TETRA TECH NUS

PHIL-22093

TO: RUSS TURNER

DATE: MAY 14, 2008

FROM: MEGAN N. RITCHIE

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SUBJECT: INORGANIC DATA VALIDATION – TOTAL/DISSOLVED METALS AND HEXAVALENT CHROMIUM
NAS JRB WILLOW GROVE SITE 3, WILLOW GROVE, PENNSYLVANIA
SDG NO. TWK-001

SAMPLES: 12/Aqueous/

03MW01I	03MW05I	03MW06SI
03MW01S	03MW05S	03MW08D
03MW04I	03MW06I	03MW08S
03MW04SI	03MW06S	DUP-01

*The sample dates were truncated for clarity.

OVERVIEW

The sample set for the NAS JRB Willow Grove Site 3 Interim Groundwater Monitoring (IGWM) – Willow Grove, PA, SDG TWK-001 consists of 12 aqueous environmental samples (designated 03MW-, 03IW-, and 03SW-). Sample 03MW01I was designated as the matrix spike and matrix spike duplicate (MS/MSD) for this sample set. One field duplicate pair (DUP-01/03MW01S) was included in this sample set. All samples were analyzed for target analyte list (TAL) total and dissolved metals. Eight samples were analyzed for hexavalent chromium.

The samples were collected by Tetra Tech NUS on March 11-14, 2008 and analyzed by Analytical Laboratory Services, Inc. (ALSI) of Middletown, Pennsylvania.

EPA SW-846 Methods were conducted using 6010C for ICP-AES metals, 6020 for ICP-MS metals, 7470D for mercury, and 7196A for hexavalent chromium.

SUMMARY

All analytes were successfully analyzed in all samples. The findings offered in this report are based upon a general review of all available data including data completeness, holding times until analysis, calibration data, laboratory blank results, ICP interference check samples, matrix spike (MS) and matrix spike duplicate (MSD) results, laboratory control spike (LCS) results, field duplicate results, ICP serial dilution results, detection limits, and analyte quantitation.

Areas of concern with respect to data quality are listed below as follows:

MINOR PROBLEMS

- The matrix spike recovery for total iron exceeded the upper QC limit of 125%. The total iron results were qualified as biased high (K) in all the associated samples.

- The matrix spike recovery for dissolved aluminum exceeded the upper QC limit of 125%. The dissolved aluminum positive results were qualified as estimated (J) due this problem in conjunction with other QC problems..
- The matrix spike duplicate recovery for dissolved magnesium was below the lower QC limit of 75%. The dissolved magnesium results were qualified as biased low (L) in all the associated samples.
- The ICP-MS interference check recoveries were below the QC criteria of 80% for dissolved aluminum. The associated non-detected dissolved aluminum result was qualified as biased low (UL). The associated positive dissolved aluminum results were superseded by the estimated qualifier (J) due to other QC problems.
- Positive results at concentrations less than the reporting limits (RLs) were qualified as estimated (J).

NOTES

An ICP-MS interference check recovery exceeded QC criteria of 120% for chromium in the dissolved fraction. No action was taken for these exceedances because there were no analyte concentrations in the samples that caused interference.

Field duplicate precision was within QC criteria.

No analytes were detected in the laboratory blanks.

The mercury and hexavalent chromium data are acceptable as reported by the laboratory.

EXECUTIVE SUMMARY

Laboratory Performance: None.

Other Factors Affecting Data Quality: Several analytes were present in the associated rinsate blank from SDG TWK-002. The MS/MSD recoveries exceeded QC criteria for two analytes.

The data for these analyses were reviewed with reference to the EPA "Functional Guidelines for Inorganic Data Review", as amended for use within EPA Region 3 (4/93).

The text of this report has been formatted to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the Functional Guidelines and the Quality Assurance Project Plan (QAPP)."

R. Sloboda for M. Ritchie

Megan N. Ritchie
Chemist

Russ Sloboda

Tetra Tech NUS, Inc.
Russ Sloboda
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

Qualified Analytical Results

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: M

nsample	03MW01I-20080311
samp_date	3/11/2008
lab_id	9726965002
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	1.16		
ANTIMONY	0.0012	J	P
ARSENIC	0.006		
BARIUM	0.215		
BERYLLIUM	0.001	U	
CADMIUM	0.0001	J	P
CALCIUM	25		
CHROMIUM	0.0043		
COBALT	0.0008	J	P
COPPER	0.0006	J	P
IRON	1.2	K	D
LEAD	0.0004	J	P
MAGNESIUM	10.6		
MANGANESE	0.0163		
MERCURY	0.0005	U	
NICKEL	0.0039	J	P
POTASSIUM	1.48		
SELENIUM	0.002	J	P
SILVER	0.001	U	
SODIUM	12.7		
THALLIUM	0.001	U	
VANADIUM	0.0005	J	P
ZINC	0.003	J	P

nsample	03MW01S-20080311
samp_date	3/11/2008
lab_id	9726965003
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.0012	J	P
ARSENIC	0.006	U	
BARIUM	0.111		
BERYLLIUM	0.0001	J	P
CADMIUM	0.001	U	
CALCIUM	7.22		
CHROMIUM	0.005		
COBALT	0.0002	J	P
COPPER	0.0003	J	P
IRON	0.11	K	D
LEAD	0.00006	J	P
MAGNESIUM	1.88		
MANGANESE	0.003	J	P
MERCURY	0.0005	U	
NICKEL	0.0038	J	P
POTASSIUM	0.67		
SELENIUM	0.003	J	P
SILVER	0.001	U	
SODIUM	12.3		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0028	J	P

nsample	03MW04I-20080314
samp_date	3/14/2008
lab_id	9727555003
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.0007	J	P
ARSENIC	0.0006	J	P
BARIUM	0.455		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	31.9		
CHROMIUM	0.001	J	P
COBALT	0.006	U	
COPPER	0.00008	J	P
IRON	0.04	J	DP
LEAD	0.002	U	
MAGNESIUM	8.26		
MANGANESE	0.006	U	
MERCURY	0.0005	U	
NICKEL	0.0018	J	P
POTASSIUM	0.68		
SELENIUM	0.003	J	P
SILVER	0.001	U	
SODIUM	13.3		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0062		

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: M

nsample	03MW04SI-20080314
samp_date	3/14/2008
lab_id	9727555004
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.0006	J	P
ARSENIC	0.0006	J	P
BARIUM	0.487		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	37.2		
CHROMIUM	0.0009	J	P
COBALT	0.006	U	
COPPER	0.0001	J	P
IRON	0.02	J	DP
LEAD	0.002	U	
MAGNESIUM	9.65		
MANGANESE	0.006	U	
MERCURY	0.0005	U	
NICKEL	0.0026	J	P
POTASSIUM	0.88		
SELENIUM	0.003	J	P
SILVER	0.001	U	
SODIUM	17.6		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0019	J	P

nsample	03MW05I-20080311
samp_date	3/11/2008
lab_id	9726965004
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.0008	J	P
ARSENIC	0.0005	J	P
BARIUM	0.209		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	12		
CHROMIUM	0.0076		
COBALT	0.004	J	P
COPPER	0.001	J	P
IRON	0.13	K	D
LEAD	0.002	U	
MAGNESIUM	3.16		
MANGANESE	0.0028	J	P
MERCURY	0.0005	U	
NICKEL	0.0057	J	P
POTASSIUM	0.79		
SELENIUM	0.002	J	P
SILVER	0.00006	J	P
SODIUM	9.32		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.006	U	

nsample	03MW05S-20080312
samp_date	3/12/2008
lab_id	9727192002
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.0007	J	P
ARSENIC	0.006	U	
BARIUM	0.055		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	9.69		
CHROMIUM	0.0027		
COBALT	0.006	U	
COPPER	0.006	U	
IRON	0.04	J	DP
LEAD	0.002	U	
MAGNESIUM	3.24		
MANGANESE	0.0017	J	P
MERCURY	0.0005	U	
NICKEL	0.0018	J	P
POTASSIUM	0.8		
SELENIUM	0.003	J	P
SILVER	0.001	U	
SODIUM	11.5		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0028	J	P

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: M

nsample	03MW06I-20080314	nsample	03MW06S-20080313	nsample	03MW06SI-20080313
samp_date	3/14/2008	samp_date	3/13/2008	samp_date	3/13/2008
lab_id	9727555002	lab_id	9727450003	lab_id	9727450002
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	2.03		
ANTIMONY	0.0007	J	P
ARSENIC	0.0091		
BARIUM	0.413		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	25.9		
CHROMIUM	0.012		
COBALT	0.003	J	P
COPPER	0.0024	J	P
IRON	2.4	K	D
LEAD	0.0014	J	P
MAGNESIUM	11.1		
MANGANESE	0.103		
MERCURY	0.0005	U	
NICKEL	0.0096		
POTASSIUM	3.08		
SELENIUM	0.002	J	P
SILVER	0.001	U	
SODIUM	9.55		
THALLIUM	0.001	U	
VANADIUM	0.0064		
ZINC	0.0106		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.089		
ANTIMONY	0.0007	J	P
ARSENIC	0.0004	J	P
BARIUM	0.037		
BERYLLIUM	0.0001	J	P
CADMIUM	0.001	U	
CALCIUM	12		
CHROMIUM	0.0049		
COBALT	0.006	U	
COPPER	0.0017	J	P
IRON	0.09	K	D
LEAD	0.002	U	
MAGNESIUM	6.42		
MANGANESE	0.0082		
MERCURY	0.0005	U	
NICKEL	0.005	J	P
POTASSIUM	1.37		
SELENIUM	0.005	J	P
SILVER	0.001	U	
SODIUM	13.5		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0084		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.144		
ANTIMONY	0.0007	J	P
ARSENIC	0.006	U	
BARIUM	0.111		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	7.31		
CHROMIUM	0.0051		
COBALT	0.006	U	
COPPER	0.0017	J	P
IRON	0.23	K	D
LEAD	0.002	U	
MAGNESIUM	2.26		
MANGANESE	0.0102		
MERCURY	0.0005	U	
NICKEL	0.0043	J	P
POTASSIUM	0.98		
SELENIUM	0.001	J	P
SILVER	0.001	U	
SODIUM	8.68		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0052	J	P

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: M

nsample	03MW08D-20080312	nsample	03MW08S-20080312	nsample	DUP-01
samp_date	3/12/2008	samp_date	3/12/2008	samp_date	3/11/2008
lab_id	9727192004	lab_id	9727192003	lab_id	9726965005
qc_type	NM	qc_type	NM	qc_type	FD
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	03MW01S-20080311

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.0007	J	P
ARSENIC	0.0005	J	P
BARIUM	0.34		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	31.9		
CHROMIUM	0.0025		
COBALT	0.0024	J	P
COPPER	0.006	U	
IRON	0.17	K	D
LEAD	0.002	U	
MAGNESIUM	13.8		
MANGANESE	0.0019	J	P
MERCURY	0.0005	U	
NICKEL	0.0028	J	P
POTASSIUM	0.77		
SELENIUM	0.001	J	P
SILVER	0.001	U	
SODIUM	10.8		
THALLIUM	0.001	U	
VANADIUM	0.00009	J	P
ZINC	0.006	U	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.0008	J	P
ARSENIC	0.006	U	
BARIUM	0.0501		
BERYLLIUM	0.0006	J	P
CADMIUM	0.001	U	
CALCIUM	11.5		
CHROMIUM	0.0028		
COBALT	0.0002	J	P
COPPER	0.002	J	P
IRON	0.07	K	D
LEAD	0.002	U	
MAGNESIUM	3.47		
MANGANESE	0.0353		
MERCURY	0.0005	U	
NICKEL	0.004	J	P
POTASSIUM	1.14		
SELENIUM	0.001	J	P
SILVER	0.001	U	
SODIUM	14.6		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0031	J	P

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.0007	J	P
ARSENIC	0.006	U	
BARIUM	0.111		
BERYLLIUM	0.00009	J	P
CADMIUM	0.001	U	
CALCIUM	7.25		
CHROMIUM	0.0047		
COBALT	0.0002	J	P
COPPER	0.0003	J	P
IRON	0.14	K	D
LEAD	0.00004	J	P
MAGNESIUM	1.88		
MANGANESE	0.0028	J	P
MERCURY	0.0005	U	
NICKEL	0.0039	J	P
POTASSIUM	0.6		
SELENIUM	0.003	J	P
SILVER	0.001	U	
SODIUM	12.3		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0028	J	P

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: MF

nsample	03MW01I-20080311	nsample	03MW01S-20080311	nsample	03MW04I-20080314
samp_date	3/11/2008	samp_date	3/11/2008	samp_date	3/14/2008
lab_id	9726965002	lab_id	9726965003	lab_id	9727555003
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.036	J	DP
ANTIMONY	0.002	U	
ARSENIC	0.0064		
BARIUM	0.199		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	24.9		
CHROMIUM	0.0035		
COBALT	0.005	U	
COPPER	0.005	U	
IRON	0.02	J	P
LEAD	0.002	U	
MAGNESIUM	10.4	L	D
MANGANESE	0.0036	J	P
MERCURY	0.00009	J	P
NICKEL	0.0018	J	P
POTASSIUM	1.56		
SELENIUM	0.005	U	
SILVER	0.001	U	
SODIUM	13.2		
THALLIUM	0.001	U	
VANADIUM	0.001		
ZINC	0.0004	J	P

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.007	J	DP
ANTIMONY	0.0014	J	P
ARSENIC	0.003	U	
BARIUM	0.104		
BERYLLIUM	0.0002	J	P
CADMIUM	0.001	U	
CALCIUM	7.69		
CHROMIUM	0.0061		
COBALT	0.0002	J	P
COPPER	0.005	U	
IRON	0.06	U	
LEAD	0.002	U	
MAGNESIUM	1.9	L	D
MANGANESE	0.0018	J	P
MERCURY	0.00009	J	P
NICKEL	0.0048	J	P
POTASSIUM	0.79		
SELENIUM	0.003	J	P
SILVER	0.001	U	
SODIUM	12.7		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0018	J	P

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	UL	K
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.461		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	35.7		
CHROMIUM	0.0015	J	P
COBALT	0.0001	J	P
COPPER	0.005	U	
IRON	0.06	U	
LEAD	0.002	U	
MAGNESIUM	8.57	L	D
MANGANESE	0.004	U	
MERCURY	0.00009	J	P
NICKEL	0.005	U	
POTASSIUM	0.87		
SELENIUM	0.002	J	P
SILVER	0.001	U	
SODIUM	13.6		
THALLIUM	0.001	U	
VANADIUM	0.0012		
ZINC	0.005	U	

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: MF

nsample	03MW04SI-20080314	nsample	03MW05I-20080311	nsample	03MW05S-20080312
samp_date	3/14/2008	samp_date	3/11/2008	samp_date	3/12/2008
lab_id	9727555004	lab_id	9726965004	lab_id	9727192002
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	UL	K
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.496		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	42.4		
CHROMIUM	0.0025		
COBALT	0.0002	J	P
COPPER	0.005	U	
IRON	0.06	U	
LEAD	0.002	U	
MAGNESIUM	10.1		
MANGANESE	0.00006	J	DP
MERCURY	0.00009	J	P
NICKEL	0.0009	J	P
POTASSIUM	1.02		
SELENIUM	0.002	J	P
SILVER	0.001	U	
SODIUM	18.5		
THALLIUM	0.001	U	
VANADIUM	0.0013		
ZINC	0.005	U	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.08	U	
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.201		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	12.8		
CHROMIUM	0.0039		
COBALT	0.0025	J	P
COPPER	0.005	U	
IRON	0.06	U	
LEAD	0.002	U	
MAGNESIUM	3.24	L	D
MANGANESE	0.004	U	
MERCURY	0.0001	J	P
NICKEL	0.0036	J	P
POTASSIUM	0.86		
SELENIUM	0.005	U	
SILVER	0.001	U	
SODIUM	9.47		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0003	J	P

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.005	J	DP
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.0548		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	11.1		
CHROMIUM	0.0049		
COBALT	0.0005	J	P
COPPER	0.005	U	
IRON	0.009	J	
LEAD	0.002	U	
MAGNESIUM	3.72	L	D
MANGANESE	0.0024	J	P
MERCURY	0.00009	J	P
NICKEL	0.0022	J	P
POTASSIUM	1.14		
SELENIUM	0.003	J	P
SILVER	0.001	U	
SODIUM	12.6		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0014	J	P

