sampling Field Activities Verification Checklist (continued)

- |   |     |  |
|---|-----|--|
| 8. Were the following conditions met when purging a Category II well:   |     |  |
| Was the flow rate less than 500 mL/min?   | NA  |  |
| Was one pump/tubing volume removed prior to sampling?   | NA  |  |
| 9. Were duplicates taken at a frequency of one per 20 samples?  | No  | One duplicate was collected; project management decided not to collect additional samples.       |
| 10. Were equipment blanks taken at a frequency of one per 20 samples that were collected with nondedicated equipment? | Yes | One equipment blank was collected; project management decided not to collect additional samples. |
| 11. Were trip blanks prepared and included with each shipment of VOC samples?   | NA  |  |
| 12. Were QC samples assigned a fictitious site identification number?   | Yes |  |
| Was the true identity of the samples recorded on the Quality Assurance Sample Log?                                    | Yes |  |
| 13. Were samples collected in the containers specified?   | Yes |  |
| 14. Were samples filtered and preserved as specified?   | Yes |  |
| 15. Were the number and types of samples collected as specified?  | Yes |  |
| 16. Were chain of custody records completed and was sample custody maintained?  | Yes |  |
| 17. Are field data sheets signed and dated by both team members?  | Yes |  |
| 18. Was all other pertinent information documented on the field data sheets?  | Yes |  |
| 19. Was the presence or absence of ice in the cooler documented at every sample location?                             | Yes |  |
| 20. Were water levels measured at the locations specified in the planning documents?                                  | Yes |  |

# **WATER QUALITY DATA**

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
				DATE	ID			LAB	DATA	QA		
Alkalinity, Total (As CaCO3	mg/L	0488	WL	08/19/2004	0001	26.00 - 26.00	937	F	#	-	-	
	mg/L	0488	WL	08/19/2004	0001	39.00 - 39.00	994	F	#	-	-	
	mg/L	0488	WL	08/19/2004	0001	33.00 - 33.00	946	F	#	-	-	
	mg/L	0493	WL	08/19/2004	0001	54.00 - 54.00	1153	F	#	-	-	
	mg/L	0493	WL	08/19/2004	0001	46.00 - 46.00	1068	F	#	-	-	
	mg/L	0557	WL	08/18/2004	0001	36.00 - 36.00	742	F	#	-	-	
	mg/L	0557	WL	08/18/2004	0001	44.00 - 44.00	849	F	#	-	-	
	mg/L	0558	WL	08/19/2004	0001	44.00 - 44.00	270	F	#	-	-	
	mg/L	0558	WL	08/19/2004	0001	36.00 - 36.00	487	F	#	-	-	
	mg/L	0559	WL	08/19/2004	0001	20.00 - 20.00	756	F	#	-	-	
	mg/L	0559	WL	08/19/2004	0001	17.00 - 17.00	794	F	#	-	-	
	mg/L	0560	WL	08/19/2004	0001	31.00 - 31.00	416	F	#	-	-	
	mg/L	0560	WL	08/19/2004	0001	39.00 - 39.00	395	F	#	-	-	
	mg/L	0561	WL	08/19/2004	0001	46.00 - 46.00	320	F	#	-	-	
	mg/L	0561	WL	08/19/2004	0001	54.00 - 54.00	215	F	#	-	-	
	mg/L	0570	WL, I&E	08/18/2004	0001	23.00 - 23.00	518	F	#	-	-	
	mg/L	0570	WL, I&E	08/18/2004	0001	16.00 - 16.00	855	F	#	-	-	
	mg/L	0570	WL, I&E	08/18/2004	0001	29.00 - 29.00	502	F	#	-	-	
	mg/L	0571	WL, I&E	08/17/2004	0001	33.00 - 33.00	492	F	#	-	-	
	mg/L	0571	WL, I&E	08/17/2004	0001	39.00 - 39.00	506	F	#	-	-	
	mg/L	0571	WL, I&E	08/17/2004	0001	26.00 - 26.00	582	F	#	-	-	
	mg/L	0572	WL, I&E	08/17/2004	0001	23.00 - 23.00	550	F	#	-	-	
	mg/L	0572	WL, I&E	08/17/2004	0001	29.00 - 29.00	554	F	#	-	-	
	mg/L	0572	WL, I&E	08/17/2004	0001	16.00 - 16.00	690	F	#	-	-	
	mg/L	0573	WL, I&E	08/17/2004	0001	39.00 - 39.00	560	F	#	-	-	
	mg/L	0573	WL, I&E	08/17/2004	0001	26.00 - 26.00	625	F	#	-	-	

