Spokane County
PUBLIC WORKS

October 31, 2022

Washington Department of Ecology
Attn: Bill Fees
4601 N Monroe St.
Spokane, WA 99205

RE: Colbert Landfill Remediation Project Annual Report 2022

Dear Bill,

Enclosed is a copy of the Colbert Landfill Remediation Project Annual Report for April/May 2022.

If you have any comments or questions, please call me at (509) 238-6607.

Sincerely,

Austin Stewart
Water Resources Specialist

Enc.

Colbert Landfill Remediation Project Annual Report 2022

Progress Report for

May 2021 through June 2022

Prepared by:

Spokane County Landfill Closure
22515 N Elk-Chattaroy Rd
Colbert, WA 99005

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https://www.spokanecounty.org/4726/Colbert-Landfill

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1.0 Colbert Landfill Remediation Project Summary

The Colbert Landfill Superfund site is a closed, 40-acre, municipal solid waste landfill located approximately 15 miles north of Spokane, Washington, and about 2.5 miles north of Colbert, Washington. The landfill received waste from 1968 to 1986 when it became filled to capacity. Groundwater in the vicinity of the landfill was found to be contaminated with volatile organic compounds and in 1983, and the landfill was placed on the National Priorities List (NPL) by EPA. In 1989, a consent decree (CD) was executed to implement a site remedy. The site remedy includes:

- An available alternate water supply for residential wells impacted by groundwater contamination originating from the landfill.
- Institutional Controls
- Construction and operation of a pump and treat system to capture and prevent further spread of groundwater contaminants.
- Landfill closure according to the State of Washington regulations Minimal Functional Standards (WAC173-304).
- Monitoring of contaminants to protect human health and the environment at the site.

Construction of a pump and treat (P&T) system was completed in 1994. The P&T system operated successfully for 20 years. In 2014, an EPA-recommended shut-down test was initiated to determine if the facility was continuing to add any significant benefit to the clean-up.

The programs currently in place include a Shut-down Test (lower aquifer) for the pump and treat system; upper aquifer compliance groundwater monitoring (includes 1,4-dioxane monitoring and Minimal Functional Standards (MFS) monitoring of the upper aquifer); residential well monitoring (includes both upper and lower aquifers); supplemental sampling (includes both upper and lower aquifers); and landfill cover maintenance and monitoring. The groundwater monitoring programs and criteria are summarized below.

Current Monitoring Programs

Program	Aquifer	Parameters	Schedule
Shut-down Test	Lower	VOC's	Annual (Extraction wells Quarterly)
Upper Aquifer Compliance	Upper	VOC's	Annual (Extraction wells Quarterly)
1,4-Dioxane Sampling	Lower/ Upper	1,4-Dioxane	Annual (Currently Monthly)
MFS Monitoring	Upper	Cl/NH3/NO2/NH3/ SO4/Fe/Mn/Zn/TOC/COD	Annual
Residential Monitoring	Lower/ Upper	VOC's	Monthly/Quarterly/SemiAnnual/ Annual/BiAnnual
Supplemental Sampling	Lower/ Upper	VOC's	Every five years

Program Criteria

PROGRAM	CRITERIA	TCA	DCE	DCA	TCE	PCE	MC	1,4-Dioxane		Units
CONSENT DECREE	Performance	200	7	4050	5	0.7	2.5			ug/L
	Evaluation	200	7	4050	5	0.7	2.5	7		
SHUT-DOWN TEST	Action Level	130	4.55	2632	3.25	0.5	1.63			
	Evaluation	200	7	4050	5	0.7	2.5			
RESIDENTIAL										ug/L
Monthly sampling initiated, evaluated in 12 months	Action Level	130	4.55	2632	3.25	0.5	1.63			
Exceedance requires alternative drinking water source be supplied	MCL	200	7	4050	5	0.7	2.5			
		Cl	**Fe**	**Mn**	**Zn**	**TOC**	**COD**	**SO4**	**NO3**	
MFS	(mg/L)	250	0.3	0.05	5	NA	NA	250	10	mg/L

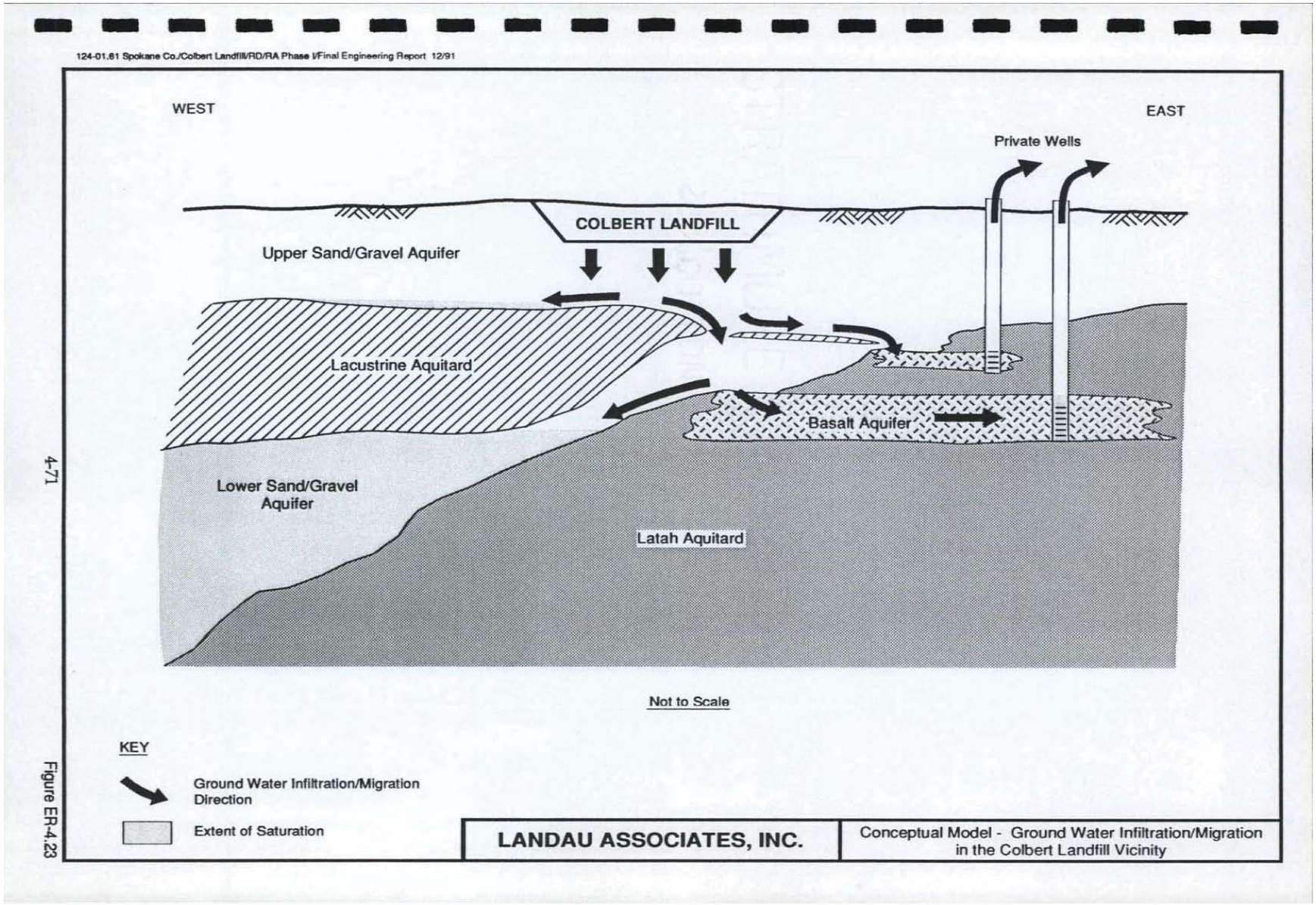
1.1 Geology/Hydrogeology

Hydrogeologic cross-sections for the Colbert Landfill is presented in Appendix D. The geology beneath the Site consists of six vertically stratified and laterally discontinuous geologic units derived from glacial and fluvial material, modified by erosional (and possibly landslide) processes, overlaid on granitic bedrock. There are two primary aquifers that include the saturated portion of the Upper Sand and Gravel Unit and the saturated portion of the Lower Sand and Gravel Unit, which are separated by a Lacustrine Unit that serves as an aquitard. The Latah Formation serves as an aquitard that underlies the Lower Sand and Gravel Aquifer at most locations. A basalt unit forms a secondary aquifer interbedded in the Latah Aquitard and is referred to as the Basalt Aquifer. The Granite Unit is an aquitard that underlies the Latah Formation and serves as the lower boundary to the regional flow system. For more information, please refer to the Phase I Engineering Report (Landau Associates 1991).

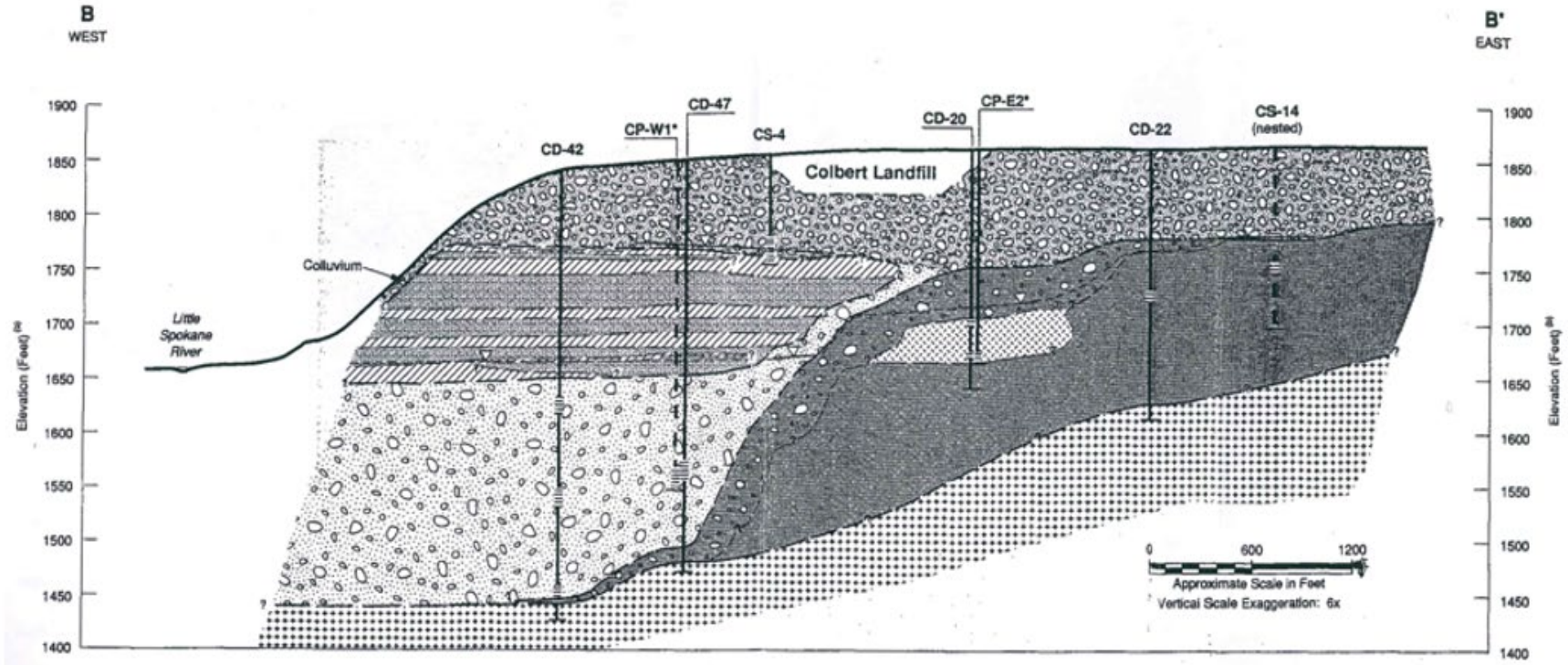
The Upper Sand and Gravel Unit aquifer (Upper Aquifer) is unconfined with a water table that lies approximately 90 ft below the ground surface. Groundwater flow in this aquifer is generally north to south, changing to the southeast approximately 1 mile south of the Site. The direction of flow appears to be influenced by the topography of the upper surface of the Lacustrine Aquitard (Landau Associates 1991).

The Lower Sand and Gravel Unit aquifer (Lower Aquifer) is confined to the west of the landfill and unconfined to the east of the landfill. To the west of the landfill, the Upper and Lower aquifers are separated by the Lacustrine unit, which causes the confined conditions in that area. Groundwater flow in the Lower Aquifer is predominantly toward the west with discharge to the Little Spokane River.

Colbert Landfill Hydrogeology/Groundwater Migration



Colbert Landfill Hydrogeology Overview



1.2 Colbert Landfill Monitoring – Overview of Results/Discussion

Shut-down Test - Lower Aquifer

The highest constituent of concern (COC) concentrations in the vicinity of the Colbert Landfill are found in the lower aquifer. After the shutdown of the Colbert Landfill extraction system, overall COC concentrations exhibited an initial increase followed by a decrease/plateau starting in 2017 and ending in 2021/2022. Currently, COC concentrations in the lower aquifer, especially TCA and DCE, appear to be on increasing trends. Despite the current increasing trend(s), there have been no COC criteria exceedances in any of the Shutdown compliance monitoring wells. For more information regarding the shutdown program, see Section 1.3.

Upper Aquifer Compliance Monitoring

COC concentrations in the upper aquifer compliance wells have exhibited stable/decreasing trends following the shutdown of the extraction wells, with the exception of concentrations found in CP-S1, CP-S4, and CD-36A1. Similar to several monitoring wells found in the lower aquifer, COC concentrations exhibited an initial increase after the shutdown of the extraction system, followed by a decrease/plateau starting in 2016/2017 and ending in 2021/2022. COC concentrations are currently exhibiting an increasing trend. For more information regarding the Upper Aquifer Compliance Monitoring program, see Section 1.4

Residential Well Monitoring

There are currently 29 residential wells that Spokane County monitors through the Residential Well Monitoring program. COC concentrations for residential wells in both the lower and upper aquifers have exhibited decreases prior to the shutdown of the extraction system. After the shutdown of the extraction system, COC concentrations have remained non-detection or at very low concentrations for all of the residential wells sampled through the Residential Monitoring Program. The only COC concentrations above the detection limit during this reporting period were low concentrations (0.52 – 0.91 ug/L) of DCA found in residential well 1073L-1. For more information regarding the Residential Well Monitoring program, see Section 1.5.

1,4-Dioxane Monitoring

From 2005 to 2008, Spokane County conducted an evaluation for 1,4-Dioxane prevalence and distribution in both the upper and lower aquifers. After the conclusion of the evaluation, only 5 wells in the upper aquifer were added to the Spokane County 1,4-Dioxane monitoring program for annual sampling. In 2021, Spokane County received grant funding to conduct another evaluation for the prevalence/distribution of 1,4-Dioxane in post-shutdown conditions. Results for the current evaluation indicate that the prevalence/distribution is similar to the results found in the 2005 – 2008 evaluation, however, concentrations found within that distribution tend to be higher than the results found in the 2005 – 2008 evaluation. While the distribution of 1,4-Dioxane appears to be greater due to a higher number of detections, this is most likely the result of a much lower detection limit used in the laboratory analyses during this evaluation (0.01 ug/L) compared to the first evaluation (up to 5 ug/L). For more information regarding the current 1,4-Dioxane monitoring, see Section 1.6

Supplemental Sampling/Monitoring

Every five years, supplemental wells are sampled during the annual sampling event to gather additional information and data on groundwater movement and contaminant transport around the Colbert Landfill. 46 wells were sampled during the May 2022 Supplemental Sampling event. Results for the 2022 Supplemental Sampling event indicate that there have been both increases and decreases in COC concentrations compared to concentrations observed from the Supplemental Sampling results in 2017. The additional data obtained from the Supplemental Sampling during May 2022 also revealed unanticipated findings. Prior to the May 2022 Supplemental Sampling, County personnel observed that the highest concentrations for TCA and DCE resided below CP-E2 and CD-04E1, respectively, when current analytical results indicate that the highest concentrations for both TCA (201 ppb) and DCE (558 ppb) reside below CD-21C3 (Spokane County has not sampled CD-21C3 since 1995). For more information regarding the Supplemental Sampling/Monitoring program, see Section 1.7.

Colbert Landfill Upper/Lower Aquifer Data Evaluation

As discussed in the Shut-down Test (lower aquifer) and the Upper Aquifer Compliance Monitoring sections, monitoring wells in both the upper and lower aquifers are currently exhibiting increasing trends in COC concentrations following a decrease/stabilization of COC concentrations starting in 2016/2017. For the lower aquifer, the increasing trends in COC concentrations are occurring in COC source areas, wells downgradient of the COC source areas, and downgradient compliance monitoring wells. If the current increase in COC source-area concentrations/western migration of the constituents of concern continues its current trajectory, downgradient/compliance wells could continue to exhibit increasing trends. For the upper aquifer, the Annual/Supplemental Sampling conducted during this reporting period indicated that several compliance monitoring wells are currently exhibiting increasing trends for several contaminants of concern.

The increasing trends for COC concentrations in both the lower and upper aquifer seem to coincide with increases in groundwater elevations, along with the lower aquifer approaching the end of the shutdown test. Groundwater velocities in the Lower Aquifer under non-pumping conditions were reported to be on the order of 100 to 200 ft/yr in the 1991 Final Phase I Engineering Report (Landau Associates 1991), and the existing downgradient compliance monitoring wells are about 900 ft west of the western extraction wells. Therefore, it is anticipated that monitoring for the shutdown test will need to continue for up to 9 years to determine the impact (if any) the system shutdown has on groundwater quality downgradient from the West System extraction wells. Since the shutdown test officially began on April 1, 2014, a 9-year shutdown test would end on April 1, 2023. For more information regarding the lower and upper aquifer sampling results, see Section 2.0 and Section 3.0 (respectively).

1.3 Shut-down Test - Lower Aquifer

A pump and treat system was successfully operated from 1994 through March 31, 2014, to prevent further spread of groundwater contamination emanating from the landfill. A shut-down test for the lower aquifer pump and treat system was deemed appropriate for the site after a Remedial System Evaluation (RSE) was performed as recommended in the 2009 Five Year Review (EPA). The RSE recommendation stated that with the extensive groundwater monitoring programs in place and with concentrations having decreased substantially after 20 years of operation, the current pump and treat system may not be adding significant benefit to the overall protectiveness of the remedy and that a shut-down test would help determine its efficacy. The shut-down test procedures are outlined in the *Final Work Plan, Groundwater Pump and Treat System Shut-down Test, Colbert Landfill CERCLA Site, Spokane County Utilities/ Landau Assoc. 2013*. See Section 2 of this report for more details. The upper aquifer monitoring wells are governed by the Consent Decree (CD) compliance, Post Closure (Minimal Functional Standards), and 1,4-dioxane sampling programs and are not included in the Shut-down test work plan. Shut-down testing results and information is presented in Section 2.0.

1.4 Upper Aquifer Monitoring

1.4.1 Compliance Monitoring (VOC's)

The compliance monitoring sampling program is outlined in the Consent Decree and performed according to the Colbert Landfill Operations and Maintenance manual *(Colbert Landfill Operations and Maintenance Manual, 1998*.). During the implementation of the lower aquifer system Shut-down Test, the compliance monitoring will only apply to the upper aquifer. Per conditions outlined in the consent decree (Appendix B, page V-7), the south system extraction wells are not required to be in operation and have been on stand-by status since 2004, and therefore are included in the compliance monitoring program. Compliance monitoring results and information is presented in Section 3.2.

1.4.2 1,4-Dioxane Sampling

In previous years, the 1,4-Dioxane monitoring program only applied to select wells in the upper aquifer. The selected upper aquifer well locations were sampled for 1,4-dioxane according to the *1,4-Dioxane Work Plan for the Colbert Landfill (December 2007)*. Spokane County is currently conducting a 1,4-Dioxane evaluation in the upper and lower aquifers. See section 1.5 for additional 1,4-Dioxane monitoring requirements/information.

1.4.3 Minimal Functional Standards (MFS) Post Closure

The landfill was closed pursuant to requirements of the Minimal Functional Standards for Solid Waste Handling (MFS, WAC173-304). Lower aquifer locations, as outlined in the MFS Groundwater Monitoring Plan (Landau Assoc., 1996), require no additional monitoring after the 2 year monitoring period, which ended in January 1999. Monitoring for the upper aquifer will continue according to the *Colbert Landfill Operations and Maintenance Manual, 1998*., and the *MFS Groundwater Monitoring Plan, 1996*. MFS analytical results and information is presented in Section 3.4.

1.5 Residential Well Monitoring

The Consent Decree specified that domestic wells within the vicinity of the landfill be monitored to protect human health. Domestic well locations and schedules for this program were selected by proximity to landfill contamination and are evaluated on a regular basis to accommodate any changes in groundwater contamination. This program includes well locations in both the upper and lower aquifers. Sampling for this program is done in accordance with the *Quality Assurance and Field Sampling Plan-Colbert Residential Well Sampling, 1991,* and is governed by the Consent Decree. Residential program analytical results and information is presented in Section 4.0.

1.6 1,4-Dioxane Sampling

In 2005, the EPA specified an additional constituent (1,4-Dioxane) for evaluation at the Colbert Landfill site. After extensive monitoring in both the upper and lower aquifers, it was determined that an ongoing monitoring program would apply to selected wells in the upper aquifer only. During the 2019 EPA Five-Year Site Review, the EPA recommended that, "*Sampling for 1,4-Dioxane should be performed across a broader network of monitoring wells, including residential wells for at least two sampling events*" to evaluate the presence and extent of 1,4-Dioxane in post-shutdown conditions. The monitoring wells that are sampled annually for 1,4-Dioxane were selected prior to the P&T system shutdown based on sampling events conducted in from 2005 - 2008, and groundwater flow conditions/contaminant transport may have changed. 1,4-Dioxane analytical results and information is presented in Section 5.0.

1.7 Supplemental Sampling

Supplemental sampling occurs every five years and is intended to collect additional data from monitoring and residential wells not regularly sampled. Although there are no criteria for monitoring or reporting associated with supplemental sampling, data collected helps provide a more accurate snapshot of groundwater flow and contamination throughout the area. Supplemental sampling occurred in April and May 2022. Supplemental Sampling analytical results and information is presented in Section 6.0.

1.8 Landfill Operations and Maintenance

In 1997, the landfill closure construction (cover system and components) was completed as part of the MFS requirements. The landfill gas collection and treatment system is monitored and maintained on a regular basis as outlined in the *Operations and Maintenance Manual for Colbert Landfill Closure, CH2MHill, May 1997*. Landfill operations and maintenance information is presented in Section 7.0.

2.0 Shut-down Test

A shut-down test of the Colbert Landfill Groundwater Pump and Treat facility was initiated April 1, 2014, when all lower aquifer extraction wells were turned off and placed in standby mode. The shut-down test was deemed appropriate for the site after a Remedial System Evaluation (RSE) was performed as recommended in the 2009 Five-Year Review (EPA). The shut-down test is performed according to the *Final Work Plan, Groundwater Pump and Treat System Shut-down Test, Colbert Landfill CERCLA Site, Spokane County Utilities/ Landau Assoc. 2013*.

2.1 Shut-down Testing Locations and Schedule

The lower aquifer wells selected as monitoring locations for the Colbert Landfill pump and treat system shut-down test include: the compliance monitoring well clusters (CD-41, CD-42, CD-43, CD-44, CD-45, and CD-48), monitoring well CD-49, and the lower aquifer extraction wells (CP-E1, CP-E2, CP-E3, CP-W1, CP-W2, and CP-W3). Locations are presented in Figure 2-1. Collection of groundwater samples (contaminant sampling) from the shut-down locations, along with the collection of water level measurements, was performed as outlined in Table 2-1.

2.2 Shut-down Test Monitoring

The lower aquifer extraction wells, the compliance monitoring well clusters (CD-41, CD-42, CD-43, CD-44, CD-45, and CD-48), and monitoring well CD-49 were sampled according to the *Colbert Landfill Operations and Maintenance Manual, 1998.* Field parameters were taken and VOC samples were collected.

2.2.1 Groundwater Elevations

Groundwater elevations for the reporting period are shown in Table 2-2 and Figure 2-2. Estimated groundwater contours and flow are shown in Figure 2-3 and Figure 2-4. Measurements were consistent and followed typical seasonal variation with levels slightly higher in the spring and slightly lower during the fall. Extraction well hydrographs show the increase in groundwater levels in the immediate vicinity of those wells in April 2014 when the system was shut down. Groundwater elevations in the lower aquifer appear to be on a decreasing trend since the increase observed after the extraction wells were shut down.

2.2.2 Field Parameters

Field parameters taken at the shut-down test locations are shown in Table 2-2. The highest conductivities were mostly seen in the east system extraction wells. Conductivity values in monitoring wells ranged from 322 to 1082 umhos/cm. Measurements of pH ranged from 6.92 to 8.06, with the lowest pH values generally found in the east system extraction wells.

2.2.3 Constituents of Concern (COC's)

Constituent of concern concentrations for Shut-down Test locations are presented in Table 2-4 and Table 2-5. COC Concentrations versus time graphs for Shut-down locations are presented in Figure 2-5 through Figure 2-12. Estimated COC plume boundaries and COC detections in the lower aquifer are presented in Figure 2-13 through Figure 2-23. All detected concentrations found in the shut-down test compliance wells were well below any applicable criteria. Colbert Landfill COC Criteria are shown in Table 2-3.

The COC's found in the shut-down program criteria-dependent (SD compliance) wells were low concentrations of TCA and DCE. No concentrations of DCA, PCE, TCE, or MC were detected in the criteria-dependent wells during this reporting period. Analytical results from the shut-down program criteria-dependent wells are shown in Table 2-4. Time versus concentration plots are presented in Figure 2-5 through Figure 2-8. Although concentrations for TCA and DCE started to decrease/plateau after increases post-shutdown, concentrations for these constituents are currently exhibiting increasing trends for wells CD-49 (TCA and DCE), CD-43C1 (TCA), and CD-45C1 (TCA). DCE concentrations for CD-49 increased from 1.18 ppb in April 2021 to 3.12 ppb in July 2022, approaching the action-level shutdown criteria of 4.55 ug/L. According to Spokane County's shutdown plan, if analyte concentrations exceed the action-level criteria for four consecutive quarters, a restart of the P&T system *may* occur if deemed necessary after further evaluating all COC concentrations/groundwater flow data in the lower aquifer. Monitoring wells CD-49 and CD-43C1 were kept on a quarterly sampling schedule to better evaluate the increasing trends in TCA/DCE concentrations. None of the SD compliance wells exceeded any criteria during this reporting period.

Lower aquifer extraction wells are not criteria-dependent locations, and therefore actions during the shut-down test are not governed by COC concentrations in these wells. Analytical results from the extraction wells are shown in Table 2-5. Time versus concentration plots are found in Figure 2-9 through Figure 2-12. Similar to the SD compliance wells, concentrations for most of the constituents of concern are currently exhibiting increasing trends after a decrease/stabilization of concentrations occurring in 2018 following the initial increases (rebound/back-diffusion) of concentrations post-shutdown. CP-E2 is an exception to this, as TCE, DCE, and DCA concentrations have been steadily increasing following the shutdown of the extraction wells. Lower aquifer extraction well criteria exceedances are summarized below (consent decree criteria only):

- CP-E1 exceeded the criteria for DCE, PCE, and TCE.
- CP-E2 exceeded the criteria for DCE, PCE, and TCE.
- CP-E3 exceeded the criteria for DCE.
- CP-W2 exceeded the criteria for DCE.
- CP-W3 exceeded the criteria for DCE and TCE.

A comparison summarizing the differences in COC concentrations observed in the Shutdown/Extraction wells from 2017, 2021, and 2022 is presented in Table 3-8.

2.3 Data Evaluation

Data indicate that, although there was an initial stabilization/decrease of COC concentrations following the initial increase of concentrations post-shutdown (rebound/back-diffusion), most COC concentrations appear to be exhibiting increasing trends starting in 2021, especially for TCA and DCE. The increase in COC concentrations found in CD-49 (primarily TCA and DCE), along with increasing COC concentrations in CP-W3 and CP-E2, indicates that the western migration/plume connectivity of the Colbert Landfill contaminants of concern is not only prevalent, but potentially even exacerbated. The sudden increase in COC concentrations coincides with an increase in groundwater elevations for the lower aquifer compliance wells.

The additional data obtained from the Supplemental Sampling during May 2022 revealed unanticipated findings. Prior to the May 2022 Supplemental Sampling, County personnel observed that the highest concentrations for TCA and DCE resided below CP-E2 and CD-04E1, respectively, when current analytical results indicate that the highest concentrations for both TCA (201 ppb) and DCE (558 ppb) reside below CD-21C3 (Spokane County has not sampled CD-21C3 since 1995). For more information on the Supplemental Well sampling results, see Section 6.0.

Conclusions from the Colbert Landfill Phase I Engineering Report found that the wells screened within the basalt aquifer (CP-E2 and CD-04E1) are directly (although incompletely) hydrologically connected to the lower sand/gravel aquifer, along with the monitoring and residential wells screened within it. This hydraulic connection potentially provides a hydrogeologic pathway connecting some of the wells with the highest COC concentrations (CD-21C3, CP-E2, and CD-04E1) to the downgradient wells screened in the lower aquifer (CP-W3 and CD-49). Between the increasing concentrations found in upgradient wells and the abiotic degradation of TCA to DCE, increasing COC concentration trends could persist for the downgradient compliance monitoring wells. County personnel will add additional wells to the quarterly/annual sampling programs to better evaluate the current increasing trends observed in source areas, source-area downgradient wells, and compliance monitoring wells.

2.4 Program Changes or Modifications

Criteria Exceedances in the lower aquifer are presented in Table 2-6 (Consent Decree criteria) and Table 2-7 (updated criteria values from the Colbert Landfill 6th Five-year Review, which includes an increase for Trichloroethene [PCE] from the performance standard in the ROD [0.7 µg/L] to the current MCL [5µg/L], and a decrease for 1,1-Dichloroethane [1,1-DCA] to the regional screening level [RSL] of 2.6 µg/L). The only criteria exceedances that occurred within this reporting period were found in the extraction wells, and those wells are not criteria-dependent.

Sampling at the lower aquifer compliance monitoring wells will continue on an annual basis, and will be sampled again in April 2023. The exceptions to this are monitoring well CD-49 and cluster well CD-43C1. Quarterly sampling will continue at CD-49 and CD-43C1 to monitor the increasing trends in TCA/DCE concentrations. Due to the high concentrations observed during the May 2022 Supplemental Sampling, monitoring well CD-21C3 will be sampled on an annual basis to monitor COC source-area trends and confirm concentrations/obtain a baseline for the well. Quarterly sampling will continue at the extraction wells, as running the wells periodically will assist with preventive maintenance and provide indicators for any possible changes in COC concentrations near the landfill boundaries.

Groundwater velocities in the Lower Aquifer under non-pumping conditions were reported to be on the order of 100 to 200 ft/yr in the 1991 Final Phase I Engineering Report (Landau Associates 1991), and the existing downgradient compliance monitoring wells are about 900 ft west of the western extraction wells. Therefore, it is anticipated that monitoring for the shutdown test will need to continue for up to 9 years to determine the impact (if any) the system shutdown has on groundwater quality downgradient from the West System extraction wells. Since the shutdown test officially began on April 1, 2014, a 9-year shutdown test would end on April 1, 2023. Spokane

County will begin evaluating all available data and will submit a separate evaluation/report summarizing a recommended action plan before the shutdown test is complete.

2.5 Cost Savings

Typical electrical costs associated with operating the pump-and-treat system for the lower aquifer continually for one year were approximately $59,000. From May 2021 through May 2022, the cost of electricity at the facility during the eighth year of the shut-down test was $20,889. Costs incurred during this reporting period were higher than typical annual sampling years due to the increased number of wells sampled, groundwater samples analyzed at the laboratories, and labor costs associated with the Supplemental Sampling event. Despite the increase in costs during this reporting period, Spokane County saved an estimated $21,111.