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: MF

nsample	03MW06I-20080314	nsample	03MW06S-20080313	nsample	03MW06SI-20080313
samp_date	3/14/2008	samp_date	3/13/2008	samp_date	3/13/2008
lab_id	9727555002	lab_id	9727450003	lab_id	9727450002
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.004	J	DPK
ANTIMONY	0.002	U	
ARSENIC	0.0101		
BARIUM	0.299		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	24.9		
CHROMIUM	0.0014	J	P
COBALT	0.0001	J	P
COPPER	0.005	U	
IRON	0.06	U	
LEAD	0.002	U	
MAGNESIUM	10.2	L	D
MANGANESE	0.0004	J	P
MERCURY	0.00009	J	P
NICKEL	0.0005	J	P
POTASSIUM	2.09		
SELENIUM	0.002	J	P
SILVER	0.001	U	
SODIUM	9.31		
THALLIUM	0.001	U	
VANADIUM	0.0049		
ZINC	0.005	U	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.01	J	DP
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.0348		
BERYLLIUM	0.0004	J	P
CADMIUM	0.001	U	
CALCIUM	14		
CHROMIUM	0.0047		
COBALT	0.005	U	
COPPER	0.0014	J	P
IRON	0.01	J	P
LEAD	0.002	U	
MAGNESIUM	6.76	L	D
MANGANESE	0.0058		
MERCURY	0.00009	J	P
NICKEL	0.0044	J	P
POTASSIUM	1.67		
SELENIUM	0.005	J	P
SILVER	0.001	U	
SODIUM	14.4		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.006		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.003	J	DP
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.104		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	8.31		
CHROMIUM	0.0036		
COBALT	0.005	U	
COPPER	0.005	U	
IRON	0.01	J	P
LEAD	0.002	U	
MAGNESIUM	2.49	L	D
MANGANESE	0.0006	J	P
MERCURY	0.00008	J	P
NICKEL	0.0026	J	P
POTASSIUM	1.1		
SELENIUM	0.005	U	
SILVER	0.001	U	
SODIUM	9.11		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0007	J	P

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: MF

nsample	03MW08D-20080312	nsample	03MW08S-20080312	nsample	DUP-01
samp_date	3/12/2008	samp_date	3/12/2008	samp_date	3/11/2008
lab_id	9727192004	lab_id	9727192003	lab_id	9726965005
qc_type	NM	qc_type	NM	qc_type	FD
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	03MW01S-20080311

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.017	J	DP
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.324		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	35.5		
CHROMIUM	0.0037		
COBALT	0.0019	J	P
COPPER	0.005	U	
IRON	0.06	U	
LEAD	0.002	U	
MAGNESIUM	15.3	L	D
MANGANESE	0.00005	J	P
MERCURY	0.0001	J	P
NICKEL	0.0017	J	P
POTASSIUM	0.97		
SELENIUM	0.009		
SILVER	0.001	U	
SODIUM	11.3		
THALLIUM	0.001	U	
VANADIUM	0.001	J	P
ZINC	0.0007	J	P

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.005	J	DP
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.0469		
BERYLLIUM	0.0006	J	P
CADMIUM	0.001	U	
CALCIUM	12.6		
CHROMIUM	0.0039		
COBALT	0.005	U	
COPPER	0.0016	J	P
IRON	0.06	U	
LEAD	0.002	U	
MAGNESIUM	3.78	L	D
MANGANESE	0.0346		
MERCURY	0.00009	J	P
NICKEL	0.0038	J	P
POTASSIUM	1.43		
SELENIUM	0.005	U	
SILVER	0.001	U	
SODIUM	15.3		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0034	J	P

Parameter	Result	Val Qual	Qual Code
ALUMINUM	0.005	J	DP
ANTIMONY	0.002	U	
ARSENIC	0.003	U	
BARIUM	0.102		
BERYLLIUM	0.001	U	
CADMIUM	0.001	U	
CALCIUM	7.84		
CHROMIUM	0.0063		
COBALT	0.0002	J	P
COPPER	0.005	U	
IRON	0.009	J	P
LEAD	0.002	U	
MAGNESIUM	1.93	L	D
MANGANESE	0.002	J	P
MERCURY	0.00009	J	P
NICKEL	0.0054		
POTASSIUM	0.78		
SELENIUM	0.003	J	P
SILVER	0.001	U	
SODIUM	12.8		
THALLIUM	0.001	U	
VANADIUM	0.001	U	
ZINC	0.0015	J	P

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: MISC

nsample	03MW01I-20080311	nsample	03MW01S-20080311	nsample	03MW05I-20080311
samp_date	3/11/2008	samp_date	3/11/2008	samp_date	3/11/2008
lab_id	9726965002	lab_id	9726965003	lab_id	9726965004
qc_type	NM	qc_type	NM	qc_type	NM
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
HEXAVALENT CHROMIUM	MG/L	0.01	U	

Parameter	units	Result	Val Qual	Qual Code
HEXAVALENT CHROMIUM	MG/L	0.01	U	

Parameter	units	Result	Val Qual	Qual Code
HEXAVALENT CHROMIUM	MG/L	0.01	U	

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: MISC

nsample	03MW05S-20080312
samp_date	3/12/2008
lab_id	9727192002
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
HEXAVALENT CHROMIUM	MG/L	0.01	U	

nsample	03MW06I-20080314
samp_date	3/14/2008
lab_id	9727555002
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
HEXAVALENT CHROMIUM	MG/L	0.01	U	

nsample	03MW06S-20080313
samp_date	3/13/2008
lab_id	9727450003
qc_type	NM
Pct_Solids	
DUP_OF:	

Parameter	units	Result	Val Qual	Qual Code
HEXAVALENT CHROMIUM	MG/L	0.01	U	

PROJ_NO: 00845

SDG: TWK-001 MEDIA: WATER DATA FRACTION: MISC

nsample	03MW06SI-20080313	nsample	DUP-01
samp_date	3/13/2008	samp_date	3/11/2008
lab_id	9727450002	lab_id	9726965005
qc_type	NM	qc_type	FD
Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:	03MW01S-20080311

Parameter	units	Result	Val Qual	Qual Code
HEXAVALENT CHROMIUM	MG/L	0.01	U	

Parameter	units	Result	Val Qual	Qual Code
HEXAVALENT CHROMIUM	MG/L	0.01	U	

Qualifier Codes:

a	=	Lab Blank Contamination
b	=	Field Blank Contamination
c	=	Calibration (i.e., %RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
d	=	MS/MSD Noncompliance
e	=	LSC/LSCD Noncompliance
f	=	Laboratory Duplicate Imprecision
g	=	Field Duplicate Imprecision
h	=	Holding Time Exceedance
i	=	ICP Serial Dilution Noncompliance
j	=	GFAA PDS – GFAA MSA's r<0.995 (correlation coefficient)
k	=	ICP Interference – include ICSAB %Rs
l	=	Instrument Calibration Range Exceedance
m	=	Sample Preservation
n	=	Internal Standard Noncompliance
o	=	Poor Instrument Performance (i.e. baseline drifting)
p	=	Uncertainty Near Detection Limit (<2 x IDL for inorganics and < CRQL for organics)
q	=	Other Problems (can encompass of number of issues)
r	=	Surrogates Recovery Noncompliance
s	=	Pesticide/PCB Resolution
t	=	% Breakdown Noncompliance for DDT and Endrin
u	=	Pesticide/PCB % Difference Between Columns for Positive Results
v	=	Non-linear Calibrations, Tuning r <0.995 (correlation coefficient)

Data Qualifier Key:

B	- Positive result is considered to be an artifact of blank contamination and should not be considered present.
J	- Value is considered estimated due to exceedance of technical quality control or because result is less than the Contract Required Quantitation Limit (CRQL).
L	- Positive result is considered biased low due to exceedance of technical quality control criteria.
U	- Value is a non-detected result as reported by the laboratory.
UL	- Non-detected result is considered biased low due to exceedance of technical quality control criteria.

APPENDIX B

Results as Reported by the Laboratory

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ANALYTICAL RESULTS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

Lab ID: 9726965002 Date Collected: 3/11/2008 09:23 Matrix: Ground Water
Sample ID: 03MW01I-20080311 Date Received: 3/12/2008 11:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 05:54	JAH	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 05:54	JAH	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 05:54	JAH	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/20/08 05:54	JAH	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 05:54	JAH	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 05:54	JAH	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/20/08 05:54	JAH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	95	%		62-133		SW846 8260B			3/20/08 05:54	JAH	A
Toluene-d8 (S)	101	%		76-127		SW846 8260B			3/20/08 05:54	JAH	A
4-Bromofluorobenzene (S)	95	%		79-114		SW846 8260B			3/20/08 05:54	JAH	A
Dibromofluoromethane (S)	99	%		78-116		SW846 8260B			3/20/08 05:54	JAH	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/14/08	JWY	3/17/08 23:35	DHF	H1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	69	%		40-125		SW846 8270D	3/14/08	JWY	3/17/08 23:35	DHF	H1
2-Fluorobiphenyl (S)	66	%		32-108		SW846 8270D	3/14/08	JWY	3/17/08 23:35	DHF	H1
2-Fluorophenol (S)	41	%		20-70		SW846 8270D	3/14/08	JWY	3/17/08 23:35	DHF	H1
Nitrobenzene-d5 (S)	67	%		31-110		SW846 8270D	3/14/08	JWY	3/17/08 23:35	DHF	H1
Phenol-d5 (S)	26	%		10-49		SW846 8270D	3/14/08	JWY	3/17/08 23:35	DHF	H1
Terphenyl-d14 (S)	55	%		27-136		SW846 8270D	3/14/08	JWY	3/17/08 23:35	DHF	H1
METALS											
Aluminum, Total	1.16	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Aluminum, Dissolved	0.036J	mg/L	1	0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 10:33	LAM	Q3
Antimony, Total	0.0012J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Arsenic, Total	0.0060	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Arsenic, Dissolved	0.0064	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Barium, Total	0.215	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Barium, Dissolved	0.199	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Beryllium, Total	ND	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Cadmium, Total	0.0001J	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Calcium, Total	25.0	mg/L		0.11	0.003	SW846 6010C	3/20/08	SRT	3/25/08 06:06	TED	N2
Calcium, Dissolved	24.9	mg/L	2	0.10	0.03	SW846 6010C	3/17/08	JWK	3/19/08 13:52	JWK	Q1
Chromium, Total	0.0043	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 18:53	LAM	N1
Chromium, Dissolved	0.0035	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Cobalt, Total	0.0008J	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Cobalt, Dissolved	ND	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Copper, Total	0.0006J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Iron, Total	1.20	mg/L	3	0.33	0.08	SW846 6010C	3/20/08	SRT	3/25/08 08:39	TED	N2

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ANALYTICAL RESULTS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

Lab ID: **9726965002** Date Collected: 3/11/2008 09:23 Matrix: Ground Water

Sample ID: **03MW01I-20080311** Date Received: 3/12/2008 11:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	0.02J	mg/L		0.06	0.009	SW846 6010C	3/17/08	JWK	3/19/08 13:52	JWK	Q1
Lead, Total	0.0004J	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Magnesium, Total	10.6	mg/L		0.11	0.01	SW846 6010C	3/20/08	SRT	3/25/08 06:06	TED	N2
Magnesium, Dissolved	10.4	mg/L	3	0.50	0.03	SW846 6010C	3/17/08	JWK	3/28/08 11:30	JWK	Q1
Manganese, Total	0.0163	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Manganese, Dissolved	0.0036J	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/21/08	CMD	3/21/08 08:40	CMD	N3
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 13:13	CMD	Q2
Nickel, Total	0.0039J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 18:53	LAM	N1
Nickel, Dissolved	0.0018J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Potassium, Total	1.48	mg/L		0.56		SW846 6010C	3/20/08	SRT	3/26/08 09:24	TED	N2
Potassium, Dissolved	1.56	mg/L		0.50	0.1	SW846 6010C	3/17/08	JWK	3/19/08 13:52	JWK	Q1
Selenium, Total	0.002J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Selenium, Dissolved	ND	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Sodium, Total	12.7	mg/L		0.56		SW846 6010C	3/20/08	SRT	3/26/08 09:24	TED	N2
Sodium, Dissolved	13.2	mg/L		0.50	0.05	SW846 6010C	3/17/08	JWK	3/19/08 13:52	JWK	Q1
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Vanadium, Total	0.0005J	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Vanadium, Dissolved	0.0010	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
Zinc, Total	0.0030J	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 18:05	LAM	N1
Zinc, Dissolved	0.0004J	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:03	LAM	Q3
WET CHEMISTRY											
Hexavalent Chromium	ND	mg/L	4	0.01	0.01	SW846 7196A			2/12/08 10:15	LMM	T

Sample Comments:

This report was modified to remove the semivolatile comments that do not apply to this project sample. SM 4/10/08

This report was modified to comment the hold time of hexavalent chromium. ASD 3/31/08

Raymond J. Martrano
Laboratory Manager

0059

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ANALYTICAL RESULTS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

Lab ID: **9726965003** Date Collected: 3/11/2008 12:45 Matrix: Ground Water
Sample ID: **03MW01S-20080311** Date Received: 3/12/2008 11:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:24	JAH	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:24	JAH	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:24	JAH	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/20/08 06:24	JAH	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:24	JAH	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:24	JAH	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/20/08 06:24	JAH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	97	%		62-133		SW846 8260B			3/20/08 06:24	JAH	A
Toluene-d8 (S)	101	%		76-127		SW846 8260B			3/20/08 06:24	JAH	A
Dibromofluoromethane (S)	94	%		78-116		SW846 8260B			3/20/08 06:24	JAH	A
4-Bromofluorobenzene (S)	97	%		79-114		SW846 8260B			3/20/08 06:24	JAH	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/14/08	JWY	3/18/08 02:07	DHF	D1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	57	%		40-125		SW846 8270D	3/14/08	JWY	3/18/08 02:07	DHF	D1
Phenol-d5 (S)	26	%		10-49		SW846 8270D	3/14/08	JWY	3/18/08 02:07	DHF	D1
Terphenyl-d14 (S)	64	%		27-136		SW846 8270D	3/14/08	JWY	3/18/08 02:07	DHF	D1
Nitrobenzene-d5 (S)	74	%		31-110		SW846 8270D	3/14/08	JWY	3/18/08 02:07	DHF	D1
2-Fluorobiphenyl (S)	77	%		32-108		SW846 8270D	3/14/08	JWY	3/18/08 02:07	DHF	D1
2-Fluorophenol (S)	37	%		20-70		SW846 8270D	3/14/08	JWY	3/18/08 02:07	DHF	D1
METALS											
Aluminum, Total	ND	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Aluminum, Dissolved	0.007J	mg/L		0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 10:44	LAM	G3
Antimony, Total	0.0012J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Antimony, Dissolved	0.0014J	mg/L	5	0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Arsenic, Total	ND	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Barium, Total	0.111	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Barium, Dissolved	0.104	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Beryllium, Total	0.0001J	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Beryllium, Dissolved	0.0002J	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/25/08 10:44	LAM	G3
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Calcium, Total	7.22	mg/L		0.11	0.003	SW846 6010C	3/20/08	SRT	3/25/08 06:19	TED	F2
Calcium, Dissolved	7.69	mg/L		0.10	0.03	SW846 6010C	3/17/08	JWK	3/19/08 14:19	JWK	G1
Chromium, Total	0.0050	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:16	LAM	F1
Chromium, Dissolved	0.0061	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Cobalt, Total	0.0002J	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Cobalt, Dissolved	0.0002J	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Copper, Total	0.0003J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Iron, Total	0.11	mg/L		0.07	0.02	SW846 6010C	3/20/08	SRT	3/25/08 08:28	TED	F2

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ANALYTICAL RESULTS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