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY	
Alkalinity, Total (As CaCO3	mg/L	0573	WL, I&E	08/17/2004	0001	33.00 - 33.00	638	F #	-	-	
	mg/L	0574	WL, I&E	08/18/2004	0001	29.00 - 29.00	618	F #	-	-	
	mg/L	0574	WL, I&E	08/18/2004	0001	23.00 - 23.00	667	F #	-	-	
	mg/L	0574	WL, I&E	08/18/2004	0001	16.00 - 16.00	830	F #	-	-	
	mg/L	0575	WL, I&E	08/18/2004	0001	39.00 - 39.00	647	F #	-	-	
	mg/L	0575	WL, I&E	08/18/2004	0001	33.00 - 33.00	669	F #	-	-	
	mg/L	0575	WL, I&E	08/18/2004	0001	26.00 - 26.00	718	F #	-	-	
	mg/L	0576	WL, I&E	08/06/2004	0001	23.00 - 23.00	929	F #	-	-	
	mg/L	0576	WL, I&E	08/06/2004	0001	16.00 - 16.00	879	F #	-	-	
	mg/L	0576	WL, I&E	08/06/2004	0001	29.00 - 29.00	809	F #	-	-	
	mg/L	0577	WL, I&E	08/05/2004	0001	33.00 - 33.00	942	F #	-	-	
	mg/L	0577	WL, I&E	08/05/2004	0001	39.00 - 39.00	732	F #	-	-	
	mg/L	0577	WL, I&E	08/05/2004	0001	26.00 - 26.00	1052	F #	-	-	
	mg/L	0578	WL, I&E	08/05/2004	0001	16.00 - 16.00	990	F #	-	-	
	mg/L	0578	WL, I&E	08/05/2004	0001	29.00 - 29.00	1073	F #	-	-	
	mg/L	0578	WL, I&E	08/05/2004	0001	23.00 - 23.00	1090	F #	-	-	
	mg/L	0579	WL, I&E	08/05/2004	0001	26.00 - 26.00	907	F #	-	-	
	mg/L	0579	WL, I&E	08/05/2004	0001	33.00 - 33.00	948	F #	-	-	
	mg/L	0579	WL, I&E	08/05/2004	0001	39.00 - 39.00	1125	F #	-	-	
	mg/L	0588	WL	08/18/2004	0001	34.00 - 34.00	672	F #	-	-	
	mg/L	0588	WL	08/18/2004	0001	26.00 - 26.00	690	F #	-	-	
	mg/L	0589	WL	08/18/2004	0001	52.00 - 52.00	394	F #	-	-	
	mg/L	0589	WL	08/18/2004	0001	44.00 - 44.00	480	F #	-	-	
	mg/L	0593	WL, PZ	08/20/2004	0001	4.13 - 4.13	980	F #	-	-	
	mg/L	0594	WL, PZ	08/20/2004	0001	2.02 - 2.02	330	F #	-	-	
	Ammonia Total as N	mg/L	0488	WL	08/19/2004	0001	33.00 - 33.00	830	F #	50	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	SAMPLE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Ammonia Total as N	mg/L	0488	WL	08/19/2004	0001	39.00 - 39.00	880	F #	50	-
	mg/L	0488	WL	08/19/2004	0001	26.00 - 26.00	780	F #	50	-
	mg/L	0493	WL	08/19/2004	0001	46.00 - 46.00	1200	F #	50	-
	mg/L	0493	WL	08/19/2004	0001	54.00 - 54.00	1300	F #	50	-
	mg/L	0495	WL, PZ	08/19/2004	0001	4.19 - 4.19	430	F #	50	-
	mg/L	0497	WL, PZ	08/19/2004	0001	4.12 - 4.12	470	F #	50	-
	mg/L	0498	WL, PZ	08/19/2004	0001	1.37 - 1.37	470	F #	50	-
	mg/L	0499	WL, PZ	08/19/2004	0001	4.29 - 4.29	650	F #	50	-
	mg/L	0557	WL	08/18/2004	0001	44.00 - 44.00	2300	F #	50	-
	mg/L	0557	WL	08/18/2004	0001	36.00 - 36.00	1100	F #	50	-
	mg/L	0558	WL	08/19/2004	0001	44.00 - 44.00	1000	F #	50	-
	mg/L	0558	WL	08/19/2004	0001	36.00 - 36.00	2100	F #	50	-
	mg/L	0559	WL	08/19/2004	0001	17.00 - 17.00	770	F #	50	-
	mg/L	0559	WL	08/19/2004	0001	20.00 - 20.00	760	F #	50	-
	mg/L	0560	WL	08/19/2004	0001	39.00 - 39.00	1800	F #	50	-
	mg/L	0560	WL	08/19/2004	0001	31.00 - 31.00	1800	F #	50	-
	mg/L	0561	WL	08/19/2004	0001	54.00 - 54.00	580	F #	50	-
	mg/L	0561	WL	08/19/2004	0001	46.00 - 46.00	1100	F #	50	-
	mg/L	0563	WL, PZ	08/20/2004	0001	3.95 - 3.95	110	F #	5	-
	mg/L	0565	WL, PZ	08/20/2004	0001	4.32 - 4.32	53	F #	2	-
	mg/L	0570	WL, I&E	08/18/2004	0001	16.00 - 16.00	510	F #	50	-
	mg/L	0570	WL, I&E	08/18/2004	0001	23.00 - 23.00	1700	F #	50	-
	mg/L	0570	WL, I&E	08/18/2004	0001	29.00 - 29.00	1700	F #	50	-
	mg/L	0571	WL, I&E	08/17/2004	0001	26.00 - 26.00	1700	F #	50	-
	mg/L	0571	WL, I&E	08/17/2004	0001	33.00 - 33.00	1600	F #	50	-
	mg/L	0571	WL, I&E	08/17/2004	0001	39.00 - 39.00	1600	F #	50	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Ammonia Total as N	mg/L	0572	WL, I&E	08/17/2004	0001	29.00 - 29.00	1200	F #	50	-
	mg/L	0572	WL, I&E	08/17/2004	0001	16.00 - 16.00	970	F #	50	-
	mg/L	0572	WL, I&E	08/17/2004	0001	23.00 - 23.00	1200	F #	50	-
	mg/L	0573	WL, I&E	08/17/2004	0001	26.00 - 26.00	1000	F #	50	-
	mg/L	0573	WL, I&E	08/17/2004	0001	33.00 - 33.00	1100	F #	50	-
	mg/L	0573	WL, I&E	08/17/2004	0001	39.00 - 39.00	1200	F #	50	-
	mg/L	0574	WL, I&E	08/18/2004	0001	16.00 - 16.00	710	F #	50	-
	mg/L	0574	WL, I&E	08/18/2004	0001	23.00 - 23.00	1000	F #	50	-
	mg/L	0574	WL, I&E	08/18/2004	0001	29.00 - 29.00	1100	F #	50	-
	mg/L	0575	WL, I&E	08/18/2004	0001	33.00 - 33.00	1100	F #	50	-
	mg/L	0575	WL, I&E	08/18/2004	0001	26.00 - 26.00	1200	F #	50	-
	mg/L	0575	WL, I&E	08/18/2004	0001	39.00 - 39.00	1200	F #	50	-
	mg/L	0576	WL, I&E	08/06/2004	0001	16.00 - 16.00	520	F #	50	-
	mg/L	0576	WL, I&E	08/06/2004	0001	23.00 - 23.00	1300	F #	50	-
	mg/L	0576	WL, I&E	08/06/2004	0001	29.00 - 29.00	1300	F #	50	-
	mg/L	0576	WL, I&E	08/06/2004	0002	29.00 - 29.00	1300	F #	50	-
	mg/L	0577	WL, I&E	08/05/2004	0001	39.00 - 39.00	960	F #	50	-
	mg/L	0577	WL, I&E	08/05/2004	0001	26.00 - 26.00	1200	F #	50	-
	mg/L	0577	WL, I&E	08/05/2004	0001	33.00 - 33.00	1200	F #	50	-
	mg/L	0578	WL, I&E	08/05/2004	0001	16.00 - 16.00	840	F #	50	-
	mg/L	0578	WL, I&E	08/05/2004	0001	23.00 - 23.00	1000	F #	50	-
	mg/L	0578	WL, I&E	08/05/2004	0001	29.00 - 29.00	1100	F #	50	-
	mg/L	0579	WL, I&E	08/05/2004	0001	26.00 - 26.00	620	F #	50	-
	mg/L	0579	WL, I&E	08/05/2004	0001	33.00 - 33.00	700	F #	50	-
	mg/L	0579	WL, I&E	08/05/2004	0001	39.00 - 39.00	1100	F #	50	-
	mg/L	0588	WL	08/18/2004	0001	34.00 - 34.00	1100	F #	50	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Ammonia Total as N	mg/L	0588	WL	08/18/2004	0001	26.00 - 26.00	1200	F	#	50	-
	mg/L	0589	WL	08/18/2004	0001	44.00 - 44.00	1400	F	#	50	-
	mg/L	0589	WL	08/18/2004	0001	52.00 - 52.00	1300	F	#	50	-
	mg/L	0590	WL, PZ	08/20/2004	0001	1.08 - 1.08	680	F	#	50	-
	mg/L	0591	WL, PZ	08/20/2004	0001	4.22 - 4.22	1100	F	#	50	-
	mg/L	0592	WL, PZ	08/20/2004	0001	2.10 - 2.10	780	F	#	50	-
	mg/L	0593	WL, PZ	08/20/2004	0001	4.13 - 4.13	830	F	#	50	-
	mg/L	0594	WL, PZ	08/20/2004	0001	2.02 - 2.02	50	F	#	2	-
Chloride	mg/L	0488	WL	08/19/2004	0001	26.00 - 26.00	1700	F	#	40	-
	mg/L	0488	WL	08/19/2004	0001	33.00 - 33.00	1700	F	#	40	-
	mg/L	0488	WL	08/19/2004	0001	39.00 - 39.00	2100	F	#	40	-
	mg/L	0493	WL	08/19/2004	0001	54.00 - 54.00	11000	F	#	200	-
	mg/L	0493	WL	08/19/2004	0001	46.00 - 46.00	5500	F	#	100	-
	mg/L	0495	WL, PZ	08/19/2004	0001	4.19 - 4.19	1300	F	#	40	-
	mg/L	0497	WL, PZ	08/19/2004	0001	4.12 - 4.12	1400	F	#	40	-
	mg/L	0498	WL, PZ	08/19/2004	0001	1.37 - 1.37	1500	F	#	40	-
	mg/L	0499	WL, PZ	08/19/2004	0001	4.29 - 4.29	1600	F	#	40	-
	mg/L	0557	WL	08/18/2004	0001	44.00 - 44.00	17000	F	#	400	-
	mg/L	0557	WL	08/18/2004	0001	36.00 - 36.00	9000	F	#	100	-
	mg/L	0558	WL	08/19/2004	0001	36.00 - 36.00	36000	F	#	1000	-
	mg/L	0558	WL	08/19/2004	0001	44.00 - 44.00	47000	F	#	1000	-
	mg/L	0559	WL	08/19/2004	0001	20.00 - 20.00	5100	F	#	100	-
	mg/L	0559	WL	08/19/2004	0001	17.00 - 17.00	5100	F	#	100	-
	mg/L	0560	WL	08/19/2004	0001	39.00 - 39.00	40000	F	#	1000	-
	mg/L	0560	WL	08/19/2004	0001	31.00 - 31.00	40000	F	#	1000	-
	mg/L	0561	WL	08/19/2004	0001	54.00 - 54.00	50000	F	#	1000	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Chloride	mg/L	0561	WL	08/19/2004	0001	46.00 - 46.00	44000	F	#	1000	-
	mg/L	0570	WL, I&E	08/18/2004	0001	16.00 - 16.00	2300	F	#	40	-
	mg/L	0570	WL, I&E	08/18/2004	0001	29.00 - 29.00	29000	F	#	1000	-
	mg/L	0570	WL, I&E	08/18/2004	0001	23.00 - 23.00	28000	F	#	1000	-
	mg/L	0571	WL, I&E	08/17/2004	0001	33.00 - 33.00	30000	F	#	1000	-
	mg/L	0571	WL, I&E	08/17/2004	0001	26.00 - 26.00	27000	F	#	1000	-
	mg/L	0571	WL, I&E	08/17/2004	0001	39.00 - 39.00	33000	F	#	1000	-
	mg/L	0572	WL, I&E	08/17/2004	0001	23.00 - 23.00	21000	F	#	400	-
	mg/L	0572	WL, I&E	08/17/2004	0001	29.00 - 29.00	23000	F	#	400	-
	mg/L	0572	WL, I&E	08/17/2004	0001	16.00 - 16.00	12000	F	#	200	-
