20040850



Specializing in Soil, Hazardous Waste and Water Analysis

OrderID:

5/14/2020

Washoe County Water ResourcesCSD

PO Box 11130 Reno, NV 89502 Attn: Ben Jesch

Dear: Ben Jesch

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 4/30/2020. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Jennifer Delaney QA Manager

Western Environmental Testing Laboratory Report Comments

Washoe County Water ResourcesCSD - 20040850

Specific Report Comments

None

Report Legend

B Blank con	tamination; Analyte detec	ted above the method reporti	ng limit in an associated blank
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Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.

HT -- Sample analyzed beyond the accepted holding time

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The
reported result should be considered an estimate.

The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH
Diesel range as per EPA 8015.

The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.

The matrix spike/matrix spike duplicate (MS/MSD) values for the analysis of this parameter were outside acceptance criteria due to probable matrix interference. The reported result should be considered an estimate.

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

 QD -- The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.

QL -- The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.

 S -- Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits

SC -- Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered

-- The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.

General Lab Comments

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Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:

A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

Western Environmental Testing Laboratory Analytical Report

Washoe County Water ResourcesCSD

PO Box 11130

Reno, NV 89502
Attn: Ben Jesch

Phone: (775) 954-4612 **Fax:** NoFax

PO\Project: Swan Lake

Customer Sample ID: Swan Lake-Compton
WETLAB Sample ID: 20040850-001

Collect Date/Time: 4/30/2020 11:40 **Receive Date:** 4/30/2020 12:30

Date Printed:

OrderID:

5/14/2020

20040850

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
General Chemistry							
Ammonia, as Nitrogen	SM 4500 NH3 D	ND	mg/L	1	0.10	5/4/2020	NV00925
Total Phosphorous as P	SM 4500-P E	0.61	mg/L	1	0.020	5/4/2020	NV00925
Total Suspended Solids (TSS)	SM 2540D	130	mg/L	1	10	4/30/2020	NV00925
Biochemical Oxygen Demand	SM 5210B	11	mg/L	1	2.0	4/30/2020	NV00925
Total Nitrogen	Calc.	3.6	mg/L	1	1.4	5/6/2020	NV00925
Total Dissolved Solids (TDS)	SM 2540C	1000	mg/L	1	25	4/30/2020	NV00925
Microbiological Analyses							
Total Coliform (MPN)	SM 9223B (Quantitray)	2599.4	MPN/100ml	2	2.0000	4/30/2020	NV00925
Escherichia Coli (MPN)	SM 9223B (Quantitray)	46.6	MPN/100ml	2	2.0	4/30/2020	NV00925
Anions by Ion Chromatography							
Chloride	EPA 300.0	160	mg/L	5	5.0	4/30/2020	NV00925
Nitrate Nitrogen	EPA 300.0	ND D	mg/L	5	0.75	4/30/2020	NV00925
Nitrite Nitrogen	EPA 300.0	ND D	mg/L	5	0.30	4/30/2020	NV00925
Sulfate	EPA 300.0	140	mg/L	5	7.5	4/30/2020	NV00925
Flow Injection Analyses							
Total Kjeldahl Nitrogen	EPA 351.2	3.6	mg/L	1	0.40	5/6/2020	NV00925
Trace Metals by ICP-OES							
Barium	EPA 200.7	0.14	mg/L	1	0.020	5/13/2020	NV00925
Boron	EPA 200.7	0.39	mg/L	1	0.10	5/13/2020	NV00925
Iron	EPA 200.7	6.8	mg/L	1	0.10	5/13/2020	NV00925
Manganese	EPA 200.7	0.38	mg/L	1	0.010	5/13/2020	NV00925
Trace Metals by ICP-MS							
Arsenic	EPA 200.8	0.040	mg/L	1	0.0050	5/8/2020	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W200505-1		1		5/5/2020	NV00925

Customer Sample ID: Swan Lake-Pompe **Collect Date/Time:** 4/30/2020 11:00 WETLAB Sample ID: 20040850-002 **Receive Date:** 4/30/2020 12:30

