ANALYTICAL SUMMARY REPORT

March 06, 2012

Atkins North America Missoula
1120 Cedar St
Missoula, MT 59802-3911

Workorder No.: B12022049 Quote ID: B2325 - East Poplar

Project Name: Poplar PWS

Energy Laboratories Inc Billings MT received the following 5 samples for Atkins North America Missoula on 2/28/2012 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B12022049-001	4298-COP1-UNT1,2,3	02/28/12 9:07	02/28/12	Aqueous	Metals by ICP/ICPMS, Total Anions by Ion Chromatography Metals Preparation by EPA 200.2 Solids, Total Dissolved 524-Purgeable Organics, SDWA
B12022049-002	4298-COP1-TRE1, 2, 3	02/28/12 9:37	02/28/12	Aqueous	Same As Above
B12022049-003	4298-COP1-DIST1, 2, 3	02/28/12 10:12	02/28/12	Aqueous	Same As Above
B12022049-004	4298-COP4-UNT1, 2, 3	02/28/12 8:30	02/28/12	Aqueous	Same As Above
B12022049-005	4298-AZURE-1, 2, 3, 4	02/28/12 11:20	02/28/12	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Total Anions by Ion Chromatography Metals Preparation by EPA 200.2 Solids, Total Dissolved 524-Purgeable Organics, SDWA

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2012.03.06 08:46:34 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Atkins North America Missoula
Project: Poplar PWS
Lab ID: B12022049-001
Client Sample ID 4298-COP1-UNT1,2,3

Report Date: 03/06/12
Collection Date: 02/28/12 09:07
DateReceived: 02/28/12
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	1200	mg/L		10		A2540 C	03/02/12 15:08 / qed
INORGANICS							
Chloride	216	mg/L	D	2		E300.0	02/29/12 20:54 / jrs
Sulfate	245	mg/L	D	10		E300.0	02/29/12 20:54 / jrs
Bromide	2	mg/L	D	1		E300.0	03/01/12 12:21 / jrs
METALS, TOTAL							
Barium	ND	mg/L		0.1		E200.7	02/29/12 14:02 / rlh
Calcium	65	mg/L		1		E200.7	02/29/12 14:02 / rlh
Lithium	0.096	mg/L		0.005		E200.7	02/29/12 14:02 / rlh
Manganese	0.51	mg/L		0.01		E200.7	02/29/12 14:02 / rlh
Sodium	316	mg/L		1		E200.7	02/29/12 14:02 / rlh
Strontium	0.7	mg/L		0.1		E200.7	02/29/12 14:02 / rlh
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	ug/L		0.50	5	E524.2	03/02/12 15:11 / jmh
Ethylbenzene	ND	ug/L		0.50	700	E524.2	03/02/12 15:11 / jmh
Toluene	ND	ug/L		0.50	1000	E524.2	03/02/12 15:11 / jmh
m+p-Xylenes	ND	ug/L		0.50		E524.2	03/02/12 15:11 / jmh
o-Xylene	ND	ug/L		0.50		E524.2	03/02/12 15:11 / jmh
Xylenes, Total	ND	ug/L		0.50	10000	E524.2	03/02/12 15:11 / jmh
Surr: p-Bromofluorobenzene	117	%REC		80-120		E524.2	03/02/12 15:11 / jmh
Surr: 1,2-Dichloroethane-d4	102	%REC		74-127		E524.2	03/02/12 15:11 / jmh
Surr: Toluene-d8	106	%REC		80-120		E524.2	03/02/12 15:11 / jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Atkins North America Missoula
Project: Poplar PWS
Lab ID: B12022049-002
Client Sample ID 4298-COP1-TRE1, 2, 3