	mg/L	0573	WL, I&E	08/17/2004	0001	33.00 - 33.00	22000	F	#	400	-
	mg/L	0573	WL, I&E	08/17/2004	0001	39.00 - 39.00	27000	F	#	400	-
	mg/L	0573	WL, I&E	08/17/2004	0001	26.00 - 26.00	18000	F	#	400	-
	mg/L	0574	WL, I&E	08/18/2004	0001	16.00 - 16.00	6300	F	#	100	-
	mg/L	0574	WL, I&E	08/18/2004	0001	23.00 - 23.00	18000	F	#	400	-
	mg/L	0574	WL, I&E	08/18/2004	0001	29.00 - 29.00	19000	F	#	400	-
	mg/L	0575	WL, I&E	08/18/2004	0001	26.00 - 26.00	17000	F	#	400	-
	mg/L	0575	WL, I&E	08/18/2004	0001	39.00 - 39.00	23000	F	#	400	-
	mg/L	0575	WL, I&E	08/18/2004	0001	33.00 - 33.00	19000	F	#	400	-
	mg/L	0576	WL, I&E	08/06/2004	0001	16.00 - 16.00	2000	F	#	40	-
	mg/L	0576	WL, I&E	08/06/2004	0001	23.00 - 23.00	8300	F	#	100	-
	mg/L	0576	WL, I&E	08/06/2004	0001	29.00 - 29.00	13000	F	#	200	-
	mg/L	0576	WL, I&E	08/06/2004	0002	29.00 - 29.00	13000	F	#	200	-
	mg/L	0577	WL, I&E	08/05/2004	0001	33.00 - 33.00	9000	F	#	100	-
	mg/L	0577	WL, I&E	08/05/2004	0001	39.00 - 39.00	16000	F	#	200	-
	mg/L	0577	WL, I&E	08/05/2004	0001	26.00 - 26.00	3900	F	#	40	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Chloride	mg/L	0578	WL, I&E	08/05/2004	0001	23.00 - 23.00	2900	F #	40	-
	mg/L	0578	WL, I&E	08/05/2004	0001	29.00 - 29.00	3200	F #	40	-
	mg/L	0578	WL, I&E	08/05/2004	0001	16.00 - 16.00	2500	F #	40	-
	mg/L	0579	WL, I&E	08/05/2004	0001	26.00 - 26.00	2400	F #	40	-
	mg/L	0579	WL, I&E	08/05/2004	0001	33.00 - 33.00	2600	F #	40	-
	mg/L	0579	WL, I&E	08/05/2004	0001	39.00 - 39.00	2900	F #	40	-
	mg/L	0588	WL	08/18/2004	0001	34.00 - 34.00	21000	F #	400	-
	mg/L	0588	WL	08/18/2004	0001	26.00 - 26.00	18000	F #	400	-
	mg/L	0589	WL	08/18/2004	0001	44.00 - 44.00	30000	F #	1000	-
	mg/L	0589	WL	08/18/2004	0001	52.00 - 52.00	38000	F #	1000	-
	mg/L	0591	WL, PZ	08/20/2004	0001	4.22 - 4.22	3900	F #	100	-
	mg/L	0593	WL, PZ	08/20/2004	0001	4.13 - 4.13	3000	F #	100	-
	mg/L	0594	WL, PZ	08/20/2004	0001	2.02 - 2.02	110	F #	4	-
	Oxidation Reduction Potent	mV	0488	WL	08/19/2004	N001	39.00 - 39.00	154.1	F #	-
mV		0488	WL	08/19/2004	N001	26.00 - 26.00	139.7	F #	-	-
mV		0488	WL	08/19/2004	N001	33.00 - 33.00	150.0	F #	-	-
mV		0493	WL	08/19/2004	N001	46.00 - 46.00	116.9	F #	-	-
mV		0493	WL	08/19/2004	N001	54.00 - 54.00	125.3	F #	-	-
mV		0495	WL, PZ	08/19/2004	N001	4.19 - 4.19	-112.7	F #	-	-
mV		0497	WL, PZ	08/19/2004	N001	4.12 - 4.12	33.7	F #	-	-
mV		0498	WL, PZ	08/19/2004	N001	1.37 - 1.37	-177.9	F #	-	-
mV		0499	WL, PZ	08/19/2004	N001	4.29 - 4.29	-180.1	F #	-	-
mV		0557	WL	08/18/2004	N001	36.00 - 36.00	135.1	F #	-	-
mV		0557	WL	08/18/2004	N001	44.00 - 44.00	124.1	F #	-	-
mV		0558	WL	08/19/2004	N001	44.00 - 44.00	148.7	F #	-	-
mV		0558	WL	08/19/2004	N001	36.00 - 36.00	137.1	F #	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Oxidation Reduction Potent	mV	0559	WL	08/19/2004	N001	17.00 - 17.00	86.6	F	#	-	-
	mV	0559	WL	08/19/2004	N001	20.00 - 20.00	112.9	F	#	-	-
	mV	0560	WL	08/19/2004	N001	39.00 - 39.00	121.8	F	#	-	-
	mV	0560	WL	08/19/2004	N001	31.00 - 31.00	159.2	F	#	-	-
	mV	0561	WL	08/19/2004	N001	46.00 - 46.00	-54.6	F	#	-	-
	mV	0561	WL	08/19/2004	N001	54.00 - 54.00	-150.6	F	#	-	-
	mV	0563	WL, PZ	08/20/2004	N001	3.95 - 3.95	11.1	F	#	-	-
	mV	0565	WL, PZ	08/20/2004	N001	4.32 - 4.32	-239	F	#	-	-
	mV	0572	WL, I&E	08/17/2004	N001	29.00 - 29.00	40.0	F	#	-	-
	mV	0572	WL, I&E	08/17/2004	N001	16.00 - 16.00	75.0	F	#	-	-
	mV	0572	WL, I&E	08/17/2004	N001	23.00 - 23.00	79.3	F	#	-	-
	mV	0573	WL, I&E	08/17/2004	N001	26.00 - 26.00	31.1	F	#	-	-
	mV	0573	WL, I&E	08/17/2004	N001	33.00 - 33.00	15.5	F	#	-	-
	mV	0573	WL, I&E	08/17/2004	N001	39.00 - 39.00	45.9	F	#	-	-
	mV	0574	WL, I&E	08/18/2004	N001	16.00 - 16.00	142.8	F	#	-	-
	mV	0574	WL, I&E	08/18/2004	N001	29.00 - 29.00	143.9	F	#	-	-
	mV	0574	WL, I&E	08/18/2004	N001	23.00 - 23.00	159.9	F	#	-	-
	mV	0575	WL, I&E	08/18/2004	N001	26.00 - 26.00	127.8	F	#	-	-
	mV	0575	WL, I&E	08/18/2004	N001	39.00 - 39.00	128.4	F	#	-	-
	mV	0575	WL, I&E	08/18/2004	N001	33.00 - 33.00	139.9	F	#	-	-
	mV	0576	WL, I&E	08/06/2004	N001	16.00 - 16.00	124.0	F	#	-	-
	mV	0576	WL, I&E	08/06/2004	N001	23.00 - 23.00	48.2	F	#	-	-
	mV	0576	WL, I&E	08/06/2004	N001	29.00 - 29.00	35.1	F	#	-	-
	mV	0577	WL, I&E	08/05/2004	N001	26.00 - 26.00	50.6	F	#	-	-
	mV	0577	WL, I&E	08/05/2004	N001	33.00 - 33.00	32.0	F	#	-	-
	mV	0577	WL, I&E	08/05/2004	N001	39.00 - 39.00	49.8	F	#	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Oxidation Reduction Potent	mV	0578	WL, I&E	08/05/2004	N001	16.00 - 16.00	158.7	F	#	-	-
	mV	0578	WL, I&E	08/05/2004	N001	23.00 - 23.00	120.8	F	#	-	-
	mV	0578	WL, I&E	08/05/2004	N001	29.00 - 29.00	115.3	F	#	-	-
	mV	0579	WL, I&E	08/05/2004	N001	39.00 - 39.00	78.6	F	#	-	-
	mV	0579	WL, I&E	08/05/2004	N001	26.00 - 26.00	131.9	F	#	-	-
	mV	0579	WL, I&E	08/05/2004	N001	33.00 - 33.00	167.7	F	#	-	-
	mV	0588	WL	08/18/2004	N001	34.00 - 34.00	172.7	F	#	-	-
	mV	0588	WL	08/18/2004	N001	26.00 - 26.00	133.1	F	#	-	-
	mV	0589	WL	08/18/2004	N001	52.00 - 52.00	155.8	F	#	-	-
	mV	0589	WL	08/18/2004	N001	44.00 - 44.00	212.8	F	#	-	-
	mV	0590	WL, PZ	08/20/2004	N001	1.08 - 1.08	145.0	F	#	-	-
	mV	0591	WL, PZ	08/20/2004	N001	4.22 - 4.22	-231.2	F	#	-	-
	mV	0592	WL, PZ	08/20/2004	N001	2.10 - 2.10	-117.2	F	#	-	-
	mV	0593	WL, PZ	08/20/2004	N001	4.13 - 4.13	33.6	F	#	-	-
	mV	0594	WL, PZ	08/20/2004	N001	2.02 - 2.02	-48.1	F	#	-	-
	pH	s.u.	0488	WL	08/19/2004	N001	33.00 - 33.00	6.85	F	#	-
s.u.		0488	WL	08/19/2004	N001	39.00 - 39.00	6.88	F	#	-	-
s.u.		0488	WL	08/19/2004	N001	26.00 - 26.00	6.84	F	#	-	-
s.u.		0493	WL	08/19/2004	N001	46.00 - 46.00	6.82	F	#	-	-
s.u.		0493	WL	08/19/2004	N001	54.00 - 54.00	6.74	F	#	-	-
s.u.		0495	WL, PZ	08/19/2004	N001	4.19 - 4.19	8.29	F	#	-	-
s.u.		0497	WL, PZ	08/19/2004	N001	4.12 - 4.12	6.68	F	#	-	-
s.u.		0498	WL, PZ	08/19/2004	N001	1.37 - 1.37	7.85	F	#	-	-
s.u.		0499	WL, PZ	08/19/2004	N001	4.29 - 4.29	7.56	F	#	-	-
s.u.		0557	WL	08/18/2004	N001	44.00 - 44.00	6.68	F	#	-	-
s.u.		0557	WL	08/18/2004	N001	36.00 - 36.00	6.82	F	#	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
pH	s.u.	0558	WL	08/19/2004	N001	36.00 - 36.00	6.60	F	#	-	-
	s.u.	0558	WL	08/19/2004	N001	44.00 - 44.00	6.69	F	#	-	-
	s.u.	0559	WL	08/19/2004	N001	20.00 - 20.00	6.77	F	#	-	-
	s.u.	0559	WL	08/19/2004	N001	17.00 - 17.00	6.77	F	#	-	-
	s.u.	0560	WL	08/19/2004	N001	31.00 - 31.00	7.9	F	#	-	-
	s.u.	0560	WL	08/19/2004	N001	39.00 - 39.00	6.58	F	#	-	-
	s.u.	0561	WL	08/19/2004	N001	46.00 - 46.00	6.75	F	#	-	-
	s.u.	0561	WL	08/19/2004	N001	54.00 - 54.00	6.82	F	#	-	-
	s.u.	0563	WL, PZ	08/20/2004	N001	3.95 - 3.95	8.57	F	#	-	-
	s.u.	0565	WL, PZ	08/20/2004	N001	4.32 - 4.32	9.08	F	#	-	-
	s.u.	0570	WL, I&E	08/18/2004	N001	23.00 - 23.00	6.70	F	#	-	-
	s.u.	0570	WL, I&E	08/18/2004	N001	16.00 - 16.00	6.71	F	#	-	-
	s.u.	0570	WL, I&E	08/18/2004	N001	29.00 - 29.00	6.75	F	#	-	-
	s.u.	0571	WL, I&E	08/17/2004	N001	26.00 - 26.00	6.70	F	#	-	-
	s.u.	0571	WL, I&E	08/17/2004	N001	39.00 - 39.00	6.60	F	#	-	-
	s.u.	0571	WL, I&E	08/17/2004	N001	33.00 - 33.00	6.67	F	#	-	-
	s.u.	0572	WL, I&E	08/17/2004	N001	16.00 - 16.00	6.70	F	#	-	-
	s.u.	0572	WL, I&E	08/17/2004	N001	29.00 - 29.00	6.67	F	#	-	-
	s.u.	0572	WL, I&E	08/17/2004	N001	23.00 - 23.00	6.69	F	#	-	-
	s.u.	0573	WL, I&E	08/17/2004	N001	39.00 - 39.00	6.66	F	#	-	-
	s.u.	0573	WL, I&E	08/17/2004	N001	26.00 - 26.00	6.69	F	#	-	-
	s.u.	0573	WL, I&E	08/17/2004	N001	33.00 - 33.00	6.70	F	#	-	-
	s.u.	0574	WL, I&E	08/18/2004	N001	16.00 - 16.00	6.69	F	#	-	-