Typical Annual Electrical Costs		**$60,000**
Electrical Costs for Eighth Year of Shut-down Test		($20,889)
Additional Lab Cost Associated with Shut-down Test		($10,500)
Estimated labor costs for additional sample rounds		($7,500)
Estimated Total Cost Savings		$21,111

Figure 2-1 Shut-down Test Locations

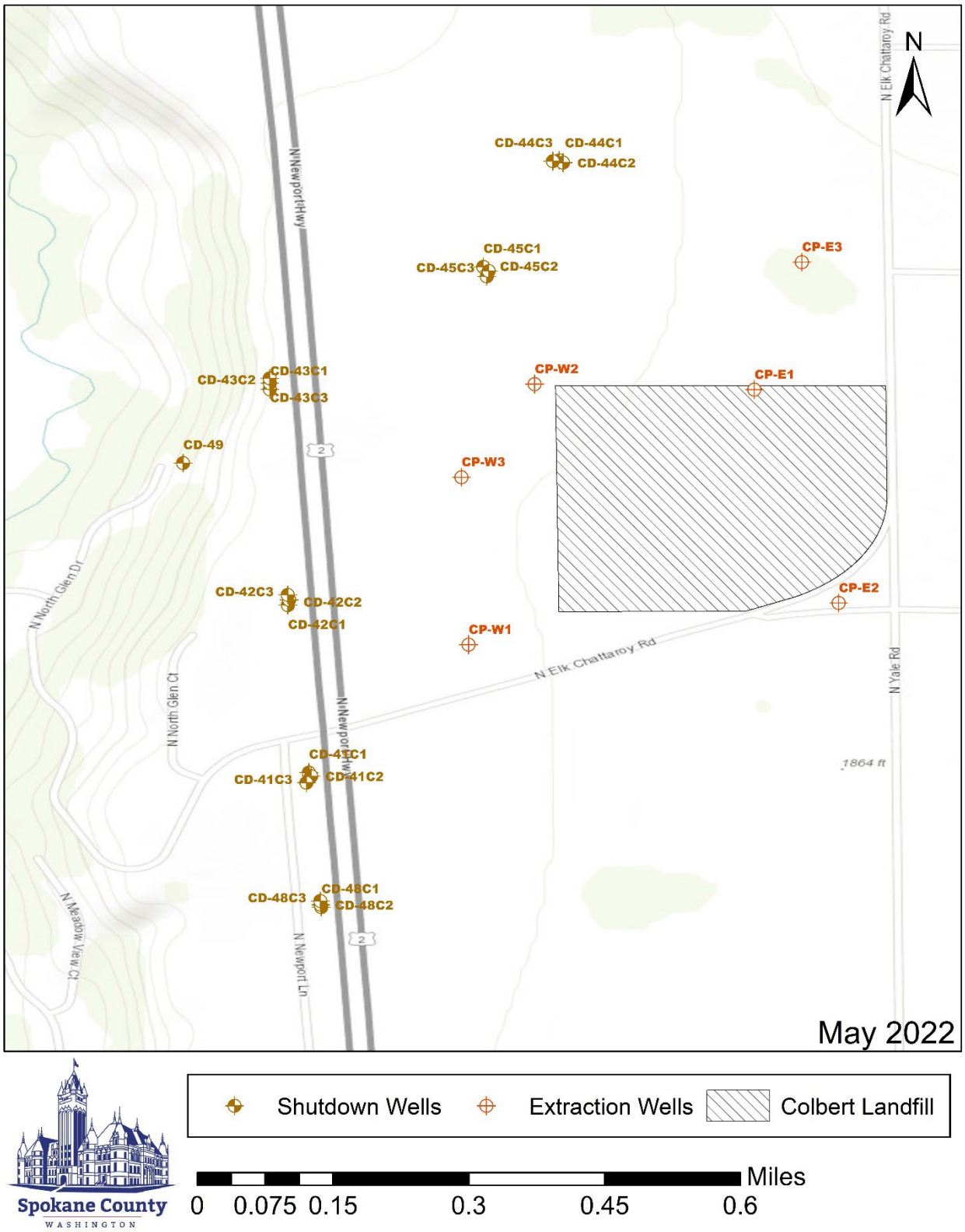
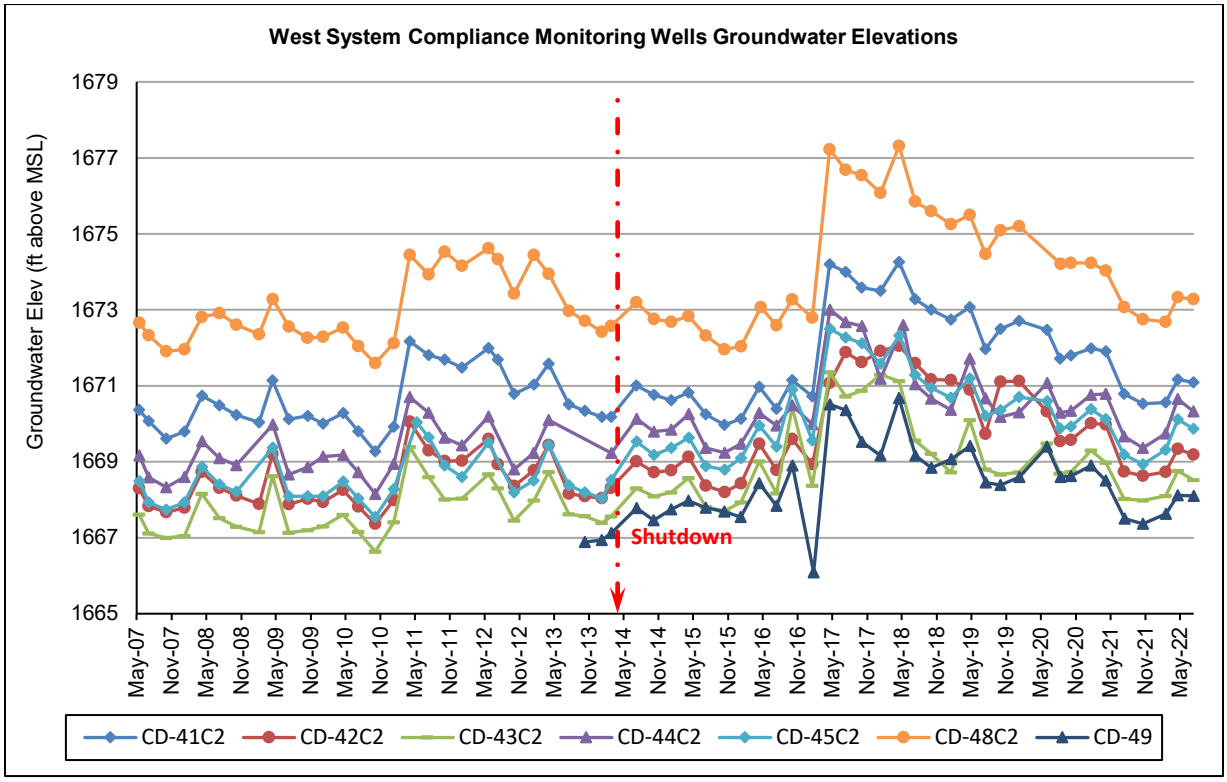


Table 2-1 Colbert Landfill Shut-down Test Sampling Schedule (May 2021 - June 2022)

System	Well ID	Monitoring Frequency		Shut-down Criteria Applies?
		Water Levels	Sampling	
West	CD-41C1	Quarterly	Annual	Yes
	CD-41C2	Quarterly	Annual	
	CD-41C3	Quarterly	Annual	
	CD-42C1	Quarterly	Annual	Yes
	CD-42C2	Quarterly	Annual	
	CD-42C3	Quarterly	Annual	
	CD-43C1	Quarterly	Quarterly	Yes
	CD-43C2	Quarterly	Annual	
	CD-43C3	Quarterly	Annual	
	CD-44C1	Quarterly	Annual	Yes
	CD-44C2	Quarterly	Annual	
	CD-44C3	Quarterly	Annual	
	CD-45C1	Quarterly	Annual	Yes
	CD-45C2	Quarterly	Annual	
	CD-45C3	Quarterly	Annual	
	CD-48C1	Quarterly	Annual	Yes
	CD-48C2	Quarterly	Annual	
	CD-48C3	Quarterly	Annual	
	CD-49	Quarterly	Quarterly	Yes
	CP-W1	Quarterly	Quarterly	No
	CP-W2	Quarterly	Quarterly	
	CP-W3	Quarterly	Quarterly	
East	CP-E1	Quarterly	Quarterly	No
	CP-E2	Quarterly	Quarterly	
	CP-E3	Quarterly	Quarterly	

Changes to the program are highlighted in **RED**

Figure 2-2 Lower Aquifer Groundwater Elevations



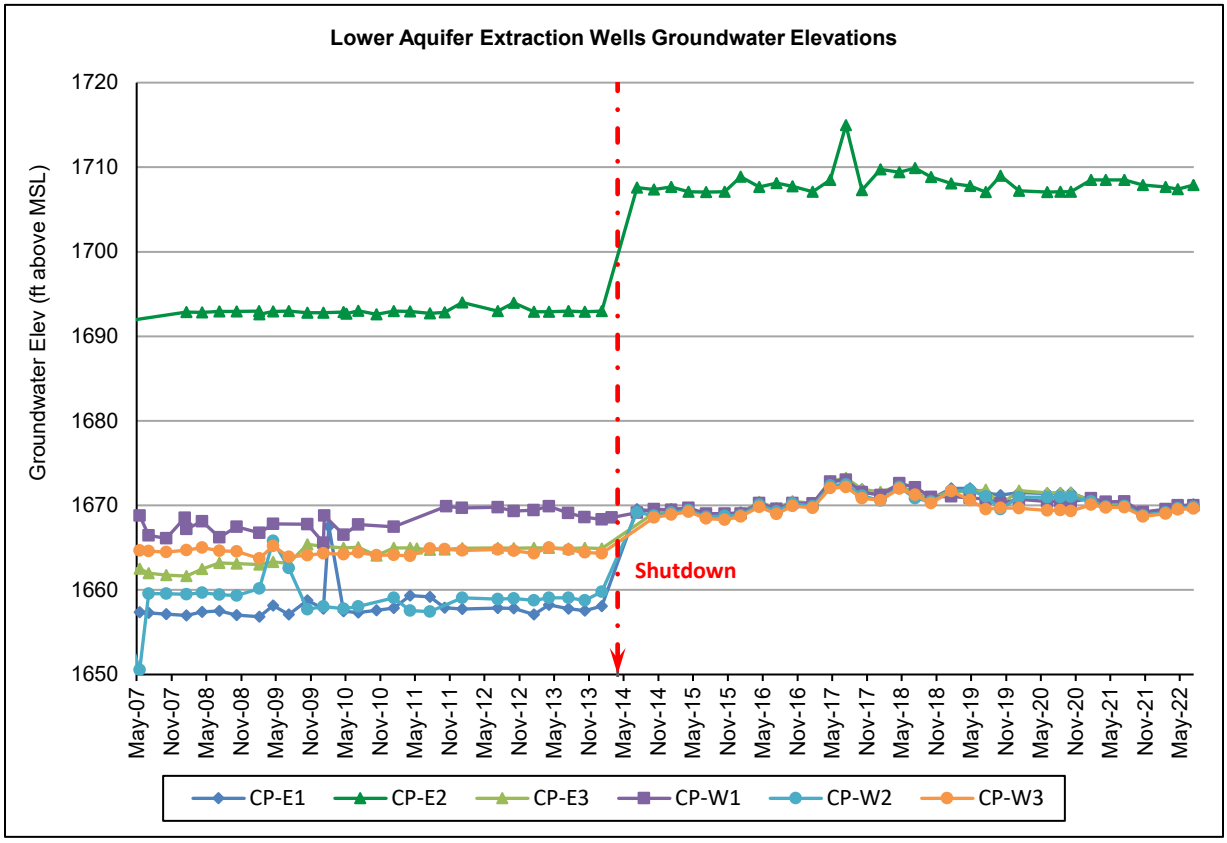


Figure 2-3 Lower Aquifer Groundwater Contours

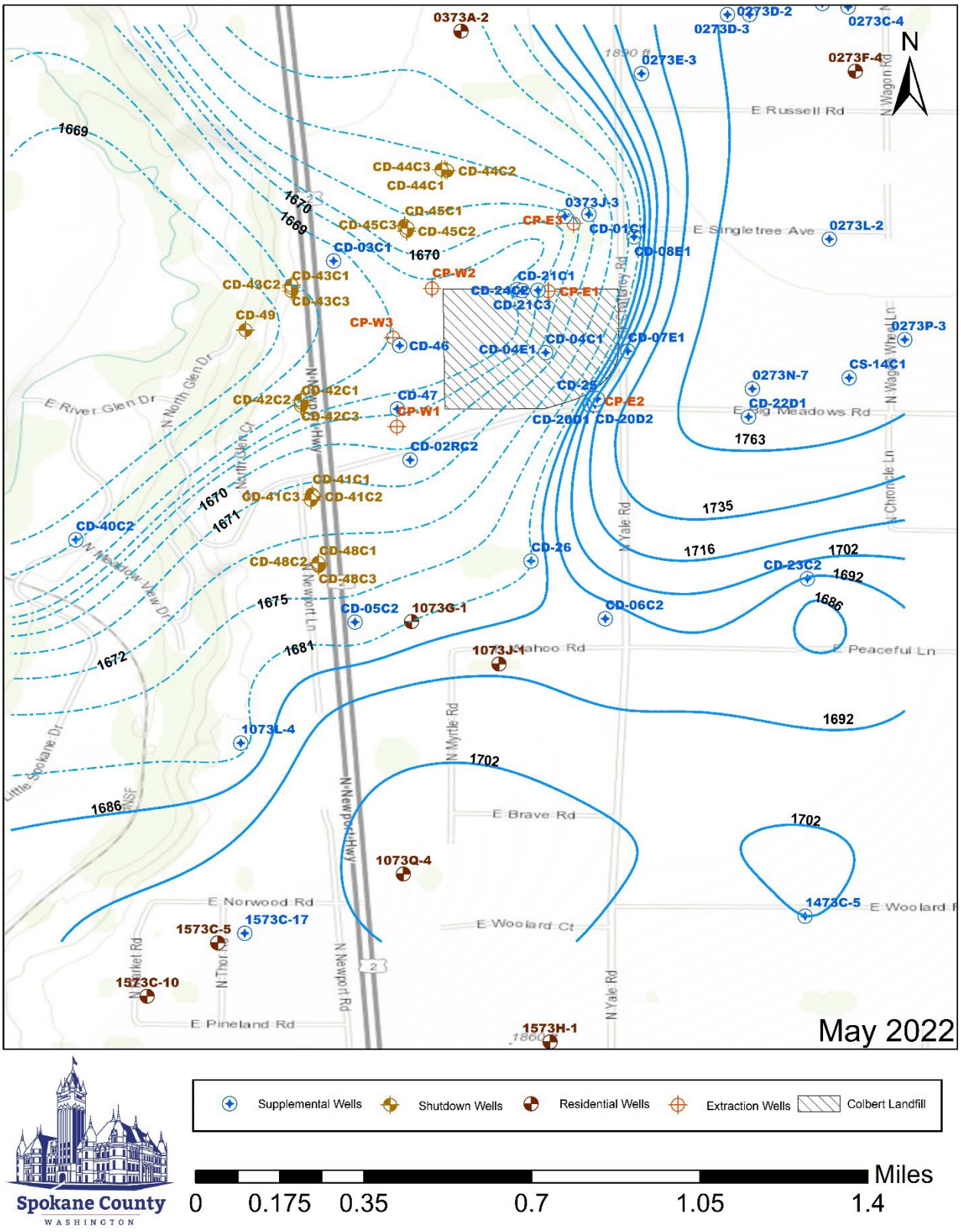


Figure 2-4 Lower Aquifer Groundwater Elevation Map

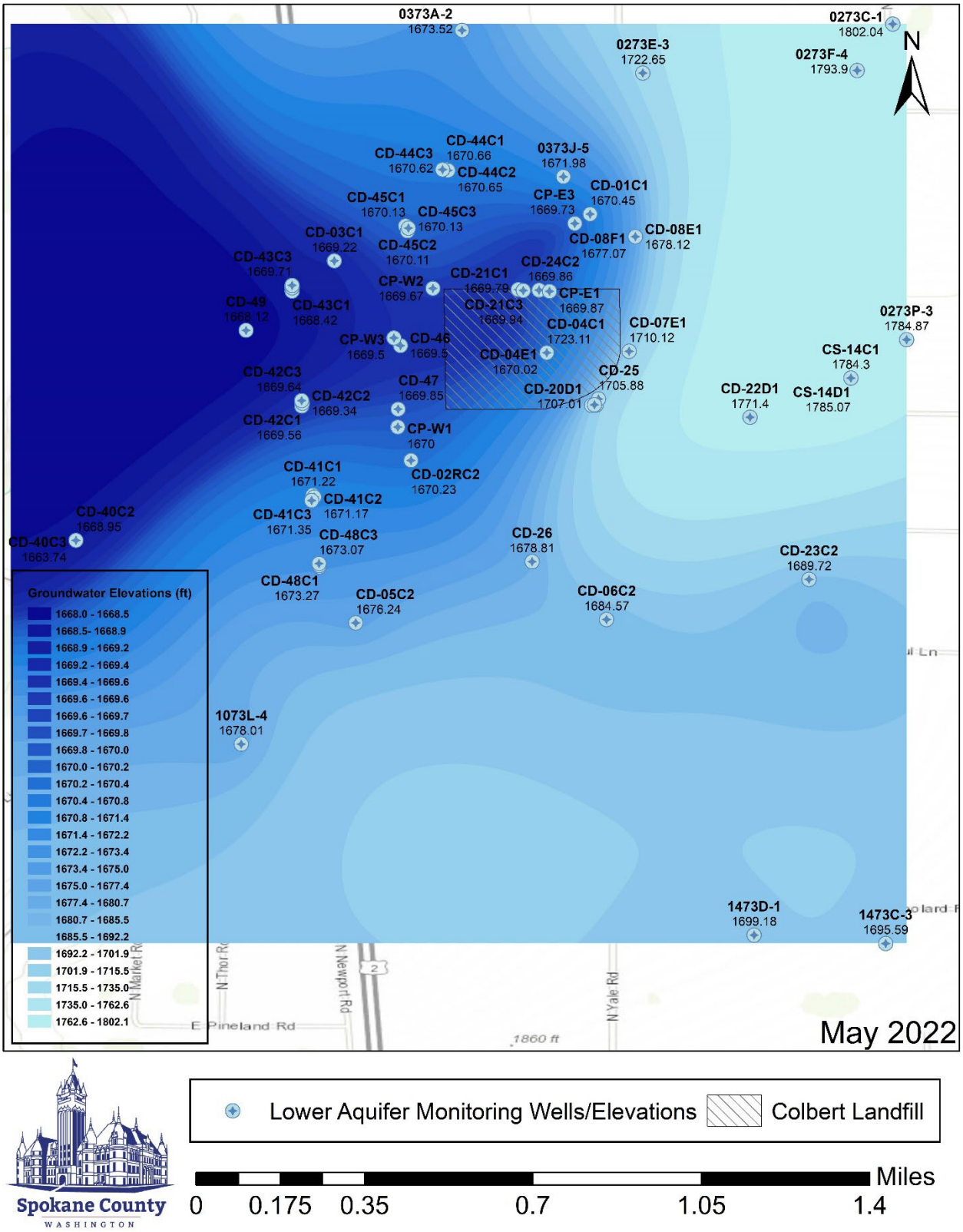


Table 2-2 Shut-down Test Location Field Parameters

StationID	SampleDate	WtrElev	Temp	PH	Conductivity	Turbidity	Aquifer	Program
CD-41C1	4/19/2022	1671.22	12	7.85	419	0.19	lower	SD
CD-41C2	4/19/2022	1671.17	11.7	7.95	444	0.17	lower	SD
CD-41C3	4/19/2022	1671.35	12.1	7.83	484	0.15	lower	SD
CD-42C1	4/19/2022	1669.56	11.9	7.81	496	0.12	lower	SD
CD-42C2	4/19/2022	1669.34	11.8	7.87	494	0.17	lower	SD
CD-42C3	4/19/2022	1669.64	12.5	7.87	428	0.45	lower	SD
CD-43C1	7/14/2021	1667.7	10.9	8.04	527	0.13	lower	SD
CD-43C1	10/19/2021	1667.6	10.2	8.02	475	0.12	lower	SD
CD-43C1	2/17/2022	1667.76	10.1	8.03	518	0.18	lower	SD
CD-43C1	4/19/2022	1668.42	10.1	7.93	514	0.13	lower	SD
CD-43C2	4/19/2022	1668.76	10.6	8	399	0.13	lower	SD
CD-43C3	4/19/2022	1669.71	11.3	7.85	322	0.44	lower	SD
CD-44C1	4/20/2022	1670.66	16.2	7.65	471	0.27	lower	SD
CD-44C2	4/20/2022	1670.65	11.1	7.6	452	0.15	lower	SD
CD-44C3	4/20/2022	1670.62	11.3	7.62	442	0.55	lower	SD
CD-45C1	4/20/2022	1670.13	10.5	7.75	515	0.08	lower	SD
CD-45C2	4/20/2022	1670.11	10.9	7.72	452	0.13	lower	SD
CD-45C3	4/20/2022	1670.13	10.6	8.06	398	0.14	lower	SD
CD-48C1	4/19/2022	1673.27	11.5	7.71	522	0.21	lower	SD
CD-48C2	4/19/2022	1673.33	11.2	7.86	489	0.38	lower	SD
CD-48C3	4/19/2022	1673.07	11.8	7.81	480	0.18	lower	SD
CD-49	7/14/2021	1667.5	13.3	8.02	504	0.07	lower	SD
CD-49	10/19/2021	1667.37	12.3	7.97	449	0.04	lower	SD
CD-49	2/17/2022	1667.63	12.2	7.91	515	0.19	lower	SD
CD-49	4/20/2022	1668.12	12.8	7.84	508	0.15	lower	SD
CP-E1	7/14/2021	1670.1	10.6	6.97	931	1.09	lower	SD
CP-E1	10/19/2021	1669.18	10.7	6.99	970	0.89	lower	SD
CP-E1	2/16/2022	1669.43	12.2	6.92	1072	1.48	lower	SD
CP-E1	4/20/2022	1669.87	11.7	6.96	1020	0.89	lower	SD
CP-E2	7/14/2021	1708.5	10.7	7.18	993	1.2	lower	SD
CP-E2	10/19/2021	1707.91	11.7	7.28	970	1.32	lower	SD
CP-E2	2/16/2022	1707.66	12.1	7.1	1082	0.22	lower	SD
CP-E2	4/20/2022	1707.41	13.1	7.27	997	0.94	lower	SD
CP-E3	7/14/2021	1670.39	13.9	7.25	840	1.2	lower	SD
CP-E3	10/19/2021	1669.04	11.9	7.32	827	0.92	lower	SD
CP-E3	2/16/2022	1669.42	11.5	7.15	894	3.16	lower	SD
CP-E3	4/20/2022	1669.73	10.6	7.31	861	0.89	lower	SD
CP-W1	7/14/2021	1670.46	10.7	7.86	495	0.98	lower	SD
CP-W1	10/19/2021	1669.23	10.9	7.79	485	0.79	lower	SD
CP-W1	2/16/2022	1669.54	11.2	7.82	495	0.39	lower	SD
CP-W1	4/20/2022	1670	10.8	7.8	513	0.89	lower	SD
CP-W2	7/14/2021	1669.94	10.6	7.6	677	0.8	lower	SD
CP-W2	10/19/2021	1668.85	10.6	7.7	647	0.69	lower	SD
CP-W2	2/16/2022	1669.17	10.1	7.58	734	1.29	lower	SD
CP-W2	4/20/2022	1669.67	10.2	7.66	698	0.51	lower	SD
CP-W3	7/14/2021	1669.78	10.6	7.47	661	1.69	lower	SD
CP-W3	10/19/2021	1668.67	10.7	7.54	664	1.11	lower	SD
CP-W3	2/16/2022	1669.02	11.1	7.42	745	0.22	lower	SD
CP-W3	4/20/2022	1669.5	10.8	7.56	710	1.11	lower	SD

Temp=degrees C; Conductivity=umhos/cm; Turbidity= NTU

Table 2-3 Colbert Landfill Shut-down Test Criteria

Groundwater monitoring associated with the P&T system currently includes water level measurements and groundwater quality monitoring at extraction and compliance monitoring wells in accordance with the Quality Assurance Project Plan (QAPP; Landau Associates 1992b) to meet the criteria established in the Consent Decree. The purpose of this monitoring is to evaluate the performance of the P&T system in preventing the spread of contaminated groundwater downgradient from the capture zone for the West System. Compliance monitoring wells are currently sampled on an annual basis and the extraction wells are sampled on a quarterly basis. The consent decree evaluation criteria and action level criteria for the shut-down test are presented below:

SHUT-DOWN TEST CRITERIA		
COC	**ACTION LEVEL CRITERIA (ug/L)**	**CONSENT DECREE EVALUATION CRITERIA (ug/L)**
TCA	**130**	**200**
DCA	**2632**	**4050**
DCE	**4.55**	**7**
MC	**1.6**	**2.5**
PCE	**0.5**	**0.7**
TCE	**3.25**	**5**

Table 2-4 Shut-down Test Compliance Well Analytical Results (reported in ug/L)

StationID	SampleDate	DCA	DCE	MC	PCE	TCA	TCE
CD-41C1	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-41C2	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-41C3	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-42C1	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-42C2	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-42C3	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-43C1	10/19/2021	<0.5	<0.5	<0.5	<0.5	**5.61**	<0.5
CD-43C1	2/17/2022	<0.5	<0.5	<0.5	<0.5	**5.96**	<0.5
CD-43C1	4/19/2022	<0.5	<0.5	<0.5	<0.5	**5.31**	<0.5
CD-43C1	7/12/2022	<0.5	<0.5	<0.5	<0.5	**5.53**	<0.5
CD-43C2	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-43C3	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-44C1	4/20/2022	<0.5	**0.52**	<0.5	<0.5	**1.17**	<0.5
CD-44C2	4/20/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-44C3	4/20/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-45C1	4/20/2022	<0.5	<0.5	<0.5	<0.5	**1.59**	<0.5
CD-45C2	4/20/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-45C3	4/20/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-48C1	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-48C2	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-48C3	4/19/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-49	10/19/2021	<0.5	**1.76**	<0.5	<0.5	**1.74**	<0.5
CD-49	2/17/2022	<0.5	**1.87**	<0.5	<0.5	**1.99**	<0.5
CD-49	4/20/2022	<0.5	**2.47**	<0.5	<0.5	**2.42**	<0.5
CD-49	7/12/2022	<0.5	**3.12**	<0.5	<0.5	**3.54**	<0.5

***Bold** indicates a value greater than non-detection.

Table 2-5 Lower Aquifer Extraction Well Analytical Results (reported in ug/L)

StationID	SampleDate	DCA	DCE	MC	PCE	TCA	TCE
CP-E1	10/19/2021	**9.28**	**18.7**	<0.5	**1.37**	**6.12**	**7.15**
CP-E1	2/16/2022	**7.48**	**13.1**	<0.5	**2.76**	**4.47**	**8.08**
CP-E1	4/20/2022	**8.29**	**16.4**	<0.5	**2.84**	**4.86**	**8.43**
CP-E1	7/12/2022	**9.43**	**17.6**	<0.5	**3.15**	**5.63**	**10.1**
CP-E2	10/19/2021	**37.7**	**142**	<0.5	**0.71**	**37.4**	**133**
CP-E2	2/16/2022	**33.1**	**136**	<0.5	**1.06**	**31.9**	**166**
CP-E2	4/20/2022	**36**	**167**	<0.5	**1.04**	**32.3**	**184**
CP-E2	7/12/2022	**39.8**	**164**	**2.48**	**1.04**	**37.1**	**186**
CP-E3	10/19/2021	**2.18**	**12.4**	<0.5	<0.5	**6.59**	**1.78**
CP-E3	2/16/2022	**1.91**	**10.9**	<0.5	<0.5	**6.42**	**1.66**
CP-E3	4/20/2022	**1.89**	**11.6**	<0.5	<0.5	**5.84**	**1.56**
CP-E3	7/12/2022	**2.51**	**16.1**	<0.5	<0.5	**8.91**	**1.99**
CP-S1	10/19/2021	**0.84**	**0.7**	<0.5	<0.5	**0.72**	**1.22**
CP-S1	2/16/2022	**0.67**	<0.5	<0.5	<0.5	**0.55**	**1.02**
CP-S1	4/20/2022	**0.68**	<0.5	<0.5	<0.5	**0.5**	**0.99**
CP-S1	7/12/2022	**0.97**	**0.67**	<0.5	<0.5	**0.73**	**1.45**
CP-S4	10/19/2021	**1.75**	<0.5	<0.5	<0.5	<0.5	**1.65**
CP-S4	2/16/2022	**1.38**	<0.5	<0.5	**0.56**	<0.5	**1.79**
CP-S4	4/20/2022	**1.38**	<0.5	<0.5	**0.54**	<0.5	**1.83**
CP-S5	10/19/2021	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CP-S5	4/20/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CP-S5	7/12/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CP-S6	10/19/2021	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CP-S6	2/17/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CP-S6	4/20/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CP-S6	7/12/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CP-W1	10/19/2021	<0.5	**3.42**	<0.5	<0.5	**2.11**	<0.5
CP-W1	2/16/2022	<0.5	**3**	<0.5	<0.5	**1.98**	<0.5
CP-W1	4/20/2022	<0.5	**3.61**	<0.5	<0.5	**2.2**	<0.5
CP-W1	7/12/2022	<0.5	**4.28**	<0.5	<0.5	**2.97**	<0.5
CP-W2	10/19/2021	**2.16**	**4.79**	<0.5	<0.5	**17.7**	<0.5
CP-W2	2/16/2022	**2.19**	**5.86**	<0.5	<0.5	**18.3**	<0.5
CP-W2	4/20/2022	**2.52**	**7.72**	<0.5	<0.5	**20**	<0.5
CP-W2	7/12/2022	**2.87**	**9.62**	<0.5	<0.5	**28.8**	<0.5
CP-W3	10/19/2021	**11.1**	**26.9**	<0.5	<0.5	**32.7**	**34.8**
CP-W3	2/16/2022	**12.2**	**26.6**	<0.5	<0.5	**35.7**	**39.8**
CP-W3	4/20/2022	**13.5**	**34.1**	<0.5	<0.5	**39.1**	**43.1**
CP-W3	7/12/2022	**18.6**	**38.3**	<0.5	<0.5	**43.1**	**47.4**

***Bold** indicates a value greater than non-detection.

Table 2-6 Shutdown Program Criteria Exceedances (Consent Decree criteria)

StationID	SampleDate	Aquifer	Program	Analyte	Result	Units	Flag
CP-E1	10/19/2021	lower	SD	1,1-Dichloroethene	18.7	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	1,1-Dichloroethene	18.3	ug/L	Exceedance
CP-E1	2/16/2022	lower	SD	1,1-Dichloroethene	13.1	ug/L	Exceedance
CP-E1	4/20/2022	lower	SD	1,1-Dichloroethene	16.4	ug/L	Exceedance
CP-E1	7/12/2022	lower	SD	1,1-Dichloroethene	17.6	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	Tetrachloroethene	1.37	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	Tetrachloroethene	1.33	ug/L	Exceedance
CP-E1	2/16/2022	lower	SD	Tetrachloroethene	2.76	ug/L	Exceedance
CP-E1	4/20/2022	lower	SD	Tetrachloroethene	2.84	ug/L	Exceedance
CP-E1	7/12/2022	lower	SD	Tetrachloroethene	3.15	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	Trichloroethene	7.15	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	Trichloroethene	6.98	ug/L	Exceedance
CP-E1	2/16/2022	lower	SD	Trichloroethene	8.08	ug/L	Exceedance
CP-E1	4/20/2022	lower	SD	Trichloroethene	8.43	ug/L	Exceedance
CP-E1	7/12/2022	lower	SD	Trichloroethene	10.1	ug/L	Exceedance
CP-E2	10/19/2021	lower	SD	1,1-Dichloroethene	142	ug/L	Exceedance
CP-E2	2/16/2022	lower	SD	1,1-Dichloroethene	136	ug/L	Exceedance
CP-E2	4/20/2022	lower	SD	1,1-Dichloroethene	167	ug/L	Exceedance
CP-E2	7/12/2022	lower	SD	1,1-Dichloroethene	164	ug/L	Exceedance
CP-E2	10/19/2021	lower	SD	Tetrachloroethene	0.71	ug/L	Exceedance
CP-E2	2/16/2022	lower	SD	Tetrachloroethene	1.06	ug/L	Exceedance
CP-E2	4/20/2022	lower	SD	Tetrachloroethene	1.04	ug/L	Exceedance
CP-E2	7/12/2022	lower	SD	Tetrachloroethene	1.04	ug/L	Exceedance
CP-E2	10/19/2021	lower	SD	Trichloroethene	133	ug/L	Exceedance
CP-E2	2/16/2022	lower	SD	Trichloroethene	166	ug/L	Exceedance
CP-E2	4/20/2022	lower	SD	Trichloroethene	184	ug/L	Exceedance
CP-E2	7/12/2022	lower	SD	Trichloroethene	186	ug/L	Exceedance
CP-E3	10/19/2021	lower	SD	1,1-Dichloroethene	12.4	ug/L	Exceedance
CP-E3	2/16/2022	lower	SD	1,1-Dichloroethene	10.9	ug/L	Exceedance
CP-E3	4/20/2022	lower	SD	1,1-Dichloroethene	11.6	ug/L	Exceedance
CP-E3	7/12/2022	lower	SD	1,1-Dichloroethene	16.1	ug/L	Exceedance
CP-W2	4/20/2022	lower	SD	1,1-Dichloroethene	7.72	ug/L	Exceedance
CP-W2	7/12/2022	lower	SD	1,1-Dichloroethene	9.58	ug/L	Exceedance
CP-W2	7/12/2022	lower	SD	1,1-Dichloroethene	9.62	ug/L	Exceedance
CP-W3	10/19/2021	lower	SD	1,1-Dichloroethene	26.9	ug/L	Exceedance
CP-W3	2/16/2022	lower	SD	1,1-Dichloroethene	26.6	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	1,1-Dichloroethene	33.6	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	1,1-Dichloroethene	34.1	ug/L	Exceedance
CP-W3	7/12/2022	lower	SD	1,1-Dichloroethene	38.3	ug/L	Exceedance
CP-W3	10/19/2021	lower	SD	Trichloroethene	34.8	ug/L	Exceedance
CP-W3	2/16/2022	lower	SD	Trichloroethene	39.8	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	Trichloroethene	42.2	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	Trichloroethene	43.1	ug/L	Exceedance
CP-W3	7/12/2022	lower	SD	Trichloroethene	47.4	ug/L	Exceedance

Table 2-7 Shutdown Program Criteria Exceedances (*Updated criteria values)

*Increase for Trichloroethene (PCE) from the performance standard in the ROD (0.7 µg/L) to the current MCL (5 µg/L), and a decrease for 1,1-Dichloroethane (1,1-DCA) to the regional screening level (RSL) of 2.8 µg/L.