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Analyte	Method	Results	Units	DF	RL	Analyzed	LabID			
General Chemistry										
Ammonia, as Nitrogen	SM 4500 NH3 D	ND	mg/L	1	0.10	5/4/2020	NV00925			
Total Phosphorous as P	SM 4500-P E	0.46	mg/L	1	0.020	5/4/2020	NV00925			
Total Suspended Solids (TSS)	SM 2540D	180	mg/L	1	10	4/30/2020	NV00925			
Biochemical Oxygen Demand	SM 5210B	12	mg/L	1	2.0	4/30/2020	NV00925			
Total Nitrogen	Calc.	3.5	mg/L	1	1.4	5/6/2020	NV00925			
Total Dissolved Solids (TDS)	SM 2540C	910	mg/L	1	25	4/30/2020	NV00925			
Microbiological Analyses										
Total Coliform (MPN)	SM 9223B (Quantitray)	2317.6	MPN/100ml	4	4.0	4/30/2020	NV00925			
Escherichia Coli (MPN)	SM 9223B (Quantitray)	201.6	MPN/100ml	4	4.0	4/30/2020	NV00925			
Anions by Ion Chromatography										
Chloride	EPA 300.0	150	mg/L	5	5.0	4/30/2020	NV00925			
Nitrate Nitrogen	EPA 300.0	ND D	mg/L	5	0.75	4/30/2020	NV00925			
Nitrite Nitrogen	EPA 300.0	ND D	mg/L	5	0.30	4/30/2020	NV00925			
Sulfate	EPA 300.0	140	mg/L	5	7.5	4/30/2020	NV00925			
Flow Injection Analyses										
Total Kjeldahl Nitrogen	EPA 351.2	3.5	mg/L	1	0.40	5/6/2020	NV00925			
Trace Metals by ICP-OES										
Barium	EPA 200.7	0.13	mg/L	1	0.020	5/13/2020	NV00925			
Boron	EPA 200.7	0.38	mg/L	1	0.10	5/13/2020	NV00925			
Iron	EPA 200.7	10	mg/L	1	0.10	5/13/2020	NV00925			
Manganese	EPA 200.7	0.26	mg/L	1	0.010	5/13/2020	NV00925			
Trace Metals by ICP-MS										
Arsenic	EPA 200.8	0.037	mg/L	1	0.0050	5/8/2020	NV00925			
Sample Preparation										
Trace Metals Digestion	EPA 200.2	W200505-1		1		5/5/2020	NV00925			

Customer Sample ID: Swan Lake-Pompe DUP **Collect Date/Time:** 4/30/2020 11:00 WETLAB Sample ID: 20040850-003 **Receive Date:** 4/30/2020 12:30

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID	
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General Chemistry								
Ammonia, as Nitrogen	SM 4500 NH3 D	ND	mg/L	1	0.10	5/4/2020	NV00925	
Total Phosphorous as P	SM 4500-P E	0.22	mg/L	1	0.020	5/4/2020	NV00925	
Total Suspended Solids (TSS)	SM 2540D	180	mg/L	1	10	4/30/2020	NV00925	
Biochemical Oxygen Demand	SM 5210B	13	mg/L	1	2.0	4/30/2020	NV00925	
Total Nitrogen	Calc.	3.5	mg/L	1	1.4	5/6/2020	NV00925	
Total Dissolved Solids (TDS)	otal Dissolved Solids (TDS) SM 2540C		mg/L	1	25	4/30/2020	NV00925	
Microbiological Analyses								
Total Coliform (MPN)	SM 9223B (Quantitray)	2746.8	MPN/100ml	4	4.0000	4/30/2020	NV00925	
Escherichia Coli (MPN)			MPN/100ml	4	4.0	4/30/2020	NV00925	
Anions by Ion Chromatography	•							
Chloride	EPA 300.0	150	mg/L	5	5.0	4/30/2020	NV00925	
Nitrate Nitrogen	EPA 300.0	ND D	mg/L	5	0.75	4/30/2020	NV0092	
Nitrite Nitrogen	EPA 300.0	ND D	mg/L	5	0.30	4/30/2020	NV0092	
Sulfate	EPA 300.0	140	mg/L	5	7.5	4/30/2020	NV00925	
Flow Injection Analyses								
Total Kjeldahl Nitrogen	EPA 351.2	3.5	mg/L	1	0.40	5/6/2020	NV00925	
Trace Metals by ICP-OES			-					
Barium	EPA 200.7	0.13	mg/L	1	0.020	5/13/2020	NV00925	
Boron	EPA 200.7	0.38	mg/L	1	0.10	5/13/2020	NV00925	
Iron	EPA 200.7	9.4	mg/L	1	0.10	5/13/2020	NV00925	
Manganese	EPA 200.7	0.26	mg/L	1	0.010	5/13/2020	NV00925	
Trace Metals by ICP-MS								
Arsenic	EPA 200.8	0.036	mg/L	1	0.0050	5/8/2020	NV00925	
Sample Preparation			-					
Trace Metals Digestion	EPA 200.2	W200505-1		1		5/5/2020	NV00925	