Report Date: 03/06/12
Collection Date: 02/28/12 09:37
DateReceived: 02/28/12
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	1190	mg/L		10		A2540 C	03/02/12 15:10 / qed
INORGANICS							
Chloride	239	mg/L	D	2		E300.0	02/29/12 21:24 / jrs
Sulfate	249	mg/L	D	10		E300.0	02/29/12 21:24 / jrs
Bromide	1	mg/L	D	1		E300.0	03/01/12 12:32 / jrs
METALS, TOTAL							
Barium	ND	mg/L		0.1		E200.7	02/29/12 14:06 / rlh
Calcium	64	mg/L		1		E200.7	02/29/12 14:06 / rlh
Lithium	0.093	mg/L		0.005		E200.7	02/29/12 14:06 / rlh
Manganese	0.08	mg/L		0.01		E200.7	02/29/12 14:06 / rlh
Sodium	312	mg/L		1		E200.7	02/29/12 14:06 / rlh
Strontium	0.6	mg/L		0.1		E200.7	02/29/12 14:06 / rlh
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	ug/L		0.50	5	E524.2	03/02/12 15:42 / jmh
Ethylbenzene	ND	ug/L		0.50	700	E524.2	03/02/12 15:42 / jmh
Toluene	ND	ug/L		0.50	1000	E524.2	03/02/12 15:42 / jmh
m+p-Xylenes	ND	ug/L		0.50		E524.2	03/02/12 15:42 / jmh
o-Xylene	ND	ug/L		0.50		E524.2	03/02/12 15:42 / jmh
Xylenes, Total	ND	ug/L		0.50	10000	E524.2	03/02/12 15:42 / jmh
Surr: p-Bromofluorobenzene	122	%REC	S	80-120		E524.2	03/02/12 15:42 / jmh
Surr: 1,2-Dichloroethane-d4	104	%REC		74-127		E524.2	03/02/12 15:42 / jmh
Surr: Toluene-d8	105	%REC		80-120		E524.2	03/02/12 15:42 / jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Atkins North America Missoula
Project: Poplar PWS
Lab ID: B12022049-003
Client Sample ID 4298-COP1-DIST1, 2, 3

Report Date: 03/06/12
Collection Date: 02/28/12 10:12
DateReceived: 02/28/12
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	1190	mg/L		10		A2540 C	03/02/12 15:11 / qed
INORGANICS							
Chloride	229	mg/L	D	2		E300.0	02/29/12 21:34 / jrs
Sulfate	242	mg/L	D	10		E300.0	02/29/12 21:34 / jrs
Bromide	1	mg/L	D	1		E300.0	03/01/12 12:42 / jrs
METALS, TOTAL							
Barium	ND	mg/L		0.1		E200.7	02/29/12 14:10 / rlh
Calcium	64	mg/L		1		E200.7	02/29/12 14:10 / rlh
Lithium	0.096	mg/L		0.005		E200.7	02/29/12 14:10 / rlh
Manganese	0.08	mg/L		0.01		E200.7	02/29/12 14:10 / rlh
Sodium	315	mg/L		1		E200.7	02/29/12 14:10 / rlh
Strontium	0.7	mg/L		0.1		E200.7	02/29/12 14:10 / rlh
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	ug/L		0.50	5	E524.2	03/02/12 16:12 / jmh
Ethylbenzene	ND	ug/L		0.50	700	E524.2	03/02/12 16:12 / jmh
Toluene	ND	ug/L		0.50	1000	E524.2	03/02/12 16:12 / jmh
m+p-Xylenes	ND	ug/L		0.50		E524.2	03/02/12 16:12 / jmh
o-Xylene	ND	ug/L		0.50		E524.2	03/02/12 16:12 / jmh
Xylenes, Total	ND	ug/L		0.50	10000	E524.2	03/02/12 16:12 / jmh
Surr: p-Bromofluorobenzene	124	%REC	S	80-120		E524.2	03/02/12 16:12 / jmh
Surr: 1,2-Dichloroethane-d4	109	%REC		74-127		E524.2	03/02/12 16:12 / jmh
Surr: Toluene-d8	105	%REC		80-120		E524.2	03/02/12 16:12 / jmh