StationID	SampleDate	Aquifer	Program	Analyte	Result	Units	Flag
CP-E1	10/19/2021	lower	SD	1,1-Dichloroethane	8.57	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	1,1-Dichloroethane	9.28	ug/L	Exceedance
CP-E1	2/16/2022	lower	SD	1,1-Dichloroethane	7.48	ug/L	Exceedance
CP-E1	4/20/2022	lower	SD	1,1-Dichloroethane	8.29	ug/L	Exceedance
CP-E1	7/12/2022	lower	SD	1,1-Dichloroethane	9.43	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	1,1-Dichloroethene	18.7	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	1,1-Dichloroethene	18.3	ug/L	Exceedance
CP-E1	2/16/2022	lower	SD	1,1-Dichloroethene	13.1	ug/L	Exceedance
CP-E1	4/20/2022	lower	SD	1,1-Dichloroethene	16.4	ug/L	Exceedance
CP-E1	7/12/2022	lower	SD	1,1-Dichloroethene	17.6	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	Trichloroethene	7.15	ug/L	Exceedance
CP-E1	10/19/2021	lower	SD	Trichloroethene	6.98	ug/L	Exceedance
CP-E1	2/16/2022	lower	SD	Trichloroethene	8.08	ug/L	Exceedance
CP-E1	4/20/2022	lower	SD	Trichloroethene	8.43	ug/L	Exceedance
CP-E1	7/12/2022	lower	SD	Trichloroethene	10.1	ug/L	Exceedance
CP-E2	10/19/2021	lower	SD	1,1-Dichloroethane	37.7	ug/L	Exceedance
CP-E2	2/16/2022	lower	SD	1,1-Dichloroethane	33.1	ug/L	Exceedance
CP-E2	4/20/2022	lower	SD	1,1-Dichloroethane	36	ug/L	Exceedance
CP-E2	7/12/2022	lower	SD	1,1-Dichloroethane	39.8	ug/L	Exceedance
CP-E2	10/19/2021	lower	SD	1,1-Dichloroethene	142	ug/L	Exceedance
CP-E2	2/16/2022	lower	SD	1,1-Dichloroethene	136	ug/L	Exceedance
CP-E2	4/20/2022	lower	SD	1,1-Dichloroethene	167	ug/L	Exceedance
CP-E2	7/12/2022	lower	SD	1,1-Dichloroethene	164	ug/L	Exceedance
CP-E2	10/19/2021	lower	SD	Trichloroethene	133	ug/L	Exceedance
CP-E2	2/16/2022	lower	SD	Trichloroethene	166	ug/L	Exceedance
CP-E2	4/20/2022	lower	SD	Trichloroethene	184	ug/L	Exceedance
CP-E2	7/12/2022	lower	SD	Trichloroethene	186	ug/L	Exceedance
CP-E3	10/19/2021	lower	SD	1,1-Dichloroethene	12.4	ug/L	Exceedance
CP-E3	2/16/2022	lower	SD	1,1-Dichloroethene	10.9	ug/L	Exceedance
CP-E3	4/20/2022	lower	SD	1,1-Dichloroethene	11.6	ug/L	Exceedance
CP-E3	7/12/2022	lower	SD	1,1-Dichloroethene	16.1	ug/L	Exceedance
CP-W2	7/12/2022	lower	SD	1,1-Dichloroethane	2.87	ug/L	Exceedance
CP-W2	7/12/2022	lower	SD	1,1-Dichloroethane	2.85	ug/L	Exceedance
CP-W2	4/20/2022	lower	SD	1,1-Dichloroethene	7.72	ug/L	Exceedance
CP-W2	7/12/2022	lower	SD	1,1-Dichloroethene	9.62	ug/L	Exceedance
CP-W2	7/12/2022	lower	SD	1,1-Dichloroethene	9.58	ug/L	Exceedance
CP-W3	10/19/2021	lower	SD	1,1-Dichloroethane	11.1	ug/L	Exceedance
CP-W3	2/16/2022	lower	SD	1,1-Dichloroethane	12.2	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	1,1-Dichloroethane	13.3	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	1,1-Dichloroethane	13.5	ug/L	Exceedance
CP-W3	7/12/2022	lower	SD	1,1-Dichloroethane	18.6	ug/L	Exceedance
CP-W3	10/19/2021	lower	SD	1,1-Dichloroethene	26.9	ug/L	Exceedance
CP-W3	2/16/2022	lower	SD	1,1-Dichloroethene	26.6	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	1,1-Dichloroethene	33.6	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	1,1-Dichloroethene	34.1	ug/L	Exceedance
CP-W3	7/12/2022	lower	SD	1,1-Dichloroethene	38.3	ug/L	Exceedance
CP-W3	10/19/2021	lower	SD	Trichloroethene	34.8	ug/L	Exceedance
CP-W3	2/16/2022	lower	SD	Trichloroethene	39.8	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	Trichloroethene	42.2	ug/L	Exceedance
CP-W3	4/20/2022	lower	SD	Trichloroethene	43.1	ug/L	Exceedance
CP-W3	7/12/2022	lower	SD	Trichloroethene	47.4	ug/L	Exceedance

Table 2-8 Shutdown Program Concentrations: Summary of 5-year/1-year Differences

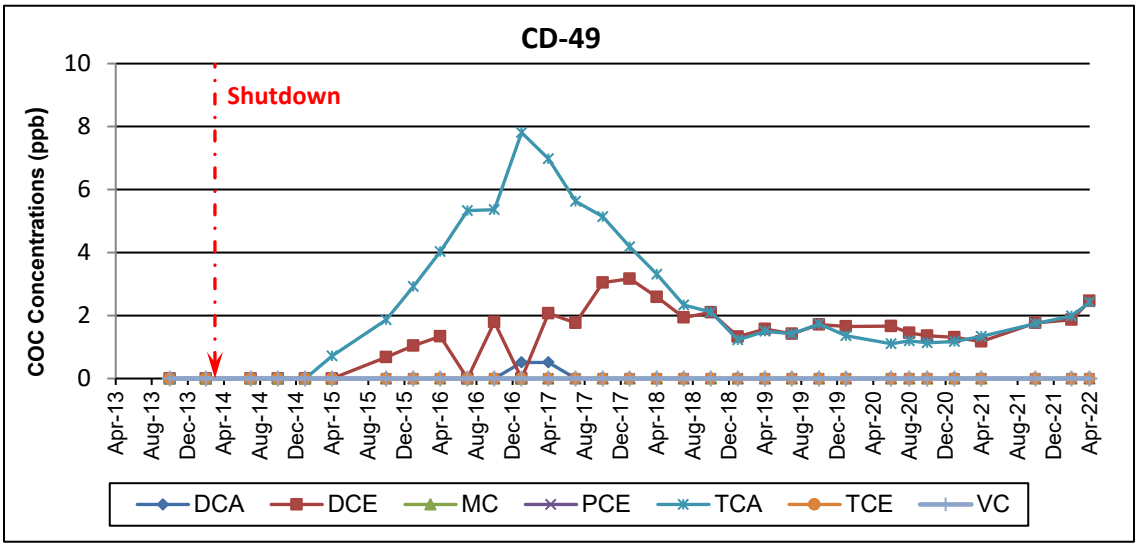
StationID	Aquifer	Program	Analyte	-5 Year Results	-1 Year Results	Current Year Results	5-Year Difference	1-Year Difference	Units
CD-41C1	lower	SD	TCA	0	0	0	0	0	ug/L
CD-41C1	lower	SD	DCA	0	0	0	0	0	ug/L
CD-41C1	lower	SD	DCE	0	0	0	0	0	ug/L
CD-41C1	lower	SD	MC	0	0	0	0	0	ug/L
CD-41C1	lower	SD	PCE	0	0	0	0	0	ug/L
CD-41C1	lower	SD	TCE	0	0	0	0	0	ug/L
CD-41C1	lower	SD	VC	0	0	0	0	0	ug/L
CD-41C2	lower	SD	TCA	0	0	0	0	0	ug/L
CD-41C2	lower	SD	DCA	0	0	0	0	0	ug/L
CD-41C2	lower	SD	DCE	0	0	0	0	0	ug/L
CD-41C2	lower	SD	MC	0	0	0	0	0	ug/L
CD-41C2	lower	SD	PCE	0	0	0	0	0	ug/L
CD-41C2	lower	SD	TCE	0	0	0	0	0	ug/L
CD-41C2	lower	SD	VC	0	0	0	0	0	ug/L
CD-41C3	lower	SD	TCA	0.84	0	0	-0.84	0	ug/L
CD-41C3	lower	SD	DCA	0	0	0	0	0	ug/L
CD-41C3	lower	SD	DCE	0	0	0	0	0	ug/L
CD-41C3	lower	SD	MC	0	0	0	0	0	ug/L
CD-41C3	lower	SD	PCE	0	0	0	0	0	ug/L
CD-41C3	lower	SD	TCE	0	0	0	0	0	ug/L
CD-41C3	lower	SD	VC	0	0	0	0	0	ug/L
CD-42C1	lower	SD	TCA	0	0	0	0	0	ug/L
CD-42C1	lower	SD	DCA	0	0	0	0	0	ug/L
CD-42C1	lower	SD	DCE	0	0	0	0	0	ug/L
CD-42C1	lower	SD	MC	0	0	0	0	0	ug/L
CD-42C1	lower	SD	PCE	0	0	0	0	0	ug/L
CD-42C1	lower	SD	TCE	0	0	0	0	0	ug/L
CD-42C1	lower	SD	VC	0	0	0	0	0	ug/L
CD-42C2	lower	SD	TCA	0	0	0	0	0	ug/L
CD-42C2	lower	SD	DCA	0	0	0	0	0	ug/L
CD-42C2	lower	SD	DCE	0	0	0	0	0	ug/L
CD-42C2	lower	SD	MC	0	0	0	0	0	ug/L
CD-42C2	lower	SD	PCE	0	0	0	0	0	ug/L
CD-42C2	lower	SD	TCE	0	0	0	0	0	ug/L
CD-42C2	lower	SD	VC	0	0	0	0	0	ug/L
CD-42C3	lower	SD	TCA	0	0	0	0	0	ug/L
CD-42C3	lower	SD	DCA	0	0	0	0	0	ug/L
CD-42C3	lower	SD	DCE	0	0	0	0	0	ug/L
CD-42C3	lower	SD	MC	0	0	0	0	0	ug/L
CD-42C3	lower	SD	PCE	0	0	0	0	0	ug/L
CD-42C3	lower	SD	TCE	0	0	0	0	0	ug/L
CD-42C3	lower	SD	VC	0	0	0	0	0	ug/L
CD-43C1	lower	SD	TCA	0.63	3.52	5.31	4.68	1.79	ug/L
CD-43C1	lower	SD	DCA	0	0	0	0	0	ug/L
CD-43C1	lower	SD	DCE	0	0	0	0	0	ug/L
CD-43C1	lower	SD	MC	0	0	0	0	0	ug/L
CD-43C1	lower	SD	PCE	0	0	0	0	0	ug/L
CD-43C1	lower	SD	TCE	0	0	0	0	0	ug/L
CD-43C1	lower	SD	VC	0	0	0	0	0	ug/L
CD-43C2	lower	SD	TCA	0	0	0	0	0	ug/L
CD-43C2	lower	SD	DCA	0	0	0	0	0	ug/L
CD-43C2	lower	SD	DCE	0	0	0	0	0	ug/L
CD-43C2	lower	SD	MC	0	0	0	0	0	ug/L
CD-43C2	lower	SD	PCE	0	0	0	0	0	ug/L
CD-43C2	lower	SD	TCE	0	0	0	0	0	ug/L
CD-43C2	lower	SD	VC	0	0	0	0	0	ug/L
CD-43C3	lower	SD	TCA	0	0	0	0	0	ug/L
CD-43C3	lower	SD	DCA	0	0	0	0	0	ug/L
CD-43C3	lower	SD	DCE	0	0	0	0	0	ug/L

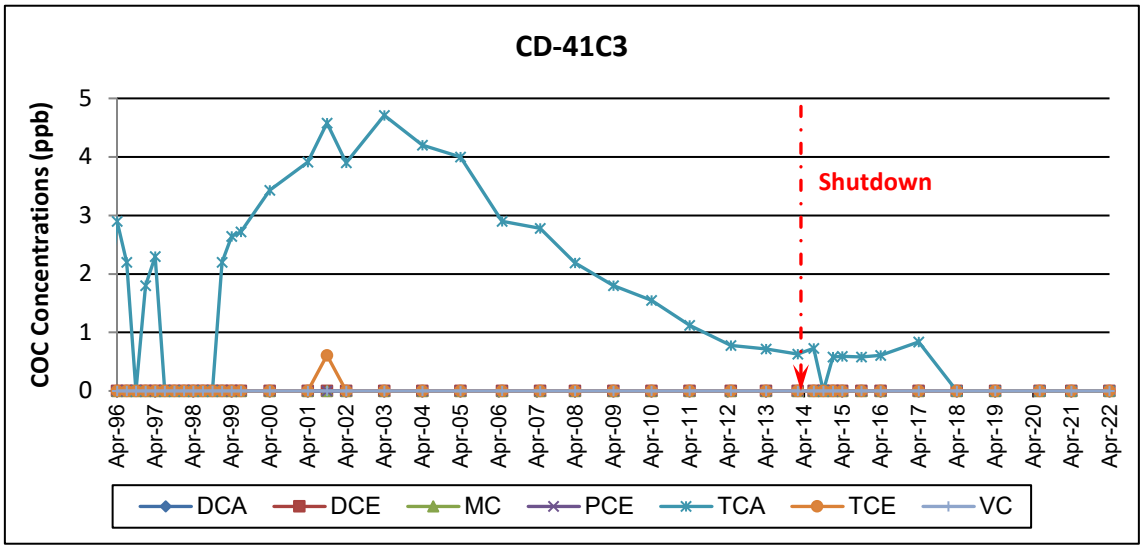
StationID	Aquifer	Program	Analyte	-5 Year Results	-1 Year Results	Current Year Results	5-Year Difference	1-Year Difference	Units
CD-43C3	lower	SD	MC	0	0	0	0	0	ug/L
CD-43C3	lower	SD	PCE	0	0	0	0	0	ug/L
CD-43C3	lower	SD	TCE	0	0	0	0	0	ug/L
CD-43C3	lower	SD	VC	0	0	0	0	0	ug/L
CD-44C1	lower	SD	TCA	2.05	2.25	1.17	-0.88	-1.08	ug/L
CD-44C1	lower	SD	DCA	0	0	0	0	0	ug/L
CD-44C1	lower	SD	DCE	0	0.6	0.52	0.52	-0.08	ug/L
CD-44C1	lower	SD	MC	0	0	0	0	0	ug/L
CD-44C1	lower	SD	PCE	0	0	0	0	0	ug/L
CD-44C1	lower	SD	TCE	0	0	0	0	0	ug/L
CD-44C1	lower	SD	VC	0	0	0	0	0	ug/L
CD-44C2	lower	SD	TCA	0	0	0	0	0	ug/L
CD-44C2	lower	SD	DCA	0	0	0	0	0	ug/L
CD-44C2	lower	SD	DCE	0	0	0	0	0	ug/L
CD-44C2	lower	SD	MC	0	0	0	0	0	ug/L
CD-44C2	lower	SD	PCE	0	0	0	0	0	ug/L
CD-44C2	lower	SD	TCE	0	0	0	0	0	ug/L
CD-44C2	lower	SD	VC	0	0	0	0	0	ug/L
CD-44C3	lower	SD	TCA	0	0	0	0	0	ug/L
CD-44C3	lower	SD	DCA	0	0	0	0	0	ug/L
CD-44C3	lower	SD	DCE	0	0	0	0	0	ug/L
CD-44C3	lower	SD	MC	0	0	0	0	0	ug/L
CD-44C3	lower	SD	PCE	0	0	0	0	0	ug/L
CD-44C3	lower	SD	TCE	0	0	0	0	0	ug/L
CD-44C3	lower	SD	VC	0	0	0	0	0	ug/L
CD-45C1	lower	SD	TCA	0.88	1.64	1.59	0.71	-0.05	ug/L
CD-45C1	lower	SD	DCA	0	0	0	0	0	ug/L
CD-45C1	lower	SD	DCE	0	0	0	0	0	ug/L
CD-45C1	lower	SD	MC	0	0	0	0	0	ug/L
CD-45C1	lower	SD	PCE	0	0	0	0	0	ug/L
CD-45C1	lower	SD	TCE	0	0	0	0	0	ug/L
CD-45C1	lower	SD	VC	0	0	0	0	0	ug/L
CD-45C2	lower	SD	TCA	0	0	0	0	0	ug/L
CD-45C2	lower	SD	DCA	0	0	0	0	0	ug/L
CD-45C2	lower	SD	DCE	0	0	0	0	0	ug/L
CD-45C2	lower	SD	MC	0	0	0	0	0	ug/L
CD-45C2	lower	SD	PCE	0	0	0	0	0	ug/L
CD-45C2	lower	SD	TCE	0	0	0	0	0	ug/L
CD-45C2	lower	SD	VC	0	0	0	0	0	ug/L
CD-45C3	lower	SD	TCA	0	0	0	0	0	ug/L
CD-45C3	lower	SD	DCA	0	0	0	0	0	ug/L
CD-45C3	lower	SD	DCE	0	0	0	0	0	ug/L
CD-45C3	lower	SD	MC	0	0	0	0	0	ug/L
CD-45C3	lower	SD	PCE	0	0	0	0	0	ug/L
CD-45C3	lower	SD	TCE	0	0	0	0	0	ug/L
CD-45C3	lower	SD	VC	0	0	0	0	0	ug/L
CD-48C1	lower	SD	TCA	0	0	0	0	0	ug/L
CD-48C1	lower	SD	DCA	0	0	0	0	0	ug/L
CD-48C1	lower	SD	DCE	0	0	0	0	0	ug/L
CD-48C1	lower	SD	MC	0	0	0	0	0	ug/L
CD-48C1	lower	SD	PCE	0	0	0	0	0	ug/L
CD-48C1	lower	SD	TCE	0	0	0	0	0	ug/L
CD-48C1	lower	SD	VC	0	0	0	0	0	ug/L
CD-48C2	lower	SD	TCA	0	0	0	0	0	ug/L
CD-48C2	lower	SD	DCA	0	0	0	0	0	ug/L
CD-48C2	lower	SD	DCE	0	0	0	0	0	ug/L
CD-48C2	lower	SD	MC	0	0	0	0	0	ug/L
CD-48C2	lower	SD	PCE	0	0	0	0	0	ug/L
CD-48C2	lower	SD	TCE	0	0	0	0	0	ug/L
CD-48C2	lower	SD	VC	0	0	0	0	0	ug/L
CD-48C3	lower	SD	TCA	0	0	0	0	0	ug/L

StationID	Aquifer	Program	Analyte	-5 Year Results	-1 Year Results	Current Year Results	5-Year Difference	1-Year Difference	Units
CD-48C3	lower	SD	DCA	0	0	0	0	0	ug/L
CD-48C3	lower	SD	DCE	0	0	0	0	0	ug/L
CD-48C3	lower	SD	MC	0	0	0	0	0	ug/L
CD-48C3	lower	SD	PCE	0	0	0	0	0	ug/L
CD-48C3	lower	SD	TCE	0	0	0	0	0	ug/L
CD-48C3	lower	SD	VC	0	0	0	0	0	ug/L
CD-49	lower	SD	TCA	6.98	1.34	2.42	-4.56	1.08	ug/L
CD-49	lower	SD	DCA	0.51	0	0	-0.51	0	ug/L
CD-49	lower	SD	DCE	2.07	1.18	2.47	0.4	1.29	ug/L
CD-49	lower	SD	MC	0	0	0	0	0	ug/L
CD-49	lower	SD	PCE	0	0	0	0	0	ug/L
CD-49	lower	SD	TCE	0	0	0	0	0	ug/L
CD-49	lower	SD	VC	0	0	0	0	0	ug/L
CP-E1	lower	SD	TCA	9.26	7.81	4.86	-4.4	-2.95	ug/L
CP-E1	lower	SD	DCA	10.3	7.84	8.29	-2.01	0.45	ug/L
CP-E1	lower	SD	DCE	16	16.5	16.4	0.4	-0.1	ug/L
CP-E1	lower	SD	MC	0	0	0	0	0	ug/L
CP-E1	lower	SD	PCE	2	1.5	2.84	0.84	1.34	ug/L
CP-E1	lower	SD	TCE	7.74	7.42	8.43	0.69	1.01	ug/L
CP-E1	lower	SD	VC	0	0	0	0	0	ug/L
CP-E2	lower	SD	TCA	62.7	40.1	32.3	-30.4	-7.8	ug/L
CP-E2	lower	SD	DCA	29.9	33.5	36	6.1	2.5	ug/L
CP-E2	lower	SD	DCE	103	132	167	64	35	ug/L
CP-E2	lower	SD	MC	0	0	0	0	0	ug/L
CP-E2	lower	SD	PCE	0.76	0.99	1.04	0.28	0.05	ug/L
CP-E2	lower	SD	TCE	92.9	158	184	91.1	26	ug/L
CP-E2	lower	SD	VC	0	0	0	0	0	ug/L
CP-E3	lower	SD	TCA	14.4	5.1	5.84	-8.56	0.74	ug/L
CP-E3	lower	SD	DCA	3.96	1.95	1.89	-2.07	-0.06	ug/L
CP-E3	lower	SD	DCE	16.3	7.83	11.6	-4.7	3.77	ug/L
CP-E3	lower	SD	MC	0	0	0	0	0	ug/L
CP-E3	lower	SD	PCE	0	0	0	0	0	ug/L
CP-E3	lower	SD	TCE	2.34	2.14	1.56	-0.78	-0.58	ug/L
CP-E3	lower	SD	VC	0	0	0	0	0	ug/L
CP-W1	lower	SD	TCA	6.26	1.9	2.2	-4.06	0.3	ug/L
CP-W1	lower	SD	DCA	0	0	0	0	0	ug/L
CP-W1	lower	SD	DCE	5.06	2.68	3.61	-1.45	0.93	ug/L
CP-W1	lower	SD	MC	0	0	0	0	0	ug/L
CP-W1	lower	SD	PCE	0	0	0	0	0	ug/L
CP-W1	lower	SD	TCE	0	0	0	0	0	ug/L
CP-W1	lower	SD	VC	0	0	0	0	0	ug/L
CP-W2	lower	SD	TCA	2.06	19.6	20	17.94	0.4	ug/L
CP-W2	lower	SD	DCA	0	2.13	2.52	2.52	0.39	ug/L
CP-W2	lower	SD	DCE	0	3.32	7.72	7.72	4.4	ug/L
CP-W2	lower	SD	MC	0	0	0	0	0	ug/L
CP-W2	lower	SD	PCE	0	0	0	0	0	ug/L
CP-W2	lower	SD	TCE	0	0	0	0	0	ug/L
CP-W2	lower	SD	VC	0	0	0	0	0	ug/L
CP-W3	lower	SD	TCA	88.5	36.8	38.7	-49.8	1.9	ug/L
CP-W3	lower	SD	DCA	37.1	7.98	13.3	-23.8	5.32	ug/L
CP-W3	lower	SD	DCE	66.8	20.9	33.6	-33.2	12.7	ug/L
CP-W3	lower	SD	MC	0	0	0	0	0	ug/L
CP-W3	lower	SD	PCE	0	0	0	0	0	ug/L
CP-W3	lower	SD	TCE	40.2	30.3	42.2	2	11.9	ug/L
CP-W3	lower	SD	VC	0	0	0	0	0	ug/L

- 5-year results are from 2017, - 1-year results are from 2021, and current-year results are from 2022.
Analytes that exceeded clean-up criteria this reporting period are displayed in **ORANGE**.
Increases in analyte concentrations are highlighted in **RED**.
Decreases in analyte concentrations are highlighted in **BLUE**.

