



Silver State Labs-Reno  
1135 Financial Blvd  
Reno, NV 89502  
(775) 857-2400 FAX: (888) 398-7002  
www.ssalabs.com

September 17, 2018  
Workorder **18090270**

Jay Flakus  
CITY OF YERINGTON  
102 South Main Street  
Yerington, NV 89447

Project: TP07 Nitrate

Dear Jay Flakus:

It is the policy of Silver State Analytical Laboratory - Reno to strictly adhere to a comprehensive Quality Assurance Plan that ensures the data presented in this report are both accurate and precise. Silver State Analytical Laboratory - Reno maintains accreditation in the State of Nevada (NV-00015) and the State of California (ELAP 2990).

The data presented in this report was obtained from the analysis of samples received under a chain of custody. Unless otherwise noted below, samples were received in good condition, properly preserved and within the hold time for the requested analyses. Any anomalies associated with the analysis of the samples have been flagged with an appropriate explanation in the Analysis Report section of the Laboratory Report.

Sincerely,

A handwritten signature in black ink that reads "Carly Wood".

Carly Wood  
Laboratory Director  
1135 Financial Blvd  
Reno, NV 89502



Silver State Labs-Reno  
 1135 Financial Blvd  
 Reno, NV 89502  
 (775) 857-2400 FAX: (888) 398-7002  
 www.ssalabs.com

# Analytical Report

Workorder#: 18090270  
 Date Reported: 9/17/2018

**Client:** CITY OF YERINGTON

**Sampled By** J. Flakus

**Project Name:** TP07 Nitrate

**PO #:**

**Laboratory Accreditation Number** NV015/CA2990

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
18090270-01	TP07	09/06/2018 13:30	9/6/2018

Parameter	Method	Result	Units	MCL	Analyst	Date/Time Analyzed	Data Flag
Arsenic	EPA 200.8	0.005	mg/L	0.01	RM	09/13/2018 14:22	
Digestion Turbidity Check	EPA 200.8	< 1.0	NTU		RM	09/11/2018 11:52	
Nitrate as N	EPA 300.0	<0.5	mg/L	10	JF	09/08/2018 4:05	

**Laboratory Accreditation Number** NV015/CA2990

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
18090270-02	W05	09/06/2018 14:15	9/6/2018

Parameter	Method	Result	Units	MCL	Analyst	Date/Time Analyzed	Data Flag
Nitrate as N	EPA 300.0	<0.5	mg/L	10	JF	09/08/2018 4:32	

**Analysis:** Anions 300.0

**Method:** EPA 300.0

**Batch ID:** R21474

**Method Blank**

RunID: 21474 SeqNo 459877 Units: mg/L

Analysis Date: 9/4/2018 1:35:17 PM Analyst: JF

Analyte	Result	Rep Limit	Rep Qual
Nitrate as N	< 0.050	0.050	

**Laboratory Control Sample (LCS)**

RunID: 21474 SeqNo 459879 Units: mg/L

Analysis Date: 9/4/2018 2:57:01 PM Analyst: JF

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Nitrate as N	1.800	1.8	103								

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Sample Spiked: 18090307-01A

RunID: 21474 SeqNo 459885 Units: mg/L

Analysis Date: 9/7/2018 2:01:38 PM Analyst: JF

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Nitrate as N	0.2601	10.00	10	99.7	10.00	10	100	0.512	20	90	110	

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Sample Spiked: 18090270-02A

RunID: 21474 SeqNo 459918 Units: mg/L

Analysis Date: 9/8/2018 4:59:45 AM Analyst: JF

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Nitrate as N	0.3652	100.0	94	94.0	100.0	95	94.4	0.363	20	90	110	

**Analysis:** Metals 200.8

**Method:** EPA 200.8

**Batch ID:** R21629

**Method Blank**

RunID: 21629 SeqNo 465490 Units: mg/L

Analysis Date: 9/13/2018 1:43:47 PM Analyst: RM

Analyte	Result	Rep Limit	Rep Qual
Arsenic	< 0.0010	0.0010	

**Laboratory Control Sample (LCS)**

RunID: 21629 SeqNo 465489 Units: mg/L

Analysis Date: 9/13/2018 1:37:14 PM Analyst: RM



Silver State Labs-Reno  
 1135 Financial Blvd  
 Reno, NV 89502  
 (775) 857-2400 FAX: (888) 398-7002  
 www.ssalabs.com

# Quality Control Report

WO#: 18090270  
 9/18/2018

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Arsenic	0.1000	0.098	98.4								

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Sample Spiked: 18090270-01B

RunID: 21629 SeqNo 465497 Units: mg/L

Analysis Date: 9/13/2018 2:29:25 PM Analyst: RM

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Arsenic	0.004838	0.1000	0.11	104	0.1000	0.11	104	0.185	20	70	130	

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Sample Spiked: 18090362-01B

RunID: 21629 SeqNo 465517 Units: mg/L

Analysis Date: 9/13/2018 4:39:38 PM Analyst: RM

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Arsenic	0.003960	1.000	1.1	108	1.000	1.1	108	0.376	20	70	130	



**SilverState**  
Analytical Laboratories

Sierra Environmental Monitoring  
EnviroTech

ssalabs.com sem-analytical.com envirotechonline.com

3626 E. SUNSET RD. STE 100, LAS VEGAS, NV 89120  
Phone (702) 873-4478 Fax: (702) 873-7967 (EPA#: NV000930, CA2885)  
180902270  
1135 FINANCIAL BOULEVARD, RENO, NV 89502  
Phone (775) 857-2400 Fax: (888) 398-7002 (EPA#: NV00015, CA2526)