Lab ID: 9726965003 Date Collected: 3/11/2008 12:45 Matrix: Ground Water

Sample ID: 03MW01S-20080311 Date Received: 3/12/2008 11:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	ND	mg/L		0.06	0.009	SW846 6010C	3/17/08	JWK	3/19/08 14:19	JWK	G1
Lead, Total	0.00006J	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Magnesium, Total	1.88	mg/L		0.11	0.01	SW846 6010C	3/20/08	SRT	3/25/08 06:19	TED	F2
Magnesium, Dissolved	1.90	mg/L		0.10	0.006	SW846 6010C	3/17/08	JWK	3/19/08 14:19	JWK	G1
Manganese, Total	0.0030J	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Manganese, Dissolved	0.0018J	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/21/08	CMD	3/21/08 08:50	CMD	F3
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 13:23	CMD	G2
Nickel, Total	0.0038J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:16	LAM	F1
Nickel, Dissolved	0.0048J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Potassium, Total	0.67	mg/L		0.56		SW846 6010C	3/20/08	SRT	3/26/08 09:31	TED	F2
Potassium, Dissolved	0.79	mg/L		0.50	0.1	SW846 6010C	3/17/08	JWK	3/19/08 14:19	JWK	G1
Selenium, Total	0.003J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Selenium, Dissolved	0.003J	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Sodium, Total	12.3	mg/L		0.56		SW846 6010C	3/20/08	SRT	3/26/08 09:31	TED	F2
Sodium, Dissolved	12.7	mg/L		0.50	0.05	SW846 6010C	3/17/08	JWK	3/19/08 14:19	JWK	G1
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Vanadium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Zinc, Total	0.0028J	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 18:30	LAM	F1
Zinc, Dissolved	0.0018J	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
WET CHEMISTRY											
Hexavalent Chromium	ND	mg/L		0.01	0.01	SW846 7196A			2/12/08 10:15	LMM	H

Sample Comments:

This report was modified to remove the semivolatile analysis comment that does not apply to this project sample. SM 4/10/08

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Laboratory Manager

0062

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ANALYTICAL RESULTS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

Lab ID: 9726965004 Date Collected: 3/11/2008 15:58 Matrix: Ground Water
Sample ID: 03MW05I-20080311 Date Received: 3/12/2008 11:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:55	JAH	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:55	JAH	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:55	JAH	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/20/08 06:55	JAH	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:55	JAH	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 06:55	JAH	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/20/08 06:55	JAH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	98	%		62-133		SW846 8260B			3/20/08 06:55	JAH	A
Toluene-d8 (S)	103	%		76-127		SW846 8260B			3/20/08 06:55	JAH	A
Dibromofluoromethane (S)	98	%		78-116		SW846 8260B			3/20/08 06:55	JAH	A
4-Bromofluorobenzene (S)	94	%		79-114		SW846 8260B			3/20/08 06:55	JAH	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/14/08	JWY	3/25/08 16:52	DHF	D1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	98	%		40-125		SW846 8270D	3/14/08	JWY	3/25/08 16:52	DHF	D1
Phenol-d5 (S)	36	%		10-49		SW846 8270D	3/14/08	JWY	3/25/08 16:52	DHF	D1
Terphenyl-d14 (S)	83	%		27-136		SW846 8270D	3/14/08	JWY	3/25/08 16:52	DHF	D1
Nitrobenzene-d5 (S)	92	%		31-110		SW846 8270D	3/14/08	JWY	3/25/08 16:52	DHF	D1
2-Fluorobiphenyl (S)	99	%		32-108		SW846 8270D	3/14/08	JWY	3/25/08 16:52	DHF	D1
2-Fluorophenol (S)	59	%		20-70		SW846 8270D	3/14/08	JWY	3/25/08 16:52	DHF	D1
METALS											
Aluminum, Total	ND	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Aluminum, Dissolved	ND	mg/L		0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 10:47	LAM	G3
Antimony, Total	0.0008J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Arsenic, Total	0.0005J	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Barium, Total	0.209	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Barium, Dissolved	0.201	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Beryllium, Total	ND	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/25/08 10:47	LAM	G3
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Calcium, Total	12.0	mg/L		0.11	0.003	SW846 6010C	3/20/08	SRT	3/25/08 06:24	TED	F2
Calcium, Dissolved	12.8	mg/L		0.10	0.03	SW846 6010C	3/17/08	JWK	3/19/08 14:23	JWK	G1
Chromium, Total	0.0076	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:22	LAM	F1
Chromium, Dissolved	0.0039	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Cobalt, Total	0.0040J	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Cobalt, Dissolved	0.0025J	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Copper, Total	0.001J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Iron, Total	0.13	mg/L		0.07	0.02	SW846 6010C	3/20/08	SRT	3/25/08 06:24	TED	F2

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ANALYTICAL RESULTS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

Lab ID: **9726965004** Date Collected: 3/11/2008 15:58 Matrix: Ground Water

Sample ID: **03MW05I-20080311** Date Received: 3/12/2008 11:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	ND	mg/L		0.06	0.009	SW846 6010C	3/17/08	JWK	3/19/08 14:23	JWK	G1
Lead, Total	ND	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Magnesium, Total	3.16	mg/L		0.11	0.01	SW846 6010C	3/20/08	SRT	3/25/08 06:24	TED	F2
Magnesium, Dissolved	3.24	mg/L		0.10	0.006	SW846 6010C	3/17/08	JWK	3/19/08 14:23	JWK	G1
Manganese, Total	0.0028J	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Manganese, Dissolved	ND	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/21/08	CMD	3/21/08 08:54	CMD	F3
Mercury, Dissolved	0.0001J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 13:26	CMD	G2
Nickel, Total	0.0057J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:22	LAM	F1
Nickel, Dissolved	0.0036J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Potassium, Total	0.79	mg/L		0.56		SW846 6010C	3/20/08	SRT	3/26/08 09:33	TED	F2
Potassium, Dissolved	0.86	mg/L		0.50	0.1	SW846 6010C	3/17/08	JWK	3/19/08 14:23	JWK	G1
Selenium, Total	0.002J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Selenium, Dissolved	ND	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Silver, Total	0.00006J	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Sodium, Total	9.32	mg/L		0.56		SW846 6010C	3/20/08	SRT	3/26/08 09:33	TED	F2
Sodium, Dissolved	9.47	mg/L		0.50	0.05	SW846 6010C	3/17/08	JWK	3/19/08 14:23	JWK	G1
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Vanadium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
Zinc, Total	ND	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 18:37	LAM	F1
Zinc, Dissolved	0.0003J	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:34	LAM	G3
WET CHEMISTRY											
Hexavalent Chromium	ND	mg/L		0.01	0.01	SW846 7196A			2/12/08 10:15	LMM	H

Sample Comments:

This report was modified to remove the semivolatile analysis comment that did not apply to this project sample. SM 4/10/08

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Laboratory Manager

0065

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ANALYTICAL RESULTS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

Lab ID: **9726965005** Date Collected: 3/11/2008 17:45 Matrix: Ground Water
Sample ID: **DUP-01** Date Received: 3/12/2008 11:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 08:59	JAH	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 08:59	JAH	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 08:59	JAH	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/20/08 08:59	JAH	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 08:59	JAH	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/20/08 08:59	JAH	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/20/08 08:59	JAH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	98	%		62-133		SW846 8260B			3/20/08 08:59	JAH	A
Dibromofluoromethane (S)	98	%		78-116		SW846 8260B			3/20/08 08:59	JAH	A
Toluene-d8 (S)	103	%		76-127		SW846 8260B			3/20/08 08:59	JAH	A
4-Bromofluorobenzene (S)	95	%		79-114		SW846 8260B			3/20/08 08:59	JAH	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/14/08	JWY	3/18/08 05:14	DHF	D1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	74	%		40-125		SW846 8270D	3/14/08	JWY	3/18/08 05:14	DHF	D1
Terphenyl-d14 (S)	62	%		27-136		SW846 8270D	3/14/08	JWY	3/18/08 05:14	DHF	D1
Phenol-d5 (S)	28	%		10-49		SW846 8270D	3/14/08	JWY	3/18/08 05:14	DHF	D1
2-Fluorobiphenyl (S)	75	%		32-108		SW846 8270D	3/14/08	JWY	3/18/08 05:14	DHF	D1
Nitrobenzene-d5 (S)	70	%		31-110		SW846 8270D	3/14/08	JWY	3/18/08 05:14	DHF	D1
2-Fluorophenol (S)	43	%		20-70		SW846 8270D	3/14/08	JWY	3/18/08 05:14	DHF	D1
METALS											
Aluminum, Total	ND	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Aluminum, Dissolved	0.005J	mg/L		0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 10:50	LAM	G5
Antimony, Total	0.0007J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Arsenic, Total	ND	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Barium, Total	0.111	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Barium, Dissolved	0.102	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Beryllium, Total	0.00009J	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/25/08 10:50	LAM	G5
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Calcium, Total	7.25	mg/L		0.11	0.003	SW846 6010C	3/20/08	SRT	3/25/08 06:28	TED	F2
Calcium, Dissolved	7.84	mg/L		0.10	0.03	SW846 6010C	3/17/08	JWK	3/19/08 14:28	JWK	G1
Chromium, Total	0.0047	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:27	LAM	F1
Chromium, Dissolved	0.0063	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Cobalt, Total	0.0002J	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Cobalt, Dissolved	0.0002J	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Copper, Total	0.0003J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Iron, Total	0.14	mg/L		0.07	0.02	SW846 6010C	3/20/08	SRT	3/25/08 06:28	TED	F2

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ANALYTICAL RESULTS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

Lab ID: **9726965005** Date Collected: 3/11/2008 17:45 Matrix: Ground Water

Sample ID: **DUP-01** Date Received: 3/12/2008 11:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	0.009J	mg/L		0.06	0.009	SW846 6010C	3/17/08	JWK	3/19/08 14:28	JWK	G1
Lead, Total	0.00004J	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Magnesium, Total	1.88	mg/L		0.11	0.01	SW846 6010C	3/20/08	SRT	3/25/08 06:28	TED	F2
Magnesium, Dissolved	1.93	mg/L		0.10	0.006	SW846 6010C	3/17/08	JWK	3/19/08 14:28	JWK	G1
Manganese, Total	0.0028J	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Manganese, Dissolved	0.0020J	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/21/08	CMD	3/21/08 08:57	CMD	F3
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 13:30	CMD	G4
Nickel, Total	0.0039J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:27	LAM	F1
Nickel, Dissolved	0.0054	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Potassium, Total	0.60	mg/L		0.56		SW846 6010C	3/20/08	SRT	3/26/08 09:41	TED	F2
Potassium, Dissolved	0.78	mg/L		0.50	0.1	SW846 6010C	3/17/08	JWK	3/19/08 14:28	JWK	G1
Selenium, Total	0.003J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Selenium, Dissolved	0.003J	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Sodium, Total	12.3	mg/L		0.56		SW846 6010C	3/20/08	SRT	3/26/08 09:41	TED	F2
Sodium, Dissolved	12.8	mg/L		0.50	0.05	SW846 6010C	3/17/08	JWK	3/19/08 14:28	JWK	G1
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Vanadium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
Zinc, Total	0.0028J	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 18:43	LAM	F1
Zinc, Dissolved	0.0015J	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:45	LAM	G5
WET CHEMISTRY											
Hexavalent Chromium	ND	mg/L		0.01	0.01	SW846 7196A			2/12/08 10:15	LMM	H

Sample Comments:

This report was modified to remove the semivolatile analysis comment that did not apply to this project sample. SM 4/10/08

Raymond J. Martrano
Laboratory Manager

0068

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9726965 TWK001|GW NASJRB CTO 0412

PARAMETER QUALIFIERS\FLAGS

[1] The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The failed recovery of the MS may be due to sample matrix interference.

[2] The concentration of this analyte was greater than ten times the concentration of the spike added to the matrix spike. According to protocol, the calculation for percent recovery of the matrix spike is not valid.

[3] The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. The sample was post-digestion spiked, and this matrix spike was within acceptable recovery limits.

[4] This sample was received at the laboratory after the 24-hour method recommended hold time had expired. ASD 3/31/08

[5] The sample had antimony at .0014 mg/L. Although it is less than the detection limit, the CCB prior to the sample was greater than 1/2 the reporting limit for antimony. AJB 3/26/08

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ANALYTICAL RESULTS

Workorder: 9727192 TWK001|GW NASJRB CTO 0412

Lab ID: **9727192002** Date Collected: 3/12/2008 10:46 Matrix: Ground Water

Sample ID: **03MW05S-20080312** Date Received: 3/13/2008 10:48

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:01	JAH	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:01	JAH	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:01	JAH	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/24/08 09:01	JAH	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:01	JAH	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:01	JAH	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/24/08 09:01	JAH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	95	%		62-133		SW846 8260B			3/24/08 09:01	JAH	A
Toluene-d8 (S)	102	%		76-127		SW846 8260B			3/24/08 09:01	JAH	A
4-Bromofluorobenzene (S)	93	%		79-114		SW846 8260B			3/24/08 09:01	JAH	A
Dibromofluoromethane (S)	96	%		78-116		SW846 8260B			3/24/08 09:01	JAH	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/14/08	JWY	3/18/08 09:26	DHF	F1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	76	%		40-125		SW846 8270D	3/14/08	JWY	3/18/08 09:26	DHF	F1
2-Fluorobiphenyl (S)	66	%		32-108		SW846 8270D	3/14/08	JWY	3/18/08 09:26	DHF	F1
2-Fluorophenol (S)	40	%		20-70		SW846 8270D	3/14/08	JWY	3/18/08 09:26	DHF	F1
Nitrobenzene-d5 (S)	70	%		31-110		SW846 8270D	3/14/08	JWY	3/18/08 09:26	DHF	F1
Phenol-d5 (S)	26	%		10-49		SW846 8270D	3/14/08	JWY	3/18/08 09:26	DHF	F1
Terphenyl-d14 (S)	58	%		27-136		SW846 8270D	3/14/08	JWY	3/18/08 09:26	DHF	F1
METALS											
Aluminum, Total	ND	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Aluminum, Dissolved	0.005J	mg/L		0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 10:53	LAM	E3
Antimony, Total	0.0007J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Arsenic, Total	ND	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Barium, Total	0.0550	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Barium, Dissolved	0.0548	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Beryllium, Total	ND	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/25/08 10:53	LAM	E3
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Calcium, Total	9.69	mg/L		0.11	0.003	SW846 6010C	3/20/08	MNP	3/25/08 03:34	TED	D2
Calcium, Dissolved	11.1	mg/L		0.10	0.03	SW846 6010C	3/25/08	JWK	3/25/08 13:06	JWK	E4
Chromium, Total	0.0027	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:33	LAM	D1
Chromium, Dissolved	0.0049	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Cobalt, Total	ND	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Cobalt, Dissolved	0.0005J	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Copper, Total	ND	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Iron, Total	0.04J	mg/L		0.07	0.02	SW846 6010C	3/20/08	MNP	3/25/08 03:34	TED	D2

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ANALYTICAL RESULTS

Workorder: 9727192 TWK001|GW NASJRB CTO 0412

Lab ID: 9727192002 Date Collected: 3/12/2008 10:46 Matrix: Ground Water

Sample ID: 03MW05S-20080312 Date Received: 3/13/2008 10:48

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	0.009J	mg/L		0.06	0.009	SW846 6010C	3/25/08	JWK	3/25/08 13:06	JWK	E4
Lead, Total	ND	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Magnesium, Total	3.24	mg/L		0.11	0.01	SW846 6010C	3/20/08	MNP	3/25/08 03:34	TED	D2
Magnesium, Dissolved	3.72	mg/L		0.10	0.006	SW846 6010C	3/25/08	JWK	3/25/08 13:06	JWK	E4
Manganese, Total	0.0017J	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Manganese, Dissolved	0.0024J	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/24/08	CMD	3/24/08 12:28	CMD	D3
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 14:01	CMD	E2
Nickel, Total	0.0018J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:33	LAM	D1
Nickel, Dissolved	0.0022J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Potassium, Total	0.80	mg/L		0.56		SW846 6010C	3/20/08	MNP	3/26/08 10:07	TED	D2
Potassium, Dissolved	1.14	mg/L		0.50	0.1	SW846 6010C	3/25/08	JWK	3/25/08 13:06	JWK	E4
Selenium, Total	0.003J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Selenium, Dissolved	0.003J	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Sodium, Total	11.5	mg/L		0.56		SW846 6010C	3/20/08	MNP	3/26/08 10:07	TED	D2
Sodium, Dissolved	12.6	mg/L		0.50	0.05	SW846 6010C	3/25/08	JWK	3/25/08 13:06	JWK	E4
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Vanadium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
Zinc, Total	0.0028J	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 18:50	LAM	D1
Zinc, Dissolved	0.0014J	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:51	LAM	E3
WET CHEMISTRY											
Hexavalent Chromium	ND	mg/L	1	0.01	0.01	SW846 7196A			3/13/08 10:34	KLZ	H

Sample Comments:

This report was modified to comment the hexavalent chromium holding time. ASD 4/1/08

This report was modified to remove the semivolatile analysis comment that did not apply to this project sample. SM 4/10/08

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Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9727192 TWK001|GW NASJRB CTO 0412

Lab ID: 9727192003 Date Collected: 3/12/2008 14:54 Matrix: Ground Water
Sample ID: 03MW08S-20080312 Date Received: 3/13/2008 10:48