Figure 2-5 Lower Aquifer Individual Monitoring Well COC Concentrations





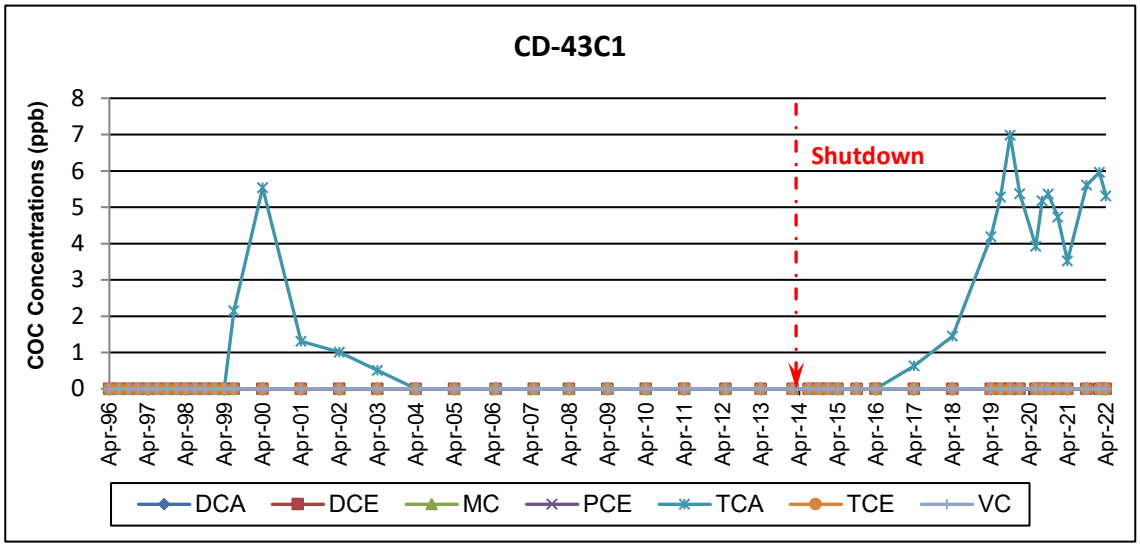
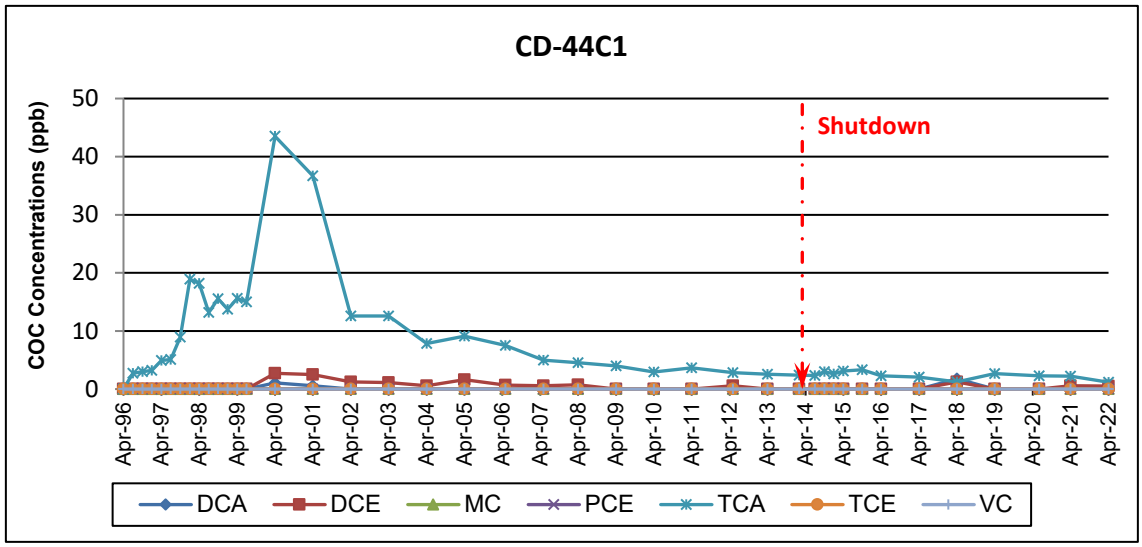
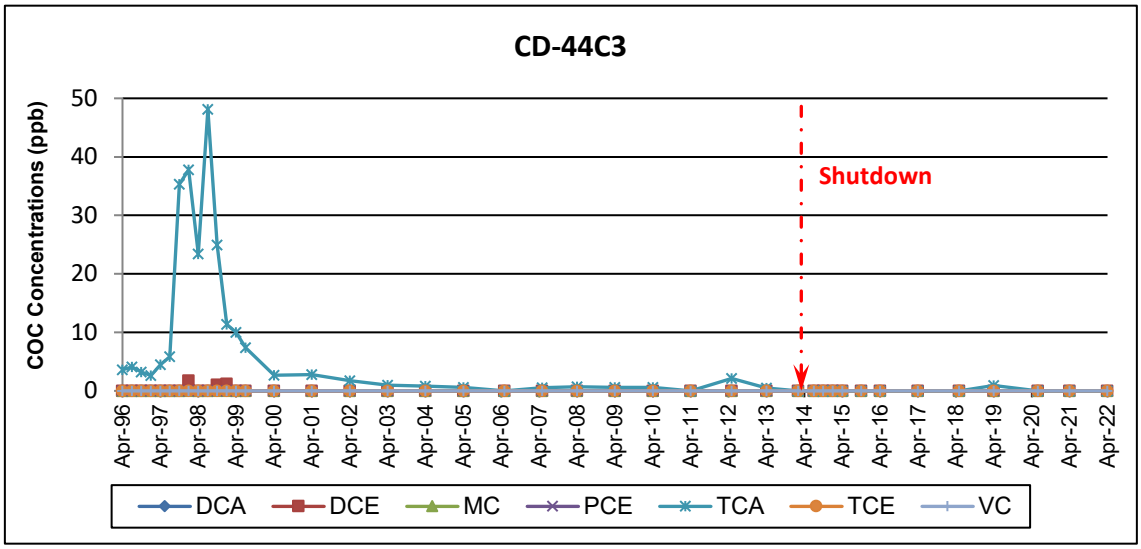


Figure 2-6 Lower Aquifer Individual Monitoring Well COC Concentrations





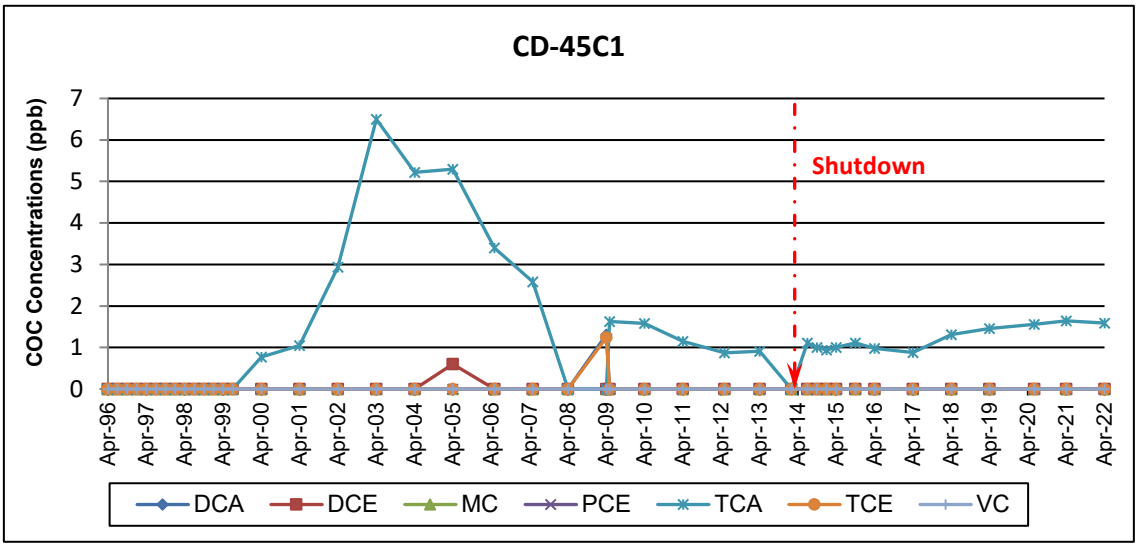
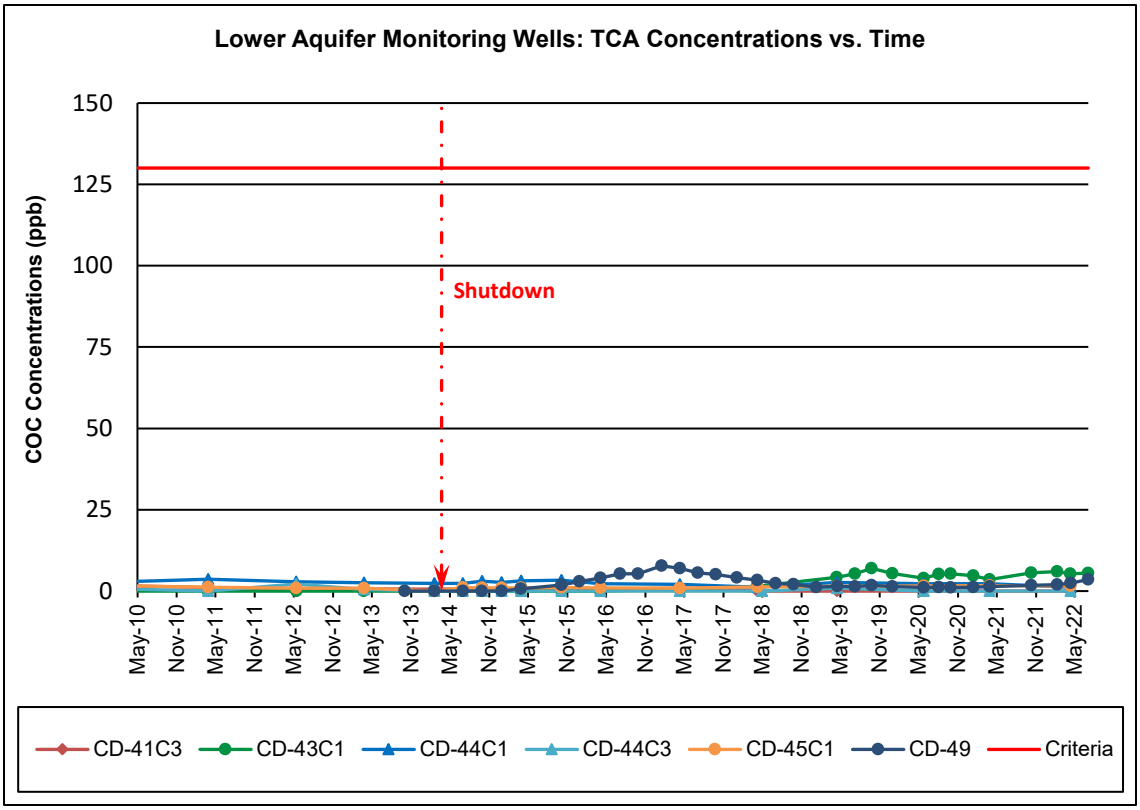


Figure 2-7 Lower Aquifer Compliance Wells TCA Concentrations



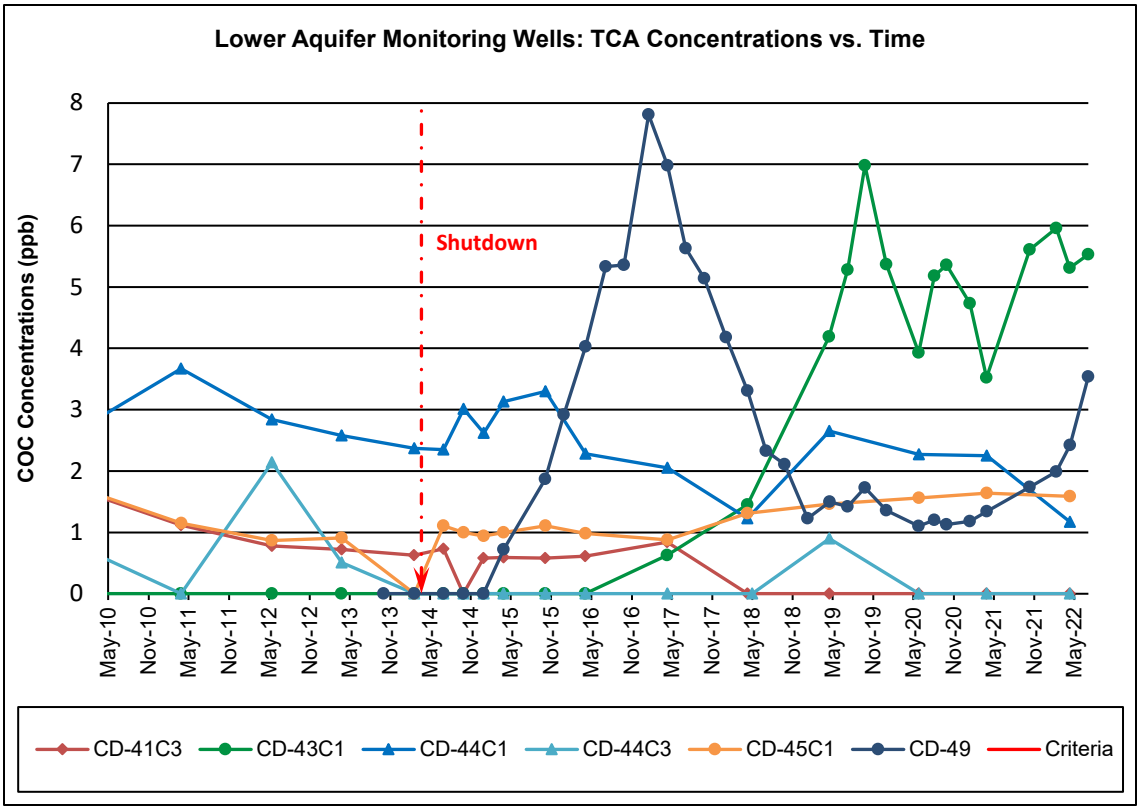
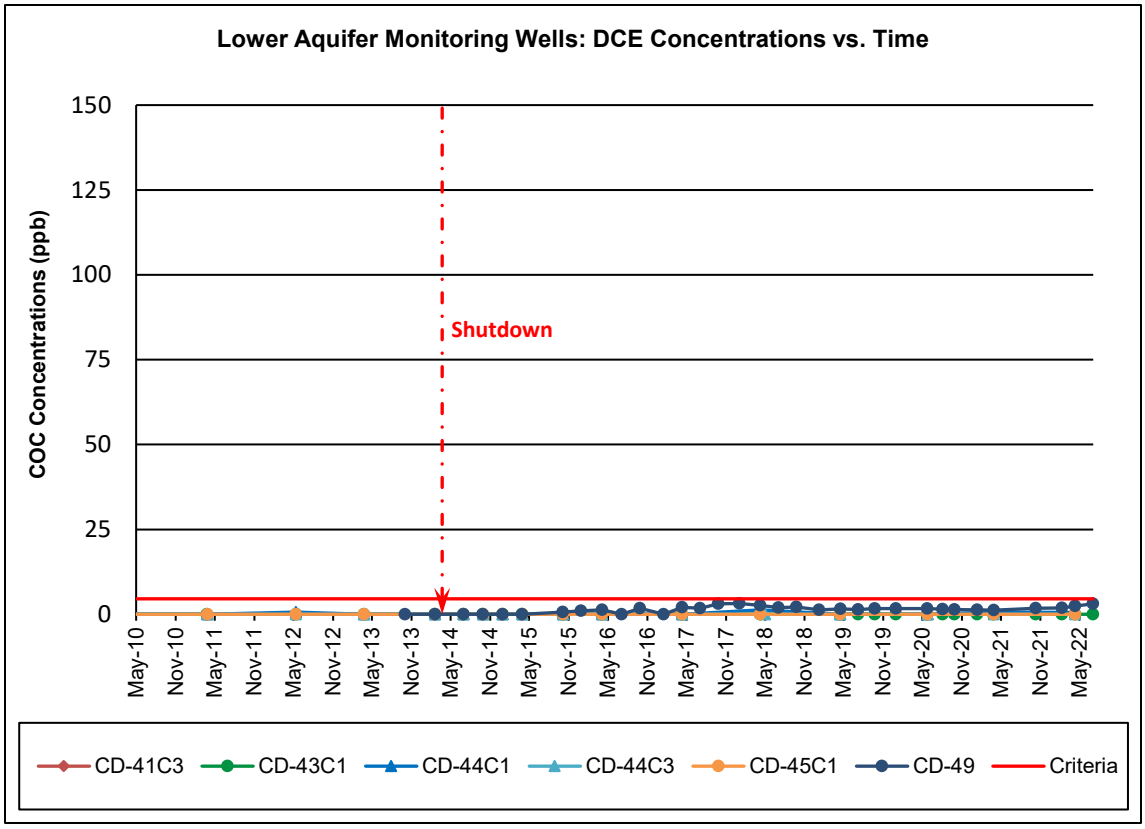


Figure 2-8 Lower Aquifer Compliance Wells DCE Concentrations



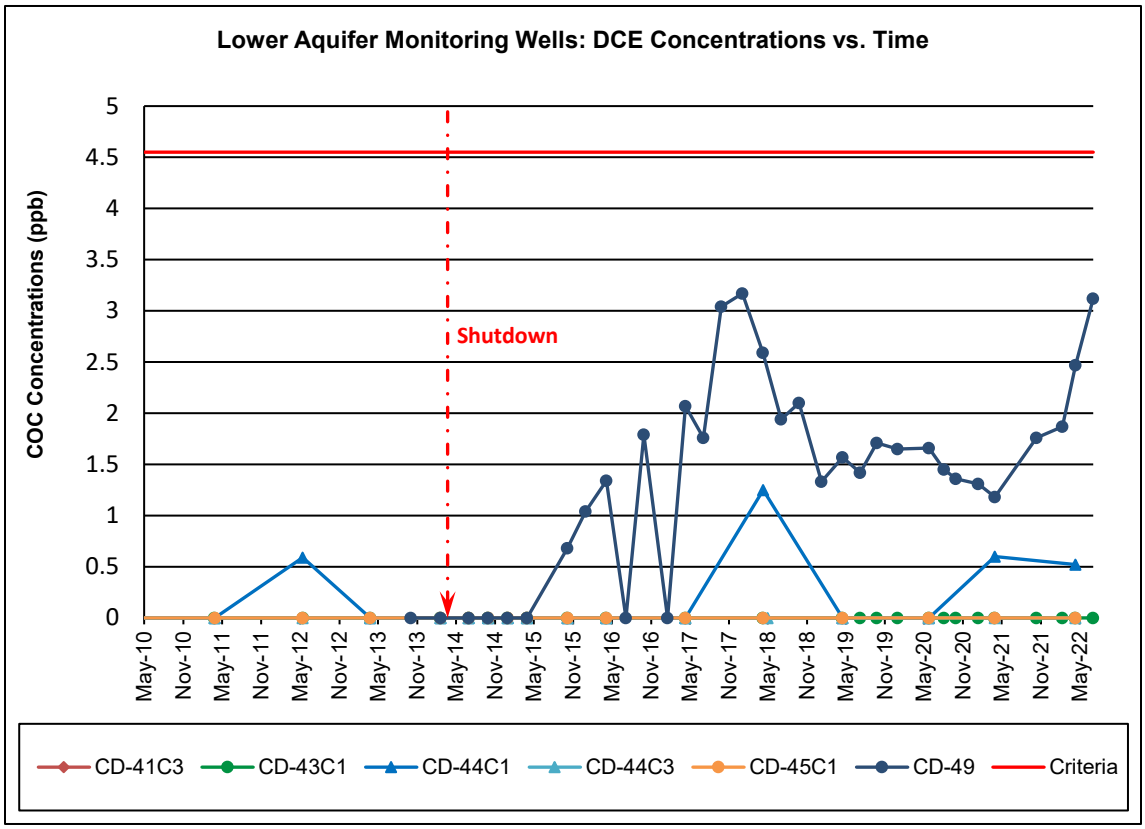
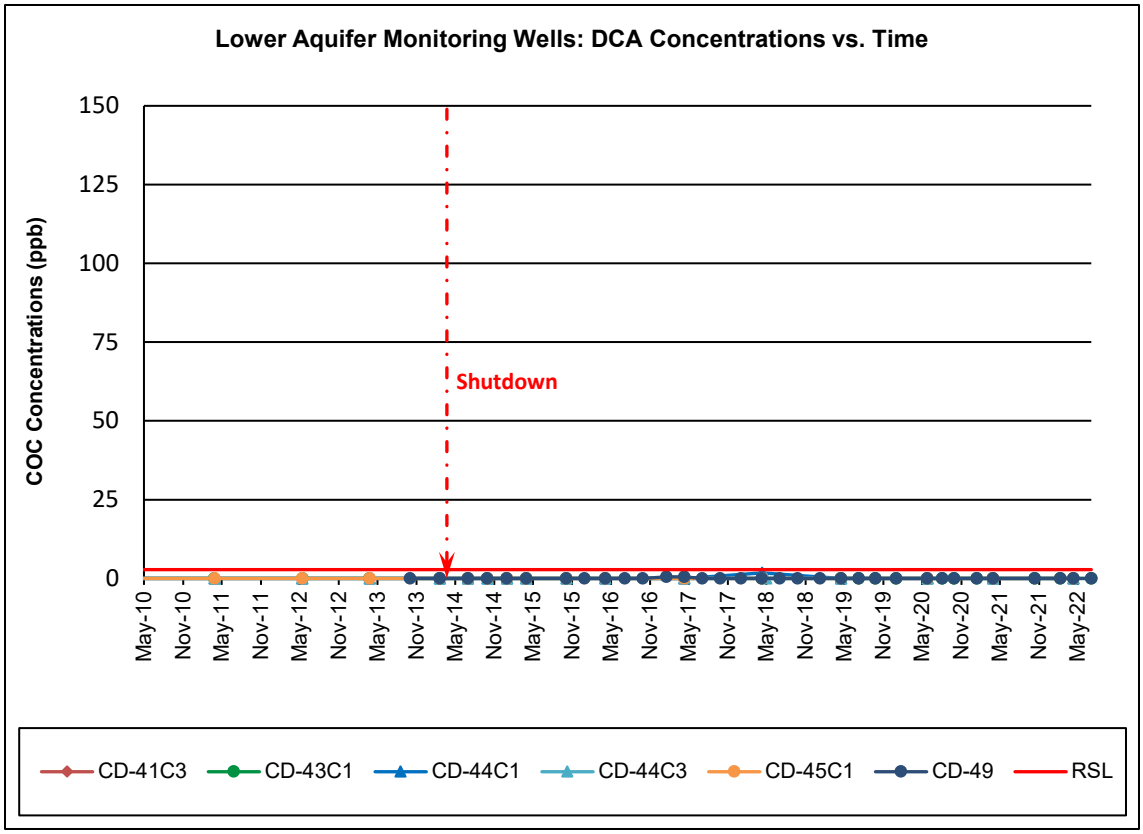


Figure 2-9 Lower Aquifer Compliance Wells DCA Concentrations



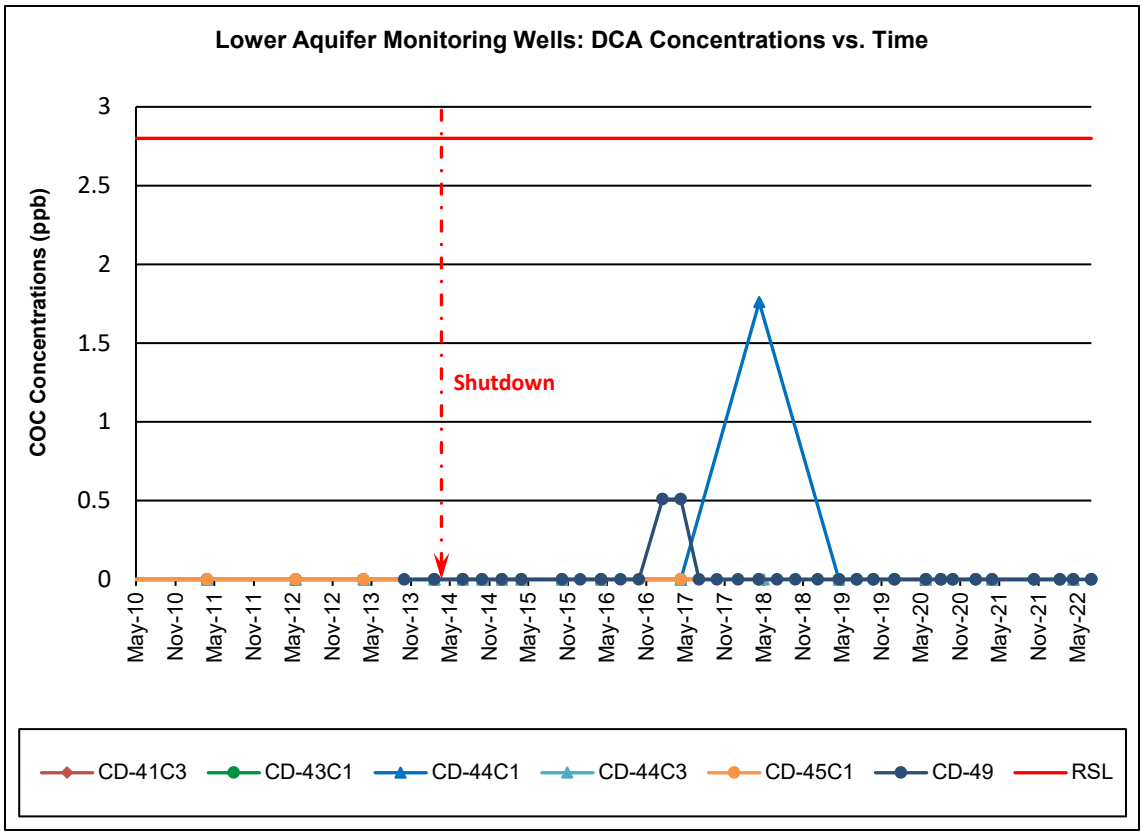
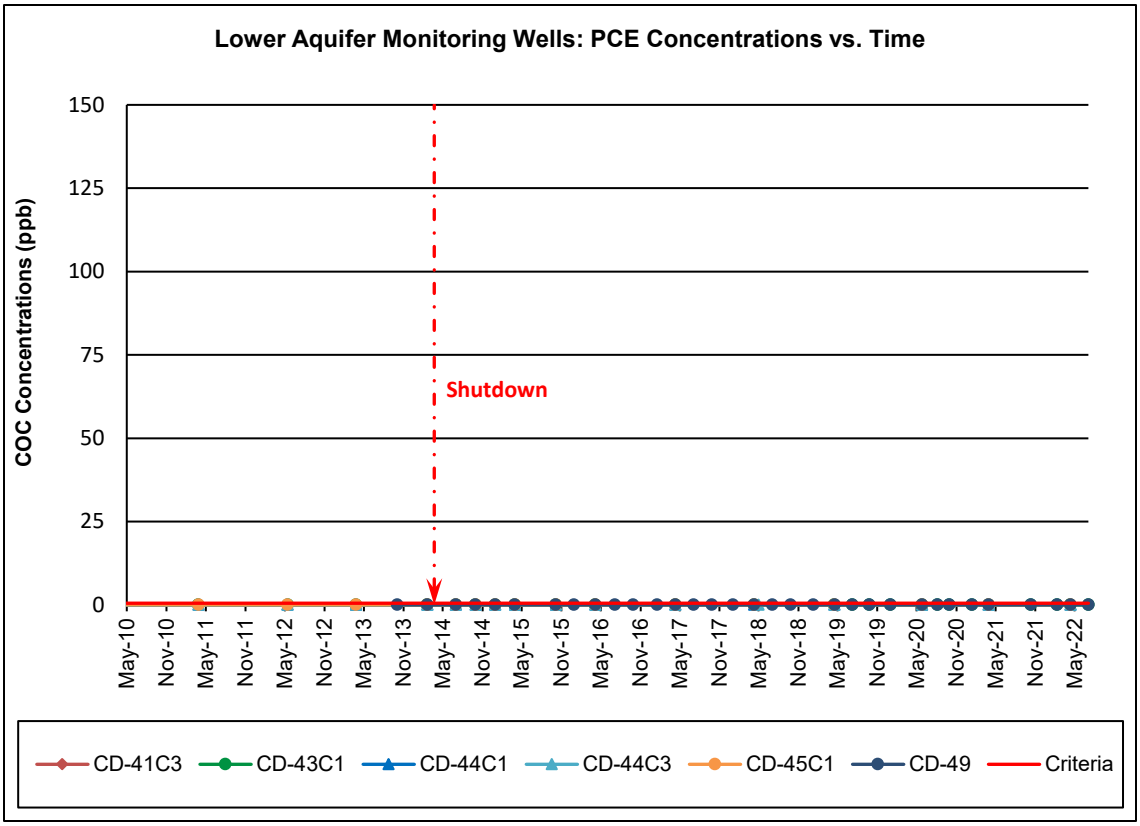


Figure 2-10 Lower Aquifer Compliance Wells PCE Concentrations



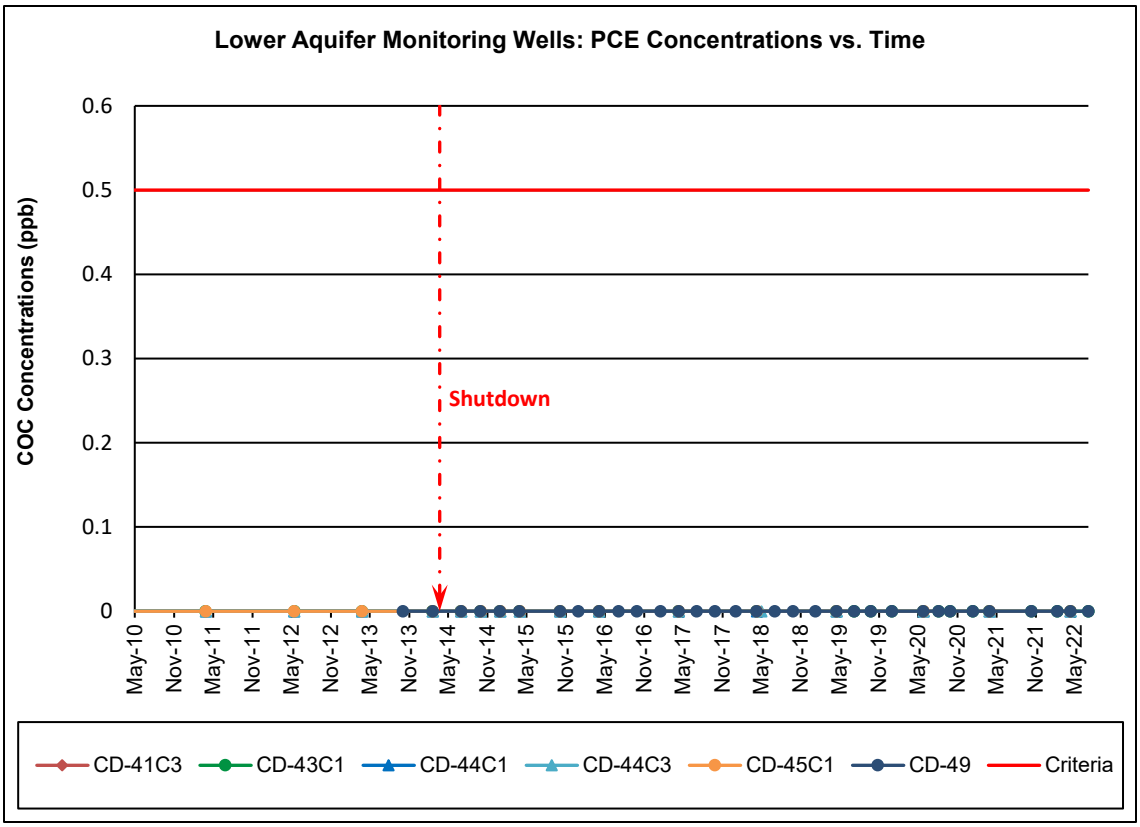
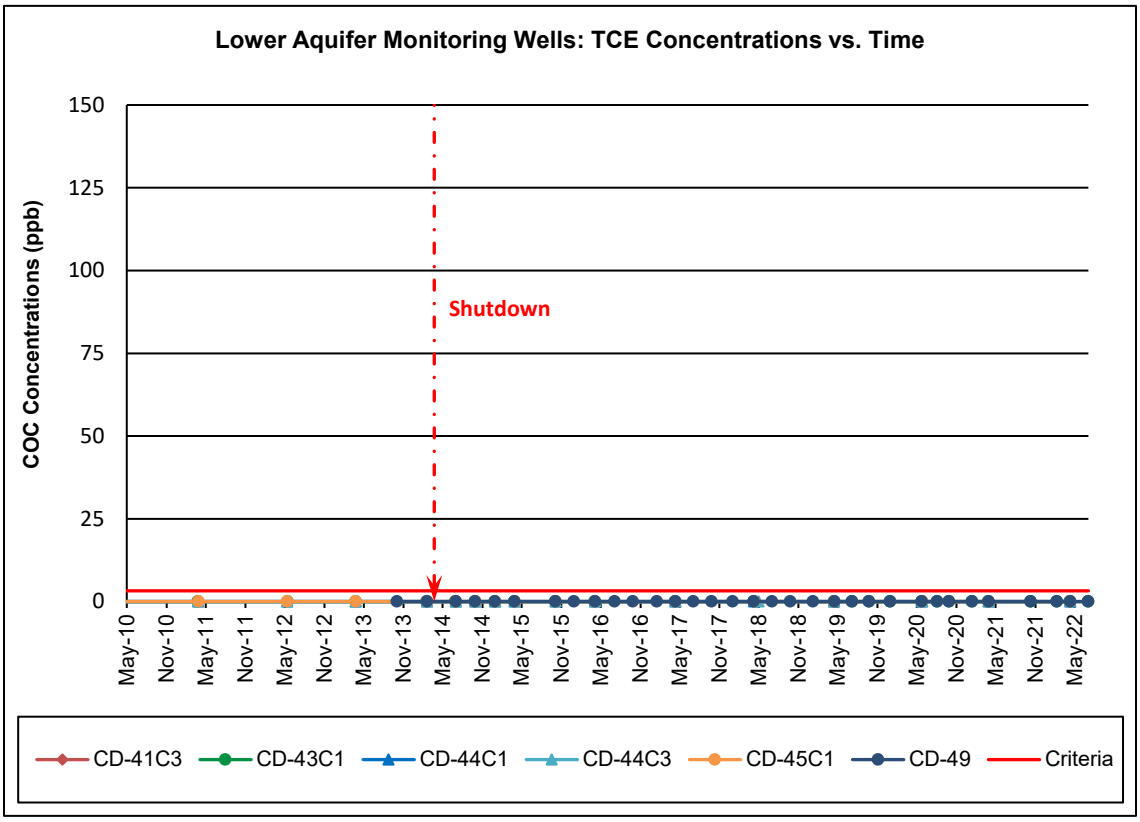