CHAIN-OF-CUSTODY-RECORD

Page 1 of 1

Page 5 of 6

**Report Results To:**

Report Attention: Jay Flakus, Public Works Director  
Project Number:  
Company: City of Yerington Nevada - Public Works  
Mailing Address: 102 S Main Street  
City, State, Zip: Yerington, NV 89447  
Phone: 775-302-1155  
Email / Fax: jayf@yerington.net

**Send Invoice To:**

Invoice Attention: Jay Flakus  
PO# OPEN  
Quote #  
Company: City of Yerington Nevada - Public Works  
Mailing Address: 102 S Main Street  
City, State, Zip: Yerington, NV 89447  
Phone: 775-302-1155  
Email / Fax: jayf@yerington.net

**ANALYSES REQUESTED**

Sampled by: Jay Flakus  
Signature: [Signature]

I attest to the validity and authenticity of the sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time is considered fraud and may be grounds for legal action.

Standard:  Standard TAT 7-10 Business Days. Note that some tests vary.  
Rush  
Same Day:  3 Day:  Other (Specify):  
1 Day:  4 Day:  Rush results will be issued after 4:00 p.m.  
2 Day:  5 Day:   
NOTE: A Rush Surcharge is applied for rush samples

12°C

Date Sampled	Time Sampled	Sample Identification	SSAL - SEM Lab No.	Comp. Grab	Matrix	Preservative**	Number / Type of Containers ***	Field Measurements
9/6/18	1330	TPO7 NITRATE		G	DW	1	1P X	NITRATE
9/6/18	1330	TPO7 ARSENIC		G	DW	2	1P X	ARSENIC
9/6/18	1415	WGS NITRATE		G	DW	1	1P X	

Temperature: Other: [Handwritten: 12°C]  
On-Site pH: [Handwritten: 7.2]  
Chlorine: [Handwritten: 0.2]

QC Level Report: I II III IV  
Send Results Via: [X] Email [X] Fax  
Send Invoice Via: [ ] Mail [ ] Email [ ] Fax

Signature	Print Name	Company	Date	Time
[Signature]	Jay Flakus	City of Yerington, NV	9/6/18	1430
[Signature]	Jessyana Corvono	City of Yerington, NV	9/6/18	1430
[Signature]	Jessyana Corvono	City of Yerington, NV	9/6/18	4:00
[Signature]	J. Flakus	SSAL	9/6/18	16:00
[Signature]	Jay Flakus, Public Works Director	City of Yerington, NV	9/6/18	1430

Authorization is required to process samples. This obligates your organization for service fees. SSAL Standard T & C's or other written agreement applies. If collections of legal services are required to recover said fees, your organization will be responsible for all fees and costs in addition to service fees.  
Matrix\* DW-Drinking Water, WW-Waste Water, GW-Ground Water, SW-Surface Water, SS-Soil, S-Solid, OT-Other  
Preservative\*\* 1=H<sub>2</sub>SO<sub>4</sub>, 2=HNO<sub>3</sub>, 3=HCl, 4=NaOH, 5=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, 6=None, 7=Other

COYPM SDW SAMPLE COC 2018  
18017





Silver State Labs-Reno  
1135 Financial Blvd  
Reno, NV 89502  
(775) 857-2400 FAX: (888) 398-7002  
www.ssalabs.com

## Definitions & Qualifiers

WO#: 18090270

Date: 9/17/2018

### Definitions:

LCS: Laboratory Control Sample; prepared by adding a known mass of target analytes to a specified amount of de-ionized water and prepared with the batch of samples, used to calculate Accuracy (%REC).

LCSD: LCS Duplicate; used to calculate both Accuracy (%REC) and Precision (%RPD)

MBLK: Method Blank; a sample of similar matrix that is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedure, and in which no target analytes or interferences are present at concentrations that impact the analytical results for sample analyses.

MS: Matrix Spike; prepared by adding a known mass of target analytes to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available, used to calculate Accuracy (%REC)

MSD: Matrix Spike Duplicate; used to calculate both Accuracy (%REC) and Precision (%RPD)

RPD: Relative Percent Difference; comparison between sample and duplicate and/or MS and MSD.

PQL: Practical Quantitation Limit; the limit to which data is quantitated for reporting.

MDL: Method Detection Limit; the limit to which the instrument can reliably detect.

MCL: Maximum Contaminant Level; value set according to EPA guidelines.

### Qualifiers:

\* - Analyte exceeds Safe Drinking Water Act MCL, does not meet drinking water standards.

C - Analyte value below Safe Drinking Water Act MCL, does not meet drinking water standards.

B - Analyte found above the PQL in associated method blank.

G - Calibration blank analyte detected above PQL.

H - Sample analyzed beyond holding time for this parameter.

J - Estimated Value; Analyte found between MDL and PQL limits.

L - Sample concentration is at least 5 times greater than spike contribution. Spike recovery criteria do not apply.

R - RPD between sample and duplicate sample outside the RPD acceptance limits.

S - Batch MS and/or MSD were outside acceptance limits, batch LCS was acceptable.

W - Sample temperature when received was out of limit as specified by method.