



NEILSON RESEARCH CORPORATION

Environmental Testing Laboratory

10/8/2014

Sherri Miyazaki
Box R Waterlab
567 NW Second Street
Prineville, OR 97754

TEL: 541-447-4911
FAX (541) 447-4917

RE: BRW X016474-City of Antelope

Order No.: 1409B53

Dear Sherri Miyazaki:

Neilson Research Corporation received 2 sample(s) on 9/30/2014 for the analyses presented in the following report.

The results relate only to the parameters tested or to the sample as received by the laboratory. This report shall not be reproduced except in full, without the written approval of Neilson Research Corporation. If you have any questions regarding these test results, please feel free to call.

Sincerely,
Neilson Research Corporation

Alec C Smith
Project Manager

Bacteria ___ Nitrate ___ Arsenic ___
Reg SOC ___ IOC ___ Reg VOC ___
 DBP's ___ TOC/Alk ___ Lead & Copper ___
Gross Alpha ___ Rad 226/228 ___ Uranium ___
Other ___
Will be sent to State via Pdf On 10/8/14

Neilson Research Corporation

245 South Grape Street, Medford, Oregon 97501 541-770-5678 Fax 541-770-2901

Analysis Report

ORELAP 100016
EPA OR00028

CLIENT: Box R Waterlab
Project: BRW X016474-City of Antelope
Lab Order: 1409B53

Date: 08-Oct-14

CASE NARRATIVE

The analyses were performed according to the guidelines in the Neilson Research Corporation Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

Neilson Research Corporation certifies that this report is in compliance with the requirements of NELAP. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Neilson Research Corporation

245 South Grape Street, Medford, Oregon 97501 541-770-5678 Fax 541-770-2901

Analysis Report

ORELAP 100016
EPA OR00028

Box R Waterlab
567 NW Second Street
Prineville, OR 97754

Lab Order: **1409B53**
NRC Sample ID: **1409B53-01A**
Collection Date: **9/29/2014 5:30:00 AM**
Received Date: **9/30/2014 9:45:00 AM**
Reported Date: **10/8/2014 3:49:40 PM**

BRW X016474-City of Antelope

PWS ID#: 41-00042
Source ID: DIST-A
Sample Comp:

Client Sample ID: BRW X016474
Sample Location: City Shop
Collectors Name: Dan Fisher

ANALYTICAL RESULTS

Analyses	Code	Method	NELAC Accredited	Result	Qual	MRL	Units	EPA Limit	Date Analyzed	Analyst
Dibromoacetic acid		EPA 552.2	A	ND		0.003	mg/L		10/7/2014	CSB
Dichloroacetic acid		EPA 552.2	A	ND		0.003	mg/L		10/7/2014	CSB
Monobromoacetic acid		EPA 552.2	A	ND		0.003	mg/L		10/7/2014	CSB
Monochloroacetic acid		EPA 552.2	A	ND		0.003	mg/L		10/7/2014	CSB
Trichloroacetic acid		EPA 552.2	A	ND		0.003	mg/L		10/7/2014	CSB
Total Haloacetic Acids	2456	EPA 552.2	A	ND		0.003	mg/L	0.06	10/7/2014	CSB
Surr: 2,3-Dibromopropionic acid		EPA 552.2		115		0	%REC		10/7/2014	CSB

Notes: ND - Not Detected at the MRL
MDL = Method Detection Limit

N.L. = No Limit

Neilson Research Corporation

245 South Grape Street, Medford, Oregon 97501 541-770-5678 Fax 541-770-2901

Analysis Report

ORELAP 100016
EPA OR00028

Box R Waterlab
567 NW Second Street
Prineville, OR 97754

Lab Order: **1409B53**
NRC Sample ID: **1409B53-01B**
Collection Date: **9/29/2014 5:30:00 AM**
Received Date: **9/30/2014 9:45:00 AM**
Reported Date: **10/8/2014 3:49:40 PM**

BRW X016474-City of Antelope

PWS ID#: 41-00042
Source ID: DIST-A
Sample Comp:

Client Sample ID: BRW X016474
Sample Location: City Shop
Collectors Name: Dan Fisher

ANALYTICAL RESULTS

Analyses	Code	Method	NELAC Accredited	Result	Qual	MRL	Units	EPA Limit	Date Analyzed	Analyst
Chloroform	2941	EPA 524.2	A	0.00399		0.0005	mg/L		10/1/2014	BAY
Bromodichloromethane	2943	EPA 524.2	A	0.00345		0.0005	mg/L		10/1/2014	BAY
Dibromochloromethane	2944	EPA 524.2	A	0.00221		0.0005	mg/L		10/1/2014	BAY
Bromoform	2942	EPA 524.2	A	0.000840		0.0005	mg/L		10/1/2014	BAY
Total Trihalomethanes	2950	EPA 524.2	A	0.0105		0.0005	mg/L	0.08	10/1/2014	BAY
Surr: 4-Bromofluorobenzene		EPA 524.2		97.4		0	%REC		10/1/2014	BAY
Surr: Dibromofluoromethane		EPA 524.2		91.1		0	%REC		10/1/2014	BAY
Surr: Toluene-d8		EPA 524.2		96.5		0	%REC		10/1/2014	BAY

Notes: ND - Not Detected at the MRL
MDL = Method Detection Limit

N.L. = No Limit

Neilson Research Corporation

245 South Grape Street, Medford, Oregon 97501 541-770-5678 Fax 541-770-2901

Analysis Report

ORELAP 100016
EPA OR00028

Box R Waterlab
567 NW Second Street
Prineville, OR 97754

Lab Order: 1409B53
NRC Sample ID: 1409B53-02A
Collection Date: 9/29/2014
Received Date: 9/30/2014 9:45:00 AM
Reported Date: 10/8/2014 3:49:40 PM

BRW X016474-City of Antelope

PWS ID#: 41-00042
Source ID: DIST-A
Sample Comp:

Client Sample ID: Trip Blank 11225
Sample Location:
Collectors Name: NRC

ANALYTICAL RESULTS

Analyses	Code	Method	NELAC Accredited	Result	Qual	MRL	Units	EPA Limit	Date Analyzed	Analyst
Chloroform	2941	EPA 524.2	A	ND		0.0005	mg/L		10/1/2014	BAY
Bromodichloromethane	2943	EPA 524.2	A	ND		0.0005	mg/L		10/1/2014	BAY
Dibromochloromethane	2944	EPA 524.2	A	ND		0.0005	mg/L		10/1/2014	BAY
Bromoform	2942	EPA 524.2	A	ND		0.0005	mg/L		10/1/2014	BAY
Total Trihalomethanes	2950	EPA 524.2	A	ND		0.0005	mg/L	0.08	10/1/2014	BAY
Surr: 4-Bromofluorobenzene		EPA 524.2		96.8		0	%REC		10/1/2014	BAY
Surr: Dibromofluoromethane		EPA 524.2		92.8		0	%REC		10/1/2014	BAY
Surr: Toluene-d8		EPA 524.2		94.2		0	%REC		10/1/2014	BAY