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:32	JAH	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:32	JAH	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:32	JAH	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/24/08 09:32	JAH	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:32	JAH	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 09:32	JAH	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/24/08 09:32	JAH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	100	%		62-133		SW846 8260B			3/24/08 09:32	JAH	A
Dibromofluoromethane (S)	99	%		78-116		SW846 8260B			3/24/08 09:32	JAH	A
Toluene-d8 (S)	101	%		76-127		SW846 8260B			3/24/08 09:32	JAH	A
4-Bromofluorobenzene (S)	96	%		79-114		SW846 8260B			3/24/08 09:32	JAH	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/14/08	JWY	3/18/08 10:16	DHF	F1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	74	%		40-125		SW846 8270D	3/14/08	JWY	3/18/08 10:16	DHF	F1
Terphenyl-d14 (S)	59	%		27-136		SW846 8270D	3/14/08	JWY	3/18/08 10:16	DHF	F1
Phenol-d5 (S)	29	%		10-49		SW846 8270D	3/14/08	JWY	3/18/08 10:16	DHF	F1
2-Fluorobiphenyl (S)	74	%		32-108		SW846 8270D	3/14/08	JWY	3/18/08 10:16	DHF	F1
Nitrobenzene-d5 (S)	74	%		31-110		SW846 8270D	3/14/08	JWY	3/18/08 10:16	DHF	F1
2-Fluorophenol (S)	45	%		20-70		SW846 8270D	3/14/08	JWY	3/18/08 10:16	DHF	F1
METALS											
Aluminum, Total	ND	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Aluminum, Dissolved	0.005J	mg/L		0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 11:02	LAM	E3
Antimony, Total	0.0008J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Arsenic, Total	ND	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Barium, Total	0.0501	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Barium, Dissolved	0.0469	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Beryllium, Total	0.0006J	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Beryllium, Dissolved	0.0006J	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/25/08 11:02	LAM	E3
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Calcium, Total	11.5	mg/L		0.11	0.003	SW846 6010C	3/20/08	MNP	3/25/08 03:49	TED	D2
Calcium, Dissolved	12.6	mg/L		0.10	0.03	SW846 6010C	3/25/08	JWK	3/25/08 13:11	JWK	E4
Chromium, Total	0.0028	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:50	LAM	D1
Chromium, Dissolved	0.0039	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Cobalt, Total	0.0002J	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Cobalt, Dissolved	ND	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Copper, Total	0.0020J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Copper, Dissolved	0.0016J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Iron, Total	0.07	mg/L		0.07	0.02	SW846 6010C	3/20/08	MNP	3/25/08 03:49	TED	D2

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ANALYTICAL RESULTS

Workorder: 9727192 TWK001|GW NASJRB CTO 0412

Lab ID: **9727192003** Date Collected: 3/12/2008 14:54 Matrix: Ground Water

Sample ID: **03MW08S-20080312** Date Received: 3/13/2008 10:48

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	ND	mg/L		0.06	0.009	SW846 6010C	3/25/08	JWK	3/25/08 13:11	JWK	E4
Lead, Total	ND	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Magnesium, Total	3.47	mg/L		0.11	0.01	SW846 6010C	3/20/08	MNP	3/25/08 03:49	TED	D2
Magnesium, Dissolved	3.78	mg/L		0.10	0.006	SW846 6010C	3/25/08	JWK	3/25/08 13:11	JWK	E4
Manganese, Total	0.0353	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Manganese, Dissolved	0.0346	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/24/08	CMD	3/24/08 12:39	CMD	D3
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 14:05	CMD	E2
Nickel, Total	0.0040J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:50	LAM	D1
Nickel, Dissolved	0.0038J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Potassium, Total	1.14	mg/L		0.56		SW846 6010C	3/20/08	MNP	3/26/08 10:09	TED	D2
Potassium, Dissolved	1.43	mg/L		0.50	0.1	SW846 6010C	3/25/08	JWK	3/25/08 13:11	JWK	E4
Selenium, Total	0.001J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Selenium, Dissolved	ND	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Sodium, Total	14.6	mg/L		0.56		SW846 6010C	3/20/08	MNP	3/26/08 10:09	TED	D2
Sodium, Dissolved	15.3	mg/L		0.50	0.05	SW846 6010C	3/25/08	JWK	3/25/08 13:11	JWK	E4
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Vanadium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3
Zinc, Total	0.0031J	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 19:09	LAM	D1
Zinc, Dissolved	0.0034J	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 18:56	LAM	E3

Sample Comments:

This report was modified to remove the semivolatile analysis comment that did not apply to this project sample. SM 4/10/08

Raymond J. Martrano
Laboratory Manager

0080

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ANALYTICAL RESULTS

Workorder: 9727192 TWK001|GW NASJRB CTO 0412

Lab ID: 9727192004 Date Collected: 3/12/2008 17:00 Matrix: Ground Water
Sample ID: 03MW08D-20080312 Date Received: 3/13/2008 10:48

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	2.6	ug/L		1.0	0.2	SW846 8260B			3/24/08 10:02	JAH	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 10:02	JAH	A
Trichloroethene	1.9	ug/L		1.0	0.2	SW846 8260B			3/24/08 10:02	JAH	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/24/08 10:02	JAH	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 10:02	JAH	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/24/08 10:02	JAH	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/24/08 10:02	JAH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	100	%		62-133		SW846 8260B			3/24/08 10:02	JAH	A
Dibromofluoromethane (S)	97	%		78-116		SW846 8260B			3/24/08 10:02	JAH	A
Toluene-d8 (S)	102	%		76-127		SW846 8260B			3/24/08 10:02	JAH	A
4-Bromofluorobenzene (S)	94	%		79-114		SW846 8260B			3/24/08 10:02	JAH	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/14/08	JWY	3/18/08 11:06	DHF	F1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	76	%		40-125		SW846 8270D	3/14/08	JWY	3/18/08 11:06	DHF	F1
Terphenyl-d14 (S)	61	%		27-136		SW846 8270D	3/14/08	JWY	3/18/08 11:06	DHF	F1
Phenol-d5 (S)	28	%		10-49		SW846 8270D	3/14/08	JWY	3/18/08 11:06	DHF	F1
2-Fluorobiphenyl (S)	70	%		32-108		SW846 8270D	3/14/08	JWY	3/18/08 11:06	DHF	F1
Nitrobenzene-d5 (S)	71	%		31-110		SW846 8270D	3/14/08	JWY	3/18/08 11:06	DHF	F1
2-Fluorophenol (S)	42	%		20-70		SW846 8270D	3/14/08	JWY	3/18/08 11:06	DHF	F1
METALS											
Aluminum, Total	ND	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Aluminum, Dissolved	0.017J	mg/L		0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 11:05	LAM	E3
Antimony, Total	0.0007J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Arsenic, Total	0.0005J	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Barium, Total	0.340	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Barium, Dissolved	0.324	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Beryllium, Total	ND	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/25/08 11:05	LAM	E3
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Calcium, Total	31.9	mg/L		0.11	0.003	SW846 6010C	3/20/08	MNP	3/25/08 03:53	TED	D2
Calcium, Dissolved	35.5	mg/L		0.10	0.03	SW846 6010C	3/25/08	JWK	3/25/08 13:15	JWK	E4
Chromium, Total	0.0025	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:56	LAM	D1
Chromium, Dissolved	0.0037	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Cobalt, Total	0.0024J	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Cobalt, Dissolved	0.0019J	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Copper, Total	ND	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Iron, Total	0.17	mg/L		0.07	0.02	SW846 6010C	3/20/08	MNP	3/25/08 05:25	TED	D2

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ANALYTICAL RESULTS

Workorder: 9727192 TWK001|GW NASJRB CTO 0412

Lab ID: 9727192004 Date Collected: 3/12/2008 17:00 Matrix: Ground Water

Sample ID: 03MW08D-20080312 Date Received: 3/13/2008 10:48

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	ND	mg/L		0.06	0.009	SW846 6010C	3/25/08	JWK	3/25/08 13:15	JWK	E4
Lead, Total	ND	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Magnesium, Total	13.8	mg/L		0.11	0.01	SW846 6010C	3/20/08	MNP	3/25/08 03:53	TED	D2
Magnesium, Dissolved	15.3	mg/L		0.10	0.006	SW846 6010C	3/25/08	JWK	3/25/08 13:15	JWK	E4
Manganese, Total	0.0019J	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Manganese, Dissolved	0.00005J	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/24/08	CMD	3/24/08 12:42	CMD	D3
Mercury, Dissolved	0.0001J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 14:08	CMD	E2
Nickel, Total	0.0028J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 19:56	LAM	D1
Nickel, Dissolved	0.0017J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Potassium, Total	0.77	mg/L		0.56		SW846 6010C	3/20/08	MNP	3/26/08 10:11	TED	D2
Potassium, Dissolved	0.97	mg/L		0.50	0.1	SW846 6010C	3/25/08	JWK	3/25/08 13:15	JWK	E4
Selenium, Total	0.001J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Selenium, Dissolved	0.009	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Sodium, Total	10.8	mg/L		0.56		SW846 6010C	3/20/08	MNP	3/26/08 10:11	TED	D2
Sodium, Dissolved	11.3	mg/L		0.50	0.05	SW846 6010C	3/25/08	JWK	3/25/08 13:15	JWK	E4
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Vanadium, Total	0.00009J	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Vanadium, Dissolved	0.001J	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3
Zinc, Total	ND	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 19:15	LAM	D1
Zinc, Dissolved	0.0007J	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 19:02	LAM	E3

Sample Comments:

This report was modified to remove the semivolatile analysis comment that did not apply to this project sample. SM 4/10/08

Raymond J. Martrano
Laboratory Manager

0083

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9727192 TWK001|GW NASJRB CTO 0412

PARAMETER QUALIFIERS\FLAGS

[1] This sample was received at the laboratory after the 24-hour method-recommended holding time had expired. ASD 4/1/08

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ANALYTICAL RESULTS

Workorder: 9727450 TWK001|GW NASJRB CTO 0412

Lab ID: 9727450002 Date Collected: 3/13/2008 14:40 Matrix: Ground Water
Sample ID: 03MW06SI-20080313 Date Received: 3/14/2008 11:21

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:17	ECR	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:17	ECR	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:17	ECR	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/27/08 01:17	ECR	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:17	ECR	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:17	ECR	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/27/08 01:17	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	99	%		62-133		SW846 8260B			3/27/08 01:17	ECR	A
Toluene-d8 (S)	117	%		76-127		SW846 8260B			3/27/08 01:17	ECR	A
4-Bromofluorobenzene (S)	95	%		79-114		SW846 8260B			3/27/08 01:17	ECR	A
Dibromofluoromethane (S)	102	%		78-116		SW846 8260B			3/27/08 01:17	ECR	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/18/08	JWY	3/20/08 02:05	JAJ	D1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	76	%		40-125		SW846 8270D	3/18/08	JWY	3/20/08 02:05	JAJ	D1
2-Fluorobiphenyl (S)	85	%		32-108		SW846 8270D	3/18/08	JWY	3/20/08 02:05	JAJ	D1
2-Fluorophenol (S)	47	%		20-70		SW846 8270D	3/18/08	JWY	3/20/08 02:05	JAJ	D1
Nitrobenzene-d5 (S)	86	%		31-110		SW846 8270D	3/18/08	JWY	3/20/08 02:05	JAJ	D1
Phenol-d5 (S)	28	%		10-49		SW846 8270D	3/18/08	JWY	3/20/08 02:05	JAJ	D1
Terphenyl-d14 (S)	76	%		27-136		SW846 8270D	3/18/08	JWY	3/20/08 02:05	JAJ	D1
METALS											
Aluminum, Total	0.144	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Aluminum, Dissolved	0.003J	mg/L		0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 11:08	LAM	G2
Antimony, Total	0.0007J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Arsenic, Total	ND	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Barium, Total	0.111	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Barium, Dissolved	0.104	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Beryllium, Total	ND	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/26/08 20:02	LAM	F1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/25/08 11:08	LAM	G2
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Calcium, Total	7.31	mg/L		0.11	0.003	SW846 6010C	3/26/08	MNP	3/26/08 14:03	TED	F3
Calcium, Dissolved	8.31	mg/L		0.10	0.03	SW846 6010C	3/25/08	JWK	3/25/08 13:28	JWK	G3
Chromium, Total	0.0051	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 20:02	LAM	F1
Chromium, Dissolved	0.0036	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Cobalt, Total	ND	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Cobalt, Dissolved	ND	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Copper, Total	0.0017J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Iron, Total	0.23	mg/L		0.07	0.02	SW846 6010C	3/26/08	MNP	3/26/08 14:03	TED	F3

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ANALYTICAL RESULTS

Workorder: 9727450 TWK001|GW NASJRB CTO 0412

Lab ID: 9727450002 Date Collected: 3/13/2008 14:40 Matrix: Ground Water

Sample ID: 03MW06SI-20080313 Date Received: 3/14/2008 11:21

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	0.01J	mg/L		0.06	0.009	SW846 6010C	3/25/08	JWK	3/25/08 13:28	JWK	G3
Lead, Total	ND	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Magnesium, Total	2.26	mg/L		0.11	0.01	SW846 6010C	3/26/08	MNP	3/26/08 14:03	TED	F3
Magnesium, Dissolved	2.49	mg/L		0.10	0.006	SW846 6010C	3/25/08	JWK	3/25/08 13:28	JWK	G3
Manganese, Total	0.0102	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Manganese, Dissolved	0.0006J	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/24/08	CMD	3/24/08 12:46	CMD	F2
Mercury, Dissolved	0.00008J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 14:18	CMD	G1
Nickel, Total	0.0043J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 20:02	LAM	F1
Nickel, Dissolved	0.0026J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Potassium, Total	0.98	mg/L		0.56		SW846 6010C	3/26/08	MNP	3/26/08 11:53	TED	F3
Potassium, Dissolved	1.10	mg/L		0.50	0.1	SW846 6010C	3/25/08	JWK	3/25/08 13:28	JWK	G3
Selenium, Total	0.001J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Selenium, Dissolved	ND	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Sodium, Total	8.68	mg/L		0.56		SW846 6010C	3/26/08	MNP	3/26/08 11:53	TED	F3
Sodium, Dissolved	9.11	mg/L		0.50	0.05	SW846 6010C	3/25/08	JWK	3/25/08 13:28	JWK	G3
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Vanadium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
Zinc, Total	0.0052J	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 20:31	LAM	F1
Zinc, Dissolved	0.0007J	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 20:20	LAM	G2
WET CHEMISTRY											
Hexavalent Chromium	ND	mg/L		0.01	0.01	SW846 7196A			3/14/08 13:10	KLZ	H

Sample Comments:

Raymond J. Martrano
Laboratory Manager

0092

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ANALYTICAL RESULTS

Workorder: 9727450 TWK001|GW NASJRB CTO 0412

Lab ID: 9727450003 Date Collected: 3/13/2008 17:14 Matrix: Ground Water
Sample ID: 03MW06S-20080313 Date Received: 3/14/2008 11:21

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 00:43	ECR	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 00:43	ECR	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 00:43	ECR	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/27/08 00:43	ECR	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 00:43	ECR	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 00:43	ECR	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/27/08 00:43	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	99	%		62-133		SW846 8260B			3/27/08 00:43	ECR	A
Toluene-d8 (S)	116	%		76-127		SW846 8260B			3/27/08 00:43	ECR	A
4-Bromofluorobenzene (S)	97	%		79-114		SW846 8260B			3/27/08 00:43	ECR	A
Dibromofluoromethane (S)	103	%		78-116		SW846 8260B			3/27/08 00:43	ECR	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.9	0.6	SW846 8270D	3/18/08	JWY	3/20/08 02:55	JAJ	D1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	83	%		40-125		SW846 8270D	3/18/08	JWY	3/20/08 02:55	JAJ	D1
Terphenyl-d14 (S)	77	%		27-136		SW846 8270D	3/18/08	JWY	3/20/08 02:55	JAJ	D1
2-Fluorobiphenyl (S)	94	%		32-108		SW846 8270D	3/18/08	JWY	3/20/08 02:55	JAJ	D1
Nitrobenzene-d5 (S)	96	%		31-110		SW846 8270D	3/18/08	JWY	3/20/08 02:55	JAJ	D1
Phenol-d5 (S)	31	%		10-49		SW846 8270D	3/18/08	JWY	3/20/08 02:55	JAJ	D1
2-Fluorophenol (S)	52	%		20-70		SW846 8270D	3/18/08	JWY	3/20/08 02:55	JAJ	D1
METALS											
Aluminum, Total	0.089	mg/L		0.080		SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Aluminum, Dissolved	0.01J	mg/L		0.080	0.002	SW846 6020	3/24/08	LAM	3/25/08 11:11	LAM	G2
Antimony, Total	0.0007J	mg/L		0.0020	0.00005	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Arsenic, Total	0.0004J	mg/L		0.0060	0.0004	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Barium, Total	0.0370	mg/L		0.0060	0.00005	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Barium, Dissolved	0.0348	mg/L		0.0050	0.0003	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Beryllium, Total	0.0001J	mg/L		0.0010	0.00007	SW846 6020	3/18/08	SRT	3/26/08 20:08	LAM	F1
Beryllium, Dissolved	0.0004J	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/25/08 11:11	LAM	G2
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Calcium, Total	12.0	mg/L		0.11	0.003	SW846 6010C	3/26/08	MNP	3/26/08 14:18	TED	F3
Calcium, Dissolved	14.0	mg/L		0.10	0.03	SW846 6010C	3/25/08	JWK	3/25/08 13:33	JWK	G3
Chromium, Total	0.0049	mg/L		0.0020	0.00006	SW846 6020	3/18/08	SRT	3/26/08 20:08	LAM	F1
Chromium, Dissolved	0.0047	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Cobalt, Total	ND	mg/L		0.0060	0.00003	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Cobalt, Dissolved	ND	mg/L		0.0050	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Copper, Total	0.0017J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Copper, Dissolved	0.0014J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Iron, Total	0.09	mg/L		0.07	0.02	SW846 6010C	3/26/08	MNP	3/26/08 14:18	TED	F3

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ANALYTICAL RESULTS

Workorder: 9727450 TWK001|GW NASJRB CTO 0412

Lab ID: **9727450003** Date Collected: 3/13/2008 17:14 Matrix: Ground Water

Sample ID: **03MW06S-20080313** Date Received: 3/14/2008 11:21

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	0.01J	mg/L		0.06	0.009	SW846 6010C	3/25/08	JWK	3/25/08 13:33	JWK	G3
Lead, Total	ND	mg/L		0.0020	0.00002	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Magnesium, Total	6.42	mg/L		0.11	0.01	SW846 6010C	3/26/08	MNP	3/26/08 14:18	TED	F3
Magnesium, Dissolved	6.76	mg/L		0.10	0.006	SW846 6010C	3/25/08	JWK	3/25/08 13:33	JWK	G3
Manganese, Total	0.0082	mg/L		0.0060	0.00004	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Manganese, Dissolved	0.0058	mg/L		0.0040	0.00001	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/24/08	CMD	3/24/08 12:49	CMD	F2
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 14:33	CMD	G1
Nickel, Total	0.0050J	mg/L		0.0060	0.00006	SW846 6020	3/18/08	SRT	3/26/08 20:08	LAM	F1
Nickel, Dissolved	0.0044J	mg/L		0.0050	0.0004	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Potassium, Total	1.37	mg/L		0.56		SW846 6010C	3/26/08	MNP	3/26/08 11:55	TED	F3
Potassium, Dissolved	1.67	mg/L		0.50	0.1	SW846 6010C	3/25/08	JWK	3/25/08 13:33	JWK	G3
Selenium, Total	0.005J	mg/L		0.006	0.001	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Selenium, Dissolved	0.005J	mg/L		0.005	0.001	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Sodium, Total	13.5	mg/L		0.56		SW846 6010C	3/26/08	MNP	3/26/08 11:55	TED	F3
Sodium, Dissolved	14.4	mg/L		0.50	0.05	SW846 6010C	3/25/08	JWK	3/25/08 13:33	JWK	G3
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Vanadium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
Zinc, Total	0.0084	mg/L		0.0060	0.002	SW846 6020	3/18/08	SRT	3/25/08 20:38	LAM	F1
Zinc, Dissolved	0.0060	mg/L		0.0050	0.0002	SW846 6020	3/24/08	LAM	3/24/08 20:26	LAM	G2
WET CHEMISTRY											
Hexavalent Chromium	ND	mg/L		0.01	0.01	SW846 7196A			3/14/08 13:10	KLZ	H

Sample Comments:

Raymond J. Martrano
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9727555 TWK001|GW NASJRB CTO 0412

Lab ID: **9727555002** Date Collected: 3/14/2008 09:15 Matrix: Ground Water
Sample ID: **03MW06I-20080314** Date Received: 3/14/2008 20:20

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:50	ECR	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:50	ECR	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:50	ECR	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/27/08 01:50	ECR	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:50	ECR	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 01:50	ECR	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/27/08 01:50	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	97	%		62-133		SW846 8260B			3/27/08 01:50	ECR	A
Toluene-d8 (S)	117	%		76-127		SW846 8260B			3/27/08 01:50	ECR	A
4-Bromofluorobenzene (S)	99	%		79-114		SW846 8260B			3/27/08 01:50	ECR	A
Dibromofluoromethane (S)	100	%		78-116		SW846 8260B			3/27/08 01:50	ECR	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/18/08	JWY	3/20/08 03:45	JAJ	G1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	80	%		40-125		SW846 8270D	3/18/08	JWY	3/20/08 03:45	JAJ	G1
2-Fluorobiphenyl (S)	95	%		32-108		SW846 8270D	3/18/08	JWY	3/20/08 03:45	JAJ	G1
2-Fluorophenol (S)	54	%		20-70		SW846 8270D	3/18/08	JWY	3/20/08 03:45	JAJ	G1
Nitrobenzene-d5 (S)	98	%		31-110		SW846 8270D	3/18/08	JWY	3/20/08 03:45	JAJ	G1
Phenol-d5 (S)	31	%		10-49		SW846 8270D	3/18/08	JWY	3/20/08 03:45	JAJ	G1
Terphenyl-d14 (S)	76	%		27-136		SW846 8270D	3/18/08	JWY	3/20/08 03:45	JAJ	G1
METALS											
Aluminum, Total	2.03	mg/L		0.080		SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Aluminum, Dissolved	0.004J	mg/L		0.080	0.002	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Antimony, Total	0.0007J	mg/L		0.0020	0.00005	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Arsenic, Total	0.0091	mg/L		0.0060	0.0004	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Arsenic, Dissolved	0.0101	mg/L		0.0030	0.0007	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Barium, Total	0.413	mg/L		0.0060	0.00005	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Barium, Dissolved	0.299	mg/L		0.0050	0.0003	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Beryllium, Total	ND	mg/L		0.0010	0.00007	SW846 6020	3/21/08	MNP	3/26/08 20:25	LAM	D1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Calcium, Total	25.9	mg/L		0.11	0.003	SW846 6010C	3/27/08	MNP	3/28/08 13:03	TED	D3
Calcium, Dissolved	24.9	mg/L		0.10	0.03	SW846 6010C	3/25/08	JWK	3/25/08 13:37	JWK	E2
Chromium, Total	0.0120	mg/L		0.0020	0.00006	SW846 6020	3/21/08	MNP	3/26/08 20:25	LAM	D1
Chromium, Dissolved	0.0014J	mg/L		0.0020	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Cobalt, Total	0.0030J	mg/L		0.0060	0.00003	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Cobalt, Dissolved	0.0001J	mg/L		0.0050	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Copper, Total	0.0024J	mg/L		0.0060	0.00006	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Iron, Total	2.40	mg/L		0.07	0.02	SW846 6010C	3/27/08	MNP	3/28/08 13:03	TED	D3

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ANALYTICAL RESULTS

Workorder: 9727555 TWK001|GW NASJRB CTO 0412

Lab ID: **9727555002** Date Collected: 3/14/2008 09:15 Matrix: Ground Water

Sample ID: **03MW06I-20080314** Date Received: 3/14/2008 20:20

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	ND	mg/L		0.06	0.009	SW846 6010C	3/25/08	JWK	3/25/08 13:37	JWK	E2
Lead, Total	0.0014J	mg/L		0.0020	0.00002	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Magnesium, Total	11.1	mg/L		0.11	0.01	SW846 6010C	3/27/08	MNP	3/28/08 13:03	TED	D3
Magnesium, Dissolved	10.2	mg/L		0.10	0.006	SW846 6010C	3/25/08	JWK	3/25/08 13:37	JWK	E2
Manganese, Total	0.103	mg/L		0.0060	0.00004	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Manganese, Dissolved	0.0004J	mg/L		0.0040	0.00001	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/24/08	CMD	3/24/08 13:20	CMD	D2
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 14:36	CMD	E1
Nickel, Total	0.0096	mg/L		0.0060	0.00006	SW846 6020	3/21/08	MNP	3/26/08 20:25	LAM	D1
Nickel, Dissolved	0.0005J	mg/L		0.0050	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Potassium, Total	3.08	mg/L		0.56		SW846 6010C	3/27/08	MNP	3/31/08 12:49	JWK	D3
Potassium, Dissolved	2.09	mg/L		0.50	0.1	SW846 6010C	3/25/08	JWK	3/25/08 13:37	JWK	E2
Selenium, Total	0.002J	mg/L		0.006	0.001	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Selenium, Dissolved	0.002J	mg/L		0.005	0.001	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/27/08	SRT	4/3/08 11:50	LAM	E3
Sodium, Total	9.55	mg/L		0.56		SW846 6010C	3/27/08	MNP	3/31/08 12:49	JWK	D3
Sodium, Dissolved	9.31	mg/L		0.50	0.05	SW846 6010C	3/25/08	JWK	3/25/08 13:37	JWK	E2
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Vanadium, Total	0.0064	mg/L		0.0010	0.00003	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Vanadium, Dissolved	0.0049	mg/L		0.0010	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
Zinc, Total	0.0106	mg/L		0.0060	0.002	SW846 6020	3/21/08	MNP	3/25/08 22:26	LAM	D1
Zinc, Dissolved	ND	mg/L		0.0050	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:23	SRT	E3
WET CHEMISTRY											
Hexavalent Chromium	ND	mg/L		0.01	0.01	SW846 7196A			3/15/08 00:40	SAD	F

Sample Comments:

Raymond J. Martrano
Laboratory Manager

0103

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ANALYTICAL RESULTS

Workorder: 9727555 TWK001|GW NASJRB CTO 0412

Lab ID: **9727555003** Date Collected: 3/14/2008 12:18 Matrix: Ground Water
Sample ID: **03MW04I-20080314** Date Received: 3/14/2008 20:20

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:24	ECR	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:24	ECR	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:24	ECR	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/27/08 02:24	ECR	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:24	ECR	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:24	ECR	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/27/08 02:24	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	98	%		62-133		SW846 8260B			3/27/08 02:24	ECR	A
Dibromofluoromethane (S)	102	%		78-116		SW846 8260B			3/27/08 02:24	ECR	A
Toluene-d8 (S)	118	%		76-127		SW846 8260B			3/27/08 02:24	ECR	A
4-Bromofluorobenzene (S)	96	%		79-114		SW846 8260B			3/27/08 02:24	ECR	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.9	0.6	SW846 8270D	3/18/08	JWY	3/20/08 04:35	JAJ	F1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	76	%		40-125		SW846 8270D	3/18/08	JWY	3/20/08 04:35	JAJ	F1
Terphenyl-d14 (S)	77	%		27-136		SW846 8270D	3/18/08	JWY	3/20/08 04:35	JAJ	F1
Phenol-d5 (S)	34	%		10-49		SW846 8270D	3/18/08	JWY	3/20/08 04:35	JAJ	F1
2-Fluorobiphenyl (S)	84	%		32-108		SW846 8270D	3/18/08	JWY	3/20/08 04:35	JAJ	F1
Nitrobenzene-d5 (S)	86	%		31-110		SW846 8270D	3/18/08	JWY	3/20/08 04:35	JAJ	F1
2-Fluorophenol (S)	53	%		20-70		SW846 8270D	3/18/08	JWY	3/20/08 04:35	JAJ	F1
METALS											
Aluminum, Total	ND	mg/L		0.080		SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Aluminum, Dissolved	ND	mg/L		0.080	0.002	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Antimony, Total	0.0007J	mg/L		0.0020	0.00005	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Arsenic, Total	0.0006J	mg/L		0.0060	0.0004	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Barium, Total	0.455	mg/L		0.0060	0.00005	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Barium, Dissolved	0.461	mg/L		0.0050	0.0003	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Beryllium, Total	ND	mg/L		0.0010	0.00007	SW846 6020	3/21/08	MNP	3/26/08 20:30	LAM	D1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Calcium, Total	31.9	mg/L		0.11	0.003	SW846 6010C	3/27/08	MNP	3/28/08 13:08	TED	D3
Calcium, Dissolved	35.7	mg/L		0.10	0.03	SW846 6010C	3/25/08	JWK	3/25/08 13:41	JWK	E2
Chromium, Total	0.001J	mg/L		0.0020	0.00006	SW846 6020	3/21/08	MNP	3/26/08 20:30	LAM	D1
Chromium, Dissolved	0.0015J	mg/L		0.0020	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Cobalt, Total	ND	mg/L		0.0060	0.00003	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Cobalt, Dissolved	0.0001J	mg/L		0.0050	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Copper, Total	0.00008J	mg/L		0.0060	0.00006	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Iron, Total	0.04J	mg/L		0.07	0.02	SW846 6010C	3/27/08	MNP	3/28/08 13:08	TED	D3

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ANALYTICAL RESULTS

Workorder: 9727555 TWK001|GW NASJRB CTO 0412

Lab ID: **9727555003** Date Collected: 3/14/2008 12:18 Matrix: Ground Water

Sample ID: **03MW04I-20080314** Date Received: 3/14/2008 20:20

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	ND	mg/L		0.06	0.009	SW846 6010C	3/25/08	JWK	3/25/08 13:41	JWK	E2
Lead, Total	ND	mg/L		0.0020	0.00002	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Magnesium, Total	8.26	mg/L		0.11	0.01	SW846 6010C	3/27/08	MNP	3/28/08 13:08	TED	D3
Magnesium, Dissolved	8.57	mg/L		0.10	0.006	SW846 6010C	3/25/08	JWK	3/25/08 13:41	JWK	E2
Manganese, Total	ND	mg/L		0.0060	0.00004	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Manganese, Dissolved	ND	mg/L		0.0040	0.00001	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/24/08	CMD	3/24/08 13:24	CMD	D2
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 14:39	CMD	E1
Nickel, Total	0.0018J	mg/L		0.0060	0.00006	SW846 6020	3/21/08	MNP	3/26/08 20:30	LAM	D1
Nickel, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Potassium, Total	0.68	mg/L		0.56		SW846 6010C	3/27/08	MNP	3/31/08 12:52	JWK	D3
Potassium, Dissolved	0.87	mg/L		0.50	0.1	SW846 6010C	3/25/08	JWK	3/25/08 13:41	JWK	E2
Selenium, Total	0.003J	mg/L		0.006	0.001	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Selenium, Dissolved	0.002J	mg/L		0.005	0.001	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/27/08	SRT	4/3/08 11:53	LAM	E3
Sodium, Total	13.3	mg/L		0.56		SW846 6010C	3/27/08	MNP	3/31/08 12:52	JWK	D3
Sodium, Dissolved	13.6	mg/L		0.50	0.05	SW846 6010C	3/25/08	JWK	3/25/08 13:41	JWK	E2
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Vanadium, Dissolved	0.0012	mg/L		0.0010	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3
Zinc, Total	0.0062	mg/L		0.0060	0.002	SW846 6020	3/21/08	MNP	3/25/08 22:32	LAM	D1
Zinc, Dissolved	ND	mg/L		0.0050	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:28	SRT	E3

Sample Comments:

Raymond J. Martrano
Laboratory Manager

0106

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ANALYTICAL RESULTS

Workorder: 9727555 TWK001|GW NASJRB CTO 0412

Lab ID: **9727555004** Date Collected: 3/14/2008 14:03 Matrix: Ground Water

Sample ID: **03MW04SI-20080314** Date Received: 3/14/2008 20:20

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:57	ECR	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:57	ECR	A
Trichloroethene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:57	ECR	A
Trichlorofluoromethane	ND	ug/L		1.0	0.3	SW846 8260B			3/27/08 02:57	ECR	A
Vinyl Chloride	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:57	ECR	A
o-Xylene	ND	ug/L		1.0	0.2	SW846 8260B			3/27/08 02:57	ECR	A
mp-Xylene	ND	ug/L		2.0	0.3	SW846 8260B			3/27/08 02:57	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	98	%		62-133		SW846 8260B			3/27/08 02:57	ECR	A
Toluene-d8 (S)	113	%		76-127		SW846 8260B			3/27/08 02:57	ECR	A
4-Bromofluorobenzene (S)	103	%		79-114		SW846 8260B			3/27/08 02:57	ECR	A
Dibromofluoromethane (S)	101	%		78-116		SW846 8260B			3/27/08 02:57	ECR	A
SEMIVOLATILES											
1,4-Dioxane	ND	ug/L		2.8	0.6	SW846 8270D	3/18/08	JWY	3/20/08 05:25	JAJ	F1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	79	%		40-125		SW846 8270D	3/18/08	JWY	3/20/08 05:25	JAJ	F1
2-Fluorobiphenyl (S)	93	%		32-108		SW846 8270D	3/18/08	JWY	3/20/08 05:25	JAJ	F1
2-Fluorophenol (S)	52	%		20-70		SW846 8270D	3/18/08	JWY	3/20/08 05:25	JAJ	F1
Nitrobenzene-d5 (S)	91	%		31-110		SW846 8270D	3/18/08	JWY	3/20/08 05:25	JAJ	F1
Phenol-d5 (S)	33	%		10-49		SW846 8270D	3/18/08	JWY	3/20/08 05:25	JAJ	F1
Terphenyl-d14 (S)	78	%		27-136		SW846 8270D	3/18/08	JWY	3/20/08 05:25	JAJ	F1
METALS											
Aluminum, Total	ND	mg/L		0.080		SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Aluminum, Dissolved	ND	mg/L		0.080	0.002	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Antimony, Total	0.0006J	mg/L		0.0020	0.00005	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Antimony, Dissolved	ND	mg/L		0.0020	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Arsenic, Total	0.0006J	mg/L		0.0060	0.0004	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Arsenic, Dissolved	ND	mg/L		0.0030	0.0007	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Barium, Total	0.487	mg/L		0.0060	0.00005	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Barium, Dissolved	0.496	mg/L		0.0050	0.0003	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Beryllium, Total	ND	mg/L		0.0010	0.00007	SW846 6020	3/21/08	MNP	3/26/08 20:36	LAM	D1
Beryllium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Cadmium, Total	ND	mg/L		0.0010	0.00001	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Cadmium, Dissolved	ND	mg/L		0.0010	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Calcium, Total	37.2	mg/L		0.11	0.003	SW846 6010C	3/27/08	MNP	3/28/08 13:12	TED	D3
Calcium, Dissolved	42.4	mg/L		0.10	0.03	SW846 6010C	3/25/08	JWK	3/25/08 13:46	JWK	E2
Chromium, Total	0.0009J	mg/L		0.0020	0.00006	SW846 6020	3/21/08	MNP	3/26/08 20:36	LAM	D1
Chromium, Dissolved	0.0025	mg/L		0.0020	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Cobalt, Total	ND	mg/L		0.0060	0.00003	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Cobalt, Dissolved	0.0002J	mg/L		0.0050	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Copper, Total	0.0001J	mg/L		0.0060	0.00006	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Copper, Dissolved	ND	mg/L		0.0050	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Iron, Total	0.02J	mg/L		0.07	0.02	SW846 6010C	3/27/08	MNP	3/28/08 13:12	TED	D3

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ANALYTICAL RESULTS

Workorder: 9727555 TWK001|GW NASJRB CTO 0412

Lab ID: **9727555004** Date Collected: 3/14/2008 14:03 Matrix: Ground Water

Sample ID: **03MW04SI-20080314** Date Received: 3/14/2008 20:20

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Dissolved	ND	mg/L		0.06	0.009	SW846 6010C	3/25/08	JWK	3/25/08 13:46	JWK	E2
Lead, Total	ND	mg/L		0.0020	0.00002	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Lead, Dissolved	ND	mg/L		0.0020	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Magnesium, Total	9.65	mg/L		0.11	0.01	SW846 6010C	3/27/08	MNP	3/28/08 13:12	TED	D3
Magnesium, Dissolved	10.1	mg/L		0.10	0.006	SW846 6010C	3/25/08	JWK	3/25/08 13:46	JWK	E2
Manganese, Total	ND	mg/L		0.0060	0.00004	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Manganese, Dissolved	0.00006J	mg/L		0.0040	0.00001	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Mercury, Total	ND	mg/L		0.0005	0.00003	SW846 7470A	3/24/08	CMD	3/24/08 13:27	CMD	D2
Mercury, Dissolved	0.00009J	mg/L		0.0005	0.00003	SW846 7470A	3/25/08	CMD	3/25/08 14:43	CMD	E1
Nickel, Total	0.0026J	mg/L		0.0060	0.00006	SW846 6020	3/21/08	MNP	3/26/08 20:36	LAM	D1
Nickel, Dissolved	0.0009J	mg/L		0.0050	0.0004	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Potassium, Total	0.88	mg/L		0.56		SW846 6010C	3/27/08	MNP	3/31/08 12:54	JWK	D3
Potassium, Dissolved	1.02	mg/L		0.50	0.1	SW846 6010C	3/25/08	JWK	3/25/08 13:46	JWK	E2
Selenium, Total	0.003J	mg/L		0.006	0.001	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Selenium, Dissolved	0.002J	mg/L		0.005	0.001	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Silver, Total	ND	mg/L		0.0010	0.00004	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Silver, Dissolved	ND	mg/L		0.0010	0.0003	SW846 6020	3/27/08	SRT	4/3/08 11:56	LAM	E3
Sodium, Total	17.6	mg/L		0.56		SW846 6010C	3/27/08	MNP	3/31/08 12:54	JWK	D3
Sodium, Dissolved	18.5	mg/L		0.50	0.05	SW846 6010C	3/25/08	JWK	3/25/08 13:46	JWK	E2
Thallium, Total	ND	mg/L		0.0010	0.00002	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Thallium, Dissolved	ND	mg/L		0.0010	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Vanadium, Total	ND	mg/L		0.0010	0.00003	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Vanadium, Dissolved	0.0013	mg/L		0.0010	0.0001	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3
Zinc, Total	0.0019J	mg/L		0.0060	0.002	SW846 6020	3/21/08	MNP	3/25/08 22:39	LAM	D1
Zinc, Dissolved	ND	mg/L		0.0050	0.0002	SW846 6020	3/27/08	SRT	3/27/08 02:33	SRT	E3

Sample Comments:

Raymond J. Martrano
Laboratory Manager

0109

APPENDIX C

Support Documentation

Willow Grove

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

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Page ___ of ___
Courier: Federal Express
Tracking #: 8646 0967 055

9726965

Co. Name: Tetra Tech NUS
Contact (Report to): Don Whalen Phone: 610 4419688
Address: 234 Mall Boulevard
Suite 260
King of Prussia PA 19406

Bill to (if different from Report to): Tetra Tech NUS PO#:
Foster Plaza 7
661 Andersen Drive
Project Name/#: Pittsburgh PA 15220 ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required:
[ ] Rush-Subject to ALSI approval and surcharges. Approved By:

Email? [ ] -Y
Fax? [ ] -Y No.:

	Container Type	Container Size	Preservative
	Glass	Glass	Poly	Poly	Poly
	Wide	Liter	Round	Round	Liter
	HCl	4°C	HNO3	HNO3	4°C

ANALYSES/METHOD REQUESTED

Cooler Temp: 4°C
Therm. ID: 5L0230159
No. of Coolers:
Notes:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	8260B - TCL Compounds	8270C 1,4-Dioxane	Total Metals	Dissolved Metals	Hexavalent Chromium	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
1 TB-20080311		3/11/08	0700	G	GW	2									
2 03MW01I-20080311		3/11/08	0923	G	GW	6	6	3	3	3	N	N	N	N	N
3 03MW01S-20080311		3/11/08	1245	G	GW	2	2	1	1	1	Y	Y	Y	Y	Y
4 03MW05I-20080311		3/11/08	1558	G	GW	2	2	1	1	1					
5 DUP-01		3/11/08	1745	G	GW	2	2	1	1	1					
6															
7															
8															

Custody seals Present? Y
(If present) Seals Intact? Y
Received on Ice? Y
COC/Labels complete/accurate? Y
Container in good condition? Y

SAMPLED BY (Please Print): Charles Meyer
LOGGED BY (signature): date 3/12/08 time 1161
REVIEWED BY (signature): date 03/20/08 time 1115

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Charles Meyer TtNUS	3/11/08	1830	2 [signature]	3/12/08	1140
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other
EDDs Required? [ ] If yes, format type:
SDWA Forms Req: yes [ ] yes [ ] yes [ ] yes [ ]
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ] Other
DOD Criteria Required?

ALSI FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY
***Container Type: AG-Amber Glass; CG-Clear Glass; PL-Plastic. Container Size: 250ml, 500ml, 1L, 5oz., etc. Preservative: HCL, HNO3, NaOH, etc.
Rev 6/07

Laboratory supplied Trip Blank DO MS/MSD on 03MW01I-20080311

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Report ID: 9727192

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ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page ___ of ___
Courier: Federal Exp
Tracking #: 864609676

9727192

Co. Name: Tetra Tech NUS
Contact (Report to): Russ Turner Phone: 610 491 9688
Address: 234 Mall Boulevard
Suite 260
King of Prussia PA 19406

Bill to (if different than Report to): PO#:

Project Name/#: ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.
Date Required:
Approved By:

Email? ___ Y
Fax? ___ Y No.:

	**Container Type	CV	Poly	Poly	Amber Glass	Poly					
	**Container Size	40ml	500ml	500ml	1L/1qt	1L/1qt					
	Preservative	HCl	HNO3	HNO3	4°C	4°C					
	*G or C	G	G	G	G	G					
	**Matrix	AQ	GW	GW	GW	GW					
	ANALYSES/METHOD REQUESTED	TCL VOC 8260B	Total Metals	Dissolved Metals	1,4-Dioxane 8270C	Hexavalent Chromium					
Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	Enter Number of Containers Per Analysis							
0029 TB-20080312	3/12/08 1048	3/12/08	0700	2							
2 03MW05S 20080312	Pb 3/13	3/12/08	1046	2	1	1	2	1			
3 03MW08S 20080312		3/12/08	1454	2	1	1	2				
4 03MW08D 20080312		3/12/08	1700	2	1	1	2				
5											
6											
7											
8											

Cooler Temp: 4°C
Therm. ID: 5102355
No. of Coolers:
Notes:

	1	2	3	4	5
Correct containers?	N	N	N	Y	
Correct sample volume?	Y	Y	Y	Y	
Correct preservation?					
Headspace/Validation?					
Circle appropriate Y or N.					
Custody seals Present?	Y	Y	Y	Y	Y
(If present) Seals intact?	N	N	N	N	N
Received on Ice?					
COC fields complete/accurate?					
Container in good condition?					

SAMPLED BY (Please Print): Charles Meyer
LOGGED BY (signature): 3/13/08 1140
REVIEWED BY (signature): 03/24/08 1755

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Charles Meyer T-NUS	3/12/08	1900	2		
3			4	3/13/08	1040
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] ____ [ ] Y yes, format type:
EDDs Required?
DQO Criteria Required?
SDWA Forms? yes / yes / yes / yes
State Samples Collected In? MD / NJ / NY / PA
Other
ALSI FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite **Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Oil=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY **Container Type: AG-Amber Glass; CG-Clear Glass; PL-Plastic. Container Size: 250ml, 500ml, 1L, 5oz., etc. Preservative: HCl, HNO3, NaOH, etc. Rev 6/07

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Page ___ of ___
Courier: Federal Expr
Tracking #: 864609670

9727450

Co. Name: Tetratech NUS
Contact (Report to): Russ Turner Phone: 610 491 9688
Address: 234 Mall Boulevard
Suite 260
King of Prussia, PA 19406

Bill to (if different than Report to): Tetra Tech NUS PO#:
7 Foster Plaza
661 Andersen Drive
Project Name/#: Pittsburgh PA 15220 ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required:
[ ] Rush-Subject to ALSI approval and surcharges. Approved By:

Email? [ ] Y
Fax? [ ] Y No.:

	CG	AG	Poly	Poly	Poly
Container Type	CG	AG	Poly	Poly	Poly
Container Size	40ml	1Liter	500ml	500ml	1Liter
Preservative	HCl	4°C	HNO3	HNO3	4°C

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	TCL VOC 8260B	1,4-Dioxane 8270C	Total TAL Metals	Dissolved Metals	Hexavalent Chromium
0037 TB-20080313	TB	3/13/08	0810	G	GW	2				
2 03MW06SI-20080313		3/14/08	1440	G	GW	2	2	1	1	1
3 03MW06S-20080313		3/14/08	1714	G	GW	2	2	1	1	1
4										
5										
6										
7										
8										

Enter Number of Containers Per Analysis

Receipt Information (completed by Sample Receiving)
Performed by: DKS
Cooler Temp: 2°C
Therm. ID: 5/0258555
No. of Coolers:
Notes:

Correct containers? Y
Correct sample volume? Y
Correct preservation? Y
Headspace/Volatiles? Y
Circle appropriate Y or N.
Custody seals Present? Y
(If present) Seals Intact? Y
Received on Ice? Y
COC/Labels complete/accurate? Y
Container in good condition? Y

SAMPLED BY (Please Print): Charles Meyer

LOGGED BY (signature): [signature] Date: 3/14/08 Time: 1445
REVIEWED BY (signature): [signature] Date: 03/20/08 Time: 1159

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	Charles Meyer TtNUS	3/13/08	1900	2			
3				4	[signature] ALSI	3/14/08	1121
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ]
EDDs Required? [ ] If yes, format type:
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected in? MD [ ] NJ [ ] NY [ ] PA [ ]
Enter PWSID No.
DOD Criteria Required?

ALSI FIELD SERVICES
[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass; PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz, etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #:
9727555

Co. Name: Petra Tech NVS
Contact (Report to): Russ Turner Phone: 610 491 9688
Address: 234 Mall Boulevard
Suite 260
King of Prussia, PA 19406

Bill to (if different than Report to): PO#:

Project Name/#: ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.
Date Required:
Approved By:

Email? [ ] Y
Fax? [ ] Y No.

**Container Type					GL	AG	Poly	Poly	Poly								
**Container Size					40ml	1liter	500ml	500ml	1liter								
Preservative					HCl	4°C	HNO3	HNO3	4°C								
Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	RCL VOC 8260B	1,4-Dioxane 8270C	Total TAL Metals	Dissolved TAL Metals	Hexavalent Chromium							
						Enter Number of Containers Per Analysis											
1 TB-20080314		3/14/08	0850	G	GW	2											
2 03MW06I-20080314		3/14/08	0915	G	GW	2	2	1	1	1							
3 03MW04I-20080314		3/14/08	1218	G	GW	2	2	1	1								
4 03MW04SI-20080314		3/14/08	1403	G	GW	2	2	1	1								
5																	
6																	
7																	
8																	

Receipt Information (completed by Sample Receiver)
Performed by: SEAL USE
Cooler Temp: 2
Therm. ID: 5102351
No. of Coolers:
Notes:

Correct container?	Correct sample volume?	Correct preservation?	Headspace/aeration?	Circle appropriate Y or N.
Y	Y	Y	Y	
Y	Y	Y	Y	
Y	Y	Y	Y	
Y	Y	Y	Y	
Custody seals Present?	(If present) Seals intact?	Received on Ice?	COC/Labels complete/accurate?	Container in good condition?

SAMPLED BY (Please Print): Charles Meyer
LOGGED BY (Signature): 3/14/08 1208
REVIEWED BY (Signature): 03/20/08 1100

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Megan Ritchie	3/14/08	1643	2 [illegible]	3/14/08	1645
3 [illegible]	3/14/08	1645	4 [illegible]	3/14/08	1940
5 [illegible]	3/14	2020	6 [illegible]	3/14	2020
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] If yes, format type:
Bills Approved
SDWA Forms? yes / yes / yes / yes
State Samples Collected In? NO / NJ / NY / PA / Other
Enter CWSID No.
DOD Criteria Required?

ALSI FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

*G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
Copies: WHITE - ORIGINAL, CANARY - CUSTOMER COPY **Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.
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Tetra Tech NUS, Inc.
NASJRB Willow Grove, PA
CTO-0412

Analytical Laboratory Services Inc.
Analytical Narrative
TWK-001

Sample Management

This report contains the results of the analysis of sixteen (16) water samples collected on March 11, 12, 13 and 14, 2008. Analytical results and quality control information are summarized in this data package.