	s.u.	0574	WL, I&E	08/18/2004	N001	29.00 - 29.00	6.78	F	#	-	-
	s.u.	0574	WL, I&E	08/18/2004	N001	23.00 - 23.00	6.81	F	#	-	-
	s.u.	0575	WL, I&E	08/18/2004	N001	26.00 - 26.00	6.77	F	#	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	SAMPLE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
p-H	s.u.	0575	WL, I&E	08/18/2004	N001	39.00 - 39.00	6.72	F #	-	-
	s.u.	0575	WL, I&E	08/18/2004	N001	33.00 - 33.00	6.76	F #	-	-
	s.u.	0576	WL, I&E	08/06/2004	N001	23.00 - 23.00	6.86	F #	-	-
	s.u.	0576	WL, I&E	08/06/2004	N001	29.00 - 29.00	6.83	F #	-	-
	s.u.	0576	WL, I&E	08/06/2004	N001	16.00 - 16.00	6.76	F #	-	-
	s.u.	0577	WL, I&E	08/05/2004	N001	39.00 - 39.00	6.81	F #	-	-
	s.u.	0577	WL, I&E	08/05/2004	N001	33.00 - 33.00	6.84	F #	-	-
	s.u.	0577	WL, I&E	08/05/2004	N001	26.00 - 26.00	6.88	F #	-	-
	s.u.	0578	WL, I&E	08/05/2004	N001	16.00 - 16.00	6.82	F #	-	-
	s.u.	0578	WL, I&E	08/05/2004	N001	23.00 - 23.00	6.84	F #	-	-
	s.u.	0578	WL, I&E	08/05/2004	N001	29.00 - 29.00	6.85	F #	-	-
	s.u.	0579	WL, I&E	08/05/2004	N001	26.00 - 26.00	6.79	F #	-	-
	s.u.	0579	WL, I&E	08/05/2004	N001	33.00 - 33.00	6.81	F #	-	-
	s.u.	0579	WL, I&E	08/05/2004	N001	39.00 - 39.00	6.86	F #	-	-
	s.u.	0588	WL	08/18/2004	N001	26.00 - 26.00	6.75	F #	-	-
	s.u.	0588	WL	08/18/2004	N001	34.00 - 34.00	6.75	F #	-	-
	s.u.	0589	WL	08/18/2004	N001	44.00 - 44.00	6.73	F #	-	-
	s.u.	0589	WL	08/18/2004	N001	52.00 - 52.00	6.67	F #	-	-
	s.u.	0590	WL, PZ	08/20/2004	N001	1.08 - 1.08	8.39	F #	-	-
	s.u.	0591	WL, PZ	08/20/2004	N001	4.22 - 4.22	7.89	F #	-	-
s.u.	0592	WL, PZ	08/20/2004	N001	2.10 - 2.10	8.32	F #	-	-	
s.u.	0593	WL, PZ	08/20/2004	N001	4.13 - 4.13	6.86	F #	-	-	
s.u.	0594	WL, PZ	08/20/2004	N001	2.02 - 2.02	8.64	F #	-	-	
Specific Conductance	umhos/cm	0488	WL	08/19/2004	N001	26.00 - 26.00	22386	F #	-	-
	umhos/cm	0488	WL	08/19/2004	N001	33.00 - 33.00	22402	F #	-	-
	umhos/cm	0488	WL	08/19/2004	N001	39.00 - 39.00	24378	F #	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION	LOC TYPE,	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN- CERTAINTY
		ID	SUBTYPE	DATE	ID			LAB	DATA	QA	
Specific Conductance	umhos/cm	0493	WL	08/19/2004	N001	54.00 - 54.00	45859	F	#	-	-
	umhos/cm	0493	WL	08/19/2004	N001	46.00 - 46.00	35022	F	#	-	-
	umhos/cm	0495	WL, PZ	08/19/2004	N001	4.19 - 4.19	17191	F	#	-	-
	umhos/cm	0497	WL, PZ	08/19/2004	N001	4.12 - 4.12	16333	F	#	-	-
	umhos/cm	0498	WL, PZ	08/19/2004	N001	1.37 - 1.37	13148	F	#	-	-
	umhos/cm	0499	WL, PZ	08/19/2004	N001	4.29 - 4.29	18744	F	#	-	-
	umhos/cm	0557	WL	08/18/2004	N001	36.00 - 36.00	39352	F	#	-	-
	umhos/cm	0557	WL	08/18/2004	N001	44.00 - 44.00	57584	F	#	-	-
	umhos/cm	0558	WL	08/19/2004	N001	36.00 - 36.00	92341	F	#	-	-
	umhos/cm	0558	WL	08/19/2004	N001	44.00 - 44.00	103173	F	#	-	-
	umhos/cm	0559	WL	08/19/2004	N001	20.00 - 20.00	27780	F	#	-	-
	umhos/cm	0559	WL	08/19/2004	N001	17.00 - 17.00	27795	F	#	-	-
	umhos/cm	0560	WL	08/19/2004	N001	39.00 - 39.00	93735	F	#	-	-
	umhos/cm	0560	WL	08/19/2004	N001	31.00 - 31.00	95780	F	#	-	-
	umhos/cm	0561	WL	08/19/2004	N001	54.00 - 54.00	106431	F	#	-	-
	umhos/cm	0561	WL	08/19/2004	N001	46.00 - 46.00	99878	F	#	-	-
	umhos/cm	0563	WL, PZ	08/20/2004	N001	3.95 - 3.95	3927	F	#	-	-
	umhos/cm	0565	WL, PZ	08/20/2004	N001	4.32 - 4.32	3930	F	#	-	-
	umhos/cm	0570	WL, I&E	08/18/2004	N001	16.00 - 16.00	19230	F	#	-	-
	umhos/cm	0570	WL, I&E	08/18/2004	N001	23.00 - 23.00	69877	F	#	-	-
	umhos/cm	0570	WL, I&E	08/18/2004	N001	29.00 - 29.00	75061	F	#	-	-
	umhos/cm	0571	WL, I&E	08/17/2004	N001	26.00 - 26.00	75769	F	#	-	-
	umhos/cm	0571	WL, I&E	08/17/2004	N001	39.00 - 39.00	88435	F	#	-	-
	umhos/cm	0571	WL, I&E	08/17/2004	N001	33.00 - 33.00	82740	F	#	-	-
	umhos/cm	0572	WL, I&E	08/17/2004	N001	16.00 - 16.00	39744	F	#	-	-
	umhos/cm	0572	WL, I&E	08/17/2004	N001	23.00 - 23.00	55360	F	#	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION	LOC TYPE,	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN- CERTAINTY
		ID	SUBTYPE	DATE	ID			LAB	DATA	QA	
Specific Conductance	umhos/cm	0572	WL, I&E	08/17/2004	N001	29.00 - 29.00	62420	F	#	-	-
	umhos/cm	0573	WL, I&E	08/17/2004	N001	26.00 - 26.00	55630	F	#	-	-
	umhos/cm	0573	WL, I&E	08/17/2004	N001	33.00 - 33.00	63666	F	#	-	-
	umhos/cm	0573	WL, I&E	08/17/2004	N001	39.00 - 39.00	66592	F	#	-	-
	umhos/cm	0574	WL, I&E	08/18/2004	N001	23.00 - 23.00	56030	F	#	-	-
	umhos/cm	0574	WL, I&E	08/18/2004	N001	29.00 - 29.00	58430	F	#	-	-
	umhos/cm	0574	WL, I&E	08/18/2004	N001	16.00 - 16.00	26630	F	#	-	-
	umhos/cm	0575	WL, I&E	08/18/2004	N001	33.00 - 33.00	56086	F	#	-	-
	umhos/cm	0575	WL, I&E	08/18/2004	N001	39.00 - 39.00	63816	F	#	-	-
	umhos/cm	0575	WL, I&E	08/18/2004	N001	26.00 - 26.00	55006	F	#	-	-
	umhos/cm	0576	WL, I&E	08/06/2004	N001	16.00 - 16.00	18470	F	#	-	-
	umhos/cm	0576	WL, I&E	08/06/2004	N001	23.00 - 23.00	40058	F	#	-	-
	umhos/cm	0576	WL, I&E	08/06/2004	N001	29.00 - 29.00	49312	F	#	-	-
	umhos/cm	0577	WL, I&E	08/05/2004	N001	26.00 - 26.00	31608	F	#	-	-
	umhos/cm	0577	WL, I&E	08/05/2004	N001	33.00 - 33.00	41282	F	#	-	-
	umhos/cm	0577	WL, I&E	08/05/2004	N001	39.00 - 39.00	56044	F	#	-	-
	umhos/cm	0578	WL, I&E	08/05/2004	N001	16.00 - 16.00	24024	F	#	-	-
	umhos/cm	0578	WL, I&E	08/05/2004	N001	23.00 - 23.00	27880	F	#	-	-
	umhos/cm	0578	WL, I&E	08/05/2004	N001	29.00 - 29.00	29929	F	#	-	-
	umhos/cm	0579	WL, I&E	08/05/2004	N001	26.00 - 26.00	21502	F	#	-	-
	umhos/cm	0579	WL, I&E	08/05/2004	N001	33.00 - 33.00	22970	F	#	-	-
	umhos/cm	0579	WL, I&E	08/05/2004	N001	39.00 - 39.00	28791	F	#	-	-
	umhos/cm	0588	WL	08/18/2004	N001	34.00 - 34.00	57740	F	#	-	-
	umhos/cm	0588	WL	08/18/2004	N001	26.00 - 26.00	53910	F	#	-	-
	umhos/cm	0589	WL	08/18/2004	N001	44.00 - 44.00	75649	F	#	-	-
	umhos/cm	0589	WL	08/18/2004	N001	52.00 - 52.00	88481	F	#	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	SAMPLE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Specific Conductance	umhos/cm	0590	WL, PZ	08/20/2004	N001	1.08 - 1.08	22825	F #	-	-
	umhos/cm	0591	WL, PZ	08/20/2004	N001	4.22 - 4.22	28650	F #	-	-
	umhos/cm	0592	WL, PZ	08/20/2004	N001	2.10 - 2.10	22625	F #	-	-
	umhos/cm	0593	WL, PZ	08/20/2004	N001	4.13 - 4.13	25527	F #	-	-
	umhos/cm	0594	WL, PZ	08/20/2004	N001	2.02 - 2.02	2875	F #	-	-
Sulfate	mg/L	0488	WL	08/19/2004	0001	39.00 - 39.00	12000	F #	100	-
	mg/L	0488	WL	08/19/2004	0001	26.00 - 26.00	11000	F #	100	-
	mg/L	0488	WL	08/19/2004	0001	33.00 - 33.00	11000	F #	100	-
	mg/L	0493	WL	08/19/2004	0001	54.00 - 54.00	15000	F #	250	-
	mg/L	0493	WL	08/19/2004	0001	46.00 - 46.00	14000	F #	250	-
	mg/L	0495	WL, PZ	08/19/2004	0001	4.19 - 4.19	7100	F #	100	-
	mg/L	0497	WL, PZ	08/19/2004	0001	4.12 - 4.12	7400	F #	100	-
	mg/L	0498	WL, PZ	08/19/2004	0001	1.37 - 1.37	7400	F #	100	-
	mg/L	0499	WL, PZ	08/19/2004	0001	4.29 - 4.29	8600	F #	100	-
	mg/L	0557	WL	08/18/2004	0001	44.00 - 44.00	14000	F #	250	-
	mg/L	0557	WL	08/18/2004	0001	36.00 - 36.00	9700	F #	250	-
	mg/L	0558	WL	08/19/2004	0001	44.00 - 44.00	6500	F #	500	-
	mg/L	0558	WL	08/19/2004	0001	36.00 - 36.00	9300	F #	500	-
	mg/L	0559	WL	08/19/2004	0001	17.00 - 17.00	8000	F #	250	-
	mg/L	0559	WL	08/19/2004	0001	20.00 - 20.00	8100	F #	250	-
	mg/L	0560	WL	08/19/2004	0001	39.00 - 39.00	8000	F #	500	-
	mg/L	0560	WL	08/19/2004	0001	31.00 - 31.00	8300	F #	500	-
	mg/L	0561	WL	08/19/2004	0001	54.00 - 54.00	5600	F #	500	-
	mg/L	0561	WL	08/19/2004	0001	46.00 - 46.00	6500	F #	500	-
	mg/L	0570	WL, I&E	08/18/2004	0001	29.00 - 29.00	8800	F #	500	-
mg/L	0570	WL, I&E	08/18/2004	0001	23.00 - 23.00	8800	F #	500	-	