Notes: ND - Not Detected at the MRL
MDL = Method Detection Limit

N.L. = No Limit

Neilson Research Corporation

DATA FLAGS

- B Analyte detected in the associated method blank.
- BA BOD Alternative Calculation: The initial results performed by Standard Methods did not fall within parameters of the Standard Methods calculation. An alternate approved calculation was performed using the HACH method and the value reported is an estimated concentration.
- C Sample(s) does not meet NELAC/ORELAP sample acceptance criteria. See Case Narrative.
- C1 Sample(s) does not meet NELAC/ORELAP sample acceptance criteria for temperature.
- CF Results confirmed by re-analysis.
- CU Cleanup performed as specified by method.
- D1 The diesel elution pattern for the sample is not typical.
- D2 The sample appears to be a heavier hydrocarbon range than diesel.
- D3 The sample appears to be a lighter hydrocarbon range than diesel.
- D4 Detected hydrocarbons do not have pattern and range consistent with typical petroleum products and may be due to biogenic interference.
- D5 Detected hydrocarbons in the diesel range appear to be weathered diesel.
- E Estimated value.
- ER Elevated reporting limit due to matrix. Report limits (MDLs, MRLs & PQLs) are adjusted based on variations in sample preparation amounts, analytical dilutions, and percent solids, where applicable.
- FC Fecal Coliforms: Sample(s) received past 40 CFR Part 136 specified holding time. Results reported as estimated values.
- G1 The gasoline elution pattern for the sample is not typical.
- G2 The sample appears to be a heavier hydrocarbon range than gasoline.
- G3 The sample appears to be a lighter hydrocarbon range than gasoline.
- G4 Detected hydrocarbons in the gasoline range appear to be weathered gasoline.
- HP Sample re-analysis performed outside of method specified holding time.
- HR Sample received outside of method specified holding time.
- HS Sample analyzed for volatile organics contained headspace.
- HT At the client's request, the sample was analyzed outside of method specified holding time.
- H Analysis performed outside of method specified holding time.
- J Analyte detected below the Minimum Reporting Limit (MRL) and above the Method Detection Limit (MDL). The J flag result is an estimated value and the user should be aware that this data is of limited reliability.
- MI Surrogate or Matrix Spike recovery is out of control limits due to matrix interference. Sample results may be biased.
- N See Case Narrative on page 2 of report.
- Q Closing continuing calibration verification (CCV) or laboratory control sample (LCS) exceeded high recovery limits, but associated samples are non-detect and the sample results are not affected. Data meets EPA/NELAC requirements.
- R Relative percent difference (RPD) is outside of the accepted recovery limits.
- R1 Relative percent difference (RPD) is outside of the accepted recovery limits. However, analyses are not controlled on RPD values for sample concentrations that are less than the reporting limit.
- R3 The relative percent difference (RPD) and/or percent recovery for the duplicate (DUP) or matrix spike (MS)/matrix spike duplicate (MSD) cannot be accurately calculated due to the concentration of analyte already present in the sample.
- R4 Duplicate analysis failed due to result being at or near method reporting limit.
- S Surrogate and/or matrix spike recovery is outside of the accepted recovery limits. Sample results may be biased.
- S1 Surrogate or matrix spike recovery is outside of control limits due to dilution necessary for analysis.
- SC Sub-contracted to another laboratory for analysis.
- T Toxicity Characteristic Leaching Procedure – Sample submitted contained < 0.5% solids. If the waste contains <0.5% dry solids, the liquid portion of the waste, after filtration, is defined as the TCLP extract.
- # Value exceeds regulatory level for TCLP contaminant.
- X1 The motor oil elution pattern for the sample is not typical.
- X2 The sample appears to be a heavier hydrocarbon range than motor oil.
- X3 The sample appears to be a lighter hydrocarbon range than motor oil.
- * Value exceeds Maximum Contaminant Level or is outside the acceptable range.

CLIENT: Box R Waterlab
 Work Order: 1409B53
 Project: BRW X016474-City of Antelope

ANALYTICAL QC SUMMARY REPORT

TestCode: HAA_W

Sample ID	MB-31008	SampType: MBLK	TestCode: HAA_W	Units: mg/L	Prep Date: 10/7/2014	RunNo: 76163					
Client ID:	ZZZZZ	Batch ID: 31008	TestNo: EPA 552.2	(EPA 3510C)	Analysis Date: 10/7/2014	SeqNo: 1132538					
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromoacetic acid	ND	0.00300									
Dichloroacetic acid	ND	0.00300									
Monobromoacetic acid	ND	0.00300									
Monochloroacetic acid	ND	0.00300									
Trichloroacetic acid	ND	0.00300									
Total Haloacetic Acids	ND	0.00300									
Surr: 2,3-Dibromopropionic acid	0.02991	0	0.025	0	120	70	130				

