Formerly McGinley & Associates

Second Half 2023
Groundwater Monitoring Report

LAKESIDE INN AND CASINO
181 Kahle Drive, Stateline, Nevada
APN 1318-22-002-102
NDEP Spill Report No. 201118-01, Facility ID No. B-000052

Prepared for:
Barton Health
2170 South Avenue
South Lake Tahoe, California 96150

and

State of Nevada
Department of Conservation and Natural Resources
Division of Environmental Protection
Bureau of Corrective Actions
Attn: Dean Peterson
901 South Stewert Street, Suite 4001
Carson City Nevada, 89701-5249

Prepared By:
UES
6995 Sierra Center Parkway
Reno, NV 89511

January 11, 2024
Project No. LIC002

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1.0 INTRODUCTION

McGinley and Associates, Inc. dba UES (UES) has prepared this report describing the groundwater monitoring activities conducted during the third and fourth quarters of 2023 at the former Lakeside Inn & Casino located at 181 Kahle Drive in Stateline, NV (Site). The location of the Site is indicated in Figure 1.

2.0 OBJECTIVES

The objectives of the groundwater monitoring activities are to: 1) monitor spatial and temporal trends in chemical concentrations in the groundwater; 2) monitor the stability of the groundwater contaminant plume; and 3) monitor hydrogeologic conditions.

3.0 SCOPE OF WORK

Activities conducted during the reporting period included:

- gauging groundwater level at two monitoring wells during the third and fourth quarters;
- collecting groundwater samples from two monitoring wells during the third and fourth quarters;
- analytical testing of collected samples; and
- preparing this report.

4.0 BACKGROUND

UES conducted a Phase I ESA in October 2020. As indicated in the Phase I, dry-cleaning operations were historically conducted at the Site which included the use of tetrachloroethene (PCE). A limited Phase II assessment of the soils in this area was conducted by Summit Engineering in 2009 to assess for potential PCE impacts; however, only two shallow soil samples were collected as part of this investigation, and groundwater samples were not collected. UES opined that the previous sampling efforts appeared to be insufficient as PCE readily migrates downward and impacts to groundwater may have occurred from the historic use of PCE.

A Limited Phase II ESA was conducted by UES on November 4, 2020. Three soil borings were advanced at the Site and groundwater samples were collected from the borings. Detectable concentrations of tetrachloroethene (PCE) were reported in two of the three groundwater samples at 1.6 micrograms per liter (µg/L) and 6.5 µg/L. Details of the Limited ESA activities are included in the Results of Limited Phase II Environmental Site Assessment and Work Plan for Additional ESA report dated January 14, 2021. Three monitoring wells were installed in February 2021 as described in the Monitoring Well Installation and 1st Quarter 2021 Groundwater Monitoring Report dated April 20, 2021.

5.0 GROUNDWATER MONITORING ACTIVITIES

UES personnel conducted the third quarter 2023 groundwater monitoring event on August 30, 2023. The fourth quarter 2023 event was conducted on October 25, 2023. Third and fourth quarter groundwater samples were collected from monitoring wells MW-2 and MW-3. Monitoring well MW-1 was submerged

in standing water and was not accessible during the third quarter. Monitoring well MW-1 was destroyed and completely removed during construction activities in September 2023 and was therefore not sampled during the fourth quarter. The monitoring well locations are indicated in Figure 2. A copy of the UES groundwater sampling log is provided in Appendix A.

5.1 Gauging of Groundwater Levels

Prior to groundwater sample collection, the groundwater level in each well was gauged using an electronic sounder. The sounder was decontaminated with an Alconox/deionized water solution after use at each well. The groundwater level measurements are provided in Table 1. Groundwater elevations during the third quarter ranged from 6,279.19 feet above mean sea level (MW-3) to 6,282.33 feet above mean sea level (MW-2). Groundwater elevations during the fourth quarter ranged from 6,279.50 feet above mean sea level (MW-2) to 6,277.66 feet above mean sea level (MW-3).

5.2 Purging of Wells

Prior to groundwater sample collection, each well was purged of approximately three casing volumes of groundwater using a submersible electric pump. Purge equipment was decontaminated with a distilled water/Alconox solution after use at each well. Wastewater generated during groundwater sampling activities was placed in 55-gallon drums which were sealed, labeled, and stored onsite pending offsite disposal.

5.3 Groundwater Sample Collection

Groundwater samples were collected using disposable polyethylene bailers. A new bailer was used at each sample location. The groundwater samples were placed in laboratory provided 40 mL volatile organic analysis (VOA) vials, preserved with hydrochloric acid, sealed, labeled, and preserved on ice in a cooler pending delivery to the laboratory.

5.4 Analytical Testing

Groundwater samples were delivered under chain-of-custody protocol to Alpha Analytical in Sparks, NV for analysis. The groundwater samples were analyzed for vinyl chloride, cis-1,2-Dichloroethene (cis-1,2-DCE), trichloroethene (TCE), and PCE by EPA method SW8260B during the third quarter. Samples were only analyzed for PCE during the fourth quarter. Chain-of-custody documentation and laboratory analytical reports are provided in Appendix B.

5.5 Analytical Results

The analytical results for the third quarter groundwater samples are provided in Table 1 and are summarized below.

- Detectable concentrations of PCE were reported in both samples collected with concentrations of 1.1 µg/L (MW-2) and 5.9 µg/L (MW-3).
- Concentrations of TCE, cis-1,2-DCE, and vinyl chloride were below the laboratory reporting level for all collected samples.

The analytical results for the fourth quarter groundwater samples are provided in Table 1 and are summarized below.

- Detectable concentrations of PCE were reported in both samples collected with concentrations of 1.9 µg/L (MW-2) and 5.7 µg/L (MW-3).

6.0 DATA ASSIMILATION

The groundwater elevation was calculated by subtracting the groundwater level measured at the time of sampling from the surveyed elevation of the well.

An isopleth map showing the inferred lateral distribution of PCE exceeding the state action level was constructed using the analytical data and professional judgment.

7.0 CONCLUSIONS

7.1 HYDROGEOLOGIC CONDITIONS

Between the second and third quarter sampling events, groundwater levels increased at MW-2 by 0.43 feet and decreased at MW-3 by 0.73 feet. Between the third and fourth quarter sampling events, groundwater elevations in monitoring wells MW-2 and MW-3 decreased by 1.53 and 2.83 feet, respectively. Hydrographs for the wells are provided in Appendix C. As indicated in the hydrographs, the groundwater level at MW-2 during the third quarter sampling event reached the highest level since monitoring commenced.

The hydraulic gradient could not be calculated for the third and fourth quarter monitoring events as groundwater level measurements could only be collected from two wells. Based on topography, current groundwater elevations, and previous calculations it is estimated that groundwater flow is to the west at a rate between 0.010 and 0.065.

7.2 CHEMICAL CONCENTRATIONS AND TRENDS

The chemicals of concern (COC) in the groundwater are PCE, TCE, 1-2 cis DCE, and vinyl chloride. The state action levels for these chemicals are as follows:

- PCE 5 µg/L
- TCE 5 µg/L
- 1-2 cis DCE 70 µg/L
- Vinyl Chloride 2 µg/L

PCE concentrations above the action level were reported in MW-2 with results of 5.9 and 5.7 µg/L, during the third and fourth quarters, respectively. All other concentrations during the third and fourth quarters were reported below their respective action levels.

An isopleth map showing the inferred lateral distribution of PCE exceeding the action level for the third and fourth quarters is provided in Figure 4A. The isopleth maps for the previous sampling events are included in Figure 4B for comparison. As indicated in the figures, PCE concentrations have fluctuated in site wells between second and third quarter 2023 and generally remained stable between third and fourth

quarters 2023. During the third and fourth quarter sampling events, monitoring well MW-1 was submerged or destroyed and was not sampled. It should be noted that PCE concentrations in MW-3 were reported above the action level during the third and fourth quarters. This is likely due to natural plume migration and attenuation with the higher water levels. It is anticipated that concentrations will continue to fluctuate and decrease over time as the primary source of PCE was removed in the 1990s and the secondary source was removed during recent demolition and excavation activities.

Time-series PCE plots for key wells are provided in Appendix D. Hydrographs are provided on the plots for comparison purposes. Based on the previous three events, inverse correlations are noted between PCE and groundwater levels at MW-2. As groundwater levels increase, PCE concentrations decrease, and as groundwater levels decrease, PCE concentrations increase. When groundwater levels are low, samples are collected from a limited portion of the screen which represents a concentrated sample vs. when groundwater levels are higher the sample is diluted from being collected across a larger screen interval and water column.

The Mann Kendall PCE trend analysis for the monitoring wells are provided in Appendix E and Table 2. The analysis indicated that there is a “no trend” at MW-1 and MW-2 with confidence factors of 72.8% and 70.4%, respectively. A “no trend” result is similar to a stable result except that it displays greater variability among the sampling events, resulting in insufficient statistical confidence to establish the stable trend result. However, a “no trend” result is considered to be evidence that the chemical concentration is not increasing (Connor, J et. al., 2021). The Mann-Kendall analysis for MW-3 indicates an “increasing” trend with a confidence factor of 99.9%.

It should be noted that while there appears to be an increasing trend in MW-3, concentrations remain low (less than 6 µg/L). This increasing trend is likely indicative of natural migration of impacted groundwater and not indicative of a new and/or ongoing release.

8.0 RECCOMENDATIONS

Given the low-level concentrations at the site, UES is requesting a project review with the NDEP. UES recommends discontinuing the groundwater monitoring program and pursuing exemption closure. UES will begin preparation of the Request for Closure presentation following approval from the NDEP.