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Sulfate	mg/L	0570	WL, I&E	08/18/2004	0001	16.00 - 16.00	7400	F	#	100	-
	mg/L	0571	WL, I&E	08/17/2004	0001	39.00 - 39.00	8700	F	#	500	-
	mg/L	0571	WL, I&E	08/17/2004	0001	26.00 - 26.00	8900	F	#	500	-
	mg/L	0571	WL, I&E	08/17/2004	0001	33.00 - 33.00	11000	F	#	500	-
	mg/L	0572	WL, I&E	08/17/2004	0001	16.00 - 16.00	8700	F	#	250	-
	mg/L	0572	WL, I&E	08/17/2004	0001	23.00 - 23.00	8700	F	#	250	-
	mg/L	0572	WL, I&E	08/17/2004	0001	29.00 - 29.00	9100	F	#	250	-
	mg/L	0573	WL, I&E	08/17/2004	0001	26.00 - 26.00	9100	F	#	250	-
	mg/L	0573	WL, I&E	08/17/2004	0001	33.00 - 33.00	9600	F	#	250	-
	mg/L	0573	WL, I&E	08/17/2004	0001	39.00 - 39.00	9700	F	#	250	-
	mg/L	0574	WL, I&E	08/18/2004	0001	16.00 - 16.00	8100	F	#	250	-
	mg/L	0574	WL, I&E	08/18/2004	0001	23.00 - 23.00	9700	F	#	250	-
	mg/L	0574	WL, I&E	08/18/2004	0001	29.00 - 29.00	9700	F	#	250	-
	mg/L	0575	WL, I&E	08/18/2004	0001	26.00 - 26.00	10000	F	#	250	-
	mg/L	0575	WL, I&E	08/18/2004	0001	39.00 - 39.00	9700	F	#	250	-
	mg/L	0575	WL, I&E	08/18/2004	0001	33.00 - 33.00	9700	F	#	250	-
	mg/L	0576	WL, I&E	08/06/2004	0001	16.00 - 16.00	7600	F	#	100	-
	mg/L	0576	WL, I&E	08/06/2004	0001	29.00 - 29.00	11000	F	#	250	-
	mg/L	0576	WL, I&E	08/06/2004	0001	23.00 - 23.00	12000	F	#	250	-
	mg/L	0576	WL, I&E	08/06/2004	0002	29.00 - 29.00	11000	F	#	250	-
	mg/L	0577	WL, I&E	08/05/2004	0001	26.00 - 26.00	13000	F	#	100	-
	mg/L	0577	WL, I&E	08/05/2004	0001	39.00 - 39.00	9900	F	#	250	-
	mg/L	0577	WL, I&E	08/05/2004	0001	33.00 - 33.00	12000	F	#	250	-
	mg/L	0578	WL, I&E	08/05/2004	0001	29.00 - 29.00	13000	F	#	100	-
	mg/L	0578	WL, I&E	08/05/2004	0001	16.00 - 16.00	11000	F	#	100	-
	mg/L	0578	WL, I&E	08/05/2004	0001	23.00 - 23.00	12000	F	#	100	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Sulfate	mg/L	0579	WL, I&E	08/05/2004	0001	26.00 - 26.00	8900	F #	100	-
	mg/L	0579	WL, I&E	08/05/2004	0001	33.00 - 33.00	9500	F #	100	-
	mg/L	0579	WL, I&E	08/05/2004	0001	39.00 - 39.00	13000	F #	100	-
	mg/L	0588	WL	08/18/2004	0001	34.00 - 34.00	9900	F #	250	-
	mg/L	0588	WL	08/18/2004	0001	26.00 - 26.00	10000	F #	250	-
	mg/L	0589	WL	08/18/2004	0001	52.00 - 52.00	8300	F #	500	-
	mg/L	0589	WL	08/18/2004	0001	44.00 - 44.00	8800	F #	500	-
	mg/L	0591	WL, PZ	08/20/2004	0001	4.22 - 4.22	13000	F #	250	-
	mg/L	0593	WL, PZ	08/20/2004	0001	4.13 - 4.13	11000	F #	250	-
	mg/L	0594	WL, PZ	08/20/2004	0001	2.02 - 2.02	330	F #	10	-
Temperature	C	0488	WL	08/19/2004	N001	39.00 - 39.00	21.67	F #	-	-
	C	0488	WL	08/19/2004	N001	26.00 - 26.00	22.43	F #	-	-
	C	0488	WL	08/19/2004	N001	33.00 - 33.00	23.01	F #	-	-
	C	0493	WL	08/19/2004	N001	54.00 - 54.00	19.64	F #	-	-
	C	0493	WL	08/19/2004	N001	46.00 - 46.00	21.82	F #	-	-
	C	0495	WL, PZ	08/19/2004	N001	4.19 - 4.19	23.86	F #	-	-
	C	0497	WL, PZ	08/19/2004	N001	4.12 - 4.12	21.25	F #	-	-
	C	0498	WL, PZ	08/19/2004	N001	1.37 - 1.37	23.32	F #	-	-
	C	0499	WL, PZ	08/19/2004	N001	4.29 - 4.29	21.75	F #	-	-
	C	0557	WL	08/18/2004	N001	44.00 - 44.00	19.97	F #	-	-
	C	0557	WL	08/18/2004	N001	36.00 - 36.00	21.25	F #	-	-
	C	0558	WL	08/19/2004	N001	44.00 - 44.00	20.41	F #	-	-
	C	0558	WL	08/19/2004	N001	36.00 - 36.00	21.23	F #	-	-
	C	0559	WL	08/19/2004	N001	20.00 - 20.00	19.65	F #	-	-
	C	0559	WL	08/19/2004	N001	17.00 - 17.00	19.73	F #	-	-
C	0560	WL	08/19/2004	N001	39.00 - 39.00	17.02	F #	-	-	