NRC - Page 7 of 10

Sample ID	LCS-31008	SampType: LCS	TestCode: HAA_W	Units: mg/L	Prep Date: 10/7/2014	RunNo: 76163					
Client ID:	ZZZZZ	Batch ID: 31008	TestNo: EPA 552.2	(EPA 3510C)	Analysis Date: 10/7/2014	SeqNo: 1132539					
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromoacetic acid	0.02268	0.00300	0.02	0	113	70	130				
Dichloroacetic acid	0.02230	0.00300	0.02	0	111	70	130				
Monobromoacetic acid	0.02230	0.00300	0.02	0	111	70	130				
Monochloroacetic acid	0.02389	0.00300	0.02	0	119	70	130				
Trichloroacetic acid	0.02384	0.00300	0.02	0	119	70	130				
Total Haloacetic Acids	0.1150	0.00300									
Surr: 2,3-Dibromopropionic acid	0.02509	0	0.025	0	100	70	130				

Sample ID	1410060-01BMS	SampType: MS	TestCode: HAA_W	Units: mg/L	Prep Date: 10/7/2014	RunNo: 76163					
Client ID:	ZZZZZ	Batch ID: 31008	TestNo: EPA 552.2	(EPA 3510C)	Analysis Date: 10/8/2014	SeqNo: 1132604					
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromoacetic acid	0.02379	0.00300	0.02	0	119	70	130				
Dichloroacetic acid	0.02059	0.00300	0.02	0	103	70	130				
Monobromoacetic acid	0.02059	0.00300	0.02	0	103	70	130				
Monochloroacetic acid	0.02116	0.00300	0.02	0	106	70	130				
Trichloroacetic acid	0.08018	0.00300	0.02	0.04671	167	70	130				MI

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Minimum Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Box R Waterlab
 Work Order: 1409B53
 Project: BRW X016474-City of Antelope

ANALYTICAL QC SUMMARY REPORT

TestCode: HAA_W

Sample ID	1410060-01BMS	SampType: MS	TestCode: HAA_W	Units: mg/L	Prep Date: 10/7/2014	RunNo: 76163					
Client ID:	ZZZZZ	Batch ID: 31008	TestNo: EPA 552.2	(EPA 3510C)	Analysis Date: 10/8/2014	SeqNo: 1132604					
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,3-Dibromopropionic acid	0.03019	0	0.025	0	121	70	130				

Sample ID	1410060-01BMSD	SampType: MSD	TestCode: HAA_W	Units: mg/L	Prep Date: 10/7/2014	RunNo: 76163					
Client ID:	ZZZZZ	Batch ID: 31008	TestNo: EPA 552.2	(EPA 3510C)	Analysis Date: 10/8/2014	SeqNo: 1132605					
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromoacetic acid	0.02495	0.00300	0.02	0	125	70	130	0.02379	4.76	20	
Dichloroacetic acid	0.02212	0.00300	0.02	0	111	70	130	0.02059	7.19	20	
Monobromoacetic acid	0.02212	0.00300	0.02	0	111	70	130	0.02059	7.19	20	
Monochloroacetic acid	0.02460	0.00300	0.02	0	123	70	130	0.02116	15.0	20	
Trichloroacetic acid	0.08715	0.00300	0.02	0.04671	202	70	130	0.08018	8.32	20	MI
Surr: 2,3-Dibromopropionic acid	0.03184	0	0.025	0	127	70	130	0	0	0	

NRC - Page 8 of 10

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Minimum Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Box R Waterlab
 Work Order: 1409B53
 Project: BRW X016474-City of Antelope