Report Definitions:
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QCL - Quality control limit.
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MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Atkins North America Missoula
Project: Poplar PWS
Lab ID: B12022049-004
Client Sample ID 4298-COP4-UNT1, 2, 3

Report Date: 03/06/12
Collection Date: 02/28/12 08:30
DateReceived: 02/28/12
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	1190	mg/L		10		A2540 C	03/02/12 15:12 / qed
INORGANICS							
Chloride	217	mg/L	D	2		E300.0	02/29/12 21:44 / jrs
Sulfate	245	mg/L	D	10		E300.0	02/29/12 21:44 / jrs
Bromide	2	mg/L	D	1		E300.0	03/01/12 12:52 / jrs
METALS, TOTAL							
Barium	ND	mg/L		0.1		E200.7	02/29/12 14:14 / rlh
Calcium	64	mg/L		1		E200.7	02/29/12 14:14 / rlh
Lithium	0.097	mg/L		0.005		E200.7	02/29/12 14:14 / rlh
Manganese	0.51	mg/L		0.01		E200.7	02/29/12 14:14 / rlh
Sodium	313	mg/L		1		E200.7	02/29/12 14:14 / rlh
Strontium	0.7	mg/L		0.1		E200.7	02/29/12 14:14 / rlh
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	ug/L		0.50	5	E524.2	03/02/12 16:42 / jmh
Ethylbenzene	ND	ug/L		0.50	700	E524.2	03/02/12 16:42 / jmh
Toluene	ND	ug/L		0.50	1000	E524.2	03/02/12 16:42 / jmh
m+p-Xylenes	ND	ug/L		0.50		E524.2	03/02/12 16:42 / jmh
o-Xylene	ND	ug/L		0.50		E524.2	03/02/12 16:42 / jmh
Xylenes, Total	ND	ug/L		0.50	10000	E524.2	03/02/12 16:42 / jmh
Surr: p-Bromofluorobenzene	122	%REC	S	80-120		E524.2	03/02/12 16:42 / jmh
Surr: 1,2-Dichloroethane-d4	106	%REC		74-127		E524.2	03/02/12 16:42 / jmh
Surr: Toluene-d8	102	%REC		80-120		E524.2	03/02/12 16:42 / jmh

Report Definitions:
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QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Atkins North America Missoula
Project: Poplar PWS
Lab ID: B12022049-005
Client Sample ID 4298-AZURE-1, 2, 3, 4

Report Date: 03/06/12
Collection Date: 02/28/12 11:20
DateReceived: 02/28/12
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	767	mg/L		10		A2540 C	03/02/12 15:13 / qed
INORGANICS							
Chloride	21	mg/L		1		E300.0	02/29/12 21:54 / jrs
Sulfate	169	mg/L		1		E300.0	02/29/12 21:54 / jrs
Bromide	ND	mg/L		0.5		E300.0	02/29/12 21:54 / jrs
METALS, DISSOLVED							
Calcium	44	mg/L		1		E200.7	02/29/12 12:37 / rlh
Magnesium	30	mg/L		1		E200.7	02/29/12 12:37 / rlh
Potassium	4	mg/L		1		E200.7	02/29/12 12:37 / rlh
Sodium	203	mg/L		1		E200.7	02/29/12 12:37 / rlh
METALS, TOTAL							
Barium	ND	mg/L		0.1		E200.7	02/29/12 14:18 / rlh
Calcium	45	mg/L		1		E200.7	02/29/12 14:18 / rlh
Lithium	0.087	mg/L		0.005		E200.7	02/29/12 14:18 / rlh
Manganese	0.12	mg/L		0.01		E200.7	02/29/12 14:18 / rlh
Sodium	196	mg/L		1		E200.7	02/29/12 14:18 / rlh
Strontium	0.6	mg/L		0.1		E200.7	02/29/12 14:18 / rlh
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	ug/L		0.50	5	E524.2	03/02/12 17:12 / jmh
Ethylbenzene	ND	ug/L		0.50	700	E524.2	03/02/12 17:12 / jmh
Toluene	ND	ug/L		0.50	1000	E524.2	03/02/12 17:12 / jmh
m+p-Xylenes	ND	ug/L		0.50		E524.2	03/02/12 17:12 / jmh
o-Xylene	ND	ug/L		0.50		E524.2	03/02/12 17:12 / jmh
Xylenes, Total	ND	ug/L		0.50	10000	E524.2	03/02/12 17:12 / jmh
Surr: p-Bromofluorobenzene	124	%REC	S	80-120		E524.2	03/02/12 17:12 / jmh
Surr: 1,2-Dichloroethane-d4	106	%REC		74-127		E524.2	03/02/12 17:12 / jmh
Surr: Toluene-d8	102	%REC		80-120		E524.2	03/02/12 17:12 / jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Atkins North America Missoula
Report Date: 03/05/12
Project: Poplar PWS
Work Order: B12022049