Figure 2-11 Lower Aquifer Compliance Wells TCE Concentrations



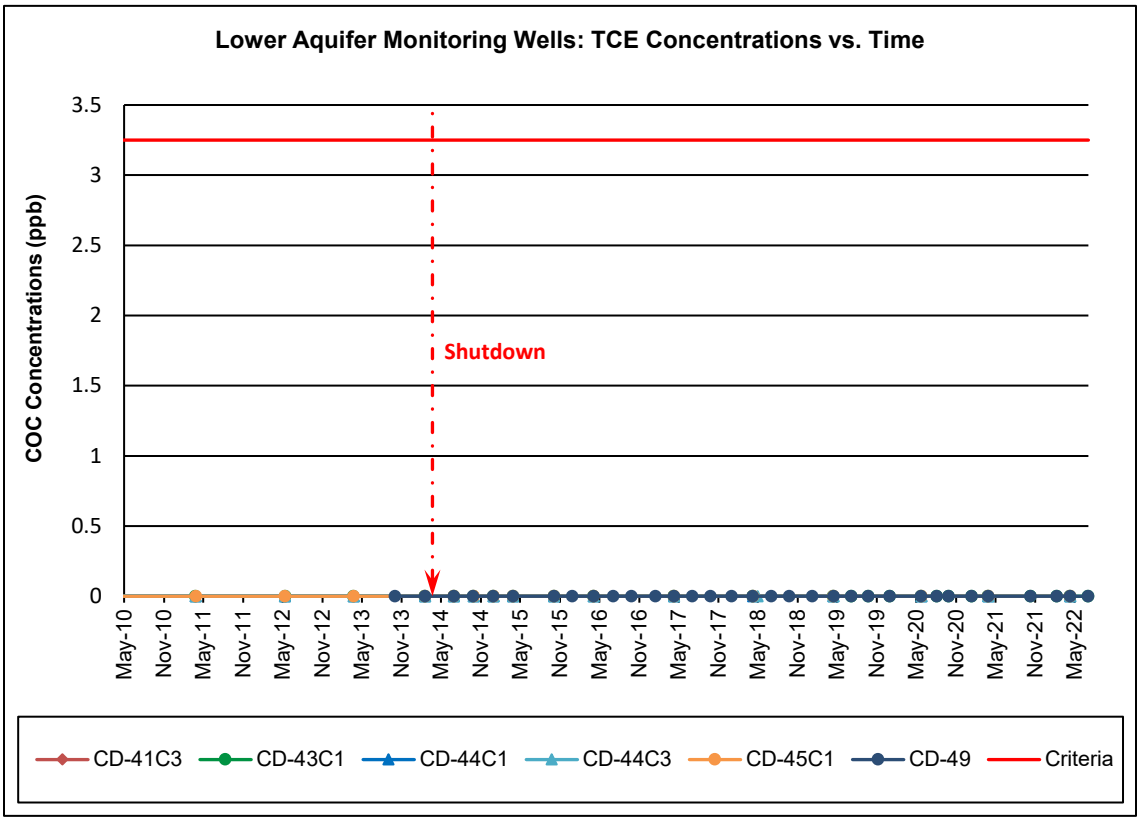


Figure 2-12 Lower Aquifer Individual Extraction Well COC Concentrations

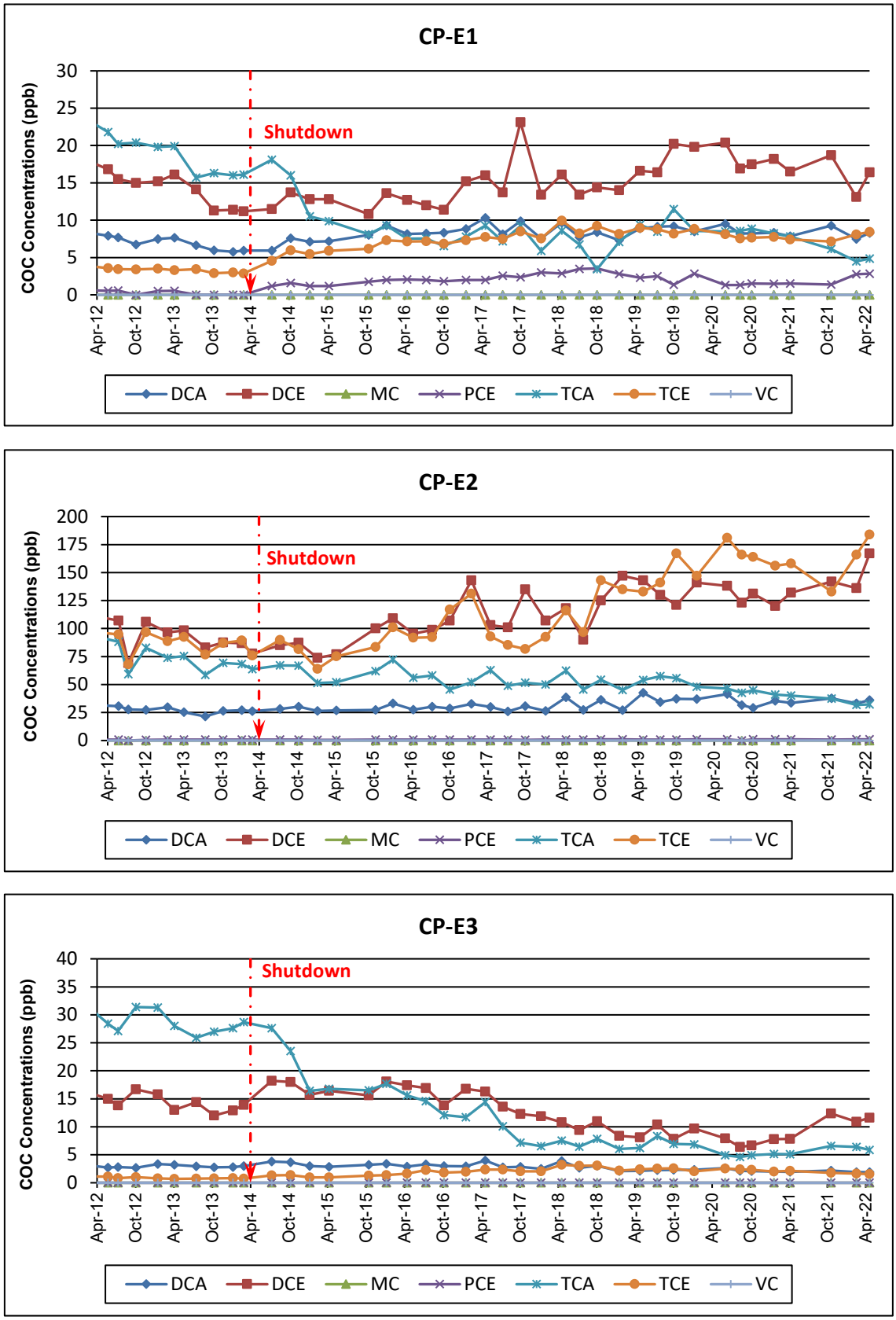


Figure 2-13 Lower Aquifer Individual Extraction Well COC Concentrations

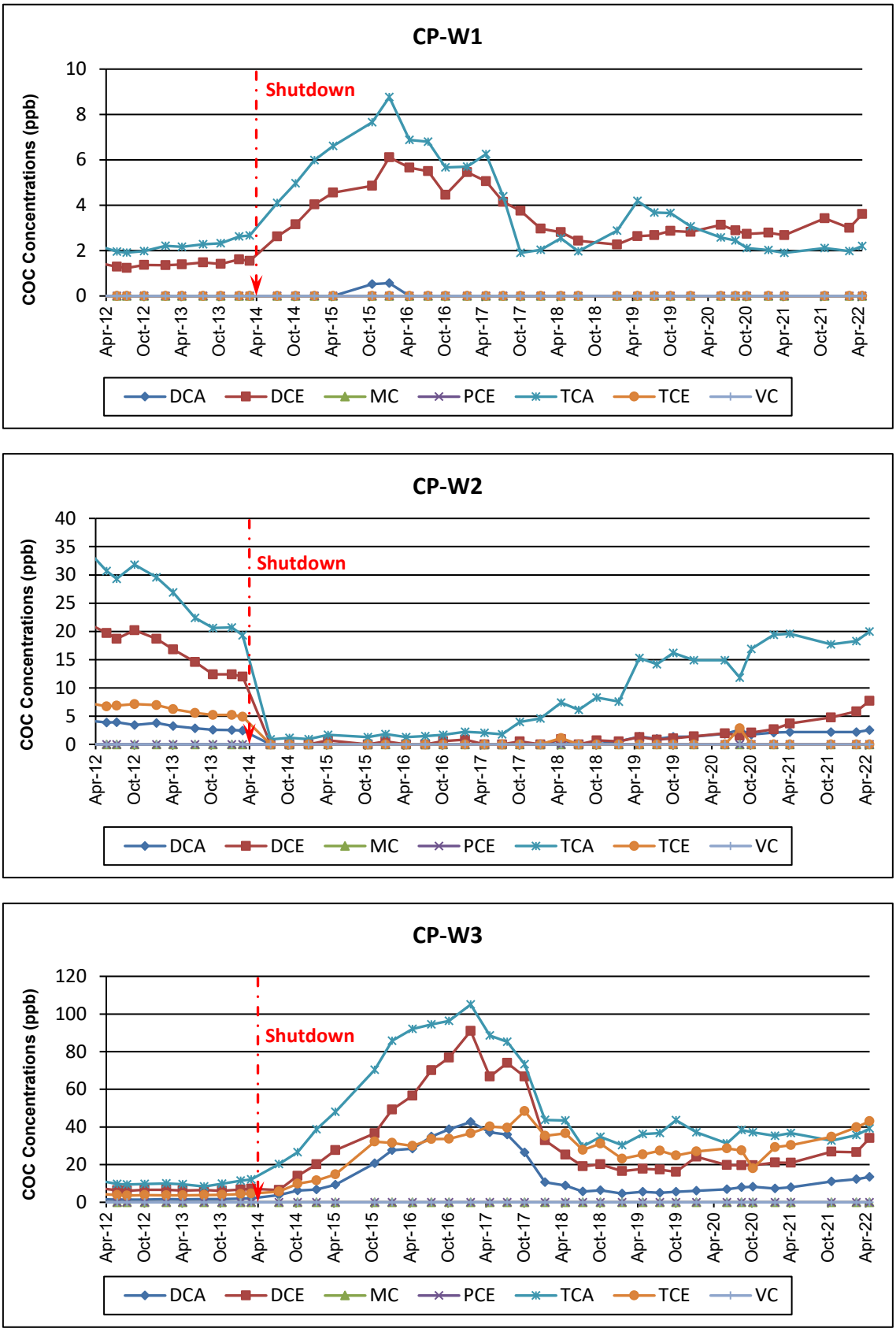
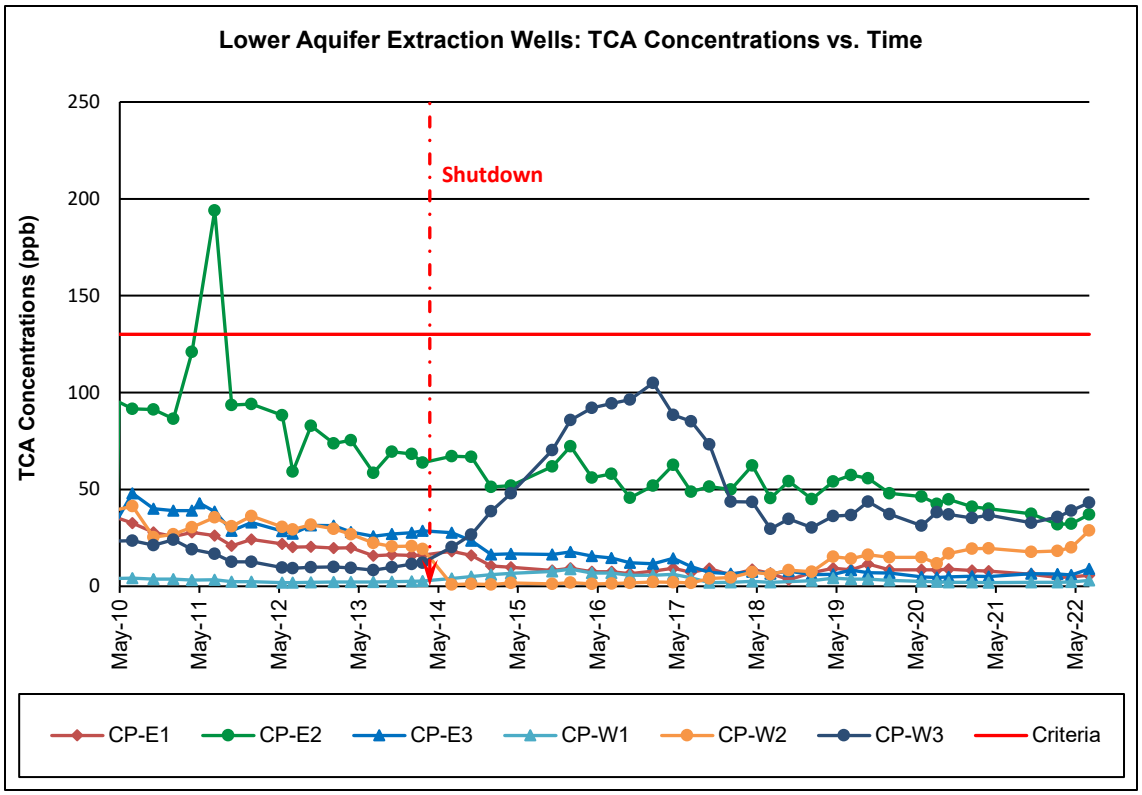


Figure 2-14 Lower Aquifer Extraction Wells TCA Concentrations vs. Time



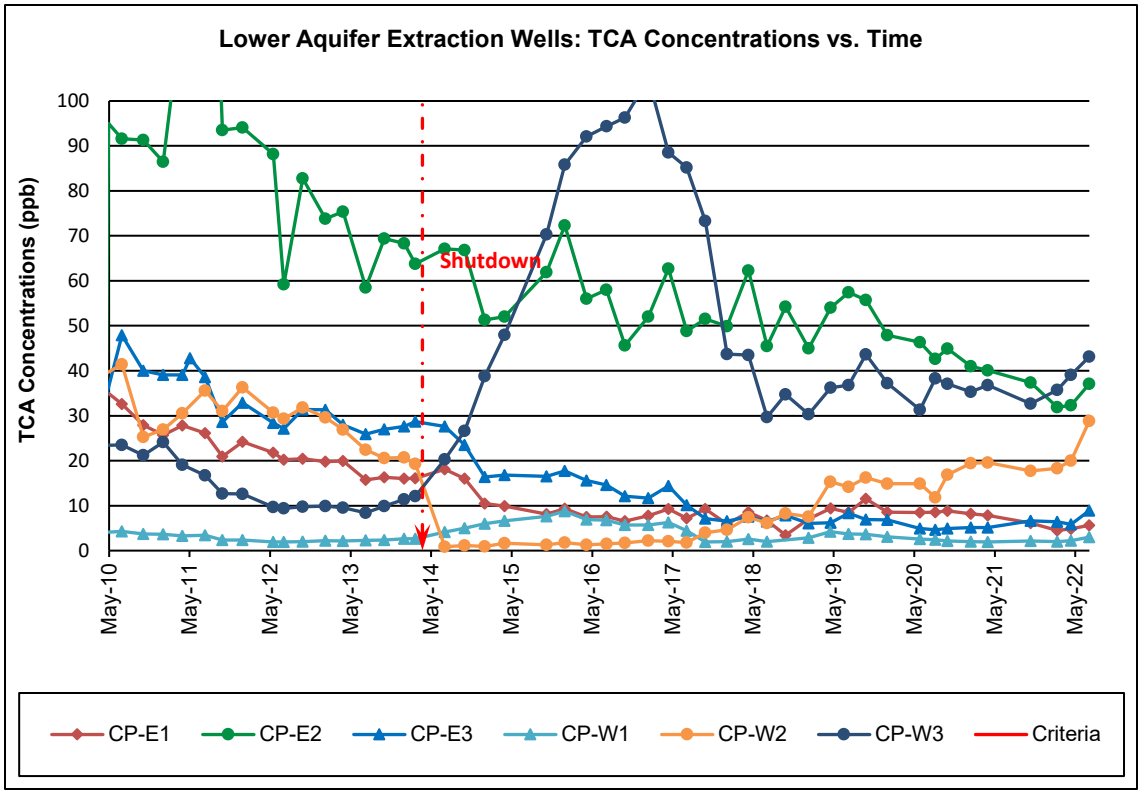
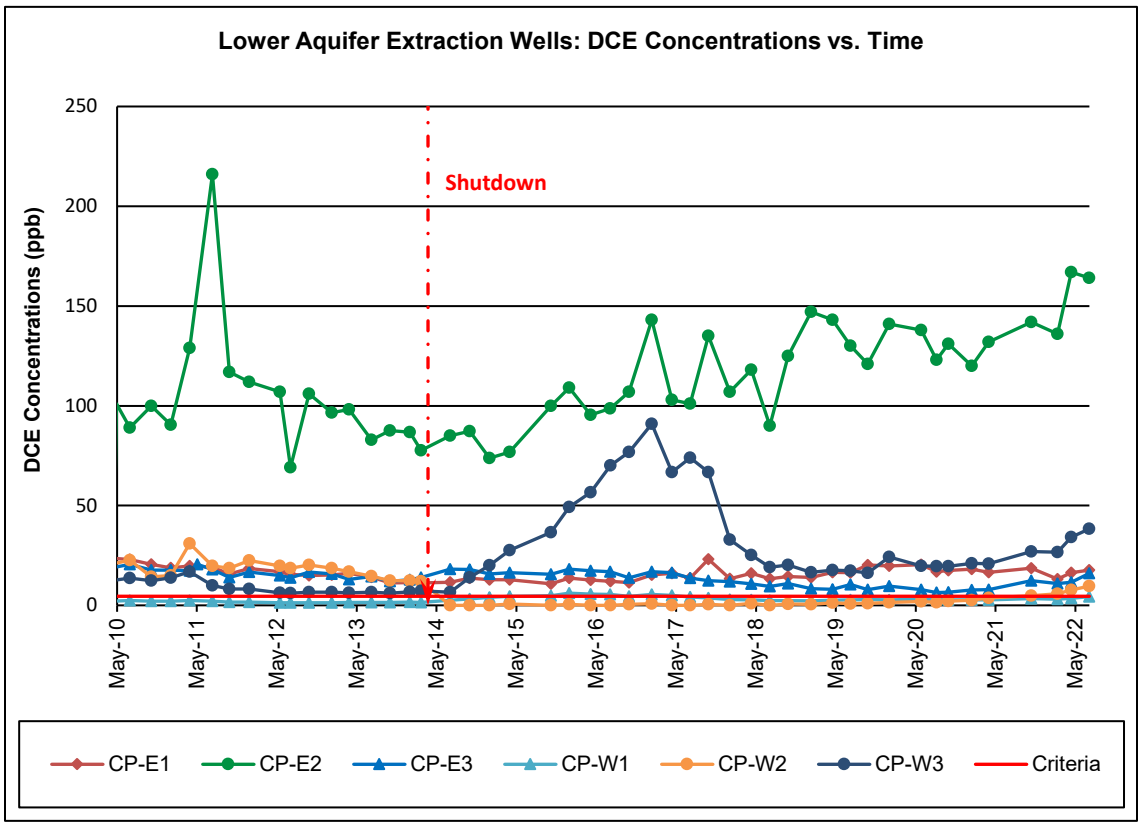


Figure 2-15 Lower Aquifer Extraction Wells DCE Concentrations vs. Time



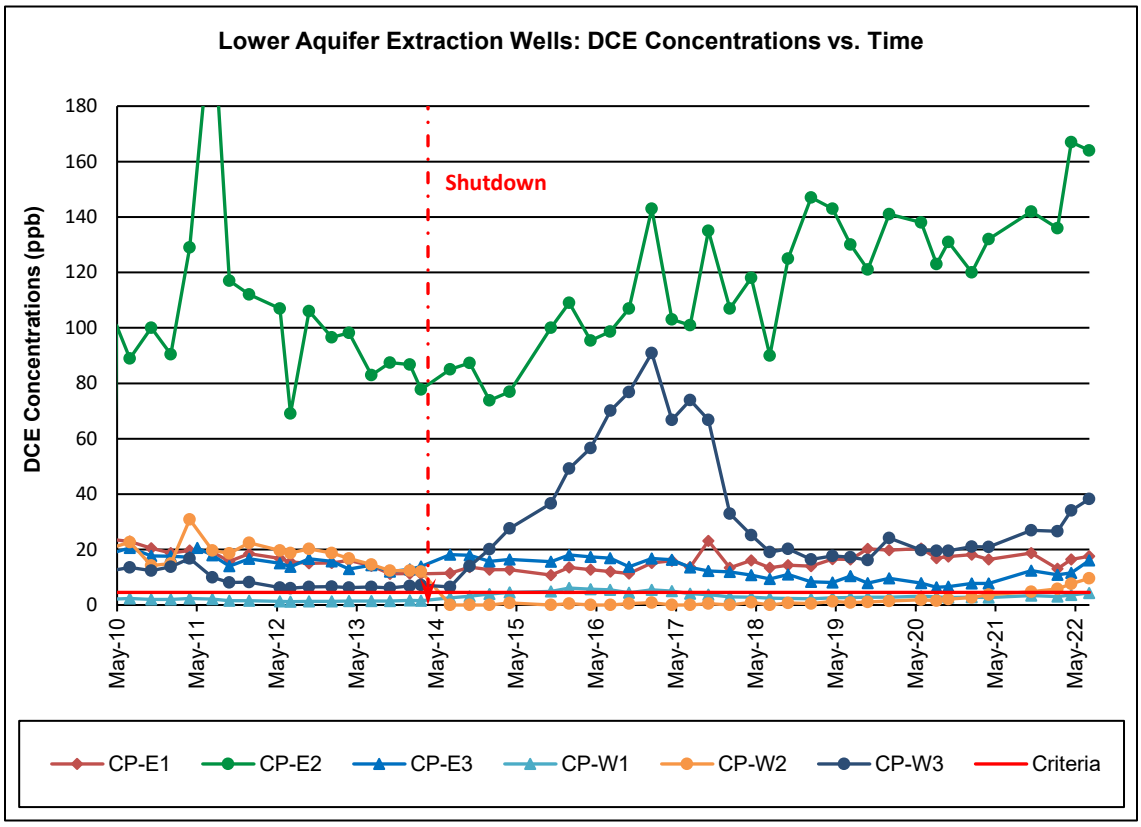
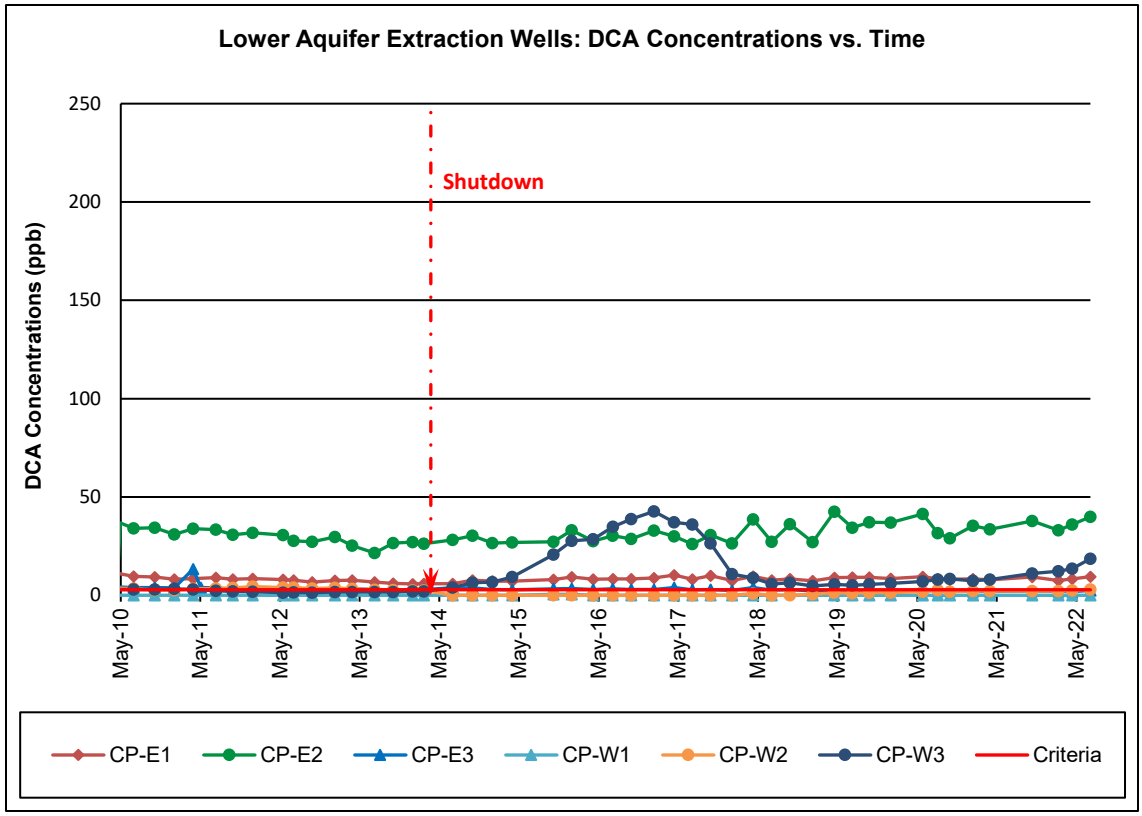


Figure 2-16 Lower Aquifer Extraction Wells DCA Concentrations vs. Time



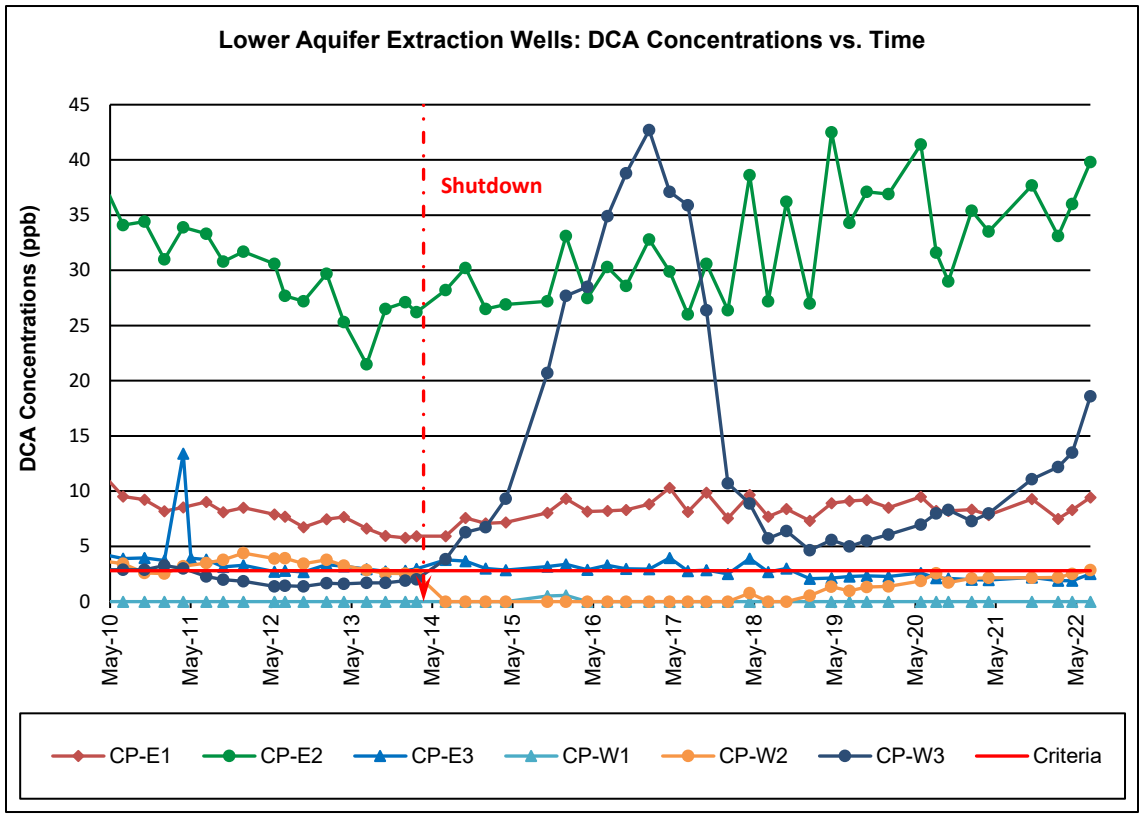
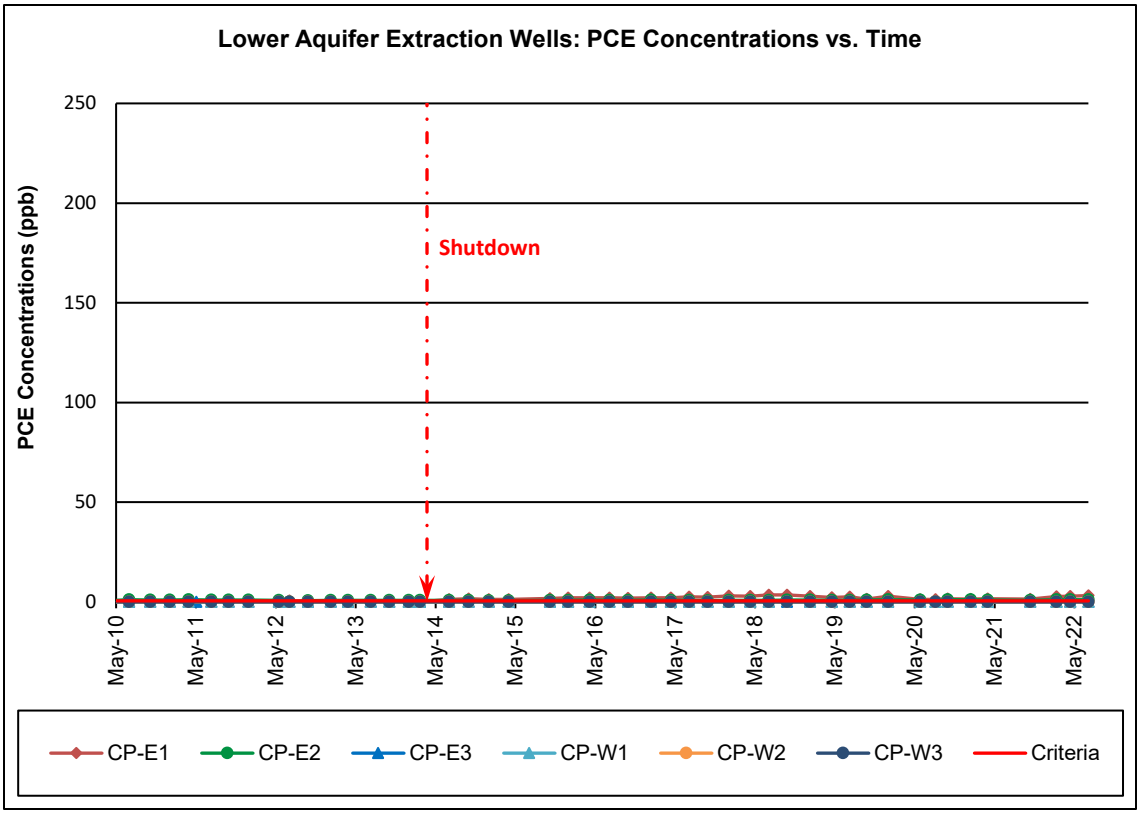


Figure 2-17 Lower Aquifer Extraction Wells PCE Concentrations vs. Time



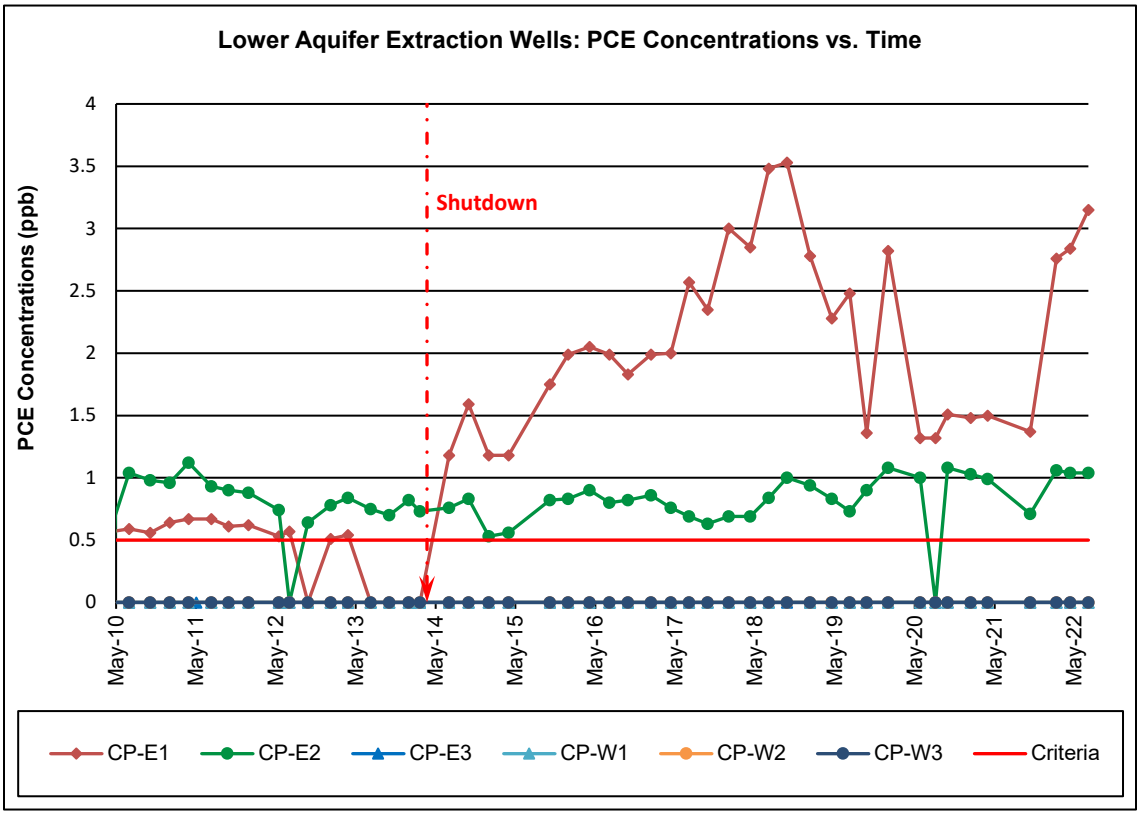
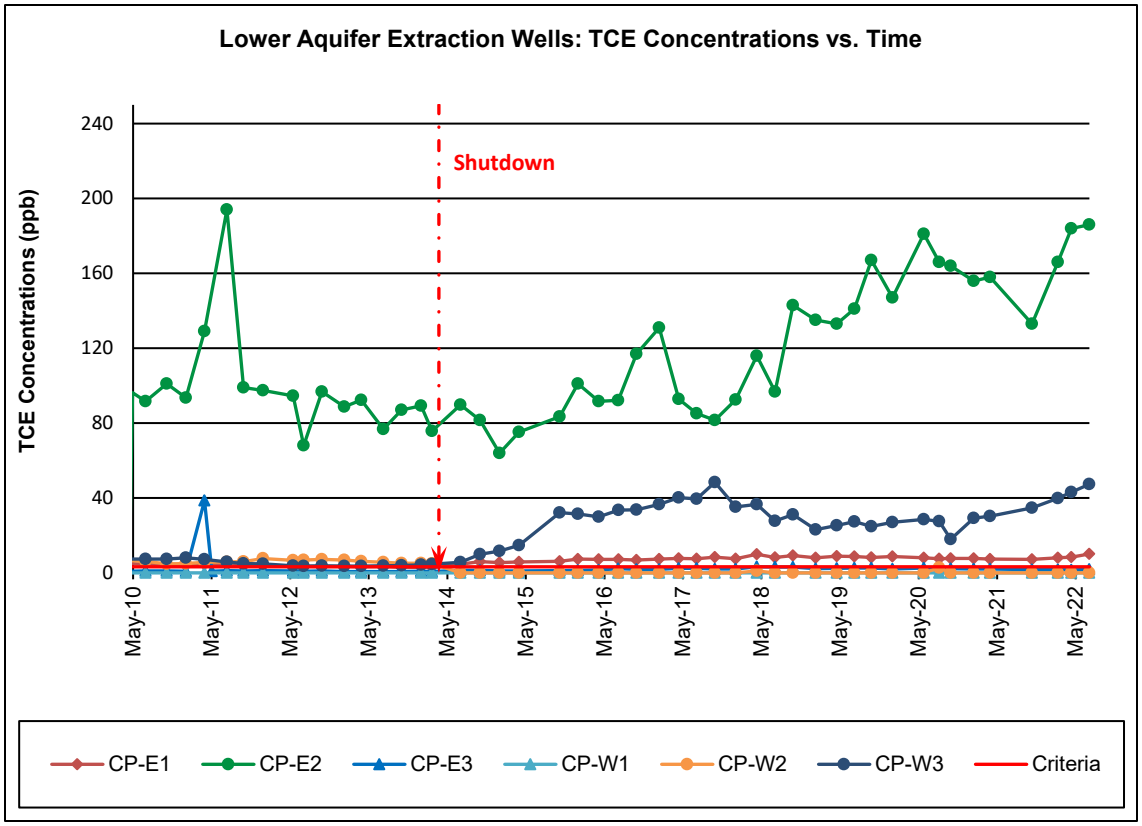


Figure 2-18 Lower Aquifer Extraction Wells TCE Concentrations vs. Time



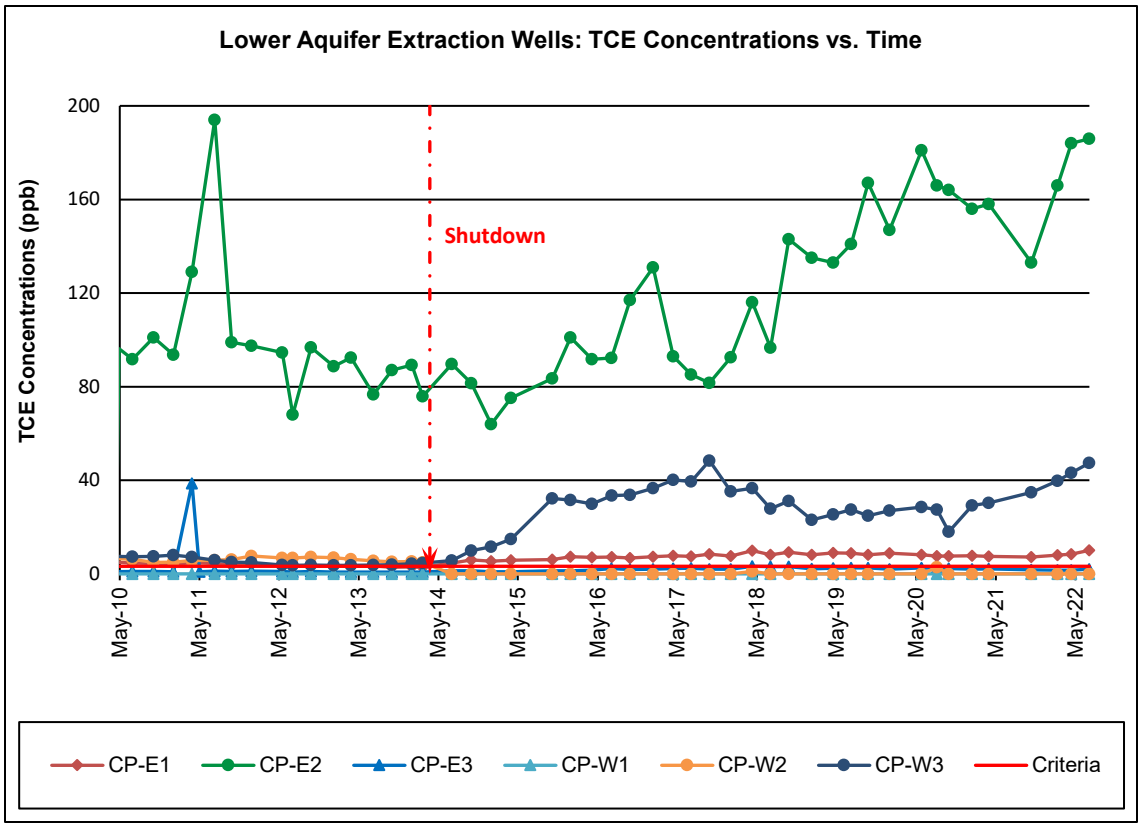


Figure 2-19 Lower Aquifer Estimated TCA Plume

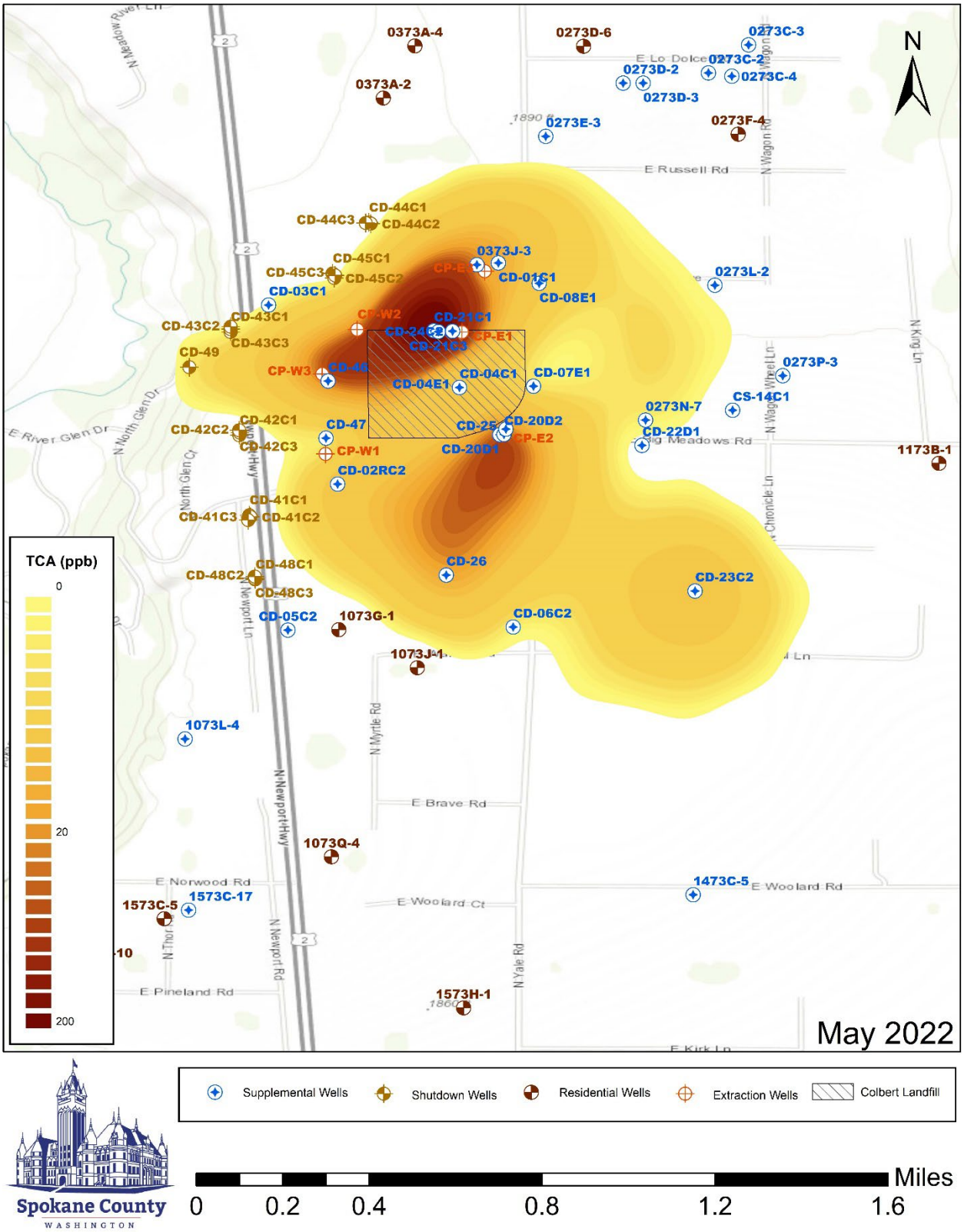


Figure 2-20 Lower Aquifer TCA Detections Map

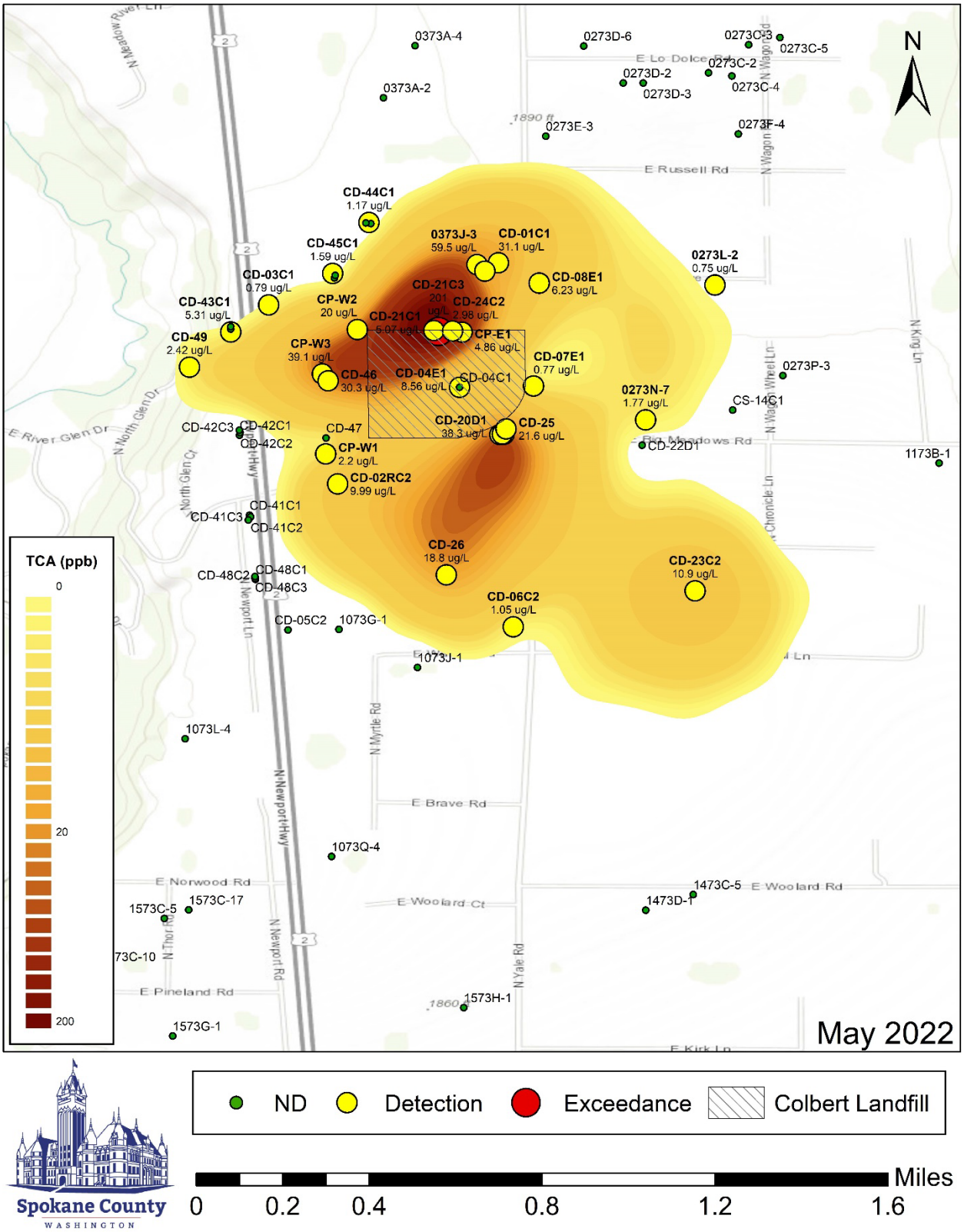


Figure 2-21 Lower Aquifer Estimated DCA Plume

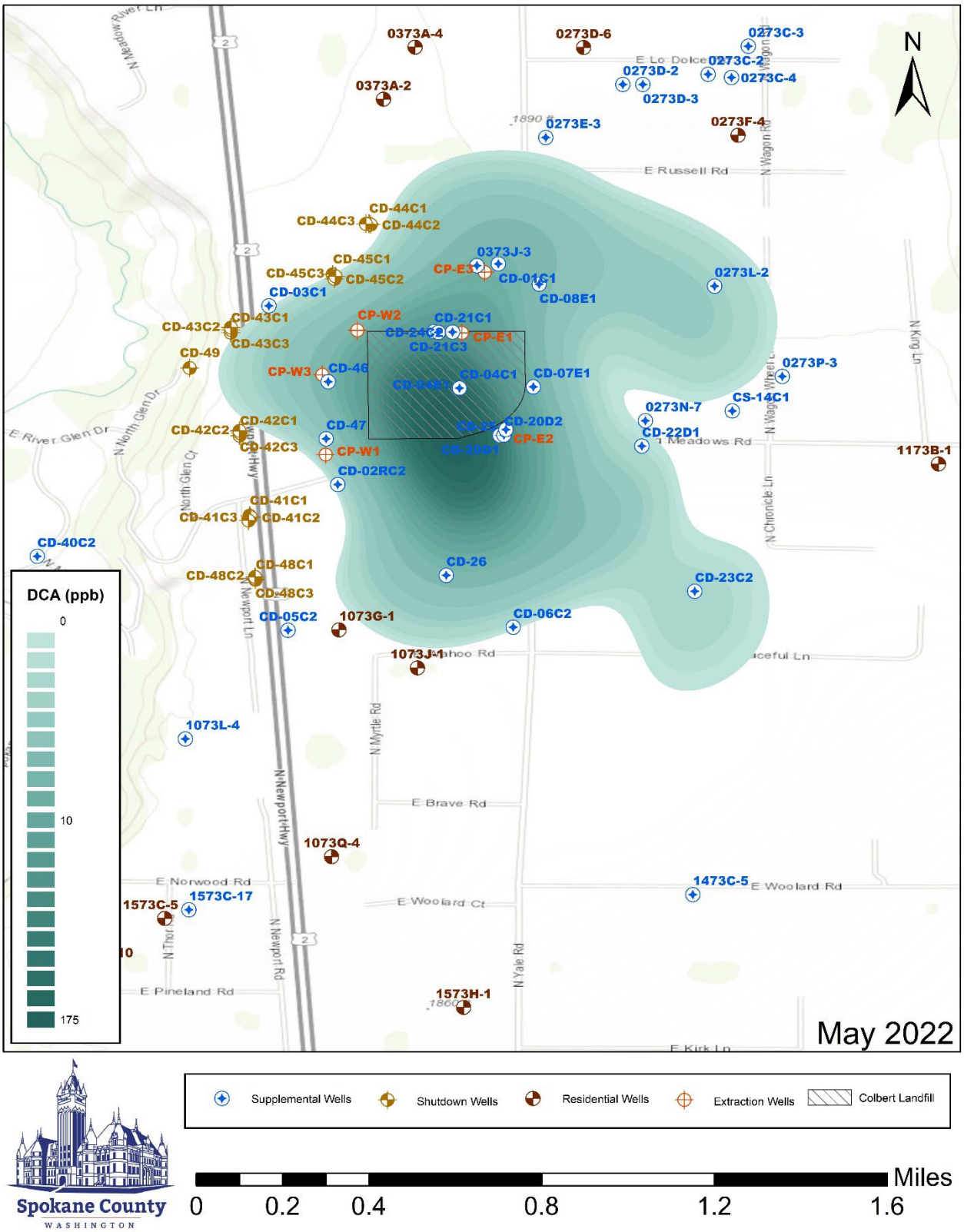


Figure 2-22 Lower Aquifer DCA Detections Map

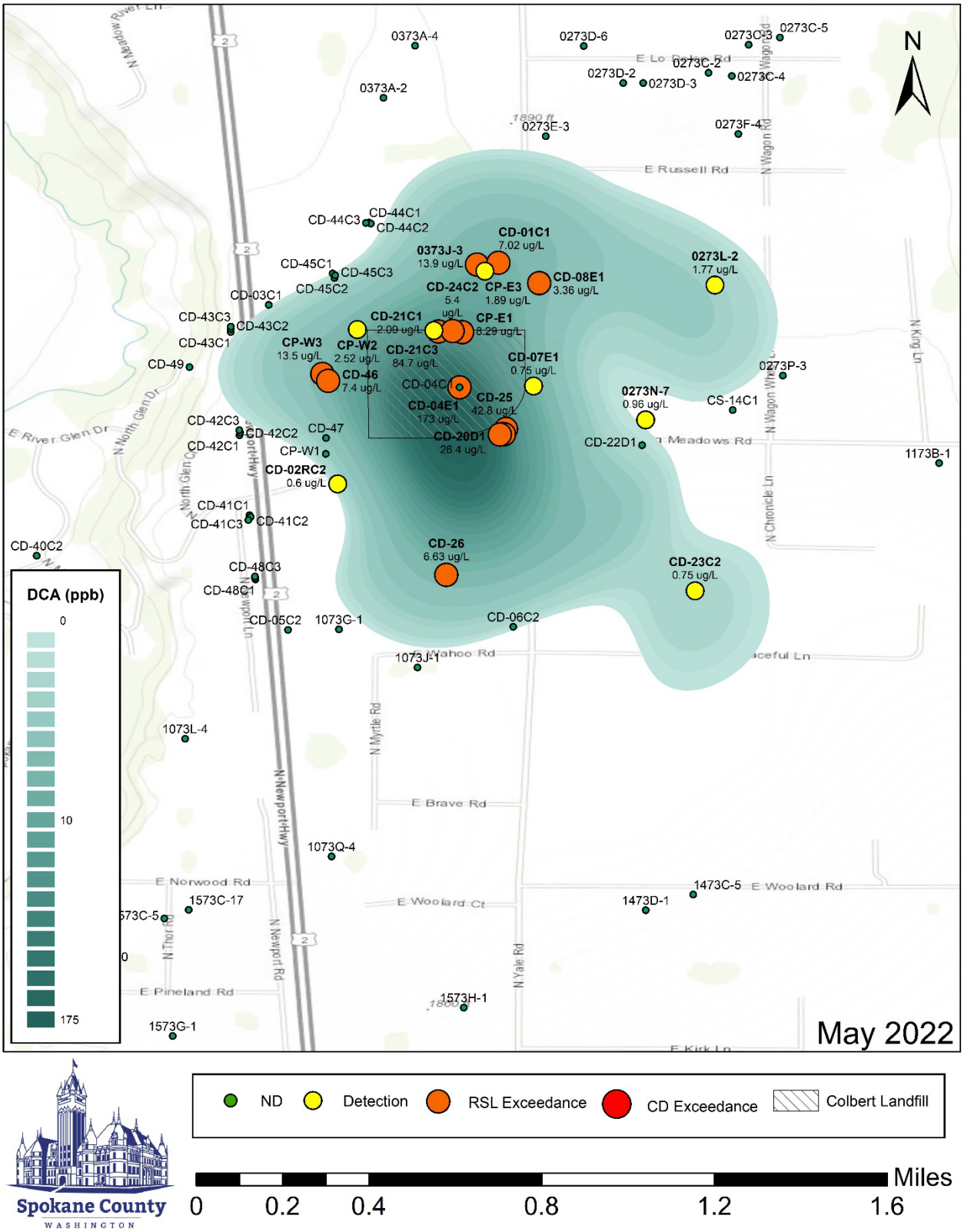


Figure 2-23 Lower Aquifer Estimated DCE Plume

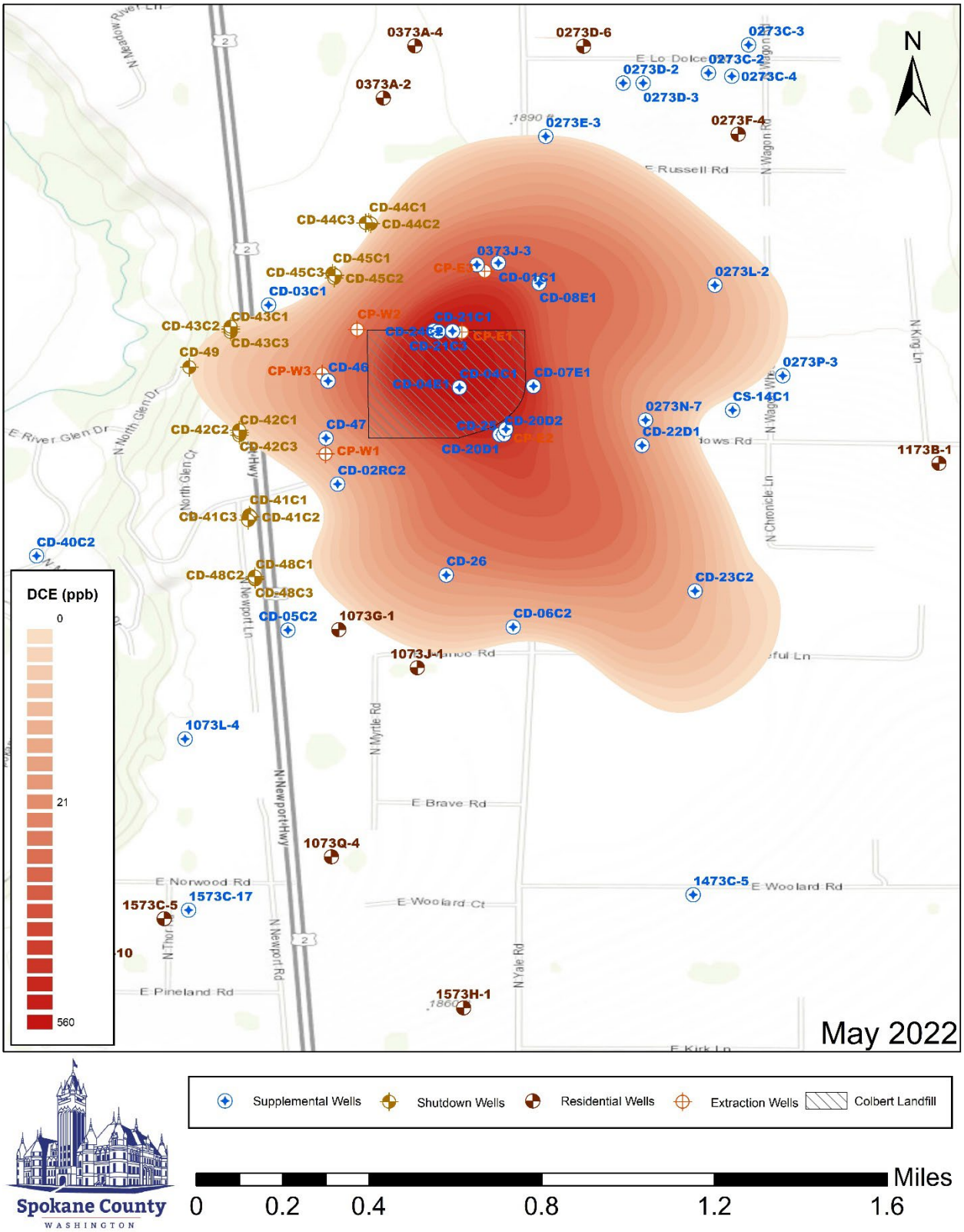


Figure 2-24 Lower Aquifer DCE Detections Map

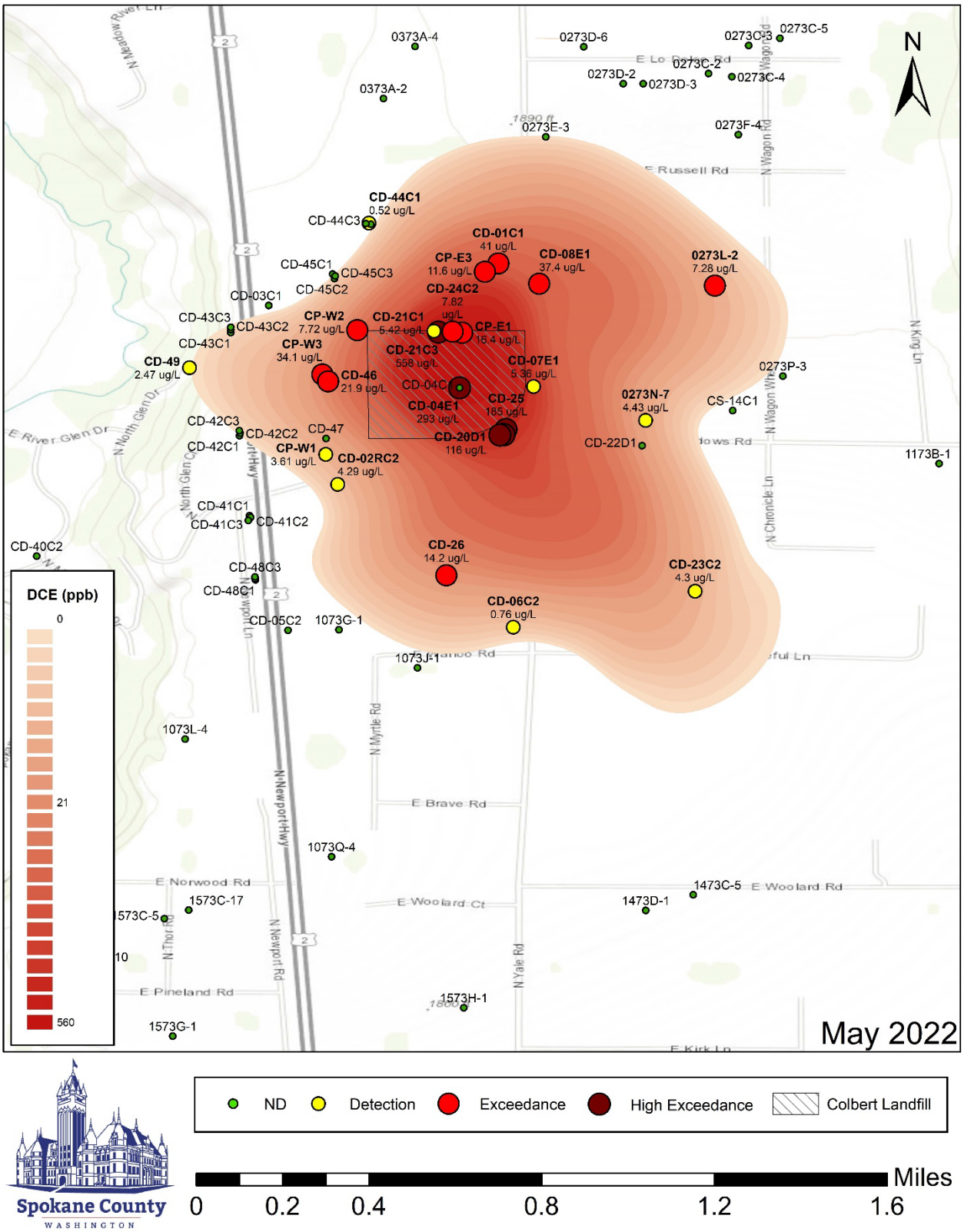


Figure 2-25 Lower Aquifer Estimated PCE Plume

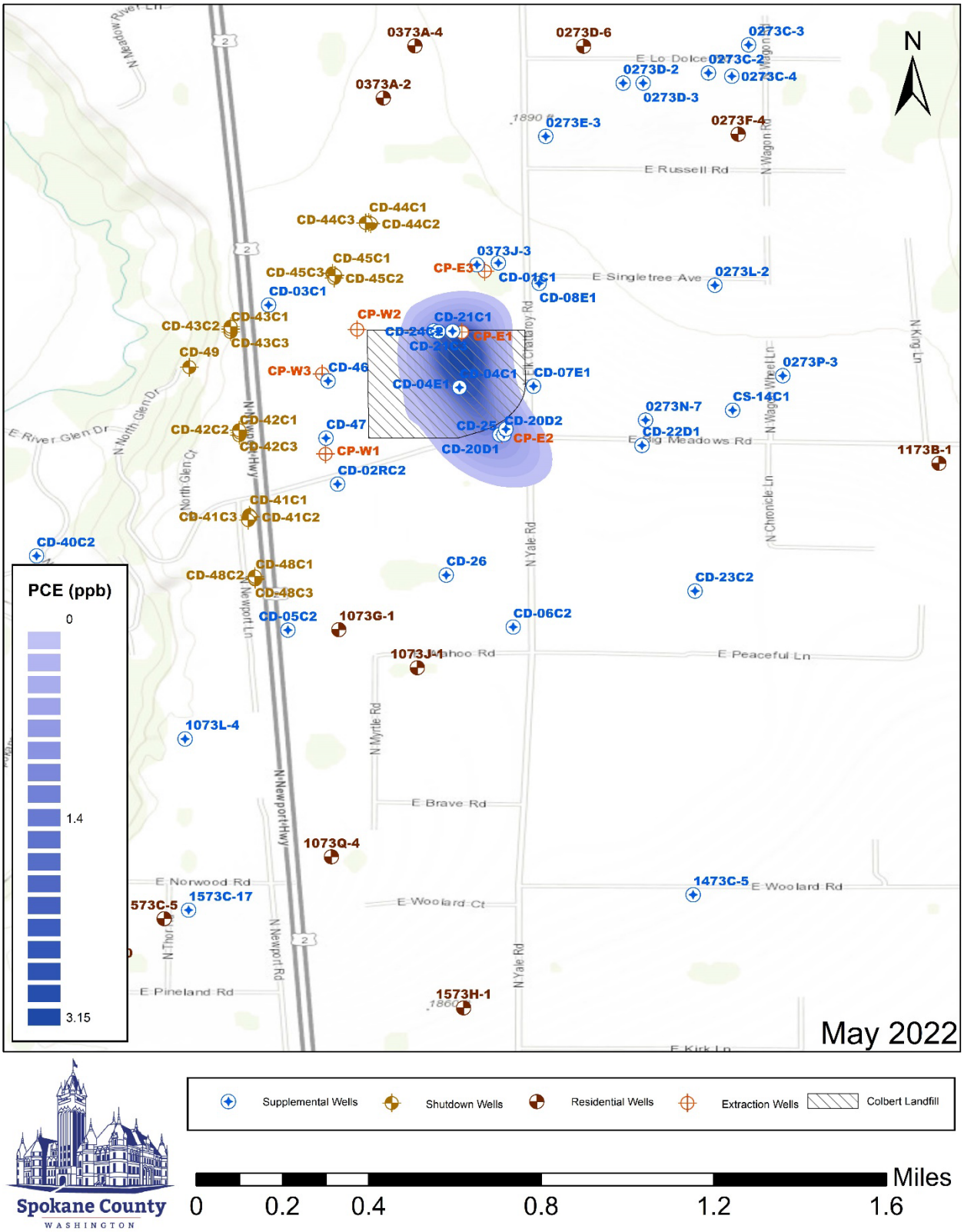


Figure 2-26 Lower Aquifer PCE Detections Map

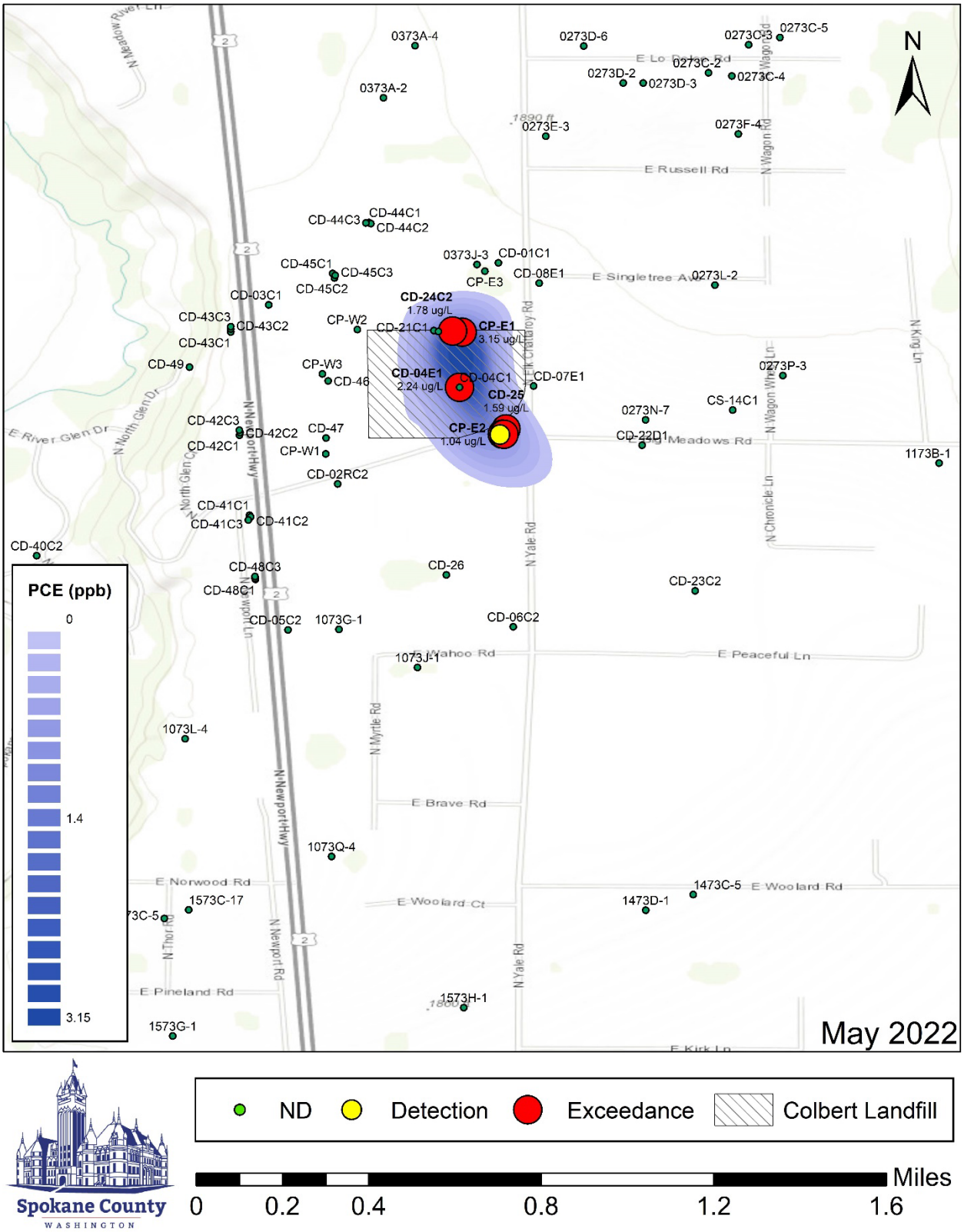


Figure 2-27 Lower Aquifer Estimated TCE Plume

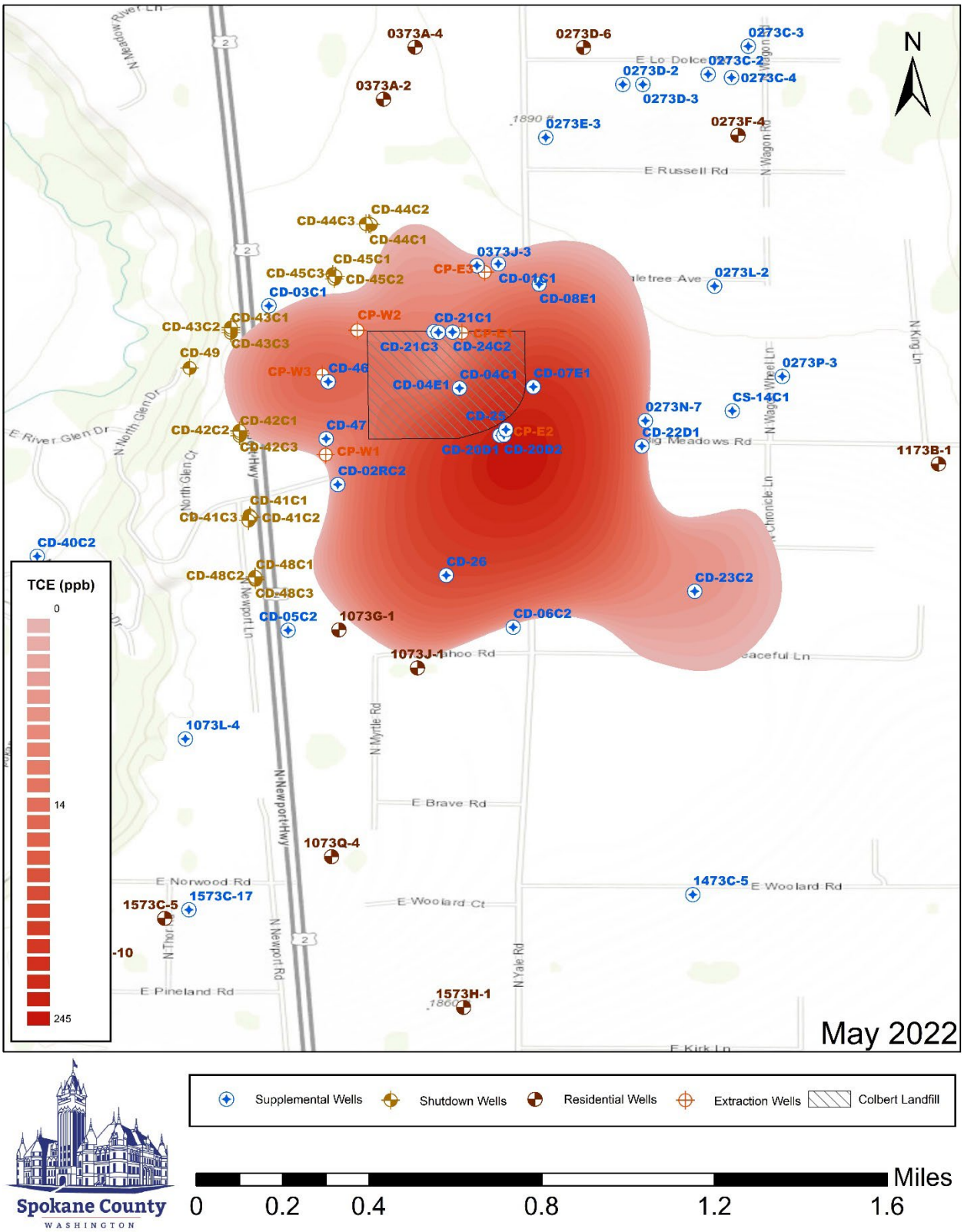


Figure 2-28 Lower Aquifer TCE Detections Map

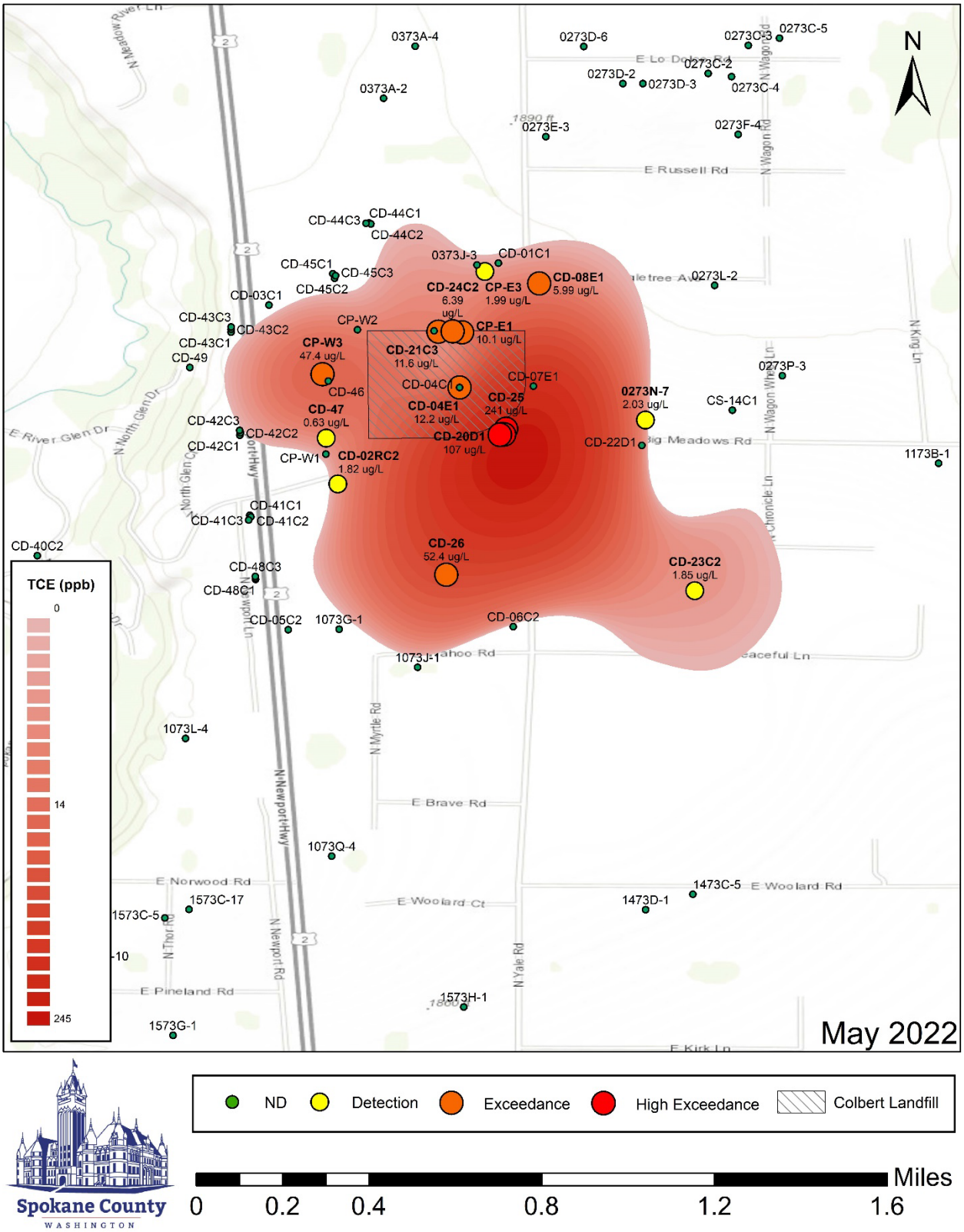
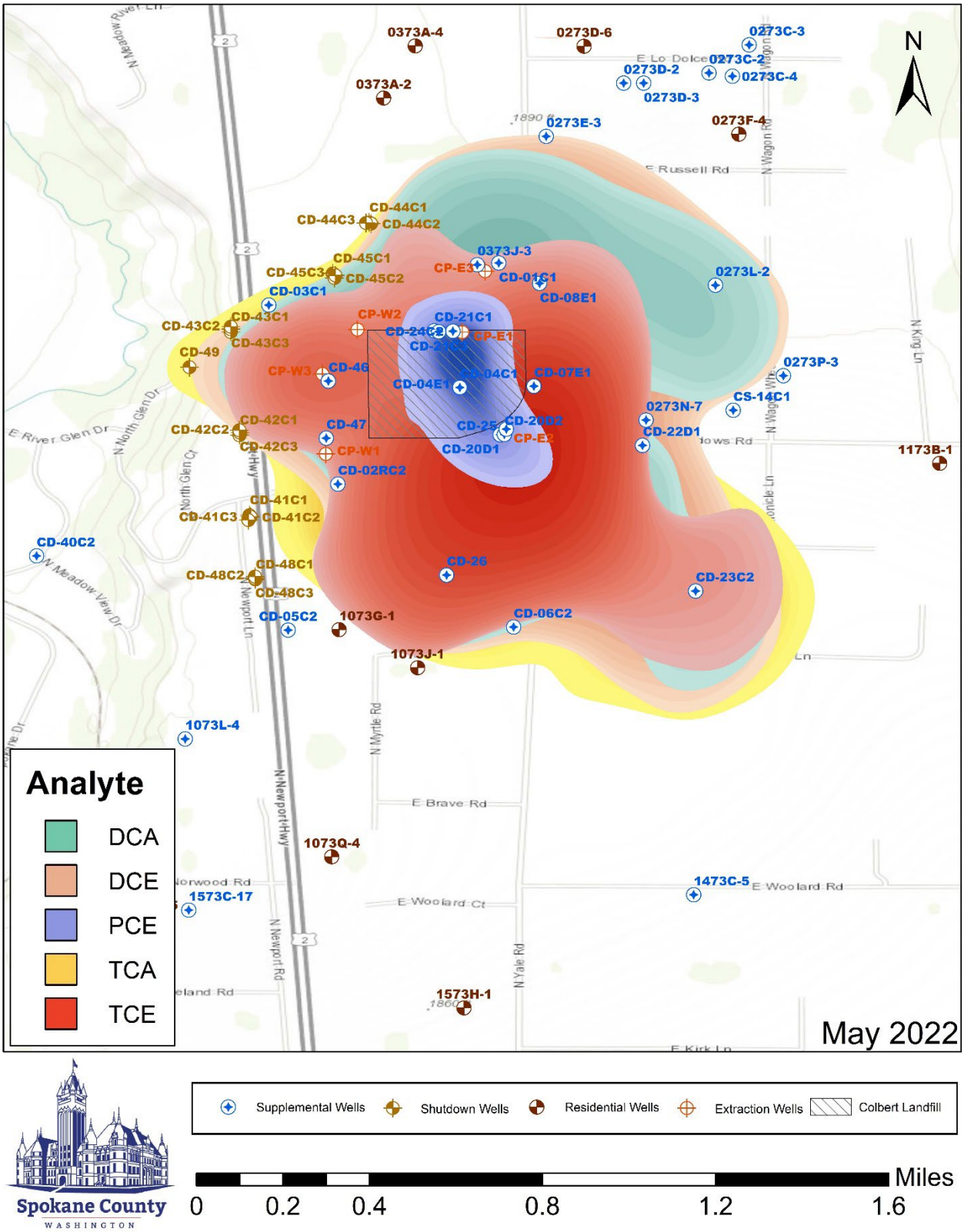


Figure 2-29 Lower Aquifer All Analytes Estimated Plume Map



3.0 Upper Aquifer Monitoring

The upper aquifer monitoring program includes the sampling of compliance indicator COC's (VOC's), 1,4-dioxane sample collection, and MFS sampling from selected monitoring wells. Table 3-1 presents all wells located in the upper aquifer monitoring program and the sample analyses assigned to each well. Upper aquifer monitoring locations are presented in Figure 3-1. All upper aquifer monitoring occurs on an annual basis with the exception of the extraction wells and CD-36A1, which are operated and sampled quarterly.

3.1 Field Data and Groundwater Elevations

All upper aquifer compliance monitoring field parameters and groundwater elevations for this reporting period are shown in Table 3-3. Conductivity values ranged from 366 to 757 umhos/cm. Field pH values ranged from 6.88 to 8.01. The highest Conductivity values and some of the lowest pH values seem to be located in the southern extraction wells. Upper aquifer groundwater elevation contours/flow paths and elevation maps are presented in Figure 3-3 and Figure 3-4.

3.2 Compliance Monitoring (VOC's)

All wells in the upper aquifer have VOC samples collected from them and analyzed, even though the VOC analysis is not required in the MFS or 1,4-Dioxane work plan specifications.

3.2.1 Chemical Data

Constituent of concern concentrations at the south system extraction wells are presented in Table 3-4. Select upper aquifer wells COC concentrations versus time are presented in Figure 3-6 and Figure 3-7. Upper aquifer COC estimated plume boundaries and COC detection maps are shown in Figure 3-8 through Figure 3-18. DCE and DCA concentrations for CD-36A1 decreased below detection limits in 2017 after an initial rebound post-shutdown, but concentrations have increased from non-detection in 2019 to 1.83 ppb (DCE) and 11.4 ppb (DCA) in 2022. TCA and TCE concentrations for CP-S1 also exhibited increases during the quarterly July 2022 sampling event following decreasing trends post-shutdown. The increases in COC concentrations coincided with an increase in groundwater elevations found in the upper compliance/MFS wells following decreasing trends. A comparison summarizing the differences in COC concentrations observed in the upper aquifer monitoring wells from 2017, 2021, and 2022 is presented in Table 3-8.

3.2.2 Criteria

Criteria for the upper aquifer programs are presented in Table 3-2. All criteria exceedances in the upper aquifer programs are presented in Table 3-5 (Consent Decree criteria) and Table 3-6 (updated criteria values from the Colbert Landfill 6th Five-year Review, which includes an increase for Trichloroethene [PCE] from the performance standard in the ROD [0.7 µg/L] to the current MCL [5µg/L], and a decrease for 1,1-Dichloroethane [1,1-DCA] to the regional screening level [RSL] of 2.6 µg/L). 1,4-Dioxane concentrations for CD-36A1 exceeded the Consent Decree criteria, and DCA concentrations for CD-36A1 exceeded the EPA regional screening level (RSL) criteria during this reporting period. Monitoring well CD-36A1 has been added to the quarterly sampling schedule to better evaluate and confirm the COC concentrations found in this well/vicinity (CP-S1 and CP-S4 are currently on the quarterly sampling schedule).

3.3 1,4-Dioxane Sampling

As outlined in the *1,4-Dioxane Workplan for the Colbert Landfill (December 2007)*, five locations were selected for annual 1,4-dioxane sampling to further evaluate the extent 1,4-Dioxane as well as protect residential wells at the Colbert Landfill site (see Table 3-1). Given potential changes in 1,4-Dioxane extent/prevalence, along with a potential change in groundwater flow conditions/ contaminant transport in post-P&T system shutdown conditions, Spokane County is conducting another evaluation for 1,4-Dioxane at the Colbert Landfill. See Section 5.0 for more information.

3.3.1 Chemical Data

The results for the 1,4-dioxane sampling during this reporting period are shown in Table 3-7. Concentrations versus time are presented in Figure 3-5. None of the wells currently listed on the 1,4-Dioxane monitoring plan exceeded any criteria during the annual sampling event in April 2022.

3.4 Upper Aquifer Minimal Functional Standards (MFS) Monitoring

Upper aquifer locations designated in the MFS groundwater monitoring program were sampled in April 2022.

3.4.1 Chemical Data

Concentrations of analytes tested for under MFS monitoring were consistent with previous results (see Figure 3-19 and Figure 3-20). None of the metals in the MFS wells had any concentrations above the reporting limit during this reporting period.

3.4.2 Criteria

None of the MFS sampling locations exceeded any of the applicable criteria during this reporting period.

3.4.3 Statistical Analysis

The MFS Groundwater Monitoring Plan (Landau Assoc., 1996) requires three statistical methods to be used when evaluating groundwater Quality in accordance with MFS requirements. Time series plots were performed and discussed previously. Box plots were required after one year of data was collected. Box plots are presented in Figure 3-23.

The third statistical method required is the Mann-Whitney nonparametric significance test. The summary results for this test are presented in Table 3-9. Although lower aquifer locations are no longer scheduled for sampling, previous results are shown here as well. A statistically significant change (less than 0.05 level of significance) from this test indicates that a difference may exist between background and downgradient wells but does not differentiate between sets. While it is true that a difference in nitrate and chloride concentrations may exist between background and downgradient wells, when taking time series plots and box plots into consideration, it is not likely these differences were due to influence by the landfill.

Table 3-1 Upper Aquifer Monitoring Programs and Locations

Program	Schedule	Parameters	Wells
Compliance Monitoring	Annual (Quarterly at extraction wells)	VOC's	CD-31A1, CD-34A1, CD-36A1, CD-37A1, CD-38A1, CD-40C1**, CP-S1, CP-S3, CP-S4, CP-S5, CP-S6
1,4-Dioxane Sampling	Annual	1,4-Dioxane	CP-S1, 1073D-1*, 1473M-1*, 1573A-1*, CD-40C1**
MFS Monitoring	Annual	Cl/NH3/NO2/NH3/SO4/ Fe/Mn/Zn/TOC/COD	CD-03A1, CD-60A1, CD-61A1, CS-04A1

* Residential use wells

**Well considered to be screened in the fluvial aquifer and COC source is from upper aquifer west of Hwy 2 (see *Phase 1 Engineering Report. Landau Assoc, 1991*.)

Table 3-2 Upper Aquifer Criteria

PROGRAM	CRITERIA	TCA	DCE	DCA	TCE	PCE	MC	1,4-Dioxane		Units
CONSENT DECREE	Performance	200	7	4050	5	0.7	2.5			ug/L
(Compliance)	Evaluation	200	7	4050	5	0.7	2.5	7		
		Cl	**Fe**	**Mn**	**Zn**	**TOC**	**COD**	**SO4**	**NO3**	
MFS	(mg/L)	250	0.3	0.05	5	NA	NA	250	10	mg/L

Figure 3-1 Upper Aquifer Compliance Monitoring Locations

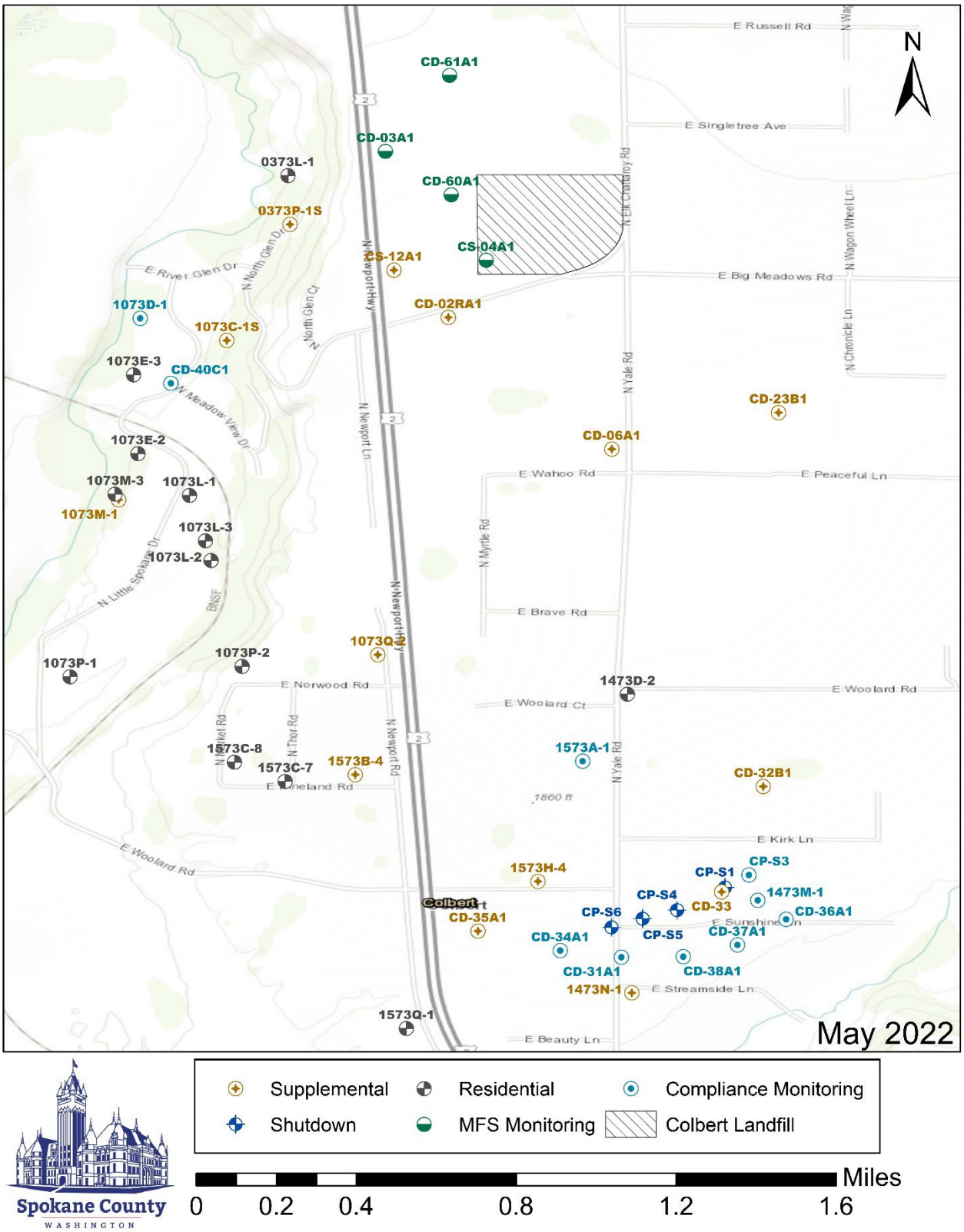
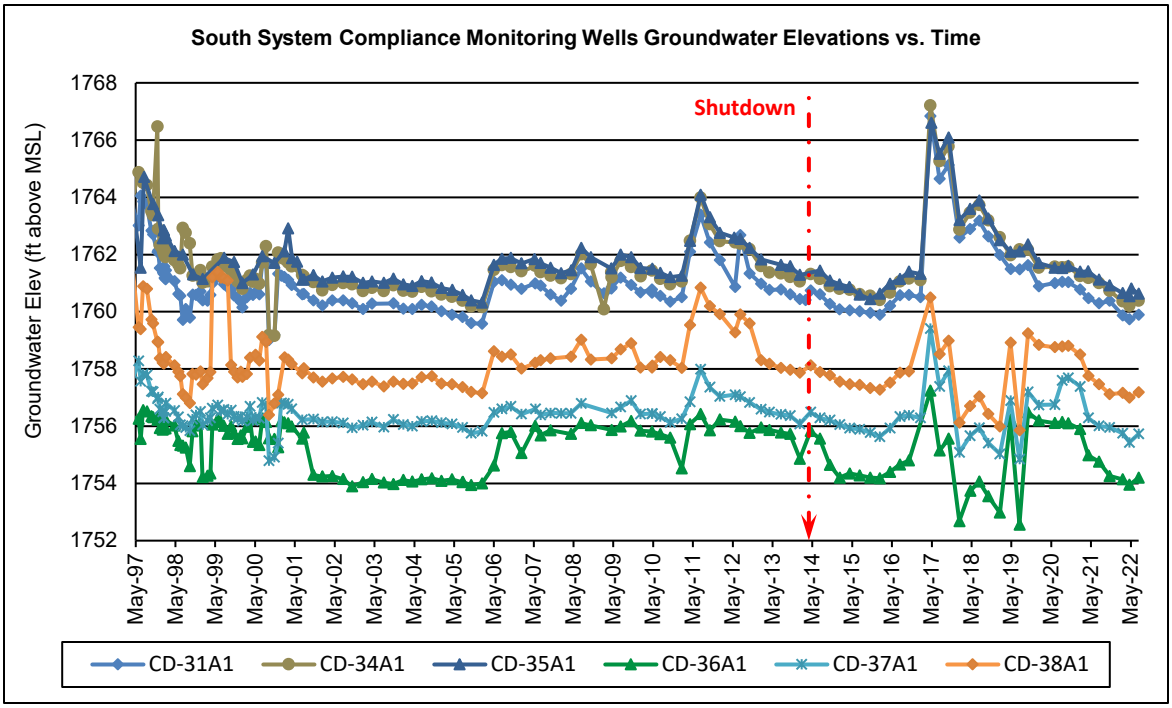