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Temperature	C	0560	WL	08/19/2004	N001	31.00 - 31.00	17.75	F	#	-	-
	C	0561	WL	08/19/2004	N001	54.00 - 54.00	16.96	F	#	-	-
	C	0561	WL	08/19/2004	N001	46.00 - 46.00	17.31	F	#	-	-
	C	0563	WL, PZ	08/20/2004	N001	3.95 - 3.95	25.61	F	#	-	-
	C	0565	WL, PZ	08/20/2004	N001	4.32 - 4.32	23.91	F	#	-	-
	C	0570	WL, I&E	08/18/2004	N001	23.00 - 23.00	16.86	F	#	-	-
	C	0570	WL, I&E	08/18/2004	N001	16.00 - 16.00	17.44	F	#	-	-
	C	0570	WL, I&E	08/18/2004	N001	29.00 - 29.00	16.55	F	#	-	-
	C	0571	WL, I&E	08/17/2004	N001	33.00 - 33.00	17.30	F	#	-	-
	C	0571	WL, I&E	08/17/2004	N001	39.00 - 39.00	17.37	F	#	-	-
	C	0571	WL, I&E	08/17/2004	N001	26.00 - 26.00	19.78	F	#	-	-
	C	0572	WL, I&E	08/17/2004	N001	29.00 - 29.00	17.46	F	#	-	-
	C	0572	WL, I&E	08/17/2004	N001	23.00 - 23.00	17.83	F	#	-	-
	C	0572	WL, I&E	08/17/2004	N001	16.00 - 16.00	18.88	F	#	-	-
	C	0573	WL, I&E	08/17/2004	N001	39.00 - 39.00	17.26	F	#	-	-
	C	0573	WL, I&E	08/17/2004	N001	33.00 - 33.00	18.18	F	#	-	-
	C	0573	WL, I&E	08/17/2004	N001	26.00 - 26.00	19.38	F	#	-	-
	C	0574	WL, I&E	08/18/2004	N001	16.00 - 16.00	18.22	F	#	-	-
	C	0574	WL, I&E	08/18/2004	N001	29.00 - 29.00	18.26	F	#	-	-
	C	0574	WL, I&E	08/18/2004	N001	23.00 - 23.00	18.38	F	#	-	-
	C	0575	WL, I&E	08/18/2004	N001	39.00 - 39.00	17.64	F	#	-	-
	C	0575	WL, I&E	08/18/2004	N001	33.00 - 33.00	18.33	F	#	-	-
	C	0575	WL, I&E	08/18/2004	N001	26.00 - 26.00	19.51	F	#	-	-
	C	0576	WL, I&E	08/06/2004	N001	16.00 - 16.00	16.9	F	#	-	-
	C	0576	WL, I&E	08/06/2004	N001	23.00 - 23.00	17.2	F	#	-	-
	C	0576	WL, I&E	08/06/2004	N001	29.00 - 29.00	17.4	F	#	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Temperature	C	0577	WL, I&E	08/05/2004	N001	33.00 - 33.00	22.4	F	#	-	-
	C	0577	WL, I&E	08/05/2004	N001	39.00 - 39.00	19.8	F	#	-	-
	C	0577	WL, I&E	08/05/2004	N001	26.00 - 26.00	23.1	F	#	-	-
	C	0578	WL, I&E	08/05/2004	N001	23.00 - 23.00	23.1	F	#	-	-
	C	0578	WL, I&E	08/05/2004	N001	16.00 - 16.00	23.8	F	#	-	-
	C	0578	WL, I&E	08/05/2004	N001	29.00 - 29.00	22.6	F	#	-	-
	C	0579	WL, I&E	08/05/2004	N001	33.00 - 33.00	18.7	F	#	-	-
	C	0579	WL, I&E	08/05/2004	N001	26.00 - 26.00	18.9	F	#	-	-
	C	0579	WL, I&E	08/05/2004	N001	39.00 - 39.00	19.5	F	#	-	-
	C	0588	WL	08/18/2004	N001	34.00 - 34.00	18.54	F	#	-	-
	C	0588	WL	08/18/2004	N001	26.00 - 26.00	18.20	F	#	-	-
	C	0589	WL	08/18/2004	N001	52.00 - 52.00	19.93	F	#	-	-
	C	0589	WL	08/18/2004	N001	44.00 - 44.00	20.82	F	#	-	-
	C	0590	WL, PZ	08/20/2004	N001	1.08 - 1.08	23.96	F	#	-	-
	C	0591	WL, PZ	08/20/2004	N001	4.22 - 4.22	23.27	F	#	-	-
	C	0592	WL, PZ	08/20/2004	N001	2.10 - 2.10	24.51	F	#	-	-
	C	0593	WL, PZ	08/20/2004	N001	4.13 - 4.13	20.79	F	#	-	-
C	0594	WL, PZ	08/20/2004	N001	2.02 - 2.02	24.34	F	#	-	-	
Total Dissolved Solids	mg/L	0488	WL	08/19/2004	0001	39.00 - 39.00	20000	F	#	400	-
	mg/L	0488	WL	08/19/2004	0001	26.00 - 26.00	18000	F	#	400	-
	mg/L	0488	WL	08/19/2004	0001	33.00 - 33.00	18000	F	#	400	-
	mg/L	0493	WL	08/19/2004	0001	46.00 - 46.00	28000	F	#	1000	-
	mg/L	0493	WL	08/19/2004	0001	54.00 - 54.00	38000	F	#	1000	-
	mg/L	0495	WL, PZ	08/19/2004	0001	4.19 - 4.19	13000	F	#	400	-
	mg/L	0497	WL, PZ	08/19/2004	0001	4.12 - 4.12	13000	F	#	400	-
	mg/L	0498	WL, PZ	08/19/2004	0001	1.37 - 1.37	12000	F	#	400	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Total Dissolved Solids	mg/L	0499	WL, PZ	08/19/2004	0001	4.29 - 4.29	14000	F	#	400	-
	mg/L	0557	WL	08/18/2004	0001	36.00 - 36.00	28000	F	#	1000	-
	mg/L	0557	WL	08/18/2004	0001	44.00 - 44.00	41000	F	#	1000	-
	mg/L	0558	WL	08/19/2004	0001	36.00 - 36.00	70000	F	#	2000	-
	mg/L	0558	WL	08/19/2004	0001	44.00 - 44.00	80000	F	#	2000	-
	mg/L	0559	WL	08/19/2004	0001	17.00 - 17.00	19000	F	#	400	-
	mg/L	0559	WL	08/19/2004	0001	20.00 - 20.00	20000	F	#	400	-
	mg/L	0560	WL	08/19/2004	0001	31.00 - 31.00	65000	F	#	2000	-
	mg/L	0560	WL	08/19/2004	0001	39.00 - 39.00	70000	F	#	2000	-
	mg/L	0561	WL	08/19/2004	0001	54.00 - 54.00	86000	F	#	2000	-
	mg/L	0561	WL	08/19/2004	0001	46.00 - 46.00	80000	F	#	2000	-
	mg/L	0570	WL, I&E	08/18/2004	0001	16.00 - 16.00	15000	F	#	400	-
	mg/L	0570	WL, I&E	08/18/2004	0001	23.00 - 23.00	55000	F	#	2000	-
	mg/L	0570	WL, I&E	08/18/2004	0001	29.00 - 29.00	56000	F	#	2000	-
	mg/L	0571	WL, I&E	08/17/2004	0001	39.00 - 39.00	61000	F	#	2000	-
	mg/L	0571	WL, I&E	08/17/2004	0001	26.00 - 26.00	52000	F	#	2000	-
	mg/L	0571	WL, I&E	08/17/2004	0001	33.00 - 33.00	57000	F	#	2000	-
	mg/L	0572	WL, I&E	08/17/2004	0001	29.00 - 29.00	48000	F	#	1000	-
	mg/L	0572	WL, I&E	08/17/2004	0001	16.00 - 16.00	29000	F	#	1000	-
	mg/L	0572	WL, I&E	08/17/2004	0001	23.00 - 23.00	43000	F	#	1000	-
	mg/L	0573	WL, I&E	08/17/2004	0001	26.00 - 26.00	40000	F	#	1000	-
	mg/L	0573	WL, I&E	08/17/2004	0001	33.00 - 33.00	46000	F	#	1000	-
	mg/L	0573	WL, I&E	08/17/2004	0001	39.00 - 39.00	53000	F	#	1000	-
	mg/L	0574	WL, I&E	08/18/2004	0001	23.00 - 23.00	40000	F	#	1000	-
	mg/L	0574	WL, I&E	08/18/2004	0001	16.00 - 16.00	21000	F	#	400	-
	mg/L	0574	WL, I&E	08/18/2004	0001	29.00 - 29.00	41000	F	#	1000	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Total Dissolved Solids	mg/L	0575	WL, I&E	08/18/2004	0001	33.00 - 33.00	42000	F #	1000	-
	mg/L	0575	WL, I&E	08/18/2004	0001	39.00 - 39.00	48000	F #	1000	-
	mg/L	0575	WL, I&E	08/18/2004	0001	26.00 - 26.00	39000	F #	1000	-
	mg/L	0576	WL, I&E	08/06/2004	0001	16.00 - 16.00	14000	F #	400	-
	mg/L	0576	WL, I&E	08/06/2004	0001	23.00 - 23.00	29000	F #	1000	-
	mg/L	0576	WL, I&E	08/06/2004	0001	29.00 - 29.00	35000	F #	1000	-
	mg/L	0576	WL, I&E	08/06/2004	0002	29.00 - 29.00	35000	F #	1000	-
	mg/L	0577	WL, I&E	08/05/2004	0001	39.00 - 39.00	37000	F #	1000	-
	mg/L	0577	WL, I&E	08/05/2004	0001	26.00 - 26.00	24000	F #	400	-
	mg/L	0577	WL, I&E	08/05/2004	0001	33.00 - 33.00	29000	F #	1000	-
	mg/L	0578	WL, I&E	08/05/2004	0001	16.00 - 16.00	19000	F #	400	-
	mg/L	0578	WL, I&E	08/05/2004	0001	23.00 - 23.00	21000	F #	400	-
	mg/L	0578	WL, I&E	08/05/2004	0001	29.00 - 29.00	23000	F #	400	-
	mg/L	0579	WL, I&E	08/05/2004	0001	26.00 - 26.00	17000	F #	400	-
	mg/L	0579	WL, I&E	08/05/2004	0001	33.00 - 33.00	17000	F #	400	-
	mg/L	0579	WL, I&E	08/05/2004	0001	39.00 - 39.00	23000	F #	400	-
	mg/L	0588	WL	08/18/2004	0001	26.00 - 26.00	40000	F #	1000	-
	mg/L	0588	WL	08/18/2004	0001	34.00 - 34.00	43000	F #	1000	-
	mg/L	0589	WL	08/18/2004	0001	44.00 - 44.00	59000	F #	2000	-
	mg/L	0589	WL	08/18/2004	0001	52.00 - 52.00	71000	F #	2000	-
	mg/L	0591	WL, PZ	08/20/2004	0001	4.22 - 4.22	24000	F #	400	-
	mg/L	0593	WL, PZ	08/20/2004	0001	4.13 - 4.13	21000	F #	400	-
	mg/L	0594	WL, PZ	08/20/2004	0001	2.02 - 2.02	850	F #	40	-
	Turbidity	NTU	0488	WL	08/19/2004	N001	26.00 - 26.00	13.2	F #	-
NTU		0488	WL	08/19/2004	N001	33.00 - 33.00	14.1	F #	-	-
NTU		0488	WL	08/19/2004	N001	39.00 - 39.00	14.8	F #	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY	
				DATE	ID			LAB	DATA	QA		DETECTION LIMIT
Turbidity	NTU	0493	WL	08/19/2004	N001	54.00 - 54.00	11.2	F	#	-	-	
	NTU	0493	WL	08/19/2004	N001	46.00 - 46.00	28.5	F	#	-	-	
	NTU	0495	WL, PZ	08/19/2004	N001	4.19 - 4.19	1000	>	F	#	-	-
	NTU	0497	WL, PZ	08/19/2004	N001	4.12 - 4.12	130		F	#	-	-
	NTU	0498	WL, PZ	08/19/2004	N001	1.37 - 1.37	1000	>	F	#	-	-
	NTU	0499	WL, PZ	08/19/2004	N001	4.29 - 4.29	1000	>	F	#	-	-
	NTU	0557	WL	08/18/2004	N001	44.00 - 44.00	6.68		F	#	-	-
	NTU	0557	WL	08/18/2004	N001	36.00 - 36.00	8.29		F	#	-	-
	NTU	0558	WL	08/19/2004	N001	44.00 - 44.00	3.64		F	#	-	-
	NTU	0558	WL	08/19/2004	N001	36.00 - 36.00	7.17		F	#	-	-
	NTU	0559	WL	08/19/2004	N001	20.00 - 20.00	3.41		F	#	-	-
	NTU	0559	WL	08/19/2004	N001	17.00 - 17.00	6.40		F	#	-	-
	NTU	0560	WL	08/19/2004	N001	31.00 - 31.00	4.60		F	#	-	-
	NTU	0560	WL	08/19/2004	N001	39.00 - 39.00	5.14		F	#	-	-
	NTU	0561	WL	08/19/2004	N001	54.00 - 54.00	4.07		F	#	-	-
	NTU	0561	WL	08/19/2004	N001	46.00 - 46.00	10.5		F	#	-	-
	NTU	0563	WL, PZ	08/20/2004	N001	3.95 - 3.95	1000	>	F	#	-	-
	NTU	0565	WL, PZ	08/20/2004	N001	4.32 - 4.32	1000	>	F	#	-	-
	NTU	0570	WL, I&E	08/18/2004	N001	16.00 - 16.00	2.71		F	#	-	-
	NTU	0570	WL, I&E	08/18/2004	N001	23.00 - 23.00	4.28		F	#	-	-
	NTU	0570	WL, I&E	08/18/2004	N001	29.00 - 29.00	5.34		F	#	-	-
	NTU	0571	WL, I&E	08/17/2004	N001	26.00 - 26.00	17.1		F	#	-	-
	NTU	0571	WL, I&E	08/17/2004	N001	33.00 - 33.00	8.70		F	#	-	-
	NTU	0571	WL, I&E	08/17/2004	N001	39.00 - 39.00	7.36		F	#	-	-
	NTU	0572	WL, I&E	08/17/2004	N001	16.00 - 16.00	2.43		F	#	-	-
	NTU	0572	WL, I&E	08/17/2004	N001	23.00 - 23.00	2.90		F	#	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Turbidity	NTU	0572	WL, I&E	08/17/2004	N001	29.00 - 29.00	4.59	F	#	-	-
	NTU	0573	WL, I&E	08/17/2004	N001	26.00 - 26.00	5.24	F	#	-	-
	NTU	0573	WL, I&E	08/17/2004	N001	39.00 - 39.00	7.11	F	#	-	-
	NTU	0573	WL, I&E	08/17/2004	N001	33.00 - 33.00	10.0	F	#	-	-
	NTU	0574	WL, I&E	08/18/2004	N001	16.00 - 16.00	2.39	F	#	-	-
	NTU	0574	WL, I&E	08/18/2004	N001	23.00 - 23.00	2.92	F	#	-	-
	NTU	0574	WL, I&E	08/18/2004	N001	29.00 - 29.00	4.07	F	#	-	-
	NTU	0575	WL, I&E	08/18/2004	N001	39.00 - 39.00	3.89	F	#	-	-
	NTU	0575	WL, I&E	08/18/2004	N001	26.00 - 26.00	8.23	F	#	-	-
	NTU	0575	WL, I&E	08/18/2004	N001	33.00 - 33.00	9.43	F	#	-	-
	NTU	0576	WL, I&E	08/06/2004	N001	16.00 - 16.00	9.77	F	#	-	-
	NTU	0576	WL, I&E	08/06/2004	N001	23.00 - 23.00	6.82	F	#	-	-
	NTU	0576	WL, I&E	08/06/2004	N001	29.00 - 29.00	14.0	F	#	-	-
	NTU	0577	WL, I&E	08/05/2004	N001	33.00 - 33.00	11.5	F	#	-	-
	NTU	0577	WL, I&E	08/05/2004	N001	26.00 - 26.00	15.0	F	#	-	-
	NTU	0577	WL, I&E	08/05/2004	N001	39.00 - 39.00	8.77	F	#	-	-
	NTU	0578	WL, I&E	08/05/2004	N001	16.00 - 16.00	3.71	F	#	-	-
	NTU	0578	WL, I&E	08/05/2004	N001	23.00 - 23.00	15.5	F	#	-	-
	NTU	0578	WL, I&E	08/05/2004	N001	29.00 - 29.00	20.7	F	#	-	-
	NTU	0579	WL, I&E	08/05/2004	N001	26.00 - 26.00	10	F	#	-	-
	NTU	0579	WL, I&E	08/05/2004	N001	33.00 - 33.00	13.1	F	#	-	-
	NTU	0579	WL, I&E	08/05/2004	N001	39.00 - 39.00	15.8	F	#	-	-
	NTU	0588	WL	08/18/2004	N001	26.00 - 26.00	5.46	F	#	-	-
	NTU	0588	WL	08/18/2004	N001	34.00 - 34.00	6.96	F	#	-	-
	NTU	0589	WL	08/18/2004	N001	44.00 - 44.00	6.24	F	#	-	-
	NTU	0589	WL	08/18/2004	N001	52.00 - 52.00	7.00	F	#	-	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE	ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
Turbidity	NTU	0590	WL, PZ	08/20/2004	N001	1.08 - 1.08	1000	> F #	-	-
	NTU	0591	WL, PZ	08/20/2004	N001	4.22 - 4.22	1000	> F #	-	-
	NTU	0592	WL, PZ	08/20/2004	N001	2.10 - 2.10	1000	> F #	-	-
	NTU	0593	WL, PZ	08/20/2004	N001	4.13 - 4.13	36.9	F #	-	-
	NTU	0594	WL, PZ	08/20/2004	N001	2.02 - 2.02	1000	> F #	-	-
Uranium	mg/L	0488	WL	08/19/2004	0001	26.00 - 26.00	2.300	F #	0.0012	-
	mg/L	0488	WL	08/19/2004	0001	33.00 - 33.00	2.400	F #	0.0012	-
	mg/L	0488	WL	08/19/2004	0001	39.00 - 39.00	2.500	F #	0.0012	-
	mg/L	0493	WL	08/19/2004	0001	46.00 - 46.00	3.300	F #	0.0012	-
	mg/L	0493	WL	08/19/2004	0001	54.00 - 54.00	3.400	F #	0.0012	-
	mg/L	0495	WL, PZ	08/19/2004	0001	4.19 - 4.19	1.200	F #	0.0012	-
	mg/L	0497	WL, PZ	08/19/2004	0001	4.12 - 4.12	1.400	E JF #	0.0012	-
	mg/L	0498	WL, PZ	08/19/2004	0001	1.37 - 1.37	1.100	F #	0.0012	-
	mg/L	0499	WL, PZ	08/19/2004	0001	4.29 - 4.29	1.700	F #	0.0012	-
	mg/L	0557	WL	08/18/2004	0001	36.00 - 36.00	2.900	F #	0.0012	-
	mg/L	0557	WL	08/18/2004	0001	44.00 - 44.00	3.100	F #	0.0012	-
	mg/L	0558	WL	08/19/2004	0001	44.00 - 44.00	0.780	F #	0.00012	-
	mg/L	0558	WL	08/19/2004	0001	36.00 - 36.00	1.400	F #	0.0012	-
	mg/L	0559	WL	08/19/2004	0001	17.00 - 17.00	2.400	F #	0.0012	-
	mg/L	0559	WL	08/19/2004	0001	20.00 - 20.00	2.400	F #	0.0012	-
	mg/L	0560	WL	08/19/2004	0001	31.00 - 31.00	1.400	F #	0.0012	-
	mg/L	0560	WL	08/19/2004	0001	39.00 - 39.00	1.300	E JF #	0.0012	-
	mg/L	0561	WL	08/19/2004	0001	54.00 - 54.00	0.390	F #	0.00012	-
	mg/L	0561	WL	08/19/2004	0001	46.00 - 46.00	0.870	F #	0.00012	-
	mg/L	0563	WL, PZ	08/20/2004	0001	3.95 - 3.95	0.150	F #	6.2E-05	-
mg/L	0570	WL, I&E	08/18/2004	0001	16.00 - 16.00	2.700	F #	0.0012	-	

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Uranium	mg/L	0570	WL, I&E	08/18/2004	0001	23.00 - 23.00	1.900	F	#	0.0012	-
	mg/L	0570	WL, I&E	08/18/2004	0001	29.00 - 29.00	1.900	F	#	0.0012	-
	mg/L	0571	WL, I&E	08/17/2004	0001	39.00 - 39.00	1.800	F	#	0.0012	-
	mg/L	0571	WL, I&E	08/17/2004	0001	26.00 - 26.00	1.700	F	#	0.0012	-
	mg/L	0571	WL, I&E	08/17/2004	0001	33.00 - 33.00	1.700	F	#	0.0012	-
	mg/L	0572	WL, I&E	08/17/2004	0001	23.00 - 23.00	2.200	F	#	0.0012	-
	mg/L	0572	WL, I&E	08/17/2004	0001	29.00 - 29.00	2.300	F	#	0.0012	-
	mg/L	0572	WL, I&E	08/17/2004	0001	16.00 - 16.00	2.500	F	#	0.0012	-
	mg/L	0573	WL, I&E	08/17/2004	0001	26.00 - 26.00	2.600	F	#	0.0012	-
	mg/L	0573	WL, I&E	08/17/2004	0001	39.00 - 39.00	2.100	F	#	0.0012	-
	mg/L	0573	WL, I&E	08/17/2004	0001	33.00 - 33.00	2.300	F	#	0.0012	-
	mg/L	0574	WL, I&E	08/18/2004	0001	16.00 - 16.00	2.300	F	#	0.0012	-
	mg/L	0574	WL, I&E	08/18/2004	0001	23.00 - 23.00	2.500	F	#	0.0012	-
	mg/L	0574	WL, I&E	08/18/2004	0001	29.00 - 29.00	2.600	F	#	0.0012	-
	mg/L	0575	WL, I&E	08/18/2004	0001	33.00 - 33.00	2.300	F	#	0.0012	-
	mg/L	0575	WL, I&E	08/18/2004	0001	39.00 - 39.00	2.300	F	#	0.0012	-
	mg/L	0575	WL, I&E	08/18/2004	0001	26.00 - 26.00	2.500	F	#	0.0012	-
	mg/L	0576	WL, I&E	08/06/2004	0001	16.00 - 16.00	2.100	F	#	0.0012	-
	mg/L	0576	WL, I&E	08/06/2004	0001	23.00 - 23.00	2.800	F	#	0.0012	-
	mg/L	0576	WL, I&E	08/06/2004	0001	29.00 - 29.00	2.800	F	#	0.0012	-
	mg/L	0576	WL, I&E	08/06/2004	0002	29.00 - 29.00	2.800	F	#	0.0012	-
	mg/L	0577	WL, I&E	08/05/2004	0001	39.00 - 39.00	2.500	F	#	0.0012	-
	mg/L	0577	WL, I&E	08/05/2004	0001	33.00 - 33.00	2.800	F	#	0.0012	-
	mg/L	0577	WL, I&E	08/05/2004	0001	26.00 - 26.00	3.100	F	#	0.0012	-
	mg/L	0578	WL, I&E	08/05/2004	0001	16.00 - 16.00	2.600	F	#	0.0012	-
	mg/L	0578	WL, I&E	08/05/2004	0001	23.00 - 23.00	3.000	F	#	0.0012	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			UN-CERTAINTY
				DATE	ID			LAB	DATA	QA	
Uranium	mg/L	0578	WL, I&E	08/05/2004	0001	29.00 - 29.00	3.200	F	#	0.0012	-
	mg/L	0579	WL, I&E	08/05/2004	0001	26.00 - 26.00	2.400	F	#	0.0012	-
	mg/L	0579	WL, I&E	08/05/2004	0001	33.00 - 33.00	2.400	F	#	0.0012	-
	mg/L	0579	WL, I&E	08/05/2004	0001	39.00 - 39.00	3.100	F	#	0.0012	-
	mg/L	0588	WL	08/18/2004	0001	34.00 - 34.00	2.600	F	#	0.0012	-
	mg/L	0588	WL	08/18/2004	0001	26.00 - 26.00	2.800	F	#	0.0012	-
	mg/L	0589	WL	08/18/2004	0001	52.00 - 52.00	1.500	F	#	0.0012	-
	mg/L	0589	WL	08/18/2004	0001	44.00 - 44.00	1.900	F	#	0.0012	-
	mg/L	0590	WL, PZ	08/20/2004	0001	1.08 - 1.08	2.000	F	#	0.0012	-
	mg/L	0591	WL, PZ	08/20/2004	0001	4.22 - 4.22	1.600	F	#	0.0012	-
	mg/L	0592	WL, PZ	08/20/2004	0001	2.10 - 2.10	1.100	F	#	0.0012	-
	mg/L	0593	WL, PZ	08/20/2004	0001	4.13 - 4.13	2.900	F	#	0.0012	-
	mg/L	0594	WL, PZ	08/20/2004	0001	2.02 - 2.02	0.110	F	#	6.2E-05	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 1:14 pm