ANALYTICAL QC SUMMARY REPORT

TestCode: TTHM_W

Sample ID MB	SampType: MBLK	TestCode: TTHM_W	Units: mg/L	Prep Date:	RunNo: 76050						
Client ID: ZZZZZ	Batch ID: R76050	TestNo: EPA 524.2		Analysis Date: 10/1/2014	SeqNo: 1131139						
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloroform	ND	0.000500									
Bromodichloromethane	ND	0.000500									
Dibromochloromethane	ND	0.000500									
Bromoform	ND	0.000500									
Total Trihalomethanes	ND	0.000500									
Surr: 4-Bromofluorobenzene	0.03938	0	0.04	0	98.4	80	120				
Surr: Dibromofluoromethane	0.03585	0	0.04	0	89.6	80	120				
Surr: Toluene-d8	0.03948	0	0.04	0	98.7	80	120				

Sample ID LCS	SampType: LCS	TestCode: TTHM_W	Units: mg/L	Prep Date:	RunNo: 76050						
Client ID: ZZZZZ	Batch ID: R76050	TestNo: EPA 524.2		Analysis Date: 10/1/2014	SeqNo: 1131146						
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloroform	0.03897	0.000500	0.04	0	97.4	70	130				
Bromodichloromethane	0.04299	0.000500	0.04	0	107	70	130				
Dibromochloromethane	0.03892	0.000500	0.04	0	97.3	70	130				
Bromoform	0.03903	0.000500	0.04	0	97.6	70	130				
Surr: 4-Bromofluorobenzene	0.04065	0	0.04	0	102	80	120				
Surr: Dibromofluoromethane	0.03819	0	0.04	0	95.5	80	120				
Surr: Toluene-d8	0.03910	0	0.04	0	97.8	80	120				

Sample ID 1409B53-01BMS	SampType: MS	TestCode: TTHM_W	Units: mg/L	Prep Date:	RunNo: 76050						
Client ID: BRW X016474	Batch ID: R76050	TestNo: EPA 524.2		Analysis Date: 10/1/2014	SeqNo: 1131141						
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloroform	0.02391	0.000500	0.02	0.00399	99.6	70	130				
Bromodichloromethane	0.02388	0.000500	0.02	0.00345	102	70	130				
Dibromochloromethane	0.02045	0.000500	0.02	0.00221	91.2	70	130				
Bromoform	0.01835	0.000500	0.02	0.00084	87.6	70	130				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Minimum Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

NRC - Page 9 of 10

CLIENT: Box R Waterlab
 Work Order: 1409B53
 Project: BRW X016474-City of Antelope

ANALYTICAL QC SUMMARY REPORT

TestCode: TTHM_W

Sample ID	1409B53-01BMS	SampType: MS	TestCode: TTHM_W	Units: mg/L	Prep Date:	RunNo: 76050					
Client ID:	BRW X016474	Batch ID: R76050	TestNo: EPA 524.2		Analysis Date: 10/1/2014	SeqNo: 1131141					
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene	0.03947	0	0.04	0	98.7	80	120				
Surr: Dibromofluoromethane	0.03863	0	0.04	0	96.6	80	120				
Surr: Toluene-d8	0.03848	0	0.04	0	96.2	80	120				

Sample ID	1409B53-01BMSD	SampType: MSD	TestCode: TTHM_W	Units: mg/L	Prep Date:	RunNo: 76050					
Client ID:	BRW X016474	Batch ID: R76050	TestNo: EPA 524.2		Analysis Date: 10/1/2014	SeqNo: 1131142					
Analyte	Result	MRL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloroform	0.02163	0.000500	0.02	0.00399	88.2	70	130	0.02391	10.0	20	
Bromodichloromethane	0.02262	0.000500	0.02	0.00345	95.8	70	130	0.02388	5.42	20	
Dibromochloromethane	0.01922	0.000500	0.02	0.00221	85.0	70	130	0.02045	6.20	20	
Bromoform	0.01738	0.000500	0.02	0.00084	82.7	70	130	0.01835	5.43	20	
Surr: 4-Bromofluorobenzene	0.03935	0	0.04	0	98.4	80	120	0	0	0	
Surr: Dibromofluoromethane	0.03557	0	0.04	0	88.9	80	120	0	0	0	
Surr: Toluene-d8	0.03776	0	0.04	0	94.4	80	120	0	0	0	

NRC - Page 10 of 10

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Minimum Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits