

Laboratory Results

Geochemical Testing

Date: 29-Sep-11

CLIENT:	RESOURCE MANAGEMENT SERVICES	Client Sample ID:	RMS 2/9/20
Lab Order:	G1109782		
Project:	BS-P	Sampled By:	Client
Lab ID:	G1109782-002	Collection Date:	9/20/2011 11:00:00 AM
Matrix:	AQUEOUS	Received Date:	9/21/2011 6:13:57 PM

Analyses	Result	QL	Q	Units	DF	Date Analyzed
INORGANIC NON-METALS		SM 2310B(4A)				Analyst: LNW
Acidity to pH 8.2	-24	0		mg/L CaCO ₃	1	9/27/2011 4:35:00 PM
PHYSICAL TESTS		EPA 120.1				Analyst: LNW
Specific Conductance	603	1		µmhos/cm	1	9/27/2011 1:29:00 PM
PH BY SM 4500 H+B		SM4500-H+B				Analyst: LNW
Lab pH	6.74	0	H	su	1	9/27/2011 1:29:00 PM
INORGANIC NON-METALS		SM 2540 C				Analyst: KLS
Total dissolved solids	496	20		mg/L	1	9/22/2011 10:56:00 AM
PHYSICAL TESTS		SM 2540D				Analyst: KLS
Total suspended solids	6	5		mg/L	1	9/22/2011 8:53:31 AM
INORGANIC NON-METALS		ASTM D1067-02				Analyst: LNW
Alkalinity to pH 4.5	46	5		mg/L CaCO ₃	1	9/27/2011 1:29:00 PM
INORGANIC NON-METALS		EPA 300.0				Analyst: CAS
Nitrate - Nitrite	0.27	0.05		mg/L as N	1	9/21/2011 7:59:00 PM
INORGANIC NON-METALS		EPA 300.0				Analyst: CAS
Bromide	1.1	0.2		mg/L	1	9/21/2011 7:59:00 PM
Chloride	155	1		mg/L	1	9/21/2011 7:59:00 PM
Sulfate	14	2		mg/L	1	9/21/2011 7:59:00 PM
INORGANIC METALS		EPA 200.7				Analyst: JAS
Aluminum	< 0.1	0.1		mg/L	1	9/27/2011 1:07:00 AM
Barium	0.12	0.01		mg/L	1	9/27/2011 1:07:00 AM
Calcium	42.3	0.1		mg/L	1	9/27/2011 1:07:00 AM
Iron	0.14	0.05		mg/L	1	9/27/2011 1:07:00 AM
Magnesium	9.9	0.1		mg/L	1	9/27/2011 1:07:00 AM
Manganese	0.06	0.01		mg/L	1	9/27/2011 1:07:00 AM
Potassium	5.2	0.5		mg/L	1	9/27/2011 1:07:00 AM
Sodium	64.0	0.2		mg/L	1	9/27/2011 1:07:00 AM
Strontium	1.19	0.01		mg/L	1	9/27/2011 1:07:00 AM
Hardness (SM 2340B)	146	1.0		mg/L CaCO ₃	1	9/27/2011 1:07:00 AM

Laboratory Results

Geochemical Testing

Date: 29-Sep-11

CLIENT:	RESOURCE MANAGEMENT SERVICES	Client Sample ID:	RMS 3/9/20
Lab Order:	G1109782		
Project:	BS-P	Sampled By:	Client
Lab ID:	G1109782-003	Collection Date:	9/20/2011 11:20:00 AM
Matrix:	AQUEOUS	Received Date:	9/21/2011 6:13:57 PM

Analyses	Result	QL	Q	Units	DF	Date Analyzed
INORGANIC NON-METALS		SM 2310B(4A)				Analyst: LNW
Acidity to pH 8.2	-41	0		mg/L CaCO ₃	1	9/27/2011 4:34:00 PM
PHYSICAL TESTS		EPA 120.1				Analyst: LNW
Specific Conductance	137	1		µmhos/cm	1	9/27/2011 1:26:00 PM
PH BY SM 4500 H+B		SM4500-H+B				Analyst: LNW
Lab pH	7.37	0	H	su	1	9/27/2011 1:26:00 PM
INORGANIC NON-METALS		SM 2540 C				Analyst: KLS
Total dissolved solids	90	20		mg/L	1	9/22/2011 10:56:00 AM
PHYSICAL TESTS		SM 2540D				Analyst: KLS
Total suspended solids	< 5	5		mg/L	1	9/22/2011 8:53:39 AM
INORGANIC NON-METALS		ASTM D1067-02				Analyst: LNW
Alkalinity to pH 4.5	61	5		mg/L CaCO ₃	1	9/27/2011 1:26:00 PM
INORGANIC NON-METALS		EPA 300.0				Analyst: CAS
Nitrate - Nitrite	0.60	0.05		mg/L as N	1	9/21/2011 8:16:00 PM
INORGANIC NON-METALS		EPA 300.0				Analyst: CAS
Bromide	< 0.2	0.2		mg/L	1	9/21/2011 8:16:00 PM
Chloride	4	1		mg/L	1	9/21/2011 8:16:00 PM
Sulfate	10	2		mg/L	1	9/21/2011 8:16:00 PM
INORGANIC METALS		EPA 200.7				Analyst: JAS
Aluminum	< 0.1	0.1		mg/L	1	9/27/2011 1:44:00 AM
Barium	0.02	0.01		mg/L	1	9/27/2011 1:44:00 AM
Calcium	18.8	0.1		mg/L	1	9/27/2011 1:44:00 AM
Iron	< 0.05	0.05		mg/L	1	9/27/2011 1:44:00 AM
Magnesium	4.4	0.1		mg/L	1	9/27/2011 1:44:00 AM
Manganese	< 0.01	0.01		mg/L	1	9/27/2011 1:44:00 AM
Potassium	1.4	0.5		mg/L	1	9/27/2011 1:44:00 AM
Sodium	3.8	0.2		mg/L	1	9/27/2011 1:44:00 AM
Strontium	0.09	0.01		mg/L	1	9/27/2011 1:44:00 AM
Hardness (SM 2340B)	64.9	1.0		mg/L CaCO ₃	1	9/27/2011 1:44:00 AM

Laboratory Results

Geochemical Testing

Date: 29-Sep-11

CLIENT:	RESOURCE MANAGEMENT SERVICES	Client Sample ID:	RMS 4/9/20
Lab Order:	G1109782		
Project:	BS-P	Sampled By:	Client
Lab ID:	G1109782-004	Collection Date:	9/20/2011 11:35:00 AM
Matrix:	AQUEOUS	Received Date:	9/21/2011 6:13:57 PM

Analyses	Result	QL	Q	Units	DF	Date Analyzed
INORGANIC NON-METALS		SM 2310B(4A)				Analyst: LNW
Acidity to pH 8.2	-136	0		mg/L CaCO ₃	1	9/27/2011 4:39:00 PM
PHYSICAL TESTS		EPA 120.1				Analyst: LNW
Specific Conductance	360	1		µmhos/cm	1	9/27/2011 1:36:00 PM
PH BY SM 4500 H+B		SM4500-H+B				Analyst: LNW
Lab pH	8.12	0	H	su	1	9/27/2011 1:36:00 PM
INORGANIC NON-METALS		SM 2540 C				Analyst: KLS
Total dissolved solids	210	20		mg/L	1	9/22/2011 10:56:00 AM
PHYSICAL TESTS		SM 2540D				Analyst: KLS
Total suspended solids	11	5		mg/L	1	9/22/2011 8:53:42 AM
INORGANIC NON-METALS		ASTM D1067-02				Analyst: LNW
Alkalinity to pH 4.5	150	5		mg/L CaCO ₃	1	9/27/2011 1:36:00 PM
INORGANIC NON-METALS		EPA 300.0				Analyst: CAS
Nitrate - Nitrite	1.22	0.05		mg/L as N	1	9/21/2011 8:33:00 PM
INORGANIC NON-METALS		EPA 300.0				Analyst: CAS
Bromide	< 0.2	0.2		mg/L	1	9/21/2011 8:33:00 PM
Chloride	18	1		mg/L	1	9/21/2011 8:33:00 PM
Sulfate	17	2		mg/L	1	9/21/2011 8:33:00 PM
INORGANIC METALS		EPA 200.7				Analyst: JAS
Aluminum	< 0.1	0.1		mg/L	1	9/27/2011 1:51:00 AM
Barium	0.03	0.01		mg/L	1	9/27/2011 1:51:00 AM
Calcium	47.0	0.1		mg/L	1	9/27/2011 1:51:00 AM
Iron	< 0.05	0.05		mg/L	1	9/27/2011 1:51:00 AM
Magnesium	5.6	0.1		mg/L	1	9/27/2011 1:51:00 AM
Manganese	< 0.01	0.01		mg/L	1	9/27/2011 1:51:00 AM
Potassium	3.2	0.5		mg/L	1	9/27/2011 1:51:00 AM
Sodium	31.4	0.2		mg/L	1	9/27/2011 1:51:00 AM
Strontium	0.42	0.01		mg/L	1	9/27/2011 1:51:00 AM
Hardness (SM 2340B)	140	1.0		mg/L CaCO ₃	1	9/27/2011 1:51:00 AM



I.D. 56-00306 PA DEP

Shuttle/Cooler ID#: _____

CHAIN OF CUSTODY**Geochemical Testing**

Form F-5002, 01.04

Geochemical Testing • 2005 North Center Avenue • Somerset PA 15501 • (814) 443-1671 • Fax (814) 445-6729

Billing Client: <u>RMS</u>	Contact (Company): <u>RMS</u>	Phone: ()
Address: _____	e-mail: _____	Fax: ()
City: _____ State: _____ Zip: _____	Sampled by: _____	Preservatives by <u>Sampler</u> ☒ <u>GT</u>
WO#: (LAB USE ONLY) <u>C1165782</u>	Project: _____	PO/Quote#: _____

Sample Matrix:	GW Ground Water	SW Surface Water	PW Potable Water	WW Wastewater	SO Soil	SL Sludge	nHZ Not Hazardous / HZ Hazardous	PCBs
Sample Type:	G Grab	C Composite	D Distribution/DW	R Raw/DW	S Special/DW	O Other	Containers Supplied by: ☐ Client ☒ GT Lab	

Sample Location/ Description	Lab Number (LAB USE ONLY)	Sample Matrix	Date	Time (Military)	Sample Type	**Analyses Requested	Remarks/ Preservatives, etc	Number of Containers
**NOTE: IF multiple analytes from one bottle, OR if multiple bottles for one analyte, THEN list separately on one line UNLESS LISTED ON ATTACHED FIELD LOG								
<u>RMS 1/9/20¹¹</u>	<u>001</u>	<u>nHZ / HZ</u> <u>PW</u>	<u>9-20-11</u>	<u>Various</u> <u>10:30</u>	<u>G</u>	<u>BS-P + O + G + A1 + K</u>	Field Filtered: Y / ☒	<u>4</u>
<u>RMS 2/9/20¹¹</u>	<u>002</u>	<u>nHZ / HZ</u> <u>SW</u>	↓	<u>11:00</u>		<u>BS-P + A1 + K</u>	Field Filtered: Y / ☒	<u>3</u>
<u>RMS 3/9/20¹¹</u>	<u>003</u>	<u>nHZ / HZ</u> <u>SW</u>		<u>11:20</u>		<u>"</u>	Field Filtered: Y / ☒	<u>3</u>
<u>RMS 4/9/20¹¹</u>	<u>004</u>	<u>nHZ / HZ</u> <u>SW</u>		<u>11:35</u>		<u>"</u>	Field Filtered: Y / ☒	<u>3</u>
<u>RMS 6/9/20¹¹</u>	<u>005</u>	<u>nHZ / HZ</u> <u>SW</u>		<u>18:45</u>	↓	<u>BS-P Group</u>	Field Filtered: Y / ☒	<u>3</u>
		<u>nHZ / HZ</u>					Field Filtered: Y / ☒	
		<u>nHZ / HZ</u>					Field Filtered: Y / N	
		<u>nHZ / HZ</u>					Field Filtered: Y / N	

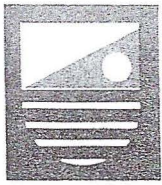
Waiver of Responsibility: Although samples were delivered without ice and at a temperature greater than 6° C, the samples are to be analyzed.

Note other preservation issues:

Name: _____ Date: ____/____/____

Relinquished by (Company & Signature)	Date	Time (Military)	Received by (Company & Signature)	Date	Time (Military)
<u>[Signature]</u>	<u>9-21-11</u>	<u>1005</u>	<u>[Signature]</u>	<u>9-21-11</u>	<u>1430</u>
<u>[Signature]</u>	<u>9-21-11</u>	<u>1700</u>	<u>B. [Signature]</u>	<u>9-21-11</u>	<u>1818</u>

Ice present on receipt: ☒ Yes or ☐ No Cooler Temp (°C) on receipt: 3



GEOCHEMICAL TESTING

Environmental and Energy Analysis

EPA Permit# PAS2D020BLCE
DEP Permit# 37-033-27255-00-00

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Thursday, September 29, 2011

RICK BONAZZA
RESOURCE MANAGEMENT SERVICES
65 FENTON ROAD
INDIANA, PA 15701

Order No.: G1109711

Dear RICK BONAZZA:

Geochemical Testing received 3 sample(s) on 9/20/2011 for the analyses presented in the following report.

There were no problems with the analyses and all QC data met NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Timothy W. Bergstresser
Director of Technical Services

Geochemical Testing

Date: 29-Sep-11

CLIENT: RESOURCE MANAGEMENT SERVICES

Project:

Lab Order: G1109711

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Legend:

ND - Not Detected at the Quantitation Limit

J - Indicates an estimated value.

U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.

B - Analyte detected in the associated Method Blank

Q - Qualifier

QL - Quantitation Limit

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

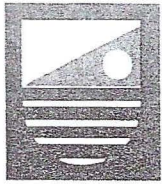
** - Value exceeds Action Limit

H - Method Hold Time Exceeded

MCL - Contaminant Limit



I.D. 56-00306 PA DEP



GEOCHEMICAL TESTING

Environmental and Energy Analysis

EPA Permit# PAS2D020BLCE
DEP Permit# 37-033-27255-00-00

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Friday, October 07, 2011

RICK BONAZZA
RESOURCE MANAGEMENT SERVICES
65 FENTON ROAD
INDIANA, PA 15701

RE: BS-P

Order No.: G1109712

Dear RICK BONAZZA:

Geochemical Testing received 8 sample(s) on 9/20/2011 for the analyses presented in the following report.

There were no problems with the analyses and all QC data met NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Timothy W. Bergstresser
Director of Technical Services

Geochemical Testing

Date: 07-Oct-11

CLIENT: RESOURCE MANAGEMENT SERVICES
Project: BS-P
Lab Order: G1109712

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Legend: ND - Not Detected at the Quantitation Limit

J - Indicates an estimated value.

U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.

B - Analyte detected in the associated Method Blank

Q - Qualifier

QL -Quantitation Limit

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

** - Value exceeds Action Limit

H - Method Hold Time Exceeded

MCL - Contaminant Limit



I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: 29-Sep-11

CLIENT:	RESOURCE MANAGEMENT SERVICES	Client Sample ID:	1/9/19
Lab Order:	G1109711		
Project:		Sampled By:	Client
Lab ID:	G1109711-001	Collection Date:	9/20/2011 10:00:00 AM
Matrix:	AQUEOUS	Received Date:	9/20/2011 6:22:21 PM

Analyses	Result	QL	Q	Units	DF	Date Analyzed
PH BY SM 4500 H+B						Analyst: LNW
Lab pH	6.10		0	su	1	9/26/2011 11:59:00 AM
INORGANIC NON-METALS						Analyst: KLS
Total dissolved solids	68		20	mg/L	1	9/21/2011 8:59:00 AM

Laboratory Results

Geochemical Testing

Date: 29-Sep-11

CLIENT:	RESOURCE MANAGEMENT SERVICES	Client Sample ID:	2/9/19
Lab Order:	G1109711		
Project:		Sampled By:	Client
Lab ID:	G1109711-002	Collection Date:	9/20/2011 10:30:00 AM
Matrix:	AQUEOUS	Received Date:	9/20/2011 6:22:21 PM

Analyses	Result	QL	Q	Units	DF	Date Analyzed
PH BY SM 4500 H+B						Analyst: LNW
Lab pH	6.49		0	su	1	9/26/2011 12:00:00 PM
INORGANIC NON-METALS						Analyst: KLS
Total dissolved solids	68		20	mg/L	1	9/21/2011 8:59:00 AM