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: TDS120302A	
Sample ID: MBLK1		Method Blank				Run: BAL #11_120302A			03/02/12 14:55	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	10						
Sample ID: LCS1		Laboratory Control Sample				Run: BAL #11_120302A			03/02/12 14:56	
Solids, Total Dissolved TDS @ 180 C		1650	mg/L	10	99	90	110			
Sample ID: B12022025-001A MS		Sample Matrix Spike				Run: BAL #11_120302A			03/02/12 15:06	
Solids, Total Dissolved TDS @ 180 C		2230	mg/L	10	90	90	110			
Sample ID: B12022049-001A DUP		Sample Duplicate				Run: BAL #11_120302A			03/02/12 15:08	
Solids, Total Dissolved TDS @ 180 C		1210	mg/L	10		90	110	0.3	5	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Atkins North America Missoula **Report Date:** 03/05/12

Project: Poplar PWS **Work Order:** B12022049

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: ICP203-B_120229A	
Sample ID: ICV	8	Continuing Calibration Verification Standard							02/29/12 10:35	
Barium		2.49	mg/L	0.10	100	95	105			
Calcium		25.8	mg/L	1.0	103	95	105			
Lithium		1.29	mg/L	0.10	104	95	105			
Magnesium		25.0	mg/L	1.0	100	95	105			
Manganese		2.43	mg/L	0.010	97	95	105			
Potassium		25.9	mg/L	1.0	104	95	105			
Sodium		25.5	mg/L	1.0	102	95	105			
Strontium		2.53	mg/L	0.10	101	95	105			
Method: E200.7									Batch: R181240	
Sample ID: MB-6500DIS120229A	8	Method Blank				Run: ICP203-B_120229A			02/29/12 10:58	
Barium		ND	mg/L	0.0002						
Calcium		ND	mg/L	0.01						
Lithium		ND	mg/L	0.001						
Magnesium		ND	mg/L	0.008						
Manganese		ND	mg/L	0.0004						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.01						
Strontium		ND	mg/L	0.00010						
Sample ID: LFB-6500DIS120229A	8	Laboratory Fortified Blank				Run: ICP203-B_120229A			02/29/12 11:02	
Barium		1.00	mg/L	0.10	100	85	115			
Calcium		51.5	mg/L	1.0	103	85	115			
Lithium		1.02	mg/L	0.10	102	85	115			
Magnesium		50.8	mg/L	1.0	102	85	115			
Manganese		4.95	mg/L	0.010	99	85	115			
Potassium		50.6	mg/L	1.0	101	85	115			
Sodium		51.4	mg/L	1.0	103	85	115			
Strontium		1.02	mg/L	0.10	102	85	115			
Sample ID: B12021977-001CMS2	8	Sample Matrix Spike				Run: ICP203-B_120229A			02/29/12 13:04	
Barium		1.07	mg/L	0.050	103	70	130			
Calcium		120	mg/L	1.0	94	70	130			
Lithium		1.26	mg/L	0.10	119	70	130			
Magnesium		81.3	mg/L	1.0	100	70	130			
Manganese		4.94	mg/L	0.0010	98	70	130			
Potassium		64.2	mg/L	1.0	118	70	130			
Sodium		119	mg/L	1.0	108	70	130			
Strontium		2.16	mg/L	0.010	98	70	130			
Sample ID: B12021977-001CMSD2	8	Sample Matrix Spike Duplicate				Run: ICP203-B_120229A			02/29/12 13:08	
Barium		1.07	mg/L	0.050	104	70	130	0.6	20	
Calcium		121	mg/L	1.0	95	70	130	0.3	20	
Lithium		1.27	mg/L	0.10	120	70	130	1.1	20	
Magnesium		81.9	mg/L	1.0	101	70	130	0.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Atkins North America Missoula **Report Date:** 03/05/12