Sample Receipt

Samples arrived at ALSI via courier on March 12, 13 and 14, 2008. Upon receipt, the samples were inspected and compared to the enclosed chain of custody. All sample bottles were preserved properly. Each sample was assigned a unique identification number (see Certificates of Analysis). The sample information was entered into the computer system and the samples were released for analysis.

Volatile Organics by SW-846 Method 8260

Sample Handling. Sixteen (16) water samples were analyzed by SW-846 Method 8260 for volatile organic compounds on MS01. All analyses were performed within the holding time.

Initial Calibrations. Six-point calibrations were analyzed on MS01 on February 25, 2008 and MS05 on March 11, 2008. These calibrations were used to quantitate the samples, blank and spikes. The initial calibrations met method criteria for all target analytes.

Continuing Calibration Checks. A continuing calibration check standard was analyzed on MS01 on March 20, 2008 and March 24, 2008, and on MS05 on March 25, 2008. The continuing calibration checks met method criteria for all target analytes.

Blanks. Method blanks, identified as 450409, 451648, and 452746 were analyzed with the samples and included in this deliverable group. No target analytes were detected in the method blanks.

Surrogates. A four-component surrogate mix was added to each sample, blank and spike. All samples, blanks and spikes had surrogate recoveries within QC limits.

Internal Standards. A three-component internal standard mix was added to each sample, blank and spike. The internal standards were recovered within QC limits in all of the samples and associated QC.

Spiked Blanks. Spiked blanks, identified as 450410, 451649, and 452747 were analyzed with the samples. In 452747, chloromethane and Freon 113 were recovered above QC limits. All other target analyte recoveries were recovered within QC limits in the spiked blanks.

Matrix Spikes. A matrix spike and matrix spike duplicate, identified as 452764 and 452765, were digested and analyzed on sample 03MW06S (9727450003), in this deliverable group. All target analytes were recovered within QC limits in the matrix spikes.

Semi-volatile Organic Chemicals by Method 8270

Sample Handling. Twelve (12) water samples were extracted by SW-846 Method 3510 and the extract was analyzed by SW-846 Method 8270 for 1,4-Dioxane. The samples, extraction blanks and spikes were analyzed on MS02, MS04, and MS06. All extractions and analyses were performed within holding time.

Initial Calibrations. An eight-point calibration for SW-846 Method 8270 was analyzed on MS02 on March 6, 2008, on MS04 on March 13, 2008, and on MS06 on March 6, 2008. These calibrations were used for the analyses of the samples, blank and spikes. The initial calibrations met method criteria for all analytes.

Calibration Checks. A calibration check standard for SW-846 Method 8270 was analyzed on MS02 on March 19, 2008, on MS04 on March 25, 2008, and on MS06 on March 17, 2008. The calibration checks met method criteria for all analytes.

Blanks. Two method blanks, identified as 449641, and 448744, were extracted and analyzed with the samples. No target compounds were detected in the method blank.

Surrogates. A six-component surrogate mix was added to the sample, blank and spikes. All surrogate recoveries were within control in the sample, blank and spikes.

Internal Standards. A six-component internal standard mix was added to each sample, blank and spike for SW-846 Method 8270. All internal standards had recoveries within QC limits.

Blank Spikes. Two blank spikes, identified as 449642, and 448745, were spiked at 100 ug/L, and were extracted and analyzed with the samples by method 8270. All recoveries were within QC limits for the spiked blanks.

Matrix Spikes. A matrix spike and matrix spike duplicate, identified as 448747 and 448748 respectively, were analyzed with project sample 9726965002 (03MW01). All analytes were recovered within QC limits with.

Total Metals by EPA Method 6010C

Sample handling. Twelve (12) water samples were analyzed for total metals on the TJA TRACE ICP using EPA Method 6010C. The samples were analyzed within the six-month holding time established for the method.

Calibration. Each day that the samples were analyzed, an initial four-point calibration was properly established and verified through the analysis of a second source calibration verification standard (QCS), an initial calibration blank (S0), an initial performance check (IPC), a reporting limit standard, an interference check standard (ICSA), and an interference check standard (ICSAB). Calibration checks were analyzed every ten samples and at the conclusion of the run. All criteria associated with the calibration and check standards were within the control limits for this method.

Blanks. Reagent (calibration) blanks were analyzed following the calibrations, after every ten samples, and at the conclusion of each run. Metals were not present in any of the reagent blanks at a detectable level. Four method blanks, identified as samples 449648-MB, 450591-MB, 451665-MB, and 452975-MB, were digested and analyzed with the samples in this deliverable group. Metals were not detected in the method blanks.

Laboratory Control Sample. Four laboratory control samples, identified as 449649-LCS, 450592-LCS, 451666-LCS, and 452976-LCS, were digested and analyzed with the samples in this deliverable group. All LCS spike recoveries were within the control limits of 80-120%.

Spikes. A matrix spike and matrix spike duplicate, identified as 449650 and 449651, were digested and analyzed on sample 9726965002 (03MW01I-20080311), in this deliverable group. With the exception of iron, the MS/MSD recoveries and their RPD's were within the control limits for this method. Due to a failing MS recovery for iron, an additional post digestion spike was performed. The undiluted post spike recovery was outside control limits. A 1/5 dilution analysis and 1/5 post digestion spike were performed. The 1/5 post spike recovery was within method control limits. The calcium analyte concentration in the sample was greater than ten times the concentration of our spiking solution. For this reason, calcium spike recoveries were not calculated.

Dissolved Metals by EPA Method 6010C

Sample handling. Twelve (12) water samples were analyzed for dissolved metals on the ThermoFisher ICP6500 using EPA Method 6010C. The samples were analyzed within the six-month holding time established for the method.

Calibration. Each day that the samples were analyzed, an initial four-point calibration was properly established and verified through the analysis of a second source calibration verification standard (QCS), an initial calibration blank (S0), an initial performance check (IPC), a reporting limit standard, an interference check standard (ICSA), and an interference check standard (ICSAB). Calibration checks were analyzed every ten samples and at the conclusion of the run. All criteria associated with the calibration and check standards were within the control limits for this method.

Blanks. Reagent (calibration) blanks were analyzed following the calibrations, after every ten samples, and at the conclusion of each run. Metals were not present in any of the reagent blanks at a detectable level. Two method blanks, identified as samples 449154-MB and 452129-MB, were analyzed with the samples in this deliverable group. Metals were not found at detectable levels in the method blanks.

Laboratory Control Sample. Two laboratory control samples, identified as 449155-LCS and 452130-LCS, were analyzed with the samples in this deliverable group. All LCS spike recoveries were within the control limits of 80-120%.

Spikes. A matrix spike and matrix spike duplicate, identified as 449156 and 449157, were prepared and analyzed on sample 9726965002 (03MW01I-20080311), in this deliverable group. With the exception of magnesium, the MS/MSD recoveries and their RPD's were within the control limits for this method. Due to a failing MSD recovery, an additional post digestion spike was performed. The straight post spike recovery and the ½ post spike recovery were both outside control limits. A 1/5 dilution analysis and 1/5 post digestion spike were required. The 1/5 post spike recovery was within method control limits. The calcium analyte concentration in the sample was greater than ten times the concentration of our spiking solution. For this reason, calcium spike recoveries were not calculated.

Total Sodium and Potassium by EPA Method 6010C

Sample handling. Twelve (12) water samples were analyzed for total sodium and potassium on the TJA IRIS ICP using EPA Method 6010C. The samples were analyzed within the six-month holding time established for the method.

Calibration. Each day that the samples were analyzed, an initial four-point calibration was properly established and verified through the analysis of a second source calibration verification standard (QCS), an initial calibration blank (S0), an initial performance check (IPC), a reporting limit standard, and an interference check standard (ICS). Calibration checks were analyzed every

ten samples and at the conclusion of the run. All criteria associated with the calibration and check standards were within the control limits for this method.

Blanks. Reagent (calibration) blanks were analyzed following the calibrations, after every ten samples, and at the conclusion of each run. Metals were not present in any of the reagent blanks at a detectable level. Four method blanks, identified as samples 449648-MB, 450591-MB, 451665-MB, and 452975-MB, were digested and analyzed with the samples in this deliverable group. Metals were not found at detectable levels in the method blanks.

Laboratory Control Sample. Four laboratory control samples, identified as 449649-LCS, 450592-LCS, 451666-LCS, and 452976-LCS, were also digested and analyzed with the samples in this deliverable group. All LCS spike recoveries were within the control limits of 80-120%.

Spikes. A matrix spike and matrix spike duplicate, identified as 449650 and 449651, were digested and analyzed on sample 9726965002 (03MW01I-20080311), in this deliverable group. The sodium and potassium MS/MSD recoveries and their RPD's were within the control limits for this method.

TOTAL METALS by SW-846 Method 6020

Sample handling. Twelve (12) aqueous samples were analyzed for total metals on the ELAN 6000 ICP-MS and Elan DRCe ICP-MS using SW-846 Method 6020A. The samples were analyzed within the six-month holding time established for this method.

Calibration. Prior to calibration, mass calibration and resolution checks were conducted on the instrument. All criteria associated with the mass calibration and resolution checks were within control. The instrument was calibrated for metals using a blank and five to seven calibration standards. The calibration was verified prior to running samples through the analysis of a second source standard. A continuing calibration standard was analyzed every ten samples and at the conclusion of the run. All criteria associated with the calibration and calibration verification standards were within control limits.

Blanks. Reagent blanks were analyzed following the calibration, after every ten samples, and at the conclusion of the run. Metals were not present in any of the reagent blanks at a detectable level. Method blanks, identified as 449194-MB and 451117-MB, were analyzed with the samples in this deliverable group. Metals were not present in the method blanks.

Laboratory Control Samples. Laboratory control samples, identified 449195-LCS and 451118-LCS, were analyzed with the samples in this deliverable group. The LCS recoveries were within the control limits for this method.

Matrix Spike/Matrix Spike Duplicate. A matrix spike/matrix spike duplicate identified as 449196 and 449197, was digested and analyzed on sample 9726965002 (03MW01I-20080311) in this deliverable group. The MS/MSD recoveries and their RPD were within the control limits for this method for all elements. The aluminum concentration in the sample was greater than ten times the spiking concentration, so recovery calculations are not valid.

DISSOLVED METALS by SW-846 Method 6020

Sample handling. Twelve (14) aqueous samples were analyzed for dissolved metals on the ELAN DRCe ICP-MS and Elan 6000 using SW-846 Method 6020A. The samples were analyzed within the six-month holding time established for this method.

Calibration. Prior to calibration, mass calibration and resolution checks were conducted on the instrument. All criteria associated with the mass calibration and resolution checks were within control. The instruments were calibrated for metals using a blank and five to seven calibration

standards. The calibration was verified prior to running samples through the analysis of a second source standard. A continuing calibration standard was analyzed every ten samples and at the conclusion of the run. All criteria associated with the calibration and calibration verification standards were within control limits.

Blanks. Reagent blanks were analyzed following the calibration, after every ten samples, and at the conclusion of the run. Metals were not present in any of the reagent blanks at a detectable level. Two method blanks, identified as samples 451856-MB and 452805-MB, were analyzed with the samples in this deliverable group. Metals were not present in the method blanks.

Laboratory Control Samples. Laboratory control samples, identified 451857-LCS and 452806-LCS, were analyzed with the samples in this deliverable group. The dissolved LCS recoveries were within the control limits for this method.

Matrix Spike/Matrix Spike Duplicate. A matrix spike/matrix spike duplicate identified as 452178 and 452179, were digested and analyzed on sample 9726965002 (03MW01i-20080311) in this deliverable group. The MS/MSD recoveries and their RPD were within the control limits for this method for all elements except aluminum.

Total Mercury by Method 7470

Sample handling. Twelve (12) water samples were analyzed for total mercury on the CETAC Hg Analyzer, using Method 7470. The samples were digested and analyzed within the 28-day holding time established for the method.

Calibration. The day the samples were analyzed, an initial five-point calibration was properly established and verified through the analysis of a second source calibration verification standard. Calibration check standards were analyzed every ten samples and at the conclusion of the run. All criteria associated with the calibration and check standards were within control limits.

Blanks. Reagent (calibration) blanks were analyzed following the calibration, after every ten samples, and at the conclusion of the run. Mercury was not detected in the reagent blanks. One Method Blank, identified as 450663-MB, 451186-MB, and 451272 were digested and analyzed with the samples in this deliverable group. Mercury was not detected in the method blank

Laboratory Control Samples. Laboratory control samples, identified as 450664-LCS, 451187-LCS, and 451273-LCS were digested and analyzed for total mercury with the samples in this deliverable group. The mercury recovery was within the control limit for this method.

Spikes. A matrix spike/matrix spike duplicate identified as 450667 and 450668, were digested and analyzed on sample 9726965002 (03MW01I-20080311), in this deliverable group. The mercury MS/MSD recoveries and their RPD were within the control limits for this method.

Dissolved Mercury by Method 7470D

Sample handling. Twelve (12) water samples were analyzed for dissolved mercury on the CETAC Hg Analyzer, using Method 7470D. The samples were digested and analyzed within the 28-day holding time established for the method.

Calibration. The day the samples were analyzed, an initial five-point calibration was properly established and verified through the analysis of a second source calibration verification standard. Calibration check standards were analyzed every ten samples and at the conclusion of the run. All criteria associated with the calibration and check standards were within control limits.

Blanks. Reagent (calibration) blanks were analyzed following the calibration, after every ten samples, and at the conclusion of the run. Mercury was not detected in the reagent blanks. One

Method Blanks, identified as 451698-MB and 451730-MB, was digested and analyzed with the samples in this deliverable group. Mercury was not detected in the method blank

Laboratory Control Samples. Laboratory control samples, identified as 451699; 451731-LCS, was also digested and analyzed for mercury with the samples in this deliverable group. The mercury recovery was within the control limit for this method.

Spikes. A matrix spike/matrix spike duplicate identified as 451700 and 451701, were digested and analyzed on sample 9726965002 (03MW01I-20080311), in this deliverable group. The mercury MS/MSD recoveries and their RPD were within the control limits for this method. A matrix spike/matrix spike duplicate was digested identified as 451732 and 451733, on sample 9727192004 (03MW08D-20080312), in this deliverable group. The mercury MS/MSD recoveries and their RPD were within the control limits for this method.

Hexavalent Chromium by SW-846 7196A

Sample handling. Eight (8) aqueous samples were analyzed for hexavalent chromium by SW-846 Method 7196A. Samples 9726965002 and 9727192002 were received at the laboratory after the 24-hour method-recommended holding time had expired. All other samples were analyzed within the holding time.

Calibration. Five-point calibrations were properly established, and continuing calibration verification standards were analyzed to verify the calibration. The recoveries were within the QC limits of 90-110%.

Blanks. Initial and continuing blanks were analyzed with the samples. Hexavalent chromium was not detected above the reporting limit in the blanks.

Spikes. A matrix spike and matrix spike duplicate analysis was performed on samples 9726965002 (03MW01i-20080311), 9727192002 (03MW05S-20080312), 9727450002 (03MW06SI-20080313) and 9727555002 (03MW06I-20080314). The spike recoveries were within the QC limits of 85-115%. The relative percent differences between the spikes were within the QC limits of 15%.

Sample Description
03MW01I-20080311

Form 3A
Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method:	6010C	SDG No.:	TWK-001
Matrix (soil/water):	WATER	Lab Sample ID:	449650 / 449651 (9726965002)
Units:	mg/L	Lab File ID:	032408A
% moisture:	NA	Instrument ID:	TJA TRACE ICP
Date Analyzed:	3/25/2008	GC Column:	NA

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
CALCIUM	1.00	22.50	22.82	NSC		80-120
IRON	1.00	0.6244	1.914	129	*	80-120
MAGNESIUM	1.00	9.555	10.500	94.5		80-120
MANGANESE	0.100	0.0163	0.1135	97.2		80-120

Analyte	Spike Added	MSD Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
CALCIUM	1.00	22.83	NSC		80-120	NSC		20
IRON	1.00	1.822	120		80-120	4.9		20
MAGNESIUM	1.00	10.47	91.5		80-120	0.3		20
MANGANESE	0.100	0.1150	98.7		80-120	1.3		20

200.7TPU - 200.7 ALL

(1) The following qualifiers are used:
* : Values outside of acceptable limits
D : Spikes diluted out

Comments: These results are not prep factor corrected.
NOTE: Due to a failing MS recovery for iron, a post digestion spike was also required.

NSC: The analyte concentration in the sample was greater than ten times the concentration of our spiking solution. For this reason, spike recoveries were not calculated.