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE: DATE ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN-CERTAINTY
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RECORDS: SELECTED FROM USEE200 WHERE site\_code='MOA01' AND location\_code in('0493','0494','0495','0496','0497','0498','0499','0557','0558','0559','0560','0561','0562','0563','0564','0565','0566','0567','0570','0571','0572','0573','0574','0575','0576','0577','0578','0579','0588','0589','0590','0591','0592','0593','0594','0595','0488') AND quality\_assurance = TRUE AND (data\_validation\_qualifiers IS NULL OR data\_validation\_qualifiers NOT LIKE '%R%' AND data\_validation\_qualifiers NOT LIKE '%X%' ) AND DATE\_SAMPLED between #8/5/2004# and #8/20/2004#

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

LOCATION TYPES: WL WELL

LOCATION SUBTYPES: I&E Dual Purpose Injection and Ex PZ Piezometer

LAB QUALIFIERS:

- \* Replicate analysis not within control limits.
- + Correlation coefficient for MSA < 0.995.
- > Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- I Increased detection limit due to required dilution.
- J Estimated
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- P > 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
- 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.
- X Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Z Laboratory defined (USEPA CLP organic) qualifier, see case narrative.

DATA QUALIFIERS:

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

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

# **WATER LEVELS**

STATIC WATER LEVELS (USEE700) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 11:09 am

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	WATER ELEVATION (FT)	WATER LEVEL FLAG
			DATE	TIME			
0488		3968.48	08/19/2004	16:02	15.08	3953.40	
0493		3967.94	08/19/2004	17:01	14.85	3953.09	
0494		3959.27	08/19/2004			-	D
0495		3957.81	08/19/2004	18:27	4.51	3953.30	
0496		3957.48	08/19/2004			-	D
0497		3955.66	08/19/2004	19:00	2.44	3953.22	
0498		3955.86	08/19/2004	19:30	2.93	3952.93	
0499		3953.44	08/19/2004	19:40	0.59	3952.85	
0557		3968.85	08/18/2004	17:59	16.40	3952.45	
0558		3968.79	08/19/2004	11:22	17.20	3951.59	
0559		3969.92	08/19/2004	10:01	18.70	3951.22	
0560		3968.77	08/19/2004	08:04	17.16	3951.61	
0561		3968.56	08/19/2004	09:05	17.15	3951.41	
0562		3956.29	08/20/2004	10:57	4.63	3951.66	
0563		3955.05	08/20/2004	11:01	3.32	3951.73	
0564		3956.39	08/20/2004	11:18	4.51	3951.88	
0565		3954.05	08/20/2004	11:27	2.25	3951.80	
0566		3955.30	08/20/2004	11:51	3.30	3952.00	
0567		3953.39	08/20/2004	12:00	3.03	3950.36	
0570		3967.52	08/18/2004	08:29	15.36	3952.16	
0571		3967.01	08/17/2004	14:53	14.97	3952.04	
0572		3967.01	08/17/2004	17:35	15.16	3951.85	
0573		3967.70	08/17/2004	16:24	15.15	3952.55	
0574		3967.30	08/18/2004	11:41	14.76	3952.54	
0575		3967.30	08/18/2004	14:32	15.10	3952.20	
0576		3967.17	08/06/2004	08:06	14.28	3952.89	
0577		3967.59	08/05/2004	16:34	14.50	3953.09	
0578		3967.80	08/05/2004	15:14	14.65	3953.15	
0579		3967.21	08/05/2004	09:25	14.12	3953.09	
0588		3969.04	08/18/2004	15:42	16.46	3952.58	

STATIC WATER LEVELS (USEE700) FOR SITE MOA01, Moab Disposal Site  
 REPORT DATE: 12/8/2004 11:09 am

LOCATION CODE	FLOW CODE	TOP OF CASING ELEVATION (FT)	MEASUREMENT		DEPTH FROM TOP OF CASING (FT)	WATER ELEVATION (FT)	WATER LEVEL FLAG
			DATE	TIME			
0589		3968.87	08/18/2004	16:44	16.62	3952.25	
0590		3956.70	08/20/2004	08:22	4.22	3952.48	
0591		3953.99	08/20/2004	08:36	1.60	3952.39	
0592		3956.36	08/20/2004	08:56	4.11	3952.25	
0593		3954.90	08/20/2004	09:04	2.48	3952.42	
0594		3955.43	08/20/2004	09:50	2.69	3952.74	
0595		3954.08	08/20/2004	09:58	3.40	3950.68	

RECORDS: SELECTED FROM USEE700 WHERE site\_code='MOA01' AND location\_code in('0493','0494','0495','0496','0497','0498','0499','0557','0558','0559','0560','0561','0562','0563','0564','0565','0566','0567','0570','0571','0572','0573','0574','0575','0576','0577','0578','0579','0588','0589','0590','0591','0592','0593','0594','0595','0488') AND LOG\_DATE between #8/5/2004# and #8/20/2004#

FLOW CODES:

WATER LEVEL FLAGS:

D Dry

# **SAMPLING TRIP REPORT**

## Memorandum

Control Number N/A

DATE: October 5, 2004 (Revised)  
TO: Ken Karp  
FROM: Ken Pill  
SUBJECT: Trip Report

**Site:** Moab Interim Action Configuration 2 Extraction Well Field Baseline Sampling

**Date of Sampling Event:** August 5-6 and August 17-20, 2004

**Team Members:** Ken Pill, Craig Goodknight, and Steve Hall

**Number of Locations Sampled:** 10 extraction wells (0570 through 0579), 9 observation wells (0588, 0589, 0557, 0560, 0561, 0559, 0558, 0488, and 0493), and 11 piezometers (0495, 0497 through 0499, 0590 through 0594, 0563, and 0565).

As part of the baseline sampling effort, the ground water samples were collected at three depths from each extraction well. One observation well (0488) also was sampled at three depths, while samples were collected at two depths from the remaining observation wells. Only one sample was collected from each piezometer. Specific depth from which each well was sampled is discussed in the Location Specific Information sections of this report.

Including one duplicate and one equipment blank, a total of **62** samples were submitted.

**Locations Not Sampled/Reason:** Piezometers 0494, 0496, 0595, 0562, 0564, 0566, and 0567 were purged dry and never recharged. As a result, no samples were collected from these locations.

**Field Variance:** Only a 125 ml sample was collected for uranium analysis as opposed to the standard 500 ml sample volume.

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

False ID	True ID	Sample Type	Associated Matrix	Ticket Number
2385	576-29	Duplicate	Ground water	NDX-357
2386	NA	Equipment Blank	Ground water	NDX-819

**RIN Number Assigned:** All samples were assigned to RIN 04070092.

**Sample Shipment:** All samples were shipped overnight FedEx to Paragon Analytics, Inc., from Moab, Utah. One cooler was sent on August 6, 2004 (Airbill No. 801914298450). Two more coolers were sent on August 19, 2004 (Airbill Nos. 801914298416 and 801914298438). One last cooler was shipped on August 20, 2004 (Airbill No. 801914298427).

**Location Specific Information – Configuration 2 Extraction Wells:** All samples were collected using micro-purge techniques with a peristaltic pump and down-hole tubing. The table below presents the depth to water measurements and the sample depths for each extraction well.

Well No.	Date	Time	Depth to Water (ft bgs)	Sample Depths (ft bgs)
0570	8/18/04	08:29	15.36	16 / 23 / 29
0571	8/17/04	14:53	14.97	26 / 33 / 39
0572	8/17/04	17:35	15.16	16 / 23 / 29
0573	8/17/04	16:24	15.15	26 / 33 / 39
0574	8/18/04	11:41	14.76	16 / 23 / 29
0575	8/18/04	14:32	15.10	26 / 33 / 39
0576	8/6/04	08:06	14.28	16 / 23 / 29
0577	8/5/04	16:34	14.50	26 / 33 / 39
0578	8/5/04	15:14	14.65	16 / 23 / 29
0579	8/5/04	09:25	14.12	26 / 33 / 39

**Location Specific Information – Configuration 2 Observation Wells:** These samples were collected using micro-purge techniques with a peristaltic pump and down-hole tubing. The table below presents the depth to water measurements and the sample depths for each observation well.

Well No.	Date	Time	Depth to Water (ft bgs)	Sample Depths (ft bgs)
0588	8/18/04	15:42	16.46	26 / 34
0589	8/18/04	16:44	16.62	44 / 52

**Location Specific Information – Configuration 2 Piezometers:** These samples were collected with a peristaltic pump and down-hole tubing. The table below presents the depth to water measurements and the sample depths for each piezometer. Photographs of these piezometer locations are presented in Appendix A.

Piezometer	Date	Time	Depth to Water (ft btoc)	Sample Depth (ft bgs)
0590	8/20/04	08:22	4.22	1.1
0591	8/20/04	08:36	1.60	4.2
0592	8/20/04	08:56	4.11	2.1
0593	8/20/04	09:04	2.48	4.1
0594	8/20/04	09:50	2.69	2.0
0595	8/20/04	09:58	3.40	na

Note: na = not applicable, sample was not collected

**Location Specific Information – Configuration 1 Observation Wells:** These samples were collected using micro-purge techniques with a peristaltic pump and down-hole tubing. The table below presents the depth to water measurements and the sample depths for each observation well.

Well No.	Date	Time	Depth to Water (ft bgs)	Sample Depths (ft bgs)
0557	8/18/04	17:59	16.40	36 / 44
0558	8/19/04	11:22	17.20	36 / 44
0559	8/19/04	10:01	18.70	17 / 20
0560	8/19/04	08:04	17.16	31 / 39
0561	8/19/04	09:05	17.15	46 / 54

**Location Specific Information – Configuration 1 Piezometers:** These samples were collected with a peristaltic pump and down-hole tubing. The table below presents the depth to water measurements and the sample depths for each piezometer. Photographs of these piezometer locations are presented in Appendix A.

Piezometer	Date	Time	Depth to Water (ft btoc)	Sample Depth (ft bgs)
0562	8/20/04	10:57	4.63	na
0563	8/20/04	11:01	3.32	4.0
0564	8/20/04	11:18	4.51	na
0565	8/20/04	11:27	2.25	4.3
0566	8/20/04	11:51	3.30	na
0567	8/20/04	12:00	3.03	na

Note: na = not applicable, sample was not collected

**Location Specific Information – Baseline Area Observation Wells:** These samples were collected using micro-purge techniques with a peristaltic pump and down-hole tubing. The table below presents the depth to water measurements and the sample depths for each observation well.

Well No.	Date	Time	Depth to Water (ft bgs)	Sample Depths (ft bgs)
0488	8/19/04	16:02	15.08	26 / 33 / 39
0493	8/19/04	17:01	14.85	46 / 54

**Location Specific Information – Baseline Area Piezometers:** These samples were collected with a peristaltic pump and down-hole tubing. The table below presents the depth to water measurements and the sample depths for each piezometer. Photographs of all piezometer locations are presented in Appendix A.

Piezometer	Date	Time	Depth to Water (ft btoc)	Sample Depth (ft bgs)
0494	8/19/04	18:15	dry	na
0495	8/19/04	18:27	4.51	4.2
0496	8/19/04	18:55	dry	na
0497	8/19/04	19:00	2.44	4.1
0498	8/19/04	19:30	2.93	1.4
0499	8/19/04	19:40	0.59	4.3

Note: na = not applicable, sample was not collected

**Colorado River Field Parameters:** Field parameters were measured on the Colorado River water that surrounded the piezometers installed in the river. These data are presented below:

Measurement Location	Surface Water Parameters				
	Date	Temperature (°C)	Specific Conductance (µS/cm)	pH	ORP
0243	08/19/04	23.41	1420	8.36	–
0246	08/20/04	27.28	1406	8.39	61.0
0239	08/20/04	23.93	1366	8.36	11.5

**Well Inspection Summary:** Well inspections were conducted at all observation wells. Construction activities were being completed at the extraction wells during the sampling event as part of the interim action expansion.

**Equipment:** All equipment functioned properly.

**Regulatory:** None.

**Site Issues:** Data from the USGS Cisco Gauging Station (Station No. 09180500) indicated the mean daily Colorado River flows during the sampling event were as follows:

<b>Date</b>	<b>Mean Daily Flow (cfs)</b>
08/05/2004	1,610
08/06/2004	2,550
08/07/2004	2,690
08/08/2004	2,670
08/09/2004	2,580
08/10/2004	2,430
08/11/2004	2,270
08/12/2004	2,110
08/13/2004	2,060
08/14/2004	2,050
08/15/2004	2,110
08/16/2004	2,130
08/17/2004	2,160
08/18/2004	2,230
08/19/2004	2,460
08/20/2004	2,670

**Corrective Action Required/Taken:** None

(KGP/lcg)

cc: J. D. Berwick, DOE-EM (e)  
D. R. Metzler, DOE-EM  
C. I. Bahrke, Stoller (e)  
K. E. Miller, Stoller  
L. M. Wright, Stoller (e)  
Working File: MOA

K:\ENGR\TCWP6\Moab\DataValidationPackages\August 2004\August 5\_6&17\_20\BaselineSamplingConf\_2.doc

## **APPENDIX A**

### **Piezometer Location Photographs**



PZ Location 590/591



PZ Location 592/593



PZ Locations 590/591 (right) and 592/593 (left)



PZ Location 594/595



PZ Location 562/563



PZ Location 564/565



PZ Location 566/567



PZ Locations 566/567 (foreground) 564/565 (background)



PZ Location 494/495



PZ Location 496/497



PZ Location 498/499