9.0 LIMITATIONS

The conclusions presented herein are partially based on information provided by UES. UES makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. The results reported herein are applicable to the time the sampling occurred. Changes in site hydrogeology may occur as a result of rainfall, snowmelt, water usage, or other factors.

It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact science. Judgments and opinions leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. Additional information not found or available to UES at the time of writing this report may result in a modification to the conclusions and recommendations contained herein.

The presentation of data presented herein is intended for the purpose of the visualization of environmental conditions. A greater degree of spatial and temporal data density may result in a more accurate representation of environmental conditions. Although such data visualization techniques may aid in providing a conceptual understanding of environmental conditions, such presentations are not intended to completely depict environmental conditions.

The use of the word "certify" in this document constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification and does not constitute a warranty or guarantee, either expressed or implied.

This report is not a legal opinion. The services performed by UES have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, express or implied, is made.

10.0 CLOSING

UES and Barton Health trust the information provided herein satisfies the requirements of the NDEP. Should you have any questions regarding this document, please contact the undersigned at (775) 829-2245.

Respectfully submitted,
UES

Alisa Prary, EIT
Staff Engineer

Reviewed By:

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations, and ordinances.

Caitlin Jelle, P.E., C.E.M #2454, (Exp. 3/24)

Senior Project Manager

TABLES

Table 1. Summary of Groundwater Elevation Data and Groundwater Analytical Results								
Well ID	**Date**	**MP**	**WL**	**EL**	**PCE**	**TCE**	**Cis-1,2-DCE**	**VC**
MW-1	18-Mar-21	6,282.20	6.41	6,275.79	**14**	<1.0	<1.0	<1.0
MW-1	25-Jun-21	6,282.20	5.95	6,276.25	**5.4**	<1.0	<1.0	<1.0
MW-1	16-Sep-21	6,282.20	6.61	6,275.59	3.8	<1.0	<1.0	<1.0
MW-1	1-Dec-21	6,282.20	5.87	6,276.33	**6.5**	<1.0	1.2	<1.0
MW-1	2-Mar-22	6,282.20	4.19	6,278.01	**88**	1.3	3.0	<1.0
MW-1	23-Jun-22	6,282.20	5.85	6,276.35	**8.4**	<1.0	<1.0	<1.0
MW-1	12-Sep-22	6,282.20	7.59	6,274.61	3.8	<1.0	<1.0	<1.0
MW-1	8-Dec-22	6,282.20	7.83	6,274.37	**28**	<1.0	<1.0	<1.0
MW-1	14-Feb-23	6,282.20	1.31	6,280.89	**16**	<1.0	<1.0	<1.0
MW-1	5-Jun-23	6,282.20	NM	UNK	NS	NS	NS	NS
MW-1	30-Aug-23	6,282.20	NM	UNK	NS	NS	NS	NS
MW-1	25-Oct-23	6,282.20	NM	UNK	NS	NS	NS	NS
MW-2	18-Mar-21	6,288.10	11.80	6,276.30	1.3	<1.0	<1.0	<1.0
MW-2	25-Jun-21	6,288.10	11.34	6,276.76	1.7	<1.0	<1.0	<1.0
MW-2	16-Sep-21	6,288.10	11.89	6,276.21	2.4	<1.0	<1.0	<1.0
MW-2	1-Dec-21	6,288.10	11.16	6,276.94	3.6	<1.0	<1.0	<1.0
MW-2	2-Mar-22	6,288.10	9.48	6,278.62	**8.2**	<1.0	<1.0	<1.0
MW-2	23-Jun-22	6,288.10	11.00	6,277.10	**9.6**	<1.0	<1.0	<1.0
MW-2	12-Sep-22	6,288.10	12.82	6,275.28	**13**	<1.0	<1.0	<1.0
MW-2	8-Dec-22	6,288.10	13.05	6,275.05	3.9	<1.0	<1.0	<1.0
MW-2	14-Feb-23	6,288.10	8.00	6,280.10	**15**	<1.0	<1.0	<1.0
MW-2	5-Jun-23	6,288.10	6.20	6,281.90	1.3	<1.0	<1.0	<1.0
MW-2	30-Aug-23	6,288.10	5.77	6,282.33	1.1	<1.0	<1.0	<1.0
MW-2	25-Oct-23	6,288.10	8.60	6,279.50	1.9	NA	NA	NA
MW-3	18-Mar-21	6,288.30	12.82	6,275.48	<1.0	<1.0	<1.0	<1.0
MW-3	25-Jun-21	6,288.30	12.78	6,275.52	<1.0	<1.0	<1.0	<1.0
MW-3	16-Sep-21	6,288.30	13.35	6,274.95	<1.0	<1.0	<1.0	<1.0
MW-3	1-Dec-21	6,288.30	12.45	6,275.85	<1.0	<1.0	<1.0	<1.0
MW-3	2-Mar-22	6,288.30	11.02	6,277.28	1.6	<1.0	<1.0	<1.0
MW-3	23-Jun-22	6,288.30	12.05	6,276.25	1.2	<1.0	<1.0	<1.0
MW-3	12-Sep-22	6,288.30	13.55	6274.75	1.2	<1.0	<1.0	<1.0
MW-3	8-Dec-22	6,288.30	14.00	6274.30	<1.0	<1.0	<1.0	<1.0
MW-3	14-Feb-23	6,288.30	11.24	6277.06	1.9	<1.0	<1.0	<1.0
MW-3	5-Jun-23	6,288.30	8.38	6279.92	3.9	<1.0	<1.0	<1.0
MW-3	30-Aug-23	6,288.30	9.11	6279.19	**5.9**	<1.0	<1.0	<1.0
MW-3	25-Oct-23	6,288.30	10.64	6277.66	**5.7**	NA	NA	NA
State Action Level					**5.0**	**5.0**	**70**	**2.0**

MP Surveyed elevation of monitoring point (feet above mean sea level)

WL Groundwater level (feet below MP)

EL Groundwater elevation (feet above mean sea level)

PCE Tetrachloroethene

TCE Trichloroethene

Cis-1,2-DCE Cis-1,2-Dicrhloroethene

VC Vinyl Chloride

µg/L micrograms per liter

All values are reported in µg/L

NS Not Sampled

NA Not Analyzed

Values in bold exceed state action level

Table 2. Summary of Results for Mann-Kendall Trend Test for PCE				
Well ID	**Period Evaluated**	**# Data Points**	**Trend**	**Confidence Factor**
MW-1	March 2021 - October 2023	9	No Trend	72.8%
MW-2	March 2021 - October 2023	12	No Trend	70.4%
MW-3	March 2021 - October 2023	12	Increasing	99.9%

FIGURES

FIGURE 1

TITLE:

PROJECT LOCATION MAP
-SHOWING-
LAKESIDE INN & CASINO
181 KAHLE DR
STATELINE, NV

UES™
Formerly McGinley & Associates

FILE:
Fig 1 - Project Location Map

COORDINATE SYSTEM:
NAD 1983 UTM Zone 11N

JOB NO.:	DATE:
LIC002	11/14/2023

REF.					REVISION:
	DESIGNED	ACH	CHECKED	ACH	-
	DRAWN	HC	APPROVED	CJ	

R:\Projects\LIC\002 - PCE Support\02_GIS_Data\Fig 1 - Project Location Map.mxd

R:\Projects\LIC\002 - PCE Support\02_GIS_Data\Fig 2 - Site Map.mxd

FIGURE 2

TITLE:

SITE MAP

-SHOWING-

Groundwater Monitoring Wells
Lakeside Inn & Casino
181 Kahle Dr
Stateline, Nevada

MW-2	Groundwater Monitoring Well
MW-1	Abandoned Groundwater Monitoring Well
	Property Boundary
APN	Assessor's Parcel Number

* MW-1 was abandoned by full removal

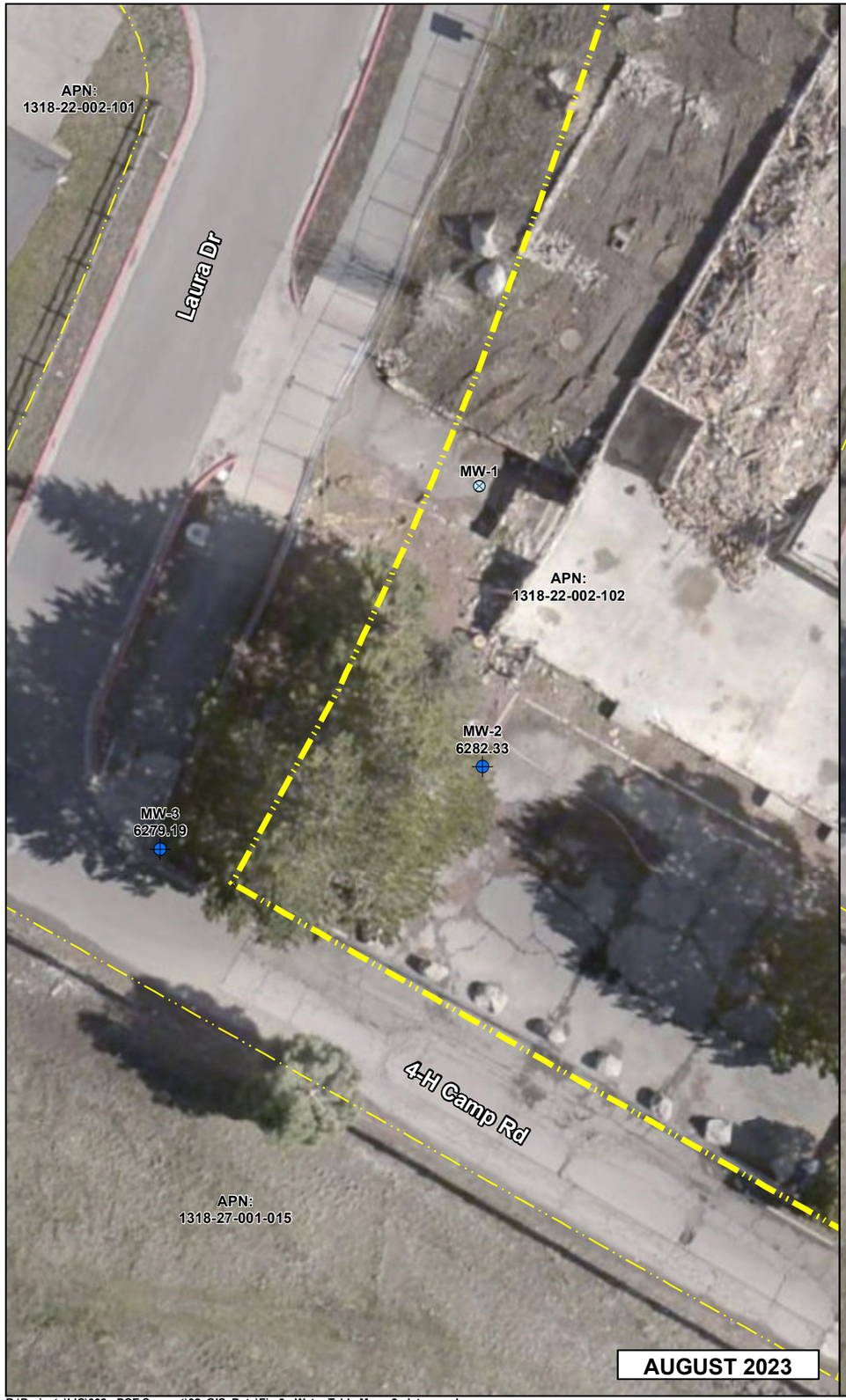
JOB NO.:
LIC002

FILE:
Fig 2 - Site Map

COORDINATE SYSTEM:
NAD 1983 StatePlane Nevada West FIPS 2703 Feet

DATE:
12/15/2023

UES TM
Formerly McGinley & Associates



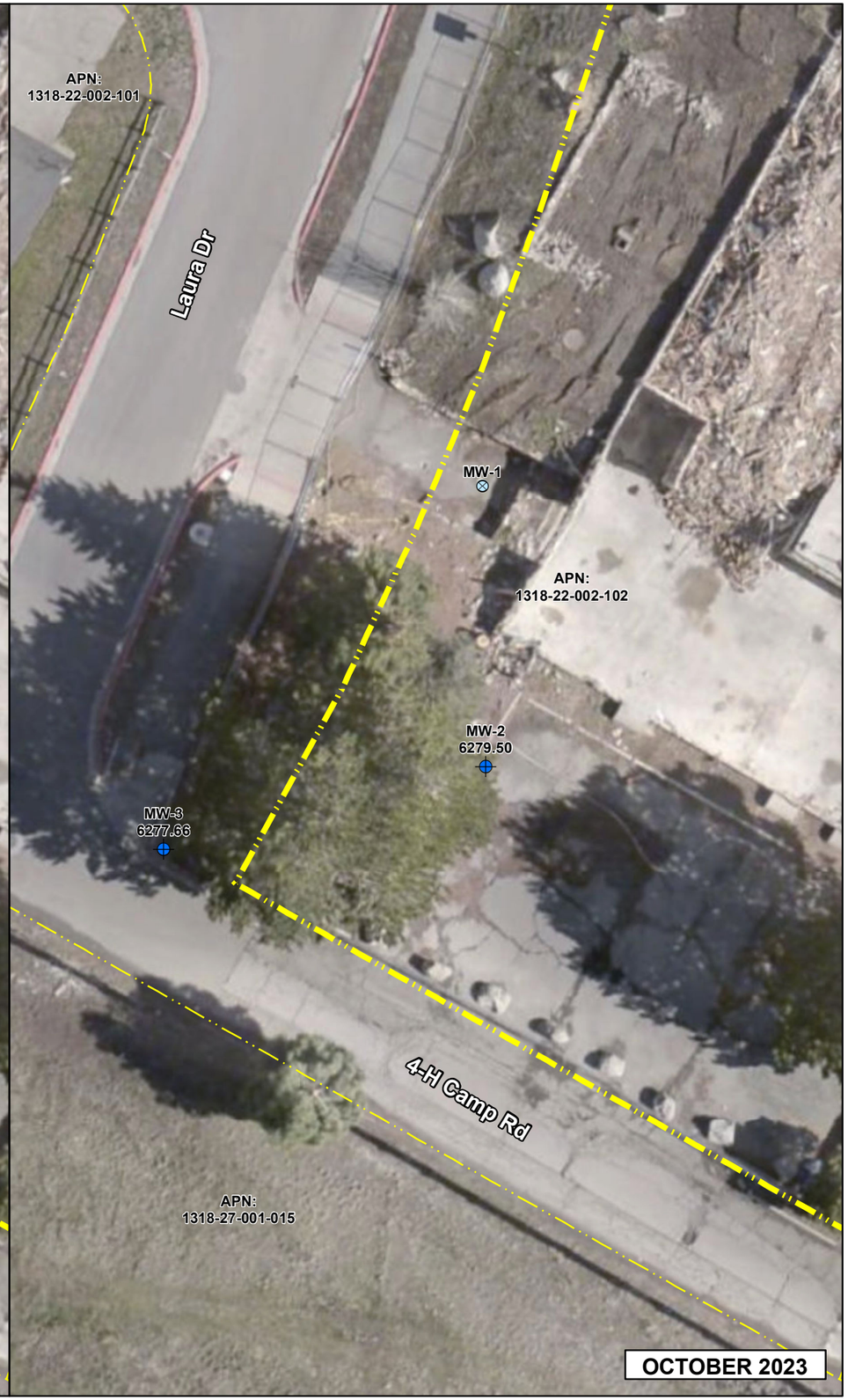


FIGURE 3

TITLE:

WATER TABLE MAP
-SHOWING-
(August 2023 & October 2023)
Lakeside Inn & Casino
181 Kahle Dr
Stateline, Nevada

MW-2 6270	Groundwater Monitoring Well Groundwater Elevation (famsl)
MW-1	Abandoned Groundwater Monitoring Well
6270	Groundwater Contour (famsl)
0.020 ft/ft	Approximate Horizontal Hydraulic Gradient
	Property Boundary
APN	Assessor's Parcel Number
famsl	Feet Above Mean Sea Level
NM	Not Measured

* MW-1 was abandoned by full removal

The hydraulic gradient could not be calculated for the third and fourth quarter monitoring events as groundwater level measurements could only be collected from two wells.

N

0 20
Feet

JOB NO.:
LIC002

FILE:
Fig 3 - Water Table Map - 2 plates

COORDINATE SYSTEM:
NAD 1983 StatePlane Nevada West FIPS 2703 Feet

DATE:
12/15/2023

UES TM
Formerly McGinley & Associates

R:\Projects\LIC\002 - PCE Support\02_GIS_Data\Fig 3 - Water Table Map - 2 plates.mxd

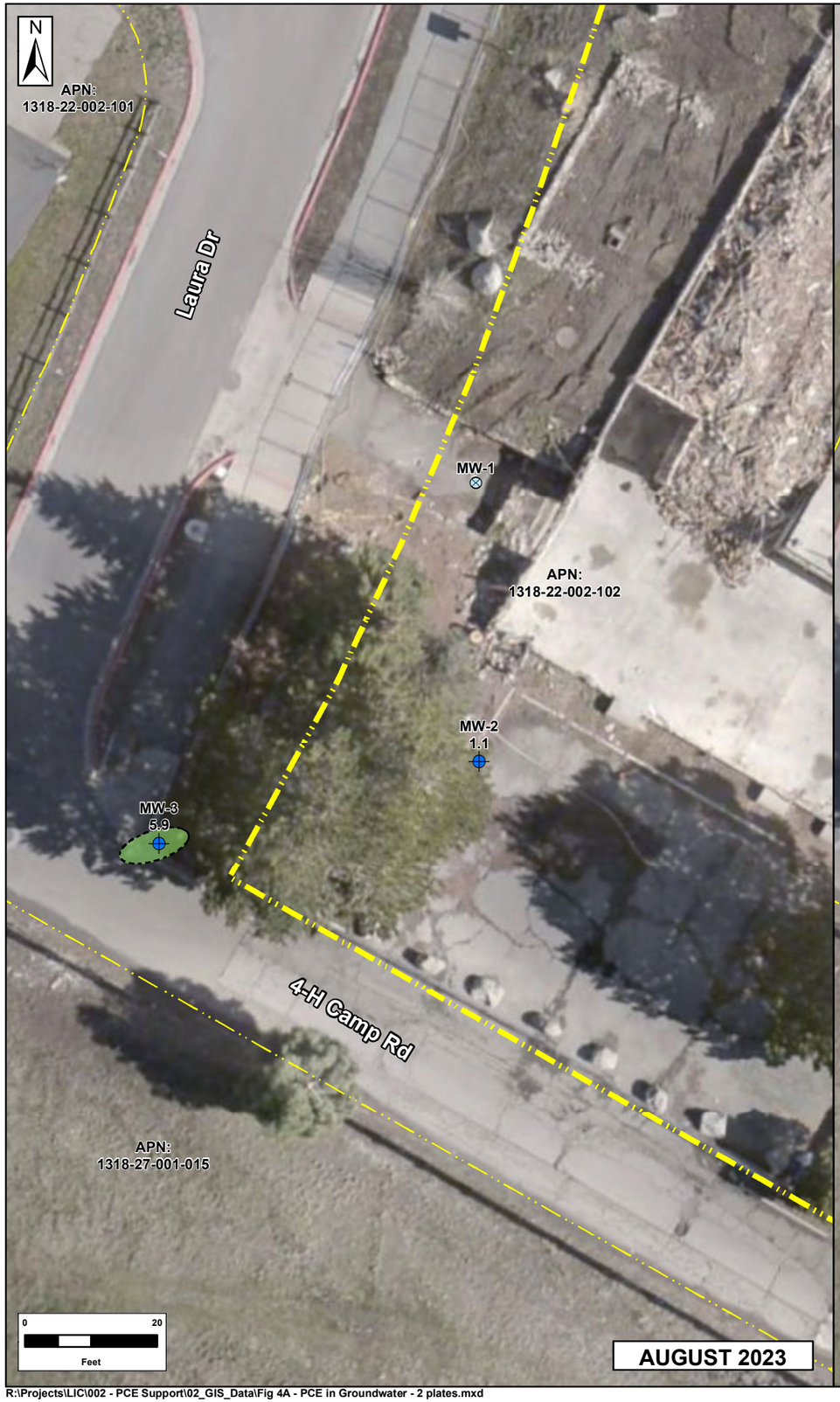


FIGURE 4A

TITLE:

Isopleth Map
-SHOWING-
Inferred Lateral Distribution of PCE Exceeding Action Level (August 2023 & October 2023)
Lakeside Inn & Casino
181 Kahle Dr
Stateline, Nevada

MW-2 6270	Groundwater Monitoring Well Groundwater Elevation (famsl)
MW-1	Abandoned Groundwater Monitoring Well
	Property Boundary
APN	Assessor's Parcel Number
NS	Not Sampled

* MW-1 was abandoned by full removal

PCE Concentration (µg/L)

5-50

JOB NO.:
LIC002

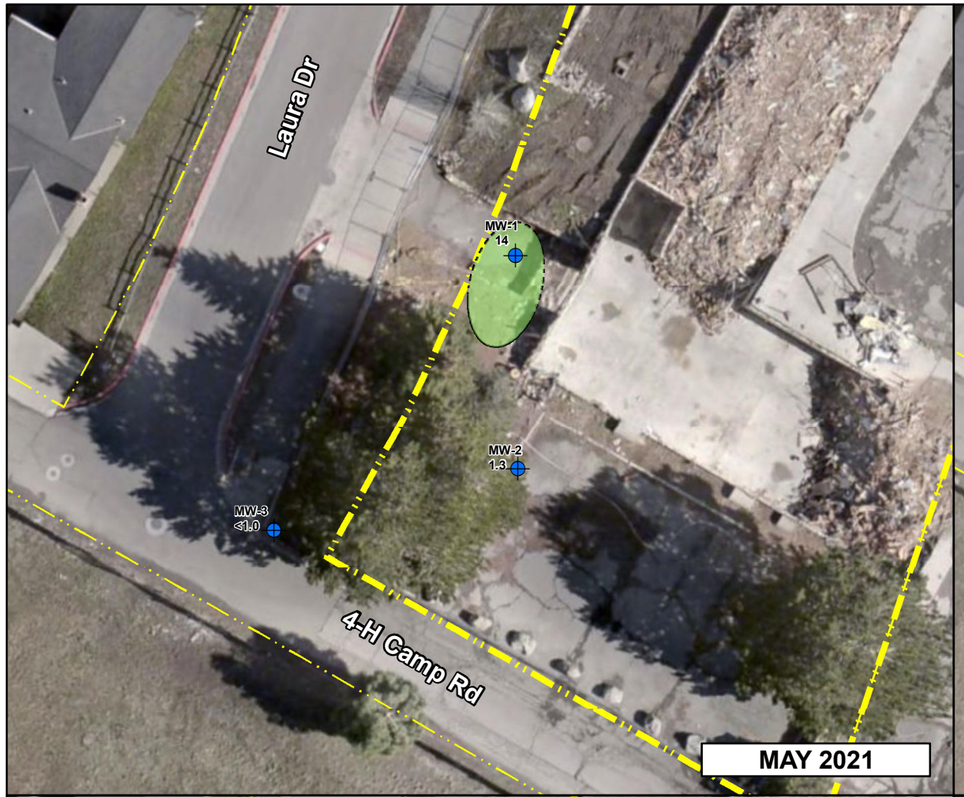
FILE:
Fig 4A - PCE in Groundwater - 2 plates

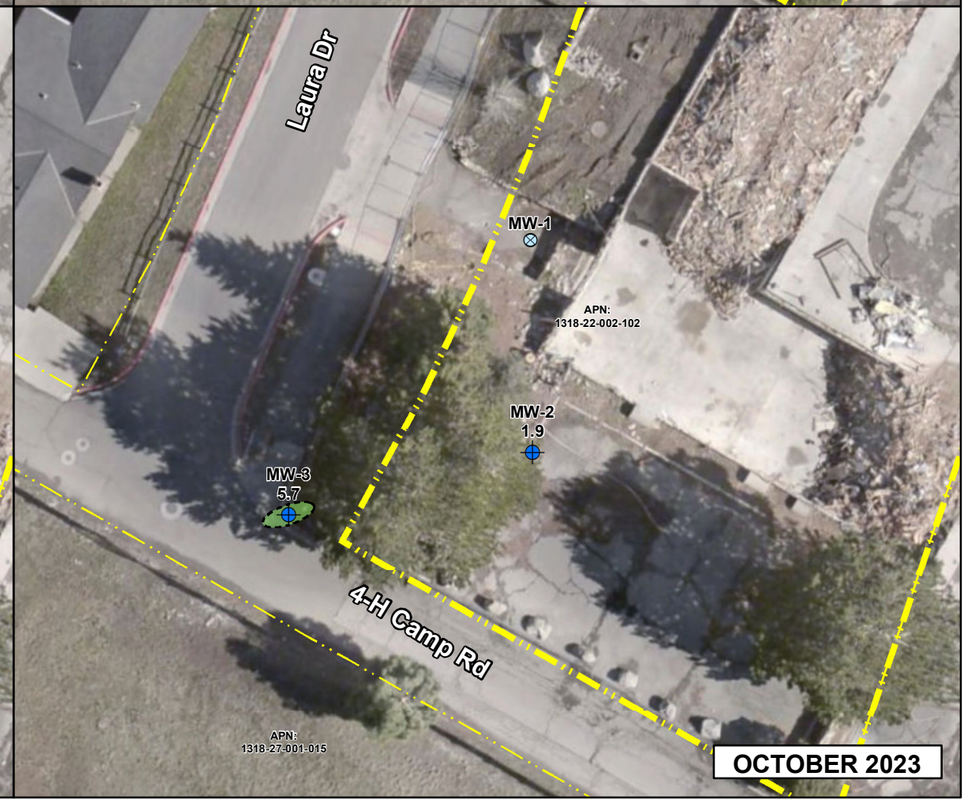
COORDINATE SYSTEM:
NAD 1983 StatePlane Nevada West FIPS 2703 Feet

DATE:
12/15/2023

UES TM
Formerly McGinley & Associates

R:\Projects\LIC\002 - PCE Support\02_GIS_Data\Fig 4A - PCE in Groundwater - 2 plates.mxd





R:\Projects\LIC\002 - PCE Support\02_GIS_Data\Fig 4B - PCE in Groundwater.mxd

FIGURE 4B

TITLE:

Isopleth Maps
-SHOWING-
Inferred Lateral Distribution of PCE Exceeding Action Level (March 2021 - October 2023)
Lakeside Inn & Casino
181 Kahle Dr
Stateline, Nevada

MW-2 5 — Groundwater Monitoring Well PCE Concentration (µg/L)

MW-1 — Abandoned Groundwater Monitoring Well

Property Boundary

APN — Assessor's Parcel Number

PCE Concentration (µg/L)

5-50

50.1 - 100

N

0 30
Feet

JOB NO.:
LIC002

FILE:
Fig 4B - PCE in Groundwater

COORDINATE SYSTEM:
NAD 1983 StatePlane Nevada West FIPS 2703 Feet

DATE:
12/15/2023

UES TM
Formerly McGinley & Associates

APPENDIX A

Groundwater Sample Log

GROUNDWATER SAMPLE LOG

Project # LIC002 | Date : 8/30/2023 | Lab:

Project Name: Lakeside Inn & Casino | Weather: Warm, sunny | Page: 1 of 1

Location: 181 Kahle Dr, Stateline NV

Sampler Name : D.Whalen | Signature:

McGinley & Associates
A Universal Engineering Sciences Company

Well ID	Container Type	Time	Well dia	Depth to Product	Depth to Water	Total Depth	Water Column	Multiplier per dia	Purge Volume	Purge Volume x3	Actual Purge Gal	Water Condition	pH	Ec	Do	Orp	Temp	Turbidity
MW3	3v	936	2"	NP	9.11	24.67	15.56	0.17	2.65	7.95	8.00							
MW2	3v	1002	2"	NP	5.77	19.34	13.57	0.17	2.30	6.90	7.00							
MW1	3v	NS*	2"	NP	NS*													

NP = No Product
NS= No sample
*MW-1 was submerged and not sampled

GROUNDWATER SAMPLE LOG

Project # LIC002 | Date : 10/25/2023 | Lab:

Project Name: Lakeside Inn & Casino | Weather: Cloudy, cold | Page: 1 of 1

Location: 181 Kahle Dr, Stateline NV

Sampler Name : D.Whalen | Signature:

McGinley & Associates
A Universal Engineering Sciences Company

Well ID	Container Type	Time	Well dia	Depth to Product	Depth to Water	Total Depth	Water Column	Multiplier per dia	Purge Volume	Purge Volume x3	Actual Purge Gal	Water Condition	pH	Ec	Do	Orp	Temp	Turbidity
MW3	3v	1000	2"	NP	10.64	24.7	14.06	0.17	2.39	7.17	8.00	Turbid						
MW2	3v	1020	2"	NP	8.60	19.40	10.80	0.17	1.83	5.49	6.00							
MW1	3v	NS*	2"	NP	NS*													

NP = No Product
NS= No sample
*MW-1 was destroyed during onsite demolition activities

APPENDIX B

Chain of Custody Records and Analytical Reports for Groundwater Samples

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

September 06, 2023

Caitlin Jelle
McGinley & Associates, Inc.
6995 Sierra Center Parkway
Reno, NV 89511
TEL: (775) 829-2245
FAX (775) 829-2213

RE: LIC002

Order No.: MGA2308188

Dear Caitlin Jelle:

The result of this report apply to the sample(s) as received.

There were no problems with the analytical events associated with this report unless noted.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

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

Sincerely,

Randy Gardner

Laboratory Director

255 Glendale Ave, #21
Sparks, Nevada 89431

ALPHA ANALYTICAL INC.

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

Analytical Report

WO#: **MGA2308188**
Report Date: **9/6/2023**

CLIENT: McGinley & Associates, Inc.
Collection Date: 8/30/2023 9:36:00 AM
Project: LIC002
Lab ID: 2308188-01
Matrix: AQUEOUS
Client Sample ID: LIC002-GW-MW-2

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Vinyl chloride	ND	1.0		µg/L	9/1/2023	EPA 8260
cis-1,2-Dichloroethene	ND	1.0		µg/L	9/1/2023	EPA 8260
Trichloroethene	ND	1.0		µg/L	9/1/2023	EPA 8260
Tetrachloroethene	1.1	1.0		µg/L	9/1/2023	EPA 8260
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	9/1/2023	EPA 8260
Surr: Toluene-d8	97	70-130		%Rec	9/1/2023	EPA 8260
Surr: 4-Bromofluorobenzene	98	70-130		%Rec	9/1/2023	EPA 8260

ALPHA ANALYTICAL INC.

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

Analytical Report

WO#: **MGA2308188**
Report Date: **9/6/2023**

CLIENT: McGinley & Associates, Inc.
Collection Date: 8/30/2023 10:02:00 AM
Project: LIC002
Lab ID: 2308188-02
Matrix: AQUEOUS
Client Sample ID: LIC002-GW-MW-3

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Vinyl chloride	ND	1.0		µg/L	9/1/2023	EPA 8260
cis-1,2-Dichloroethene	ND	1.0		µg/L	9/1/2023	EPA 8260
Trichloroethene	ND	1.0		µg/L	9/1/2023	EPA 8260
Tetrachloroethene	5.9	1.0		µg/L	9/1/2023	EPA 8260
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	9/1/2023	EPA 8260
Surr: Toluene-d8	102	70-130		%Rec	9/1/2023	EPA 8260
Surr: 4-Bromofluorobenzene	92	70-130		%Rec	9/1/2023	EPA 8260

ALPHA ANALYTICAL INC.

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

QC SUMMARY REPORT

WO#: **2308188**

06-Sep-23

Client: McGinley & Associates, Inc.

Project: LIC002 **TestCode:** **VOC_W**

Sample ID: **MB-19239** SampType: **MBLK** TestCode: **VOC_W** Units: **µg/L**
Client ID: **PBW** Batch ID: **A19239** TestNo: **SW8260C**
Prep Date: **9/1/2023** RunNo: **17697** SeqNo: **511917**
Analysis Date: **9/1/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1									
cis-1,2-Dichloroethene	ND	1									
Trichloroethene	ND	1									
Tetrachloroethene	ND	1									
Surr: 1,2-Dichloroethane-d4	10		10		100	69.51	130.49				
Surr: Toluene-d8	10		10		100	69.51	130.49				
Surr: 4-Bromofluorobenzene	10		10		100	69.51	130.49				

Sample ID: **LCS-19239** SampType: **LCS** TestCode: **VOC_W** Units: **µg/L**
Client ID: **LCSW** Batch ID: **A19239** TestNo: **SW8260C**
Prep Date: **9/1/2023** RunNo: **17697** SeqNo: **511916**
Analysis Date: **9/1/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	11.9	1	10	0	119	47.8	132				
cis-1,2-Dichloroethene	9.78	1	10	0	97.8	59.2	131				
Trichloroethene	9.4	1	10	0	94.0	69	120.4				
Tetrachloroethene	10.4	1	10	0	104	64	123				
Surr: 1,2-Dichloroethane-d4	10.2		10		102	69.51	130.5				
Surr: Toluene-d8	10.3		10		103	69.51	130.5				
Surr: 4-Bromofluorobenzene	10.2		10		102	69.51	130.5				

Sample ID: **2308161-02AMS** SampType: **MS** TestCode: **VOC_W** Units: **µg/L**
Client ID: **BatchQC** Batch ID: **A19239** TestNo: **SW8260C**
Prep Date: **9/1/2023** RunNo: **17697** SeqNo: **511926**
Analysis Date: **9/1/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	49.9	5	50	0	99.8	60.4	140				
cis-1,2-Dichloroethene	49.9	5	50	0	99.9	73.9	133				
Trichloroethene	45.8	5	50	0	91.7	65.7	131				
Tetrachloroethene	54.4	5	50	0	109	45.9	138				
Surr: 1,2-Dichloroethane-d4	53.2		50		106	69.51	130.49				
Surr: Toluene-d8	45.3		50		90.6	69.51	130.49				
Surr: 4-Bromofluorobenzene	38.9		50		77.8	69.51	130.49				

Qualifiers:

B	Analyte detected in the associated Method Blank
ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

ALPHA ANALYTICAL INC.

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

QC SUMMARY REPORT

WO#: **2308188**

06-Sep-23

Client: McGinley & Associates, Inc.

Project: LIC002 **TestCode:** **VOC_W**

Sample ID: **2308161-02AMSD** SampType: **MSD** TestCode: **VOC_W** Units: **µg/L**

Client ID: **BatchQC** Batch ID: **A19239** TestNo: **SW8260C**

Prep Date: **9/1/2023** RunNo: **17697** SeqNo: **511927**

Analysis Date: **9/1/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	60.6	5	50	0	121	60.4	140	49.9	19	23.9	
cis-1,2-Dichloroethene	52.8	5	50	0	106	73.9	133	49.9	5.5	20.1	
Trichloroethene	48.7	5	50	0	97.4	65.7	131	45.8	6.1	25.3	
Tetrachloroethene	55.9	5	50	0	112	45.9	138	54.4	2.8	30.9	
Surr: 1,2-Dichloroethane-d4	55.7		50		111	69.51	130.49	53.2	0	0	
Surr: Toluene-d8	44.9		50		89.7	69.51	130.49	45.3	0	0	
Surr: 4-Bromofluorobenzene	38		50		76.1	69.51	130.49	38.9	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank
ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

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255 Glendale Ave, #21
Sparks, Nevada 89431
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Website: www.alpha-analytical.com

Definition Only

WO#: **2308188**
Date: **9/6/2023**

Definitions:

ND = Not Detected

C = Reported concentration includes additional compounds uncharacteristic of common fuels and lubricants.

D = Reporting Limits were increased due to high concentrations of non-target analytes.

H = Reporting Limits were increased due to the hydrocarbons present in the sample.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

K = DRO concentration may include contributions from lighter-end hydrocarbons (e.g. gasoline) that elute in the DRO range.

L = DRO concentration may include contributions from heavier-end hydrocarbons (e.g. motor oil) that elute in the DRO range.

O = Reporting Limits were increased due to sample foaming.

V = Reporting Limits were increased due to high concentrations of target analytes.

X = Reporting Limits were increased due to sample matrix interferences.

Z = DRO concentration may include contributions from lighter-end (e.g. gasoline) and heavier-end (e.g. motor oil) hydrocarbons that elute in the DRO range.

S50 = The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The laboratory control sample was acceptable.

S51 = Surrogate recovery could not be determined due to the presence of co-eluting hydrocarbons.

S52 = Surrogate recovery was above laboratory acceptance limits. Probable matrix effect.

S53 = Surrogate recovery was below laboratory acceptance limits. Probable matrix effect.

S54 = Surrogate recovery was below laboratory acceptance limits.

S55 = Surrogate recovery was above laboratory acceptance limits.

Report CC's Anna Henry
Caitlin Jelle

WORKORDER SUMMARY

Alpha Analytical, Inc.