1763

Sample Description
03MW01I-20080311

Form 3B
Post-digestion Spike Recovery Summary

Analysis Method: 6010C
Matrix (soil/water): WATER
Units: mg/L
% moisture: NA
Date Analyzed: 3/25/2008

SDG No.: TWK-001
Lab Sample ID: 9726965002-PS
Lab File ID: 032508
Instrument ID: TJA TRACE ICP

Analyte	Spike Added	Sample Concentration	Post-Spike Concentration	Recovery (%)	(1)	Acceptable Limits (%)
IRON	2.00	0.6244	3.552	146	*	80-120

(1) The following qualifiers are used:
* : Values outside of acceptable limits
D : Spikes diluted out

Comments: These results are not prep factor corrected.
NOTE: The post digestion spike recovery was outside control limits. The sample required a dilution and diluted post sp

200.7TFU - 200.7 ALL

1764

Sample Description
03MW01I-20080311

Form 3A
Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method:	6010C	SDG No.:	TWK-001
Matrix (soil/water):	WATER	Lab Sample ID:	449156 / 449157 (9726965002)
Units:	mg/L	Lab File ID:	031908
% moisture:	NA	Instrument ID:	THERMOFISHER ICP6500
Date Analyzed:	3/19/2008	GC Column:	NA

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
CALCIUM	1.00	24.94	25.74	NSC		80-120
IRON	1.00	0.0243	1.114	109		80-120
MAGNESIUM	1.00	9.769	10.780	101		80-120
MANGANESE	0.100	0.0047	0.1144	110		80-120
SODIUM	20.0	13.17	34.250	105		80-120
POTASSIUM	20.0	1.558	23.700	111		80-120

Analyte	Spike Added	MSD Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
CALCIUM	1.00	24.58	NSC		80-120	NSC		20
IRON	1.00	1.074	105		80-120	3.7		20
MAGNESIUM	1.00	10.430	66.1	*	80-120	3.3		20
MANGANESE	0.100	0.1085	104		80-120	5.3		20
SODIUM	20.0	32.99	99.1		80-120	3.7		20
POTASSIUM	20.0	22.87	114		80-120	3.6		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments: These results are not prep factor corrected.
NOTE: Due to a failing MSD recovery for magnesium, a post digestion spike was also required.

NSC: The analyte concentration in the sample was greater than ten times the concentration of our spiking solution. For this reason, spike recoveries were not calculated.

2140

Sample Description
03MW01I-20080311

Form 3B
Post-digestion Spike Recovery Summary

Analysis Method: 6010C
Matrix (soil/water): WATER
Units: mg/L
% moisture: NA
Date Analyzed: 3/25/2008

SDG No.: TWK-001
Lab Sample ID: 9726965002-PS
Lab File ID: 032508
Instrument ID: THERMOFISHER ICP6500

Analyte	Spike Added	Sample Concentration	Post-Spike Concentration	Recovery (%)	(1)	Acceptable Limits (%)
MAGNESIUM	2.00	9.769	12.27	125	*	80-120

(1) The following qualifiers are used:
* : Values outside of acceptable limits
D : Spikes diluted out

Comments: These results are not prep factor corrected.
NOTE: The post digestion spike recovery was outside control limits. The sample required a dilution and diluted post spike.

2141

Sample Description
03MW01I-20080311

Form 3B
Post-digestion Spike Recovery Summary

Analysis Method: 6010C
Matrix (soil/water): WATER
Units: mg/L
% moisture: NA
Date Analyzed: 3/25/2008

SDG No.: TWK-001
Lab Sample ID: 9726965002-PS 1/2
Lab File ID: 032508
Instrument ID: THERMOFISHER ICP6500

Analyte	Spike Added	Sample Concentration	Post-Spike Concentration	Recovery (%)	(1)	Acceptable Limits (%)
MAGNESIUM	2.00	5.27	6.603	66.7	*	80-120

(1) The following qualifiers are used:
* : Values outside of acceptable limits
D : Spikes diluted out

Comments: These results are not prep factor corrected.
NOTE: The 1/2 dilution post digestion spike recovery was outside control limits. The sample required a 1/5 dilution and 1/5 diluted post spike.

2142

Sample Description
03MW01I-20080311

Form 3A
Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: 6020
Matrix (soil/water): WATER
Units: mg/L
% moisture: NA
Date Analyzed: 3/25/2008

SDG No.: TWK-001
Lab Sample ID: 452178/452179(9726965002)
Lab File ID: D032508
Instrument ID: ELAN DRCe
GC Column: NA

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
ALUMINUM	0.100	0.0358	0.170	134	*	75-125
BERYLLIUM	0.100	0	0.104	104		75-125

Analyte	Spike Added	MSD Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
ALUMINUM	0.100	0.182	146	*	75-125	7.1		20
BERYLLIUM	0.100	0.101	101		75-125	2.5		20

(1) The following qualifiers are used:
* : Values outside of acceptable limits
D : Spikes diluted out

Comments: These results are not prep factor corrected.

3055

Form 5B
ICPMS Interference Check A Summary

Analysis Method: 6020
Date Analyzed: 3/26/2008
Instrument ID: ELAN DRCe

SDG No.: TWK-001

Concentration Units: mg/L

Analyte	Int. Check Concentration Added	Initial Analysis						Acceptable Limits (%)
		Int. Check Concentration Found	Recovery	(1)	Int. Check Concentration Found	Recovery	(1)	
BERYLLIUM	0.0	-0.000237						(-.001 to .001)
ALUMINUM	100	79.2	79	*				80-120
VANADIUM	0.0	0.000061						(-.002 to .002)
CHROMIUM	0.0	0.004055		*				(-.002 to .002)
MANGANESE	0.0	0.005939		*				(-.005 to .005)
COBALT	0.0	0.001912						(-.005 to .005)
NICKEL	0.0	0.007650		*				(-.005 to .005)
COPPER	0.0	0.003938						(-.005 to .005)
ZINC	0.0	0.007030		*				(-.005 to .005)
ARSENIC	0.0	0.000196						(-.005 to .005)
SELENIUM	0.0	-0.001646						(-.005 to .005)
MOLYBDENUM	2.00	2.18	109					80-120
SILVER	0.0	-0.000731						(-.001 to .001)
CADMIUM	0.0	0.000409						(-.001 to .001)
ANTIMONY	0.0	-0.000233						(-.002 to .002)
BARIUM	0.0	0.001289						(-.005 to .005)
THALLIUM	0.0	-0.000086						(-.001 to .001)
LEAD	0.0	-0.000104						(-.002 to .002)

(1) The following qualifiers are used: * : Value outside of acceptable limits

Comments: LDR for Al is 50PPM. Cr, Mn and Zn have known contaminants. Our solution was contaminated by a new analyst. New bottles were ordered. Would not affect data.

2654

Form 5B2
ICPMS Interference Check AB Summary

Analysis Method: 6020
Date Analyzed: 3/26/2008
Instrument ID: ELAN DRCe

SDG No.: TWK-001

Concentration Units: mg/L

Analyte	Int. Check Concentration Added	Initial Analysis						Acceptable Limits (%)
		Int. Check Concentration Found	Recovery	(1)	Int. Check Concentration Found	Recovery	(1)	
BERYLLIUM	0.0	-0.000238						(-.001 to .001)
ALUMINUM	100	78.5	79	*				80-120
VANADIUM	0.040	0.0408	102					80-120
CHROMIUM	0.020	0.0223	112					80-120
MANGANESE	0.020	0.0184	92					80-120
COBALT	0.040	0.0431	108					80-120
NICKEL	0.040	0.0461	115					80-120
COPPER	0.020	0.0233	117					80-120
ZINC	0.020	0.0201	101					80-120
ARSENIC	0.020	0.0196	98					80-120
SELENIUM	0.020	0.0202	101					80-120
MOLYBDENUM	2.00	2.04	102					80-120
SILVER	0.020	0.0174	87					80-120
CADMIUM	0.010	0.00936	94					80-120
ANTIMONY	0.0	-0.000276						(-.002 to .002)
BARIUM	0.0	0.000579						(-.005 to .005)
THALLIUM	0.0	-0.000075						(-.001 to .001)
LEAD	0.0	0.000825						(-.002 to .002)

(1) The following qualifiers are used: * : Value outside of acceptable limits

Comments:LDR for Al is 50 PPM
NOTE:

2655

Form 5B
ICPMS Interference Check A Summary

Analysis Method: 6020
Date Analyzed: 3/27/2008
Instrument ID: ELAN DRCe

SDG No.: TWK-001

Concentration Units: mg/L

Analyte	Int. Check Concentration Added	Initial Analysis						Acceptable Limits (%)
		Int. Check Concentration Found	Recovery	(1)	Int. Check Concentration Found	Recovery	(1)	
BERYLLIUM	0.0	0.000042						(-.001 to .001)
ALUMINUM	100	78.6	79	*				80-120
VANADIUM	0.0	-0.000268						(-.002 to .002)
CHROMIUM	0.0	0.013650		*				(-.002 to .002)
MANGANESE	0.0	0.006001		*				(-.004 to .004)
COBALT	0.0	0.001986						(-.005 to .005)
NICKEL	0.0	0.008774		*				(-.005 to .005)
COPPER	0.0	0.003359						(-.005 to .005)
ZINC	0.0	0.003676						(-.005 to .005)
ARSENIC	0.0	0.000213						(-.003 to .003)
SELENIUM	0.0	-0.001213						(-.005 to .005)
MOLYBDENUM	2.00	2.21	110					80-120
SILVER	0.0							(-.001 to .001)
CADMIUM	0.0	0.000584						(-.001 to .001)
ANTIMONY	0.0	0.000034						(-.002 to .002)
BARIUM	0.0	0.000521						(-.005 to .005)
THALLIUM	0.0	0.000069						(-.001 to .001)
LEAD	0.0	0.000194						(-.002 to .002)

(1) The following qualifiers are used: * : Value outside of acceptable limits

Comments: LDR for Al is 50PPM. Cr, Mn are known contaminants and Ni was contaminated in the solution by a new analyst. New standards were ordered.

3064

Form 5B2
ICPMS Interference Check AB Summary

Analysis Method: 6020
Date Analyzed: 3/27/2008
Instrument ID: ELAN DRCe

SDG No.: TWK-001

Concentration Units: mg/L

Analyte	Int. Check Concentration Added	Initial Analysis						Acceptable Limits (%)
		Int. Check Concentration Found	Recovery	(1)	Int. Check Concentration Found	Recovery	(1)	
BERYLLIUM	0.0	0.000046						(-.001 to .001)
ALUMINUM	100	80.1	80					80-120
VANADIUM	0.040	0.0382	96					80-120
CHROMIUM	0.020	0.0254	127	*				80-120
MANGANESE	0.020	0.0184	92					80-120
COBALT	0.040	0.0429	107					80-120
NICKEL	0.040	0.0440	110					80-120
COPPER	0.020	0.0211	106					80-120
ZINC	0.020	0.0202	101					80-120
ARSENIC	0.020	0.0188	94					80-120
SELENIUM	0.020	0.0168	84					80-120
MOLYBDENUM	2.00	2.19	109					80-120
SILVER	0.020							80-120
CADMIUM	0.010	0.00861	86					80-120
ANTIMONY	0.0	-0.000062						(-.002 to .002)
BARIUM	0.0	-0.000100						(-.005 to .005)
THALLIUM	0.0	0.000081						(-.001 to .001)
LEAD	0.0	0.001241						(-.002 to .002)

(1) The following qualifiers are used: * : Value outside of acceptable limits

Comments: The ICSA was contaminated during standard prep for Cr.
NOTE:

3065

EVALUATION OF INORGANIC DUPLICATE ANALYSIS PRECISION

Precision Objectives

	Compound >or=5xCRQL/MDL	Compound <5xCRQL
Aqueous	RPD<or=30%	Difference < or =CRQL/MDL
Solid	RPD<or=50%	Difference < or =2xCRQL/MDL
Air	RPD<or=20%	Difference < or =CRQL/MDL

Sample ID:	**03MW01S**		**DUP-01**				
Laboratory ID:							
Sample Date:	**03/11/08**		**03/11/08**				
Duplicate:	**DUP-01**		**03MW01S**				
	RESULT	**QUAL**	**RESULT**	**QUAL**	**RPD**	**CRQL/MDL**	**NOTES**
TOTAL METALS	**mg/L**		**mg/L**				
Aluminum	0.08	U	0.08	U	0.0	0.08	1, IN
Antimony	0.0012	J	0.0007	J	nc	0.002	2, IN
Arsenic	0.006	U	0.006	U	0.0	0.006	1, IN
Barium	0.111		0.111		0.0	0.006	1, IN
Beryllium	0.0001	J	0.00009	J	nc	0.001	2, IN
Cadmium	0.001	U	0.001	U	0.0	0.001	1, IN
Calcium	7.22		7.25		-0.4	0.11	1, IN
Chromium	0.005		0.0047		nc	0.002	2, IN
Cobalt	0.0002	J	0.0002	J	nc	0.006	2, IN
Copper	0.0003	J	0.0003	J	nc	0.006	2, IN
Iron	0.11	K	0.14	K	-24.0	0.07	1, IN
Lead	0.00006	J	0.00004	J	nc	0.002	2, IN
Magnesium	1.88		1.88		0.0	0.11	1, IN
Manganese	0.003	J	0.0028	J	nc	0.006	2, IN
Mercury	0.0005	U	0.0005	U	0.0	0.0005	1, IN
Nickel	0.0038	J	0.0039	J	nc	0.006	2, IN
Potassium	0.67		0.6		nc	0.56	2, IN
Selenium	0.003	J	0.003	J	nc	0.006	2, IN
Silver	0.001	U	0.001	U	0.0	0.001	1, IN
Sodium	12.3		12.3		0.0	0.56	1, IN
Thallium	0.001	U	0.001	U	0.0	0.001	1, IN
Vanadium	0.001	U	0.001	U	0.0	0.001	1, IN
Zinc	0.0028	J	0.0028	J	nc	0.006	2, IN
DISSOLVED METALS	**mg/L**		**mg/L**				
Aluminum	0.007	J	0.005	J	nc	0.08	2, IN
Antimony	0.0014	J	0.002	U	nc	0.002	2, IN
Arsenic	0.003	U	0.003	U	0.0	0.003	1, IN
Barium	0.104		0.102		1.9	0.005	1, IN
Beryllium	0.0002	J	0.001	U	nc	0.001	2, IN
Cadmium	0.001	U	0.001	U	0.0	0.001	1, IN
Calcium	7.69		7.84		-1.9	0.1	1, IN
Chromium	0.0061		0.0063		nc	0.002	2, IN
Cobalt	0.0002	J	0.0002	J	nc	0.005	2, IN
Copper	0.005	U	0.005	U	0.0	0.005	1, IN
Iron	0.06	U	0.009	J	nc	0.06	2, IN
Lead	0.002	U	0.002	U	0.0	0.002	1, IN
Magnesium	1.9	L	1.93	L	-1.6	0.1	1, IN
Manganese	0.0018	J	0.002	J	nc	0.004	2, IN
Mercury	0.00009	J	0.00009	J	nc	0.0005	2, IN
Nickel	0.0048	J	0.0054		nc	0.005	2, IN
Potassium	0.79		0.78		nc	0.5	2, IN
Selenium	0.003	J	0.003	J	nc	0.005	2, IN
Silver	0.001	U	0.001	U	0.0	0.001	1, IN
Sodium	12.7		12.8		-0.8	0.5	1, IN
Thallium	0.001	U	0.001	U	0.0	0.001	1, IN
Vanadium	0.001	U	0.001	U	0.0	0.001	1, IN
Zinc	0.0018	J	0.0015	J	nc	0.005	2, IN

NOTES

1 - When both results are > or = 5xCRQL/MDL, the acceptance limit is the relative percent difference must be < or = 30% for aqueous and air samples and must be < 50% for solid samples.

2 - When at least one of the results is < 5x CRQL/MDL, the acceptance limit is the difference between the results must be < or = CRQL/MDL for aqueous and air samples and < or = 2xCRQL/MDL for solid samples.

Q - The qualifier is entered to indicate if the anlayte was not detected or qualitatively questionable in the sample.

U - the compound was not detected in the sample at or above the associated numerical value.

NC - The RPD was not calculated because one of the results was not detected; the acceptance limit used is the difference between the results must be < or = CRQL/MDL for aqueous and air samples and < or = 2xCRQL/MDL for solid samples.

J - The positive results should be considered estimated.

B - The result should be considered non-detected or qualitatively questionable due to blank contamination.

IN - The results are acceptable.