Western Environmental Testing Laboratory QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC20050012	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Nitrate Nitrogen	EPA 300.0	ND			mg/L
		Nitrite Nitrogen	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC20050040	Blank 1	Total Coliform (MPN)	SM 9223B (Quant	ND			MPN/100ml
		Escherichia Coli (MPN)	SM 9223B (Quant	ND			MPN/100ml
QC20050046	Blank 1	Total Suspended Solids (TSS)	SM 2540D	ND			mg/L
QC20050081	Blank 1	Total Phosphorous as P	SM 4500-P E	ND			mg/L
QC20050082	Blank 1	Ammonia, as Nitrogen	SM 4500 NH3 D	ND			mg/L
QC20050084	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC20050137	Blank 1	Biochemical Oxygen Demand	SM 5210B	ND			mg/L
QC20050212	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC20050354	Blank 1	Arsenic	EPA 200.8	ND			mg/L
QC20050516	Blank 1	Barium	EPA 200.7	ND			mg/L
		Boron	EPA 200.7	ND			mg/L
		Iron	EPA 200.7	ND			mg/L
		Manganese	EPA 200.7	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC20050012	LCS 1	Chloride	EPA 300.0	10.1	10.0	101	mg/L
		Nitrate Nitrogen	EPA 300.0	2.04	2.00	102	mg/L
		Nitrite Nitrogen	EPA 300.0	0.514	0.500	103	mg/L
		Sulfate	EPA 300.0	26.1	25.0	104	mg/L
QC20050046	LCS 1	Total Suspended Solids (TSS)	SM 2540D	198	200	99	mg/L
QC20050046	LCS 2	Total Suspended Solids (TSS)	SM 2540D	198	200	99	mg/L
QC20050081	LCS 1	Total Phosphorous as P	SM 4500-P E	0.246	0.250	98	mg/L
QC20050082	LCS 1	Ammonia, as Nitrogen	SM 4500 NH3 D	0.908	1.00	91	mg/L
QC20050084	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	143	150	95	mg/L
QC20050084	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	137	150	91	mg/L
QC20050137	LCS 1	Biochemical Oxygen Demand	SM 5210B	208	198	105	mg/L
QC20050212	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	1.02	1.00	102	mg/L
QC20050354	LCS 1	Arsenic	EPA 200.8	0.0461	0.050	92	mg/L
QC20050516	LCS 1	Barium	EPA 200.7	0.993	1.00	99	mg/L
		Boron	EPA 200.7	0.978	1.00	98	mg/L
		Iron	EPA 200.7	1.03	1.00	103	mg/L
		Manganese	EPA 200.7	0.894	1.00	89	mg/L

QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result	Units	RPD
QC20050046	Duplicate 1	Total Suspended Solids (TSS)	SM 2540D	20040850-001	130	130	mg/L	<1%
QC20050084	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	20040811-004	422	419	mg/L	1 %
QC20050084	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	20040823-001	2078	2134	mg/L	3 %

QCBatchID QCType	Parameter	Method	Spike Sample	Sample Result	MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC20050012 MS 1	Chloride	EPA 300.0	20040785-001	1.28	6.41	6.11	5	mg/L	103	97	5
	Nitrate Nitrogen	EPA 300.0	20040785-001	ND	2.25	2.14	2	mg/L	106	100	5
	Nitrite Nitrogen	EPA 300.0	20040785-001	ND	0.512	0.484	0.5	mg/L	102	97	6

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

Page 6 of 7

3230 Polaris Ave. Suite 4 Las Vegas, Nevada 89102 tel (702) 475-8899 fax (702) 622-2868 EPA LAB ID: NV00932

Washoe County Water ResourcesCSD - 20040850

QCBatchID QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
	Sulfate	EPA 300.0	20040785-001	ND		10.6	9.78	10	mg/L	100	92	8
QC20050012 MS 2	Chloride	EPA 300.0	20040839-001	23.3		49.0	48.7	5	mg/L	103	101	<1
	Nitrate Nitrogen	EPA 300.0	20040839-001	ND	D	10.5	10.4	2	mg/L	105	104	1
	Nitrite Nitrogen	EPA 300.0	20040839-001	ND	D	2.56	2.54	0.5	mg/L	102	102	<1
	Sulfate	EPA 300.0	20040839-001	387		434	431	10	mg/L	94	88	<1
QC20050081 MS 1	Total Phosphorous as P	SM 4500-P E	20040849-005	ND		0.260	0.261	0.25	mg/L	100	100	<1
QC20050081 MS 2	Total Phosphorous as P	SM 4500-P E	20050013-001	0.028		0.282	0.312	0.25	mg/L	102	114	10
QC20050082 MS 1	Ammonia, as Nitrogen	SM 4500 NH3 D	20040855-002	ND		0.945	0.949	1	mg/L	85	86	<1
QC20050082 MS 2	Ammonia, as Nitrogen	SM 4500 NH3 D	20040850-002	ND		0.872	0.911	1	mg/L	84	88	4
QC20050212 MS 1	Total Kjeldahl Nitrogen	EPA 351.2	20040844-005	ND		0.969	0.886	1	mg/L	90	82	9
QC20050212 MS 2	Total Kjeldahl Nitrogen	EPA 351.2	20040846-007	1.79	M	2.60	2.71	1	mg/L	NC	NC	NC
QC20050354 MS 1	Arsenic	EPA 200.8	20050013-001	ND		0.0493	0.0460	0.05	mg/L	93	86	7
QC20050516 MS 1	Barium	EPA 200.7	20050013-001	0.031		0.991	0.986	1	mg/L	96	95	<1
	Boron	EPA 200.7	20050013-001	0.640		1.60	1.59	1	mg/L	96	95	<1
	Iron	EPA 200.7	20050013-001	0.104		1.15	1.16	1	mg/L	104	105	<1
	Manganese	EPA 200.7	20050013-001	ND		0.862	0.880	1	mg/L	86	88	2

WETLAB WESTERN ENVIRONMENTAL TESTING LABORATORY Specializing in Soil, Hazardous Waste and Wate										vsie						.2		16	8 5	
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