255 Glendale Ave, #21 Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406

NV

WorkOrder: MGA2308188
Report Due By: 07-Sep-23
EDD Required: YES

Report Attention: Caitlin Jelle

Client:
UES/McGinley & Associates, Inc.
6995 Sierra Center Parkway
Reno, NV 89511

TEL: 7758292245
FAX: 7758292213
ProjectNo: LIC002

Date Received: 30-Aug-23

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_W							Sample Remarks
MGA2308188-01	LIC002-GW-MW-2	AQ	8/30/2023 9:36:00 AM	3	0	5	A - PCE/TCE/cis-1,2-DCE/VC_N							
MGA2308188-02	LIC002-GW-MW-3	AQ	8/30/2023 10:02:00 AM	3	0	5	A - PCE/TCE/cis-1,2-DCE/VC_N							

Comments:

	Signature	Print Name	Company	Date/Time
Logged in by:	Kmurray	K Murray	Alpha Analytical, Inc.	8/30/23 1550

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

Company: MGA
Attn:
Address:
City, State, Zip:
Phone Number: Fax:

ALPHA ANALYTICAL INC.

Alpha Analytical, Inc.
Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:
Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Northern NV: 350 7th St. Elko, NV 89801 Phone: 775-388-7043

Consultant/ Client Info:
Company:
Address:
City, State, Zip:

Job and Purchase Order Info:
Job # LIC002
Job Name:
P.O. #:

Report Attention/Project Manager:
Name: CAITLIN
Email Address:
Phone #:
Cell #:

QC Deliverable Info:
EDD Required? Yes / No EDF Required? Yes / No
Global ID:
Date Validation Packages: III or IV

Samples Collected from which State? (circle one) AR CA KS NV OR WA Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	Field Filtered? (Yes / No) Yes	Field Filtered? (Yes / No) No	# Containers** (See Key Below)	Analysis Requested: PCE	TCE	cis-1,2-DCE	VC	added per DW	Remarks
0932	08/30	AQ	MGA2308188-01	LIC002-GW-MW-2	STD		✓	3V	✓	X	X	X		
1002	"	"	02	" MW-3	↓		↓	↓	✓	X	X	X		

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: C. Romero & Whitaker

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
	8/30/2023	12:35	KM	8/30/23	1235

* Key: AQ - Aqueous AR-Air OT - Other SO - Soil WA-Waste **: B - Brass L - Liter O - Orbo OT-Other S-Soil Jar T - Tedlar V-VOA

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

October 30, 2023

Caitlin Jelle
McGinley & Associates, Inc.
6995 Sierra Center Parkway
Reno, NV 89511
TEL: (775) 829-2245
FAX (775) 829-2213

RE: LIC002

Order No.: MGA2310264

Dear Caitlin Jelle:

The result of this report apply to the sample(s) as received.

There were no problems with the analytical events associated with this report unless noted.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

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

Sincerely,

Randy Gardner

Laboratory Director

255 Glendale Ave, #21
Sparks, Nevada 89431

ALPHA ANALYTICAL INC.

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

Analytical Report

WO#: **MGA2310264**
Report Date: **10/30/2023**

CLIENT: McGinley & Associates, Inc.
Collection Date: 10/25/2023 10:00:00 AM
Project: LIC002
Lab ID: 2310264-01
Matrix: AQUEOUS
Client Sample ID: LIC002-MW3

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Tetrachloroethene	5.7	1.0		µg/L	10/26/2023	EPA 8260
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	10/26/2023	EPA 8260
Surr: Toluene-d8	101	70-130		%Rec	10/26/2023	EPA 8260
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	10/26/2023	EPA 8260

ALPHA ANALYTICAL INC.

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

Analytical Report

WO#: **MGA2310264**
Report Date: **10/30/2023**

CLIENT: McGinley & Associates, Inc.
Collection Date: 10/25/2023 10:20:00 AM
Project: LIC002
Lab ID: 2310264-02
Matrix: AQUEOUS
Client Sample ID: LIC002-MW2

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Tetrachloroethene	1.9	1.0		µg/L	10/26/2023	EPA 8260
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	10/26/2023	EPA 8260
Surr: Toluene-d8	101	70-130		%Rec	10/26/2023	EPA 8260
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	10/26/2023	EPA 8260

ALPHA ANALYTICAL INC.

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

QC SUMMARY REPORT

WO#: **2310264**

30-Oct-23

Client: McGinley & Associates, Inc.

Project: LIC002 **TestCode:** **VOC_W**

Sample ID: **MB-19618** SampType: **MBLK** TestCode: **VOC_W** Units: **µg/L**
Client ID: **PBW** Batch ID: **A19618** TestNo: **SW8260C**
Prep Date: **10/26/2023** RunNo: **18031** SeqNo: **520845**
Analysis Date: **10/26/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene	ND	1									
Surr: 1,2-Dichloroethane-d4	10		10		103	69.51	130.49				
Surr: Toluene-d8	10		10		105	69.51	130.49				
Surr: 4-Bromofluorobenzene	11		10		111	69.51	130.49				

Sample ID: **LCS-19618** SampType: **LCS** TestCode: **VOC_W** Units: **µg/L**
Client ID: **LCSW** Batch ID: **A19618** TestNo: **SW8260C**
Prep Date: **10/26/2023** RunNo: **18031** SeqNo: **520844**
Analysis Date: **10/26/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene	10.7	1	10	0	107	64	123				
Surr: 1,2-Dichloroethane-d4	10.3		10		103	69.51	130.5				
Surr: Toluene-d8	10		10		100	69.51	130.5				
Surr: 4-Bromofluorobenzene	9.48		10		94.8	69.51	130.5				

Sample ID: **2310269-07AMS** SampType: **MS** TestCode: **VOC_W** Units: **µg/L**
Client ID: **BatchQC** Batch ID: **A19618** TestNo: **SW8260C**
Prep Date: **10/26/2023** RunNo: **18031** SeqNo: **520864**
Analysis Date: **10/26/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene	51.9	5	50	0	104	45.9	138				
Surr: 1,2-Dichloroethane-d4	56.4		50		113	69.51	130.49				
Surr: Toluene-d8	47.8		50		95.5	69.51	130.49				
Surr: 4-Bromofluorobenzene	46.9		50		93.8	69.51	130.49				

Sample ID: **2310269-07AMSD** SampType: **MSD** TestCode: **VOC_W** Units: **µg/L**
Client ID: **BatchQC** Batch ID: **A19618** TestNo: **SW8260C**
Prep Date: **10/26/2023** RunNo: **18031** SeqNo: **520865**
Analysis Date: **10/26/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene	50.7	5	50	0	101	45.9	138	51.9	2.4	30.9	
Surr: 1,2-Dichloroethane-d4	55.3		50		111	69.51	130.49	56.4	0	0	
Surr: Toluene-d8	47.6		50		95.1	69.51	130.49	47.8	0	0	
Surr: 4-Bromofluorobenzene	47.7		50		95.4	69.51	130.49	46.9	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank
ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

Definition Only

WO#: **2310264**
Date: **10/30/2023**

Definitions:

ND = Not Detected

C = Reported concentration includes additional compounds uncharacteristic of common fuels and lubricants.

D = Reporting Limits were increased due to high concentrations of non-target analytes.

H = Reporting Limits were increased due to the hydrocarbons present in the sample.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

K = DRO concentration may include contributions from lighter-end hydrocarbons (e.g. gasoline) that elute in the DRO range.

L = DRO concentration may include contributions from heavier-end hydrocarbons (e.g. motor oil) that elute in the DRO range.

O = Reporting Limits were increased due to sample foaming.

V = Reporting Limits were increased due to high concentrations of target analytes.

X = Reporting Limits were increased due to sample matrix interferences.

Z = DRO concentration may include contributions from lighter-end (e.g. gasoline) and heavier-end (e.g. motor oil) hydrocarbons that elute in the DRO range.

S50 = The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The laboratory control sample was acceptable.

S51 = Surrogate recovery could not be determined due to the presence of co-eluting hydrocarbons.

S52 = Surrogate recovery was above laboratory acceptance limits. Probable matrix effect.

S53 = Surrogate recovery was below laboratory acceptance limits. Probable matrix effect.

S54 = Surrogate recovery was below laboratory acceptance limits.

S55 = Surrogate recovery was above laboratory acceptance limits.

Report CC's Anna Henry
Caitlin Jelle
Leo Karcz

WORKORDER SUMMARY

Alpha Analytical, Inc.

255 Glendale Ave, #21 Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention: Caitlin Jelle

NV

WorkOrder: MGA2310264
Report Due By: 01-Nov-23
EDD Required: YES

Client:
UES/McGinley & Associates, Inc.
6995 Sierra Center Parkway
Reno, NV 89511

TEL: 7758292245
FAX: 7758292213
ProjectNo: LIC002

Date Received: 25-Oct-23

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_W							Sample Remarks
MGA2310264-01	LIC002-MW3	AQ	10/25/2023 10:00:00 AM	3	0	5	A - PCE_N							
MGA2310264-02	LIC002-MW2	AQ	10/25/2023 10:20:00 AM	3	0	5	A - PCE_N							

Comments:

	Signature	Print Name	Company	Date/Time
Logged in by:	Kmurray	K Murray	Alpha Analytical, Inc.	10/25/23 1317

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN OF CUSTODY

07642

Billing Information:

Company: MGA
Attn:
Address:
City, State, Zip:
Phone Number: Fax:

Alpha Analytical, Inc.
Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:
Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-8089
Northern NV: 350 7th St., Elko, NV 89801 Phone: 775-388-7043

Consultant/ Client Info:
Company:
Address:
City, State, Zip:

Job and Purchase Order Info:
Job # LIC002
Job Name:
P.O. #:

Report Attention/Project Manager:
Name: Caitlin/Leo
Email Address:
Phone #:
Cell #:

QC Deliverable Info:
EDD Required? Yes / No EDF Required? Yes / No
Global ID:
Data Validation Packages: III or IV

Samples Collected from which State? (circle one) AR CA KS (NV) OR WA Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Field Filtered? Yes	Field Filtered? No	PCE	Remarks
10:00	10/25	AQ	MGA2310264-01	LIC002-MW3	STD	3V		✓	✓	
10:20	10/25	AQ	02	LIC002-MW2	STD	3V		✓	✓	

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: Domonic Whalen

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
	10/25/23	12:43	Kelly	10/25/23	1243
	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:

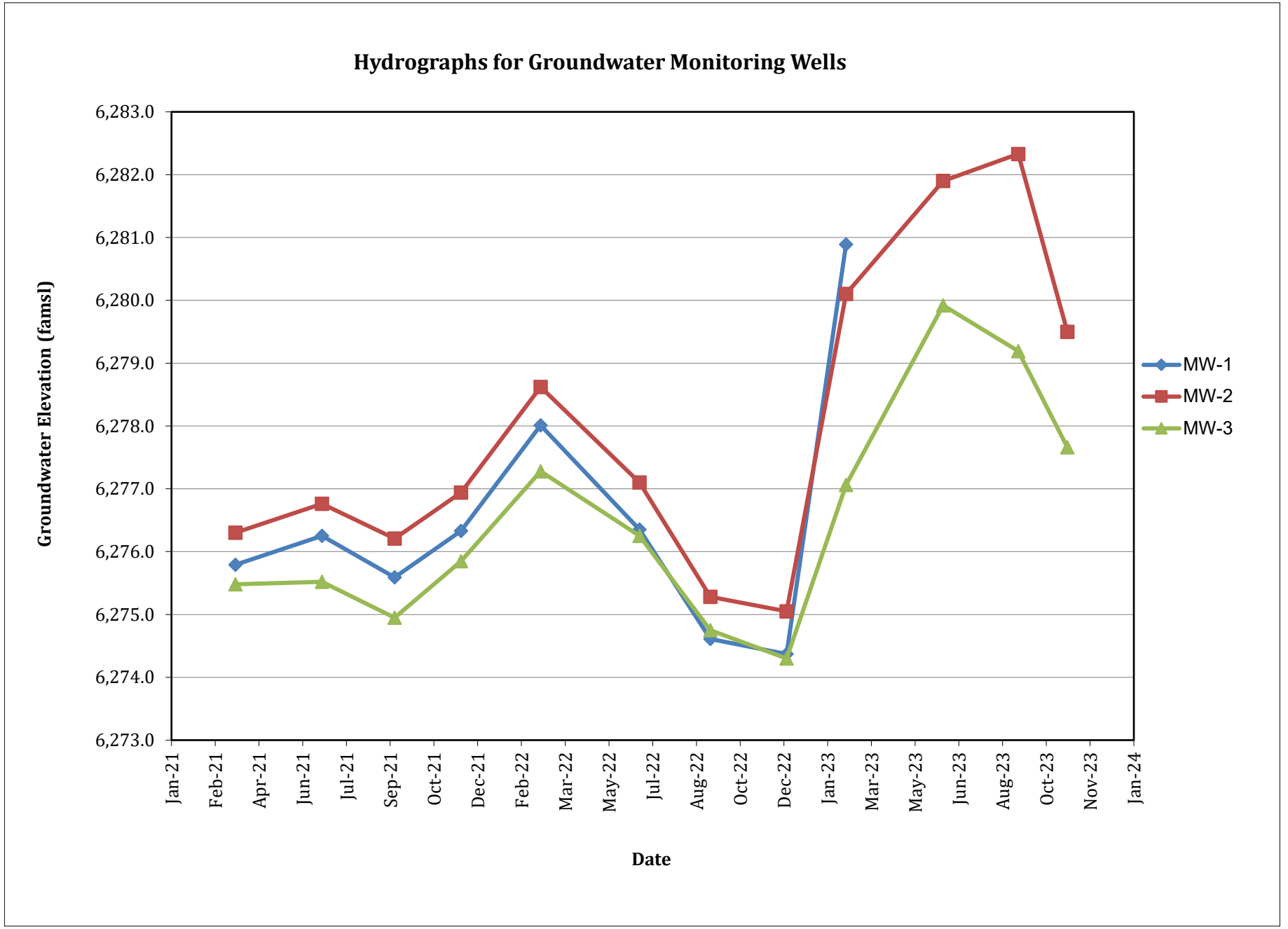
* Key: AQ - Aqueous AR-Air OT - Other So-Soil WA - Waste ** B - Brass L - Liter O - Orbo OT - Other P - Plastic S-Soil Jar T - Tedlar V - VOA

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

12/17

APPENDIX C

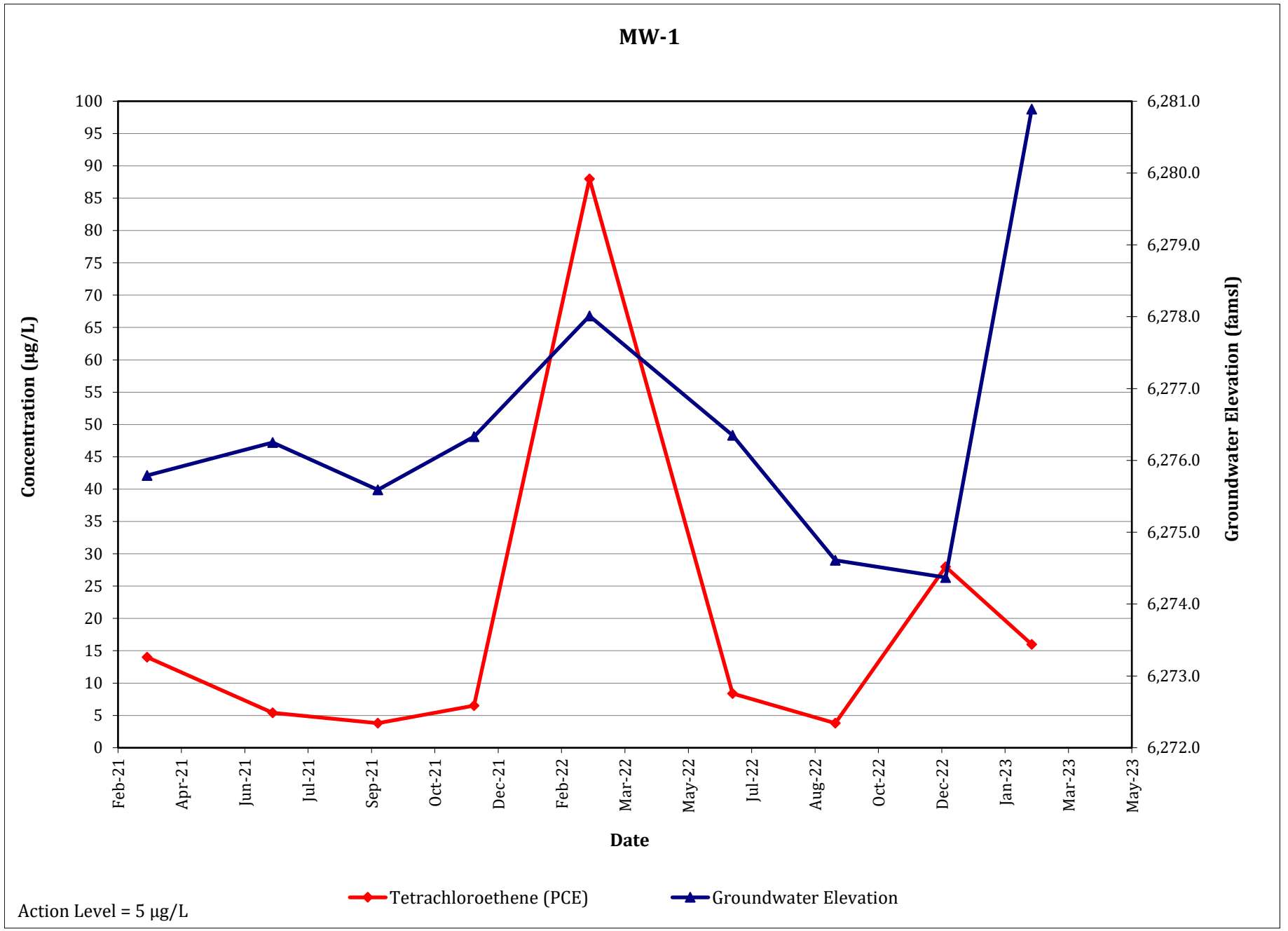
Hydrographs for Groundwater Monitoring Wells



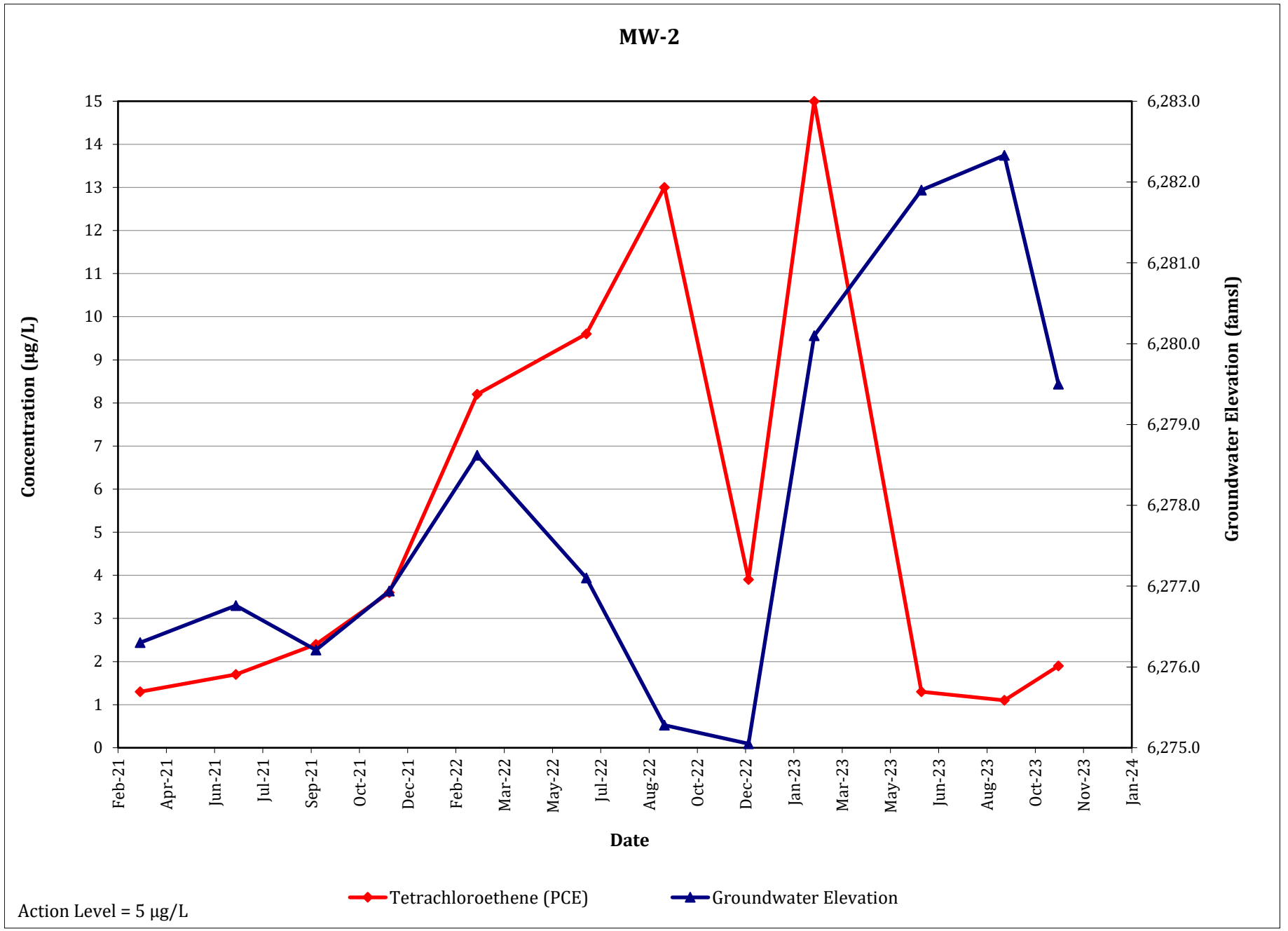
famsl feet above mean sea level

APPENDIX D

Time Series PCE Plots at Key Wells

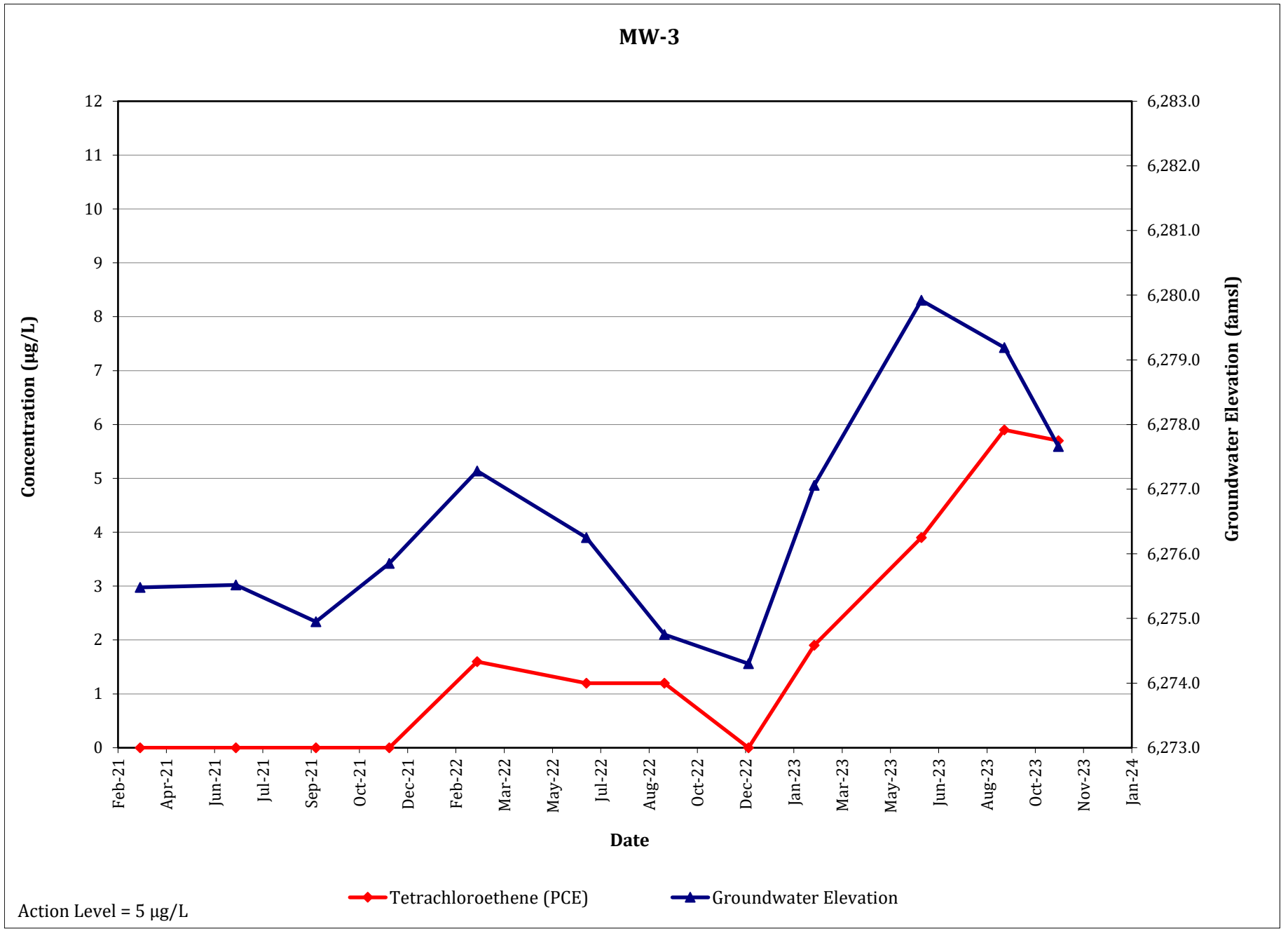


µg/L micrograms per Liter
famsl feet above mean sea level



µg/L micrograms per Liter
famsl feet above mean sea level

HALL001



µg/L micrograms per Liter
famsl feet above mean sea level

HALL001

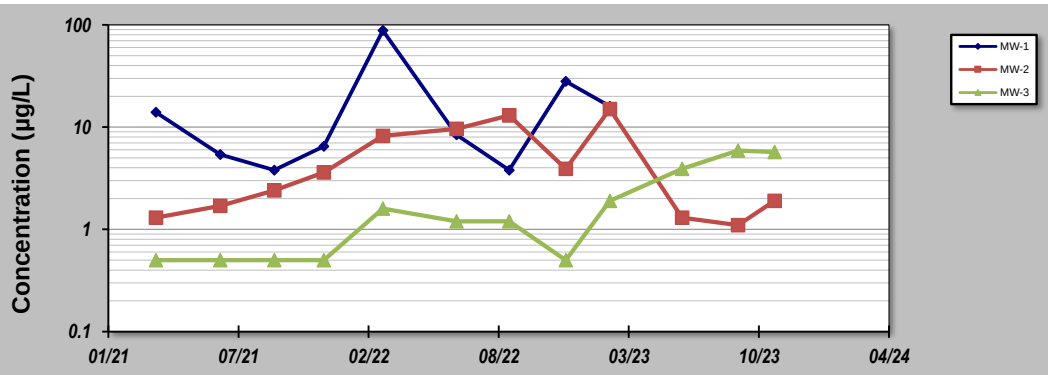
APPENDIX E

Mann-Kendall Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Nov-23	Job ID:	LIC002
Facility Name:	Former Lakeside Inn & Casino	Constituent:	PCE
Conducted By:	McGinley	Concentration Units:	µg/L

Sampling Point ID:	MW-1	MW-2	MW-3				
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	18-Mar-21	14	1.3	0.5				
2	25-Jun-21	5.4	1.7	0.5				
3	16-Sep-21	3.8	2.4	0.5				
4	1-Dec-21	6.5	3.6	0.5				
5	2-Mar-22	88	8.2	1.6				
6	23-Jun-22	8.4	9.6	1.2				
7	12-Sep-22	3.8	13	1.2				
8	8-Dec-22	28	3.9	0.5				
9	14-Feb-23	16	15	1.9				
10	5-Jun-23		1.3	3.9				
11	30-Aug-23		1.1	5.9				
12	25-Oct-23		1.9	5.7				
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		1.39	0.94	1.02				
Mann-Kendall Statistic (S):		7	9	43				
Confidence Factor:		72.8%	70.4%	99.9%				
Concentration Trend:		No Trend	No Trend	Increasing				



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.