Project: Poplar PWS **Work Order:** B12022049

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: R181240
Sample ID: B12021977-001CMSD2	8	Sample Matrix Spike Duplicate				Run: ICP203-B_120229A			02/29/12 13:08	
Manganese		4.99	mg/L	0.0010	98	70	130	1.0	20	
Potassium		63.8	mg/L	1.0	117	70	130	0.6	20	
Sodium		120	mg/L	1.0	108	70	130	0.3	20	
Strontium		2.19	mg/L	0.010	101	70	130	1.3	20	
Sample ID: B12021950-001BMS2	8	Sample Matrix Spike				Run: ICP203-B_120229A			02/29/12 13:35	
Barium		1.02	mg/L	0.050	99	70	130			
Calcium		111	mg/L	1.0	99	70	130			
Lithium		1.03	mg/L	0.10	100	70	130			
Magnesium		80.9	mg/L	1.0	101	70	130			
Manganese		4.89	mg/L	0.0010	97	70	130			
Potassium		53.6	mg/L	1.0	99	70	130			
Sodium		167	mg/L	1.0	92	70	130			
Strontium		1.87	mg/L	0.010	98	70	130			
Sample ID: B12021950-001BMSD2	8	Sample Matrix Spike Duplicate				Run: ICP203-B_120229A			02/29/12 13:47	
Barium		1.03	mg/L	0.050	100	70	130	0.7	20	
Calcium		113	mg/L	1.0	101	70	130	1.1	20	
Lithium		1.04	mg/L	0.10	100	70	130	0.2	20	
Magnesium		81.3	mg/L	1.0	102	70	130	0.5	20	
Manganese		4.97	mg/L	0.0010	99	70	130	1.7	20	
Potassium		53.7	mg/L	1.0	99	70	130	0.0	20	
Sodium		166	mg/L	1.0	90	70	130	0.5	20	
Strontium		1.88	mg/L	0.010	99	70	130	0.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Atkins North America Missoula **Report Date:** 03/05/12

Project: Poplar PWS **Work Order:** B12022049

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Analytical Run: IC203-B_120229A	
Sample ID: ICV022912-11	3	Initial Calibration Verification Standard							02/29/12 15:40	
Chloride		24.7	mg/L	1.0	99	90	110			
Sulfate		102	mg/L	1.0	102	90	110			
Bromide		12.2	mg/L	0.50	98	90	110			
Method: E300.0									Batch: R181275	
Sample ID: ICB022912-12	3	Method Blank				Run: IC203-B_120229A			02/29/12 15:50	
Chloride		ND	mg/L	0.05						
Sulfate		ND	mg/L	0.04						
Bromide		ND	mg/L	0.02						
Sample ID: LFB022912-13	3	Laboratory Fortified Blank				Run: IC203-B_120229A			02/29/12 16:00	
Chloride		23.9	mg/L	1.0	96	90	110			
Sulfate		99.7	mg/L	1.1	100	90	110			
Bromide		48.1	mg/L	0.53	96	90	110			
Sample ID: B12022049-001AMS	3	Sample Matrix Spike				Run: IC203-B_120229A			02/29/12 21:04	
Chloride		480	mg/L	2.6	105	90	110			
Sulfate		1310	mg/L	11	106	90	110			
Bromide		514	mg/L	5.3	103	90	110			
Sample ID: B12022049-001AMSD	3	Sample Matrix Spike Duplicate				Run: IC203-B_120229A			02/29/12 21:14	
Chloride		485	mg/L	2.6	107	90	110	1.0	20	
Sulfate		1320	mg/L	11	108	90	110	1.2	20	
Bromide		525	mg/L	5.3	105	90	110	2.0	20	
Method: E300.0									Analytical Run: IC203-B_120301A	
Sample ID: ICV030112-11		Initial Calibration Verification Standard							03/01/12 11:51	
Bromide		12.3	mg/L	0.50	99	90	110			
Method: E300.0									Batch: R181359	
Sample ID: ICB030112-12		Method Blank				Run: IC203-B_120301A			03/01/12 12:01	
Bromide		ND	mg/L	0.02						
Sample ID: LFB030112-13		Laboratory Fortified Blank				Run: IC203-B_120301A			03/01/12 12:11	
Bromide		49.3	mg/L	0.53	99	90	110			
Sample ID: B12022076-002AMS		Sample Matrix Spike				Run: IC203-B_120301A			03/01/12 13:12	
Bromide		512	mg/L	5.3	102	90	110			
Sample ID: B12022076-002AMSD		Sample Matrix Spike Duplicate				Run: IC203-B_120301A			03/01/12 13:22	
Bromide		509	mg/L	5.3	102	90	110	0.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Atkins North America Missoula **Report Date:** 03/06/12

Project: Poplar PWS **Work Order:** B12022049

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E524.2								Analytical Run: R181457	
Sample ID: ccv030212	Continuing Calibration Verification Standard							03/02/12 10:21	
Benzene	5.28	ug/L	0.50	106	70	130			
Ethylbenzene	5.04	ug/L	0.50	101	70	130			
Toluene	5.24	ug/L	0.50	105	70	130			
m+p-Xylenes	11.1	ug/L	0.50	111	70	130			
o-Xylene	5.20	ug/L	0.50	104	70	130			
Xylenes, Total	16.3	ug/L	0.50		0	0			
Surr: p-Bromofluorobenzene			0.50	105	80	120			
Surr: 1,2-Dichloroethane-d4			0.50	96	74	127			
Surr: Toluene-d8			0.50	105	80	120			
Method: E524.2								Batch: R181457	
Sample ID: lcs030212	Laboratory Control Sample				Run: VOASATURN_120302A			03/02/12 11:38	
Benzene	5.08	ug/L	0.50	102	70	130			
Ethylbenzene	4.96	ug/L	0.50	99	70	130			
Toluene	5.12	ug/L	0.50	102	70	130			
m+p-Xylenes	10.2	ug/L	0.50	102	70	130			
o-Xylene	4.96	ug/L	0.50	99	70	130			
Surr: p-Bromofluorobenzene			0.50	106	80	120			
Surr: 1,2-Dichloroethane-d4			0.50	101	74	127			
Surr: Toluene-d8			0.50	104	80	120			
Sample ID: blk030212	Method Blank				Run: VOASATURN_120302A			03/02/12 12:39	
Benzene	ND	ug/L	0.50						
Ethylbenzene	ND	ug/L	0.50						
Toluene	ND	ug/L	0.50						
m+p-Xylenes	ND	ug/L	0.50						
o-Xylene	ND	ug/L	0.50						
Xylenes, Total	ND	ug/L	0.50						
Surr: p-Bromofluorobenzene			0.50	122	80	120			S
Surr: 1,2-Dichloroethane-d4			0.50	102	74	127			
Surr: Toluene-d8			0.50	102	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

Workorder Receipt Checklist

Atkins North America Missoula

B12022049

Login completed by: Genoa R. Carver
Date Received: 2/28/2012
Reviewed by: BL2000\kmcdonald
Received by: jrz
Reviewed Date: 3/1/2012
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Container/Temp Blank temperature:	1.4°C On Ice		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Contact and Corrective Action Comments:

Sample 4298-COP4-TRE1, 2, 3 should read 4298-COP4-UNT1, 2, 3 per Tyler Etzel.

Trip Blank received broken.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: ATKINS	Project Name, PWS, Permit, Etc. POPLAR PWS	Sample Origin State: MT	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: 1120 CEDAR St MISSOULA, MT 59802	Contact Name: TYLER ETZEL Phone/Fax: 406 532-7249	Email: TYLER.ETZEL@ATKINSGLOBAL.COM	Sampler: (Please Print) BRENT MERRITT
Invoice Address: SAME	Invoice Contact & Phone: CHRIS HALL	Purchase Order: 10000 4298	Quote/Bottle Order: 55890

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

RUSH: Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: HAND
Cooler ID(s):
Receipt Temp 1.4 °C
On Ice: Yes No
Custody Seal Y N
Bottles/Coolers B C
Intact Y N
Signature Match Y N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O; Air Water Soils/Solids Vegetation Bioassay Other)	TDS, SULFATE	CHLORIDE, BROMIDE	E524.2 BTEX ONLY	Ba Ca Li (T)	Mn Na Sr (T)					SEE ATTACHED	Normal Turnaround (TAT)			LABORATORY USE ONLY
1 4298-COPI-UNT 1	2/28/12	907	1W	X	X									X		B12022049-001	
2 4298-COPI-UNT 2		907	3W			X								X			"
3 4298-COPI-UNT 3		907	1W				X	X						X			"
4 4298-COPI-TRE 1		937	1W	X	X									X			-002
5 4298-COPI-TRE 2		937	3W			X								X			"
6 4298-COPI-TRE 3		937	1W				X	X						X			"
7 4298-COPI-DIST 1		1012	1W	X	X									X			-003
8 4298-COPI-DIST 2		1012	3W			X								X			"
9 4298-COPI-DIST 3		1012	1W				X	X						X			"
10 4298-COPI-TRE 1		830	1W	X	X									X			-004

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
BRENT E. MERRITT	2/28/12 1620	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: SP ZOPMER	2/28/12 1620	[signature]

Sample Disposal: Return to Client: _____ Lab Disposal: X

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

Chain of Custody and Analytical Request Record

ENERGY LABORATORIES

PLEASE PRINT (Provide as much information as possible.)

Company Name: ATKINS

Project Name, PWS, Permit, Etc.: POPLAR PWS

Sample Origin — State:

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address:

Contact Name: Phone/Fax: Email:

Sampler: (Please Print)

Invoice Address:

Invoice Contact & Phone:

Purchase Order: 10004298

Quote/Bottle Order: 55890

Special Report/Formats:

☐ DW
☐ POTW/WWTP
☐ State:
☐ Other:

☐ EDD/EDT (Electronic Data) Format:
☐ LEVEL IV
☐ NELAC

ANALYSIS REQUESTED

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: HAND

Cooler ID(s):

Receipt Temp: 1.4 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	TDS, Sulfate, Chloride, Bromide	E524.2 BTEX only	Ba Ca Li (T)	Mn, Na, Sr (T)	Diss Ca, Mg, K, Na		SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments:	LABORATORY USE ONLY
1 4298-COPY-TRE2	2/28/12	1012	3W		X						X			B12022049-004
2 4298-COPY-TRE3		1012	1W			X	X				X			"
3 4298-AZURE-1		1120	1W	X	X						X			-005
4 4298-AZURE-2		1120	3W		X						X			"
5 4298-AZURE-3		1120	1W			X	X				X			"
6 4298-AZURE-4		1120	1W					X			X		field filtered	"
7														2/28/12
8 TRIP BLANK	–	–	1W								X			~~006~~
9 TB011112TSSHP0255														~~006~~
10														

Custody Record MUST be Signed

Relinquished by (print): BRENT E. MERRITT Date/Time: 2/28/12 1620 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: JR ZORMEIER 2/28/12 1620 Signature: [signature]

Sample Disposal: Return to Client: Lab Disposal: X

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.