Table 3-3 Upper Aquifer Field Parameters

SampleDate	StationID	WtrElev	Temp	PH	Conductivity	Turbidity	Aquifer	Program
4/19/2022	1573A-1	1760.52	10.8	7.82	502	0.29	upper	CCM
4/19/2022	CD-31A1	1759.74	9.9	7.61	660	0.18	upper	CCM
4/19/2022	CD-34A1	1760.2	10.9	7.51	611	0.32	upper	CCM
4/19/2022	CD-36A1	1753.95	10.2	7.7	621	0.18	upper	CCM
7/12/2022	CD-36A1	1754.2	12.4	7.53	597	0.51	upper	CCM
4/19/2022	CD-37A1	1755.43	11	7.39	710	0.11	upper	CCM
4/19/2022	CD-38A1	1756.99	10.4	7.64	589	0.22	upper	CCM
4/19/2022	CD-40C1	1661.61	10.3	7.89	554	0.17	upper	CCM
4/19/2022	CP-S3	1757.83	11.6	7.54	628	0.87	upper	CCM
4/19/2022	1073D-1		10.8	8.01	376	0.17	upper	CCM/res
4/19/2022	1473M-1		10.7	7.83	565	0.22	upper	CCM/res
4/21/2022	CD-03A1	1772.82	10.9	7.71	366	0.47	upper	MFS
4/21/2022	CD-60A1	1772.28	10.1	7.62	413	0.19	upper	MFS
4/21/2022	CD-61A1	1773.09	10.5	7.08	551	0.14	upper	MFS
4/21/2022	CS-04A1		9.5	6.88	671	0.49	upper	MFS
7/14/2021	CP-S1	1759.38	10.7	7.54	487	0.8	upper	SD
10/19/2021	CP-S1	1759.04	11	7.51	482	0.69	upper	SD
2/16/2022	CP-S1	1758.93	10.1	7.56	572	0.09	upper	SD
4/20/2022	CP-S1	1758.88	9.7	7.61	561	0.7	upper	SD
7/12/2022	CP-S1	1758.97	11	7.65	568	0.59	upper	SD
7/14/2021	CP-S4	1760.17	10.6	7.4	681	0.68	upper	SD
10/19/2021	CP-S4	1759.95	10.9	7.46	637	0.81	upper	SD
2/16/2022	CP-S4	1759.71	10.1	7.31	755	3.8	upper	SD
4/20/2022	CP-S4	1755.86	10.1	7.31	674	0.79	upper	SD
7/12/2022	CP-S4	1759.73	11.4	7.24	686	0.68	upper	SD
7/14/2021	CP-S5		10.6	7.39	671	0.5	upper	SD
10/19/2021	CP-S5		10.8	7.5	662	0.39	upper	SD
4/20/2022	CP-S5		10	7.3	671	0.61	upper	SD
7/12/2022	CP-S5		10.9	7.35	677	0.57	upper	SD
7/14/2021	CP-S6	1761.1	10.5	7.41	649	0.33	upper	SD
10/19/2021	CP-S6	1760.66	10.9	7.45	630	0.29	upper	SD
2/17/2022	CP-S6	1760.48	10.4	7.36	757	0.38	upper	SD
4/20/2022	CP-S6	1760.42	10	7.48	660	0.29	upper	SD
7/12/2022	CP-S6	1760.42	10.8	7.48	669	0.41	upper	SD

Temp=degrees C; Conductivity=umhos/cm; Turbidity= NTU

Figure 3-2 Upper Aquifer Groundwater Elevations vs. Time



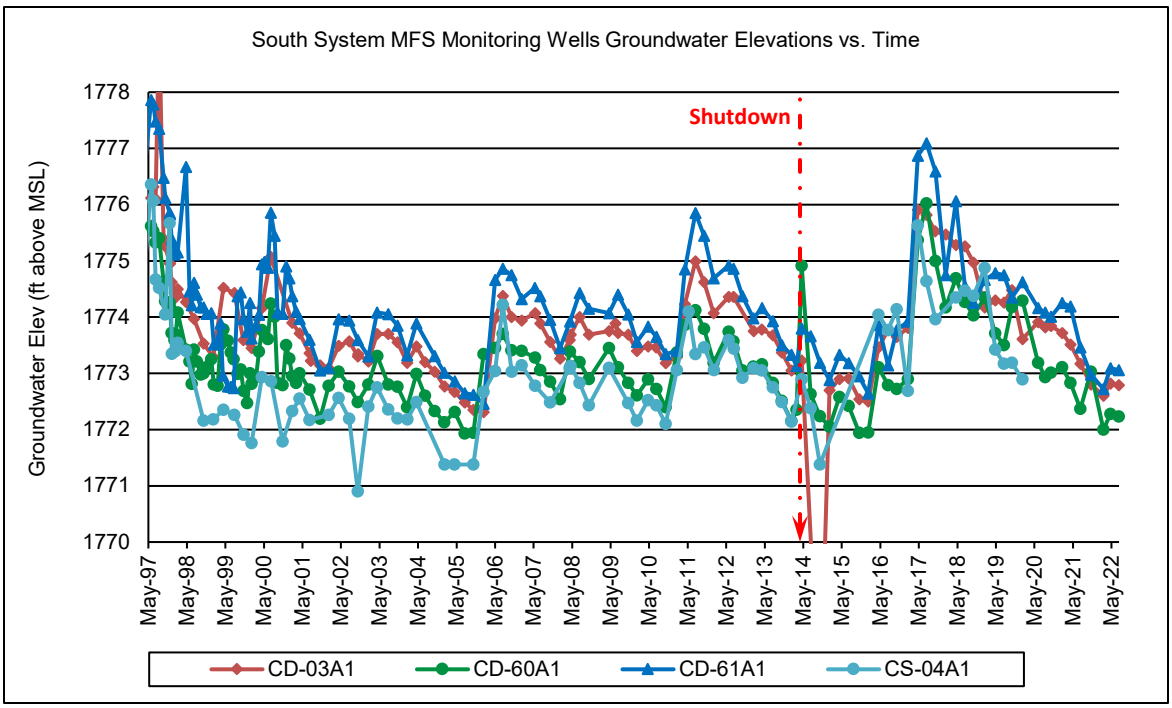


Figure 3-3 Upper Aquifer Estimated Groundwater Elevation Contours

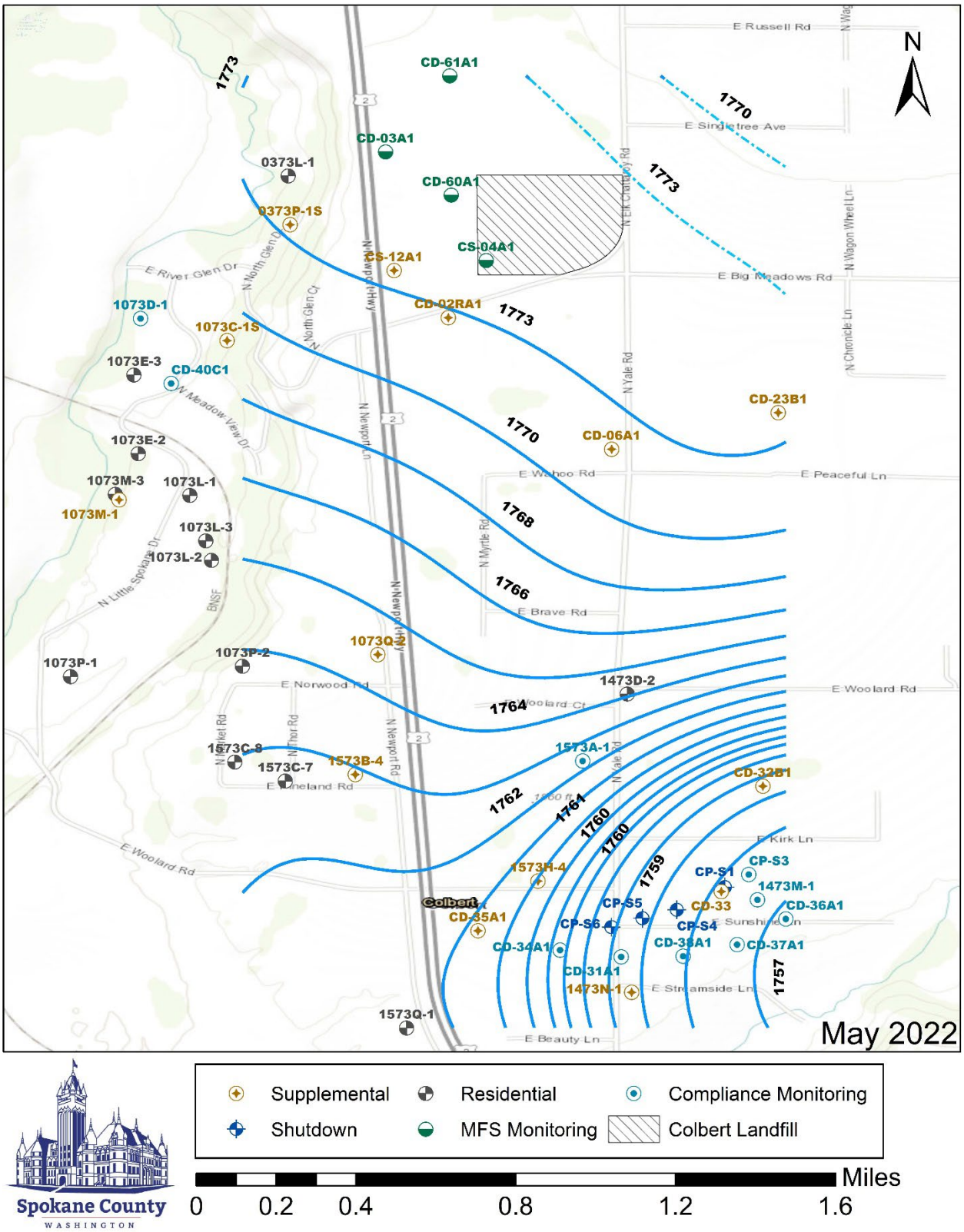


Figure 3-4 Upper Aquifer Groundwater Elevation Map

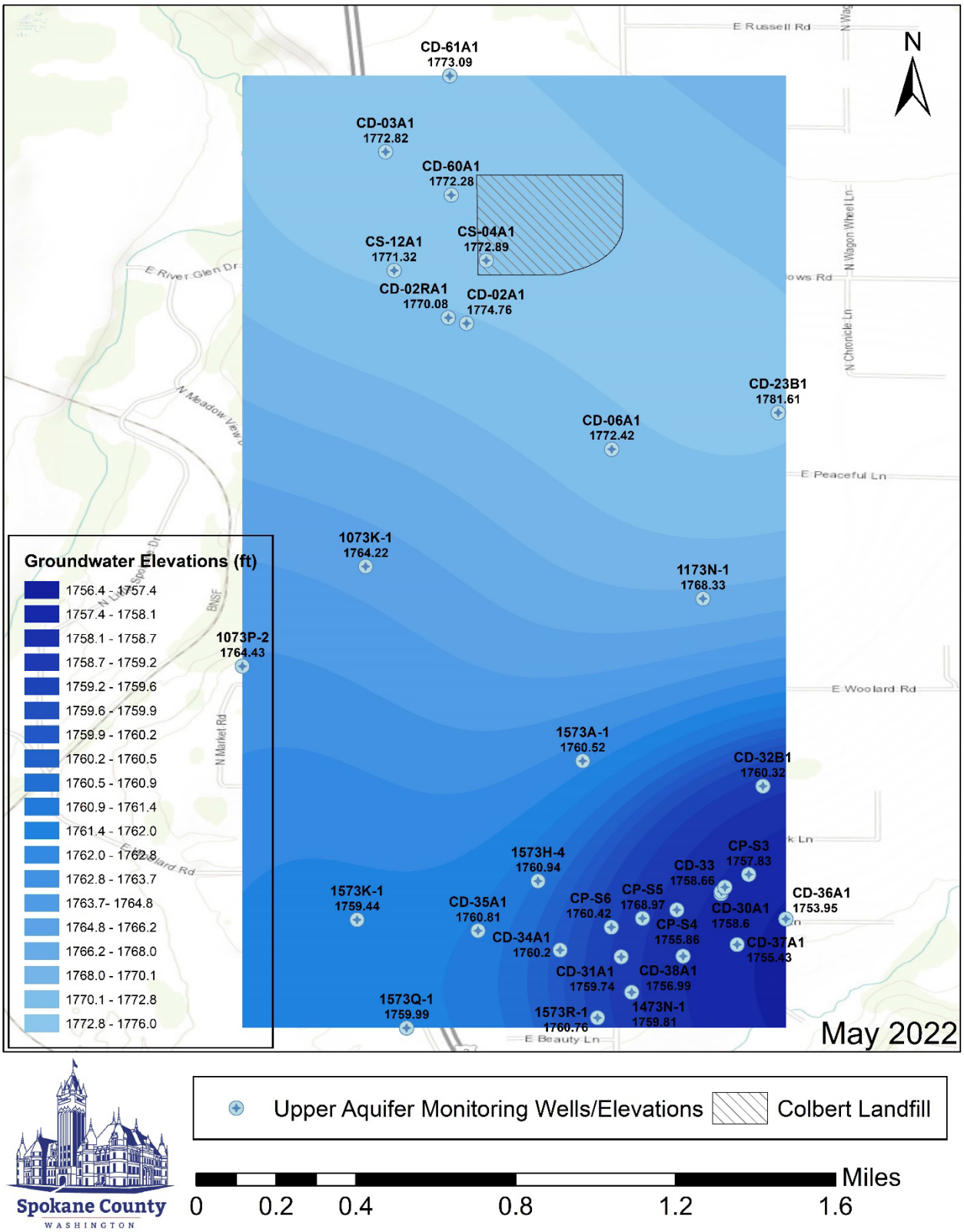


Table 3-4 Upper Aquifer Groundwater Monitoring Result

				ug/L						mg/L								
StationID	Aquifer	Program	SampleDate	DCA	DCE	MC	PCE	TCA	TCE	Cl	COD	Fe	Mn	N-NH3	N-NO3	SO4	TOC	Zn
1573A-1	upper	CCM	4/19/2022	0.61	<0.50	<0.50	<0.50	0.78	0.6									
CD-31A1	upper	CCM	4/19/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CD-34A1	upper	CCM	4/19/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CD-36A1	upper	CCM	4/19/2022	11.4	1.83	<0.50	<0.50	<0.50	<0.50									
CD-36A1	upper	CCM	7/12/2022	11.4	1.89	<0.50	<0.50	<0.50	<0.50									
CD-37A1	upper	CCM	4/19/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CD-38A1	upper	CCM	4/19/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CD-40C1	upper	CCM	4/19/2022	1.15	1.13	<0.50	<0.50	0.9	<0.50									
CP-S3	upper	CCM	4/19/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
1073D-1	upper	CCM/res	4/19/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
1473M-1	upper	CCM/res	4/19/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CD-03A1	upper	MFS	4/21/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.64	<0.50	<0.50	<0.50	<0.50	0.31	5.93	<0.50	<0.50
CD-60A1	upper	MFS	4/21/2022	<0.50	<0.50	<0.50	<0.50	0.87	<0.50	0.8	<0.50	<0.50	<0.50	<0.50	0.133	10.7	<0.50	<0.50
CD-61A1	upper	MFS	4/21/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.08	<0.50	<0.50	<0.50	<0.50	2.37	10.8	1.05	<0.50
CS-04A1	upper	MFS	4/21/2022	1.08	<0.50	<0.50	<0.50	<0.50	0.61	2.99	6.6	<0.50	<0.50	<0.50	2.9	6.34	1.76	<0.50
CP-S1	upper	SD	10/19/2021	0.84	0.7	<0.50	<0.50	0.72	1.22									
CP-S1	upper	SD	2/16/2022	0.67	<0.50	<0.50	<0.50	0.55	1.02									
CP-S1	upper	SD	4/20/2022	0.68	<0.50	<0.50	<0.50	0.5	0.99									
CP-S1	upper	SD	7/12/2022	0.97	0.67	<0.50	<0.50	0.73	1.45									
CP-S4	upper	SD	10/19/2021	1.75	<0.50	<0.50	<0.50	<0.50	1.65									
CP-S4	upper	SD	2/16/2022	1.38	<0.50	<0.50	0.56	<0.50	1.79									
CP-S4	upper	SD	4/20/2022	1.38	<0.50	<0.50	0.54	<0.50	1.83									
CP-S5	upper	SD	10/19/2021	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CP-S5	upper	SD	4/20/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CP-S5	upper	SD	7/12/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CP-S6	upper	SD	10/19/2021	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CP-S6	upper	SD	2/17/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CP-S6	upper	SD	4/20/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									
CP-S6	upper	SD	7/12/2022	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50									

Table 3-5 Upper Aquifer Criteria Exceedances (Consent Decree criteria)

StationID	SampleDate	Aquifer	Program	Analyte	Result	Units	Flag
CD-36A1	4/19/2022	upper	CCM	1,4-Dioxane	10.4	ug/L	Exceedance
CD-36A1	7/12/2022	upper	CCM	1,4-Dioxane	10.5	ug/L	Exceedance

Table 3-6 Shutdown Program Criteria Exceedances (*updated criteria values)

*Increase for Trichloroethene (PCE) from the performance standard in the ROD (0.7 µg/L) to the current MCL (5µg/L), and a decrease for 1,1-Dichloroethane (1,1-DCA) to the regional screening level (RSL) of 2.8 µg/L.

StationID	SampleDate	Aquifer	Program	Analyte	Result	Units	Flag
CD-36A1	4/19/2022	upper	CCM	1,1-Dichloroethane	11.4	ug/L	Exceedance
CD-36A1	7/12/2022	upper	CCM	1,1-Dichloroethane	11.4	ug/L	Exceedance
CD-36A1	4/19/2022	upper	CCM	1,4-Dioxane	10.4	ug/L	Exceedance
CD-36A1	7/12/2022	upper	CCM	1,4-Dioxane	10.5	ug/L	Exceedance

Table 3-7 1,4-Dioxane Monitoring Results

StationID	Aquifer	Analyte	SampleDate	Result	Units	Reporting Limit	Qualifier
1073D-1	upper	1,4-Dioxane	4/19/2022	0.276	ug/L	0.01	
1473M-1	upper	1,4-Dioxane	4/19/2022	0.01	ug/L	0.01	U
1573A-1	upper	1,4-Dioxane	4/19/2022	0.01	ug/L	0.01	U
CD-40C1	upper	1,4-Dioxane	4/19/2022	0.01	ug/L	0.01	U
CP-S1	upper	1,4-Dioxane	4/20/2022	1.16	ug/L	0.01	
CP-S1	upper	1,4-Dioxane	7/12/2022	1.43	ug/L	0.01	

Figure 3-5 1,4-Dioxane Concentrations vs. Time

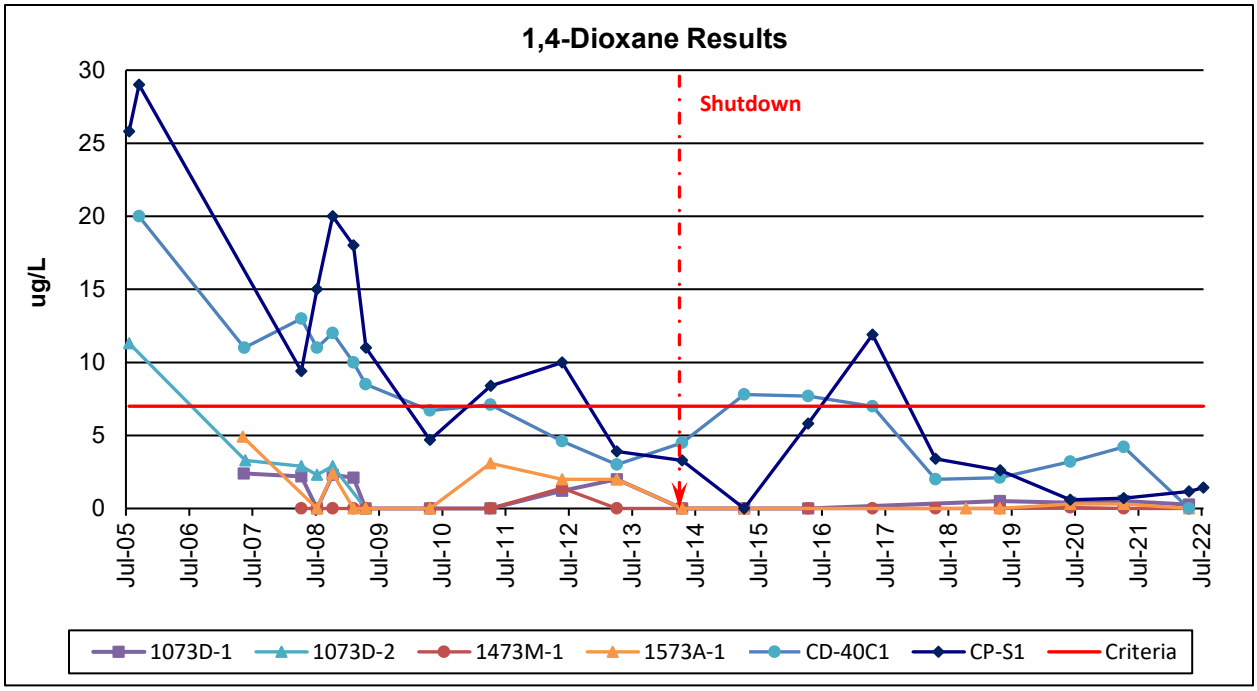


Table 3-8 Upper Aquifer Well Concentrations: Summary of 5-year/1-year Differences

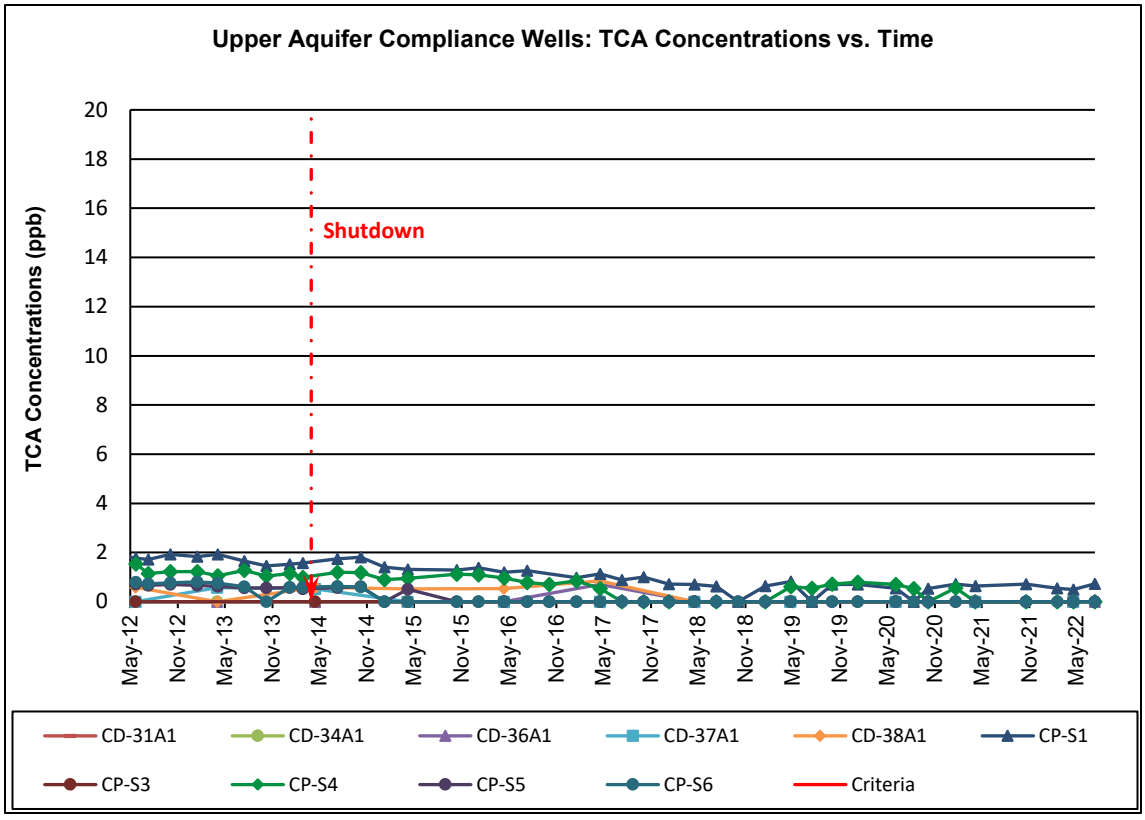
StationID	Aquifer	Program	Analyte	-5 Year Results	-1 Year Results	Current Year Results	5-Year Difference	1-Year Difference	Units
1573A-1	upper	CCM	TCA	1.77	0.91	0.78	-0.99	-0.13	ug/L
1573A-1	upper	CCM	DCA	1.87	0.59	0.61	-1.26	0.02	ug/L
1573A-1	upper	CCM	DCE	0.78	0	0	-0.78	0	ug/L
1573A-1	upper	CCM	MC	0	0	0	0	0	ug/L
1573A-1	upper	CCM	PCE	0	0	0	0	0	ug/L
1573A-1	upper	CCM	TCE	0.95	0.6	0.6	-0.35	0	ug/L
1573A-1	upper	CCM	VC	0	0	0	0	0	ug/L
CD-31A1	upper	CCM	TCA	0	0	0	0	0	ug/L
CD-31A1	upper	CCM	DCA	0	0	0	0	0	ug/L
CD-31A1	upper	CCM	DCE	0	0	0	0	0	ug/L
CD-31A1	upper	CCM	MC	0	0	0	0	0	ug/L
CD-31A1	upper	CCM	PCE	0	0	0	0	0	ug/L
CD-31A1	upper	CCM	TCE	0	0	0	0	0	ug/L
CD-31A1	upper	CCM	VC	0	0	0	0	0	ug/L
CD-34A1	upper	CCM	TCA	0	0	0	0	0	ug/L
CD-34A1	upper	CCM	DCA	0	0	0	0	0	ug/L
CD-34A1	upper	CCM	DCE	0	0	0	0	0	ug/L
CD-34A1	upper	CCM	MC	0	0	0	0	0	ug/L
CD-34A1	upper	CCM	PCE	0	0	0	0	0	ug/L
CD-34A1	upper	CCM	TCE	0	0	0	0	0	ug/L
CD-34A1	upper	CCM	VC	0	0	0	0	0	ug/L
CD-36A1	upper	CCM	TCA	0.7	0	0	-0.7	0	ug/L
CD-36A1	upper	CCM	DCA	1.76	0	11.4	9.64	11.4	ug/L
CD-36A1	upper	CCM	DCE	0	0	1.83	1.83	1.83	ug/L
CD-36A1	upper	CCM	MC	0	0	0	0	0	ug/L
CD-36A1	upper	CCM	PCE	0	0	0	0	0	ug/L
CD-36A1	upper	CCM	TCE	1.07	0	0	-1.07	0	ug/L
CD-36A1	upper	CCM	VC	0	0	0	0	0	ug/L
CD-37A1	upper	CCM	TCA	0	0	0	0	0	ug/L
CD-37A1	upper	CCM	DCA	0	0	0	0	0	ug/L
CD-37A1	upper	CCM	DCE	0	0	0	0	0	ug/L
CD-37A1	upper	CCM	MC	0	0	0	0	0	ug/L
CD-37A1	upper	CCM	PCE	0	0	0	0	0	ug/L
CD-37A1	upper	CCM	TCE	0	0	0	0	0	ug/L
CD-37A1	upper	CCM	VC	0	0	0	0	0	ug/L
CD-38A1	upper	CCM	TCA	0.84	0	0	-0.84	0	ug/L
CD-38A1	upper	CCM	DCA	0	0	0	0	0	ug/L
CD-38A1	upper	CCM	DCE	0	0	0	0	0	ug/L
CD-38A1	upper	CCM	MC	0	0	0	0	0	ug/L
CD-38A1	upper	CCM	PCE	0	0	0	0	0	ug/L
CD-38A1	upper	CCM	TCE	0	0	0	0	0	ug/L
CD-38A1	upper	CCM	VC	0	0	0	0	0	ug/L
CD-40C1	upper	CCM	TCA	4.66	1.28	0.9	-3.76	-0.38	ug/L
CD-40C1	upper	CCM	DCA	3.15	1.34	1.15	-2	-0.19	ug/L
CD-40C1	upper	CCM	DCE	1.93	0.91	1.08	-0.85	0.17	ug/L

StationID	Aquifer	Program	Analyte	-5 Year Results	-1 Year Results	Current Year Results	5-Year Difference	1-Year Difference	Units
CD-40C1	upper	CCM	MC	0	0	0	0	0	ug/L
CD-40C1	upper	CCM	PCE	0	0	0	0	0	ug/L
CD-40C1	upper	CCM	TCE	0	0	0	0	0	ug/L
CD-40C1	upper	CCM	VC	0	0	0	0	0	ug/L
CP-S3	upper	CCM	TCA	0	0	0	0	0	ug/L
CP-S3	upper	CCM	DCA	0	0	0	0	0	ug/L
CP-S3	upper	CCM	DCE	0	0	0	0	0	ug/L
CP-S3	upper	CCM	MC	0	0	0	0	0	ug/L
CP-S3	upper	CCM	PCE	0	0	0	0	0	ug/L
CP-S3	upper	CCM	TCE	0	0	0	0	0	ug/L
CP-S3	upper	CCM	VC	0	0	0	0	0	ug/L
1073D-1	upper	CCM/res	TCA	0.54	0	0	-0.54	0	ug/L
1073D-1	upper	CCM/res	DCA	0	0	0	0	0	ug/L
1073D-1	upper	CCM/res	DCE	0	0	0	0	0	ug/L
1073D-1	upper	CCM/res	MC	0	0	0	0	0	ug/L
1073D-1	upper	CCM/res	PCE	0	0	0	0	0	ug/L
1073D-1	upper	CCM/res	TCE	0	0	0	0	0	ug/L
1073D-1	upper	CCM/res	VC	0	0	0	0	0	ug/L
1473M-1	upper	CCM/res	TCA	0	0	0	0	0	ug/L
1473M-1	upper	CCM/res	DCA	0.51	0	0	-0.51	0	ug/L
1473M-1	upper	CCM/res	DCE	0	0	0	0	0	ug/L
1473M-1	upper	CCM/res	MC	0	0	0	0	0	ug/L
1473M-1	upper	CCM/res	PCE	0	0	0	0	0	ug/L
1473M-1	upper	CCM/res	TCE	0	0	0	0	0	ug/L
1473M-1	upper	CCM/res	VC	0	0	0	0	0	ug/L
CD-03A1	upper	MFS	TCA	0.58	0	0	-0.58	0	ug/L
CD-03A1	upper	MFS	DCA	0	0	0	0	0	ug/L
CD-03A1	upper	MFS	DCE	0	0	0	0	0	ug/L
CD-03A1	upper	MFS	MC	0	0	0	0	0	ug/L
CD-03A1	upper	MFS	PCE	0	0	0	0	0	ug/L
CD-03A1	upper	MFS	TCE	0	0	0	0	0	ug/L
CD-03A1	upper	MFS	VC	0	0	0	0	0	ug/L
CD-60A1	upper	MFS	TCA	0	0	0.87	0.87	0.87	ug/L
CD-60A1	upper	MFS	DCA	0	0	0	0	0	ug/L
CD-60A1	upper	MFS	DCE	0	0	0	0	0	ug/L
CD-60A1	upper	MFS	MC	0	0	0	0	0	ug/L
CD-60A1	upper	MFS	PCE	1.12	0	0	-1.12	0	ug/L
CD-60A1	upper	MFS	TCE	0	0	0	0	0	ug/L
CD-60A1	upper	MFS	VC	0	0	0	0	0	ug/L
CD-61A1	upper	MFS	TCA	2.41	1.23	0	-2.41	-1.23	ug/L
CD-61A1	upper	MFS	DCA	0	0	0	0	0	ug/L
CD-61A1	upper	MFS	DCE	0	0	0	0	0	ug/L
CD-61A1	upper	MFS	MC	0	0	0	0	0	ug/L
CD-61A1	upper	MFS	PCE	0	0	0	0	0	ug/L
CD-61A1	upper	MFS	TCE	0	0	0	0	0	ug/L
CD-61A1	upper	MFS	VC	0	0	0	0	0	ug/L
CS-04A1	upper	MFS	TCA	0	0	0	0	0	ug/L

StationID	Aquifer	Program	Analyte	-5 Year Results	-1 Year Results	Current Year Results	5-Year Difference	1-Year Difference	Units
CS-04A1	upper	MFS	DCA	0.61	1.26	1.08	0.47	-0.18	ug/L
CS-04A1	upper	MFS	DCE	0	0	0	0	0	ug/L
CS-04A1	upper	MFS	MC	0	0	0	0	0	ug/L
CS-04A1	upper	MFS	PCE	0	0	0	0	0	ug/L
CS-04A1	upper	MFS	TCE	0.53	0.55	0.61	0.08	0.06	ug/L
CS-04A1	upper	MFS	VC	0	0	0	0	0	ug/L
CP-S1	upper	SD	TCA	1.13	0.64	0.5	-0.63	-0.14	ug/L
CP-S1	upper	SD	DCA	3.3	0.65	0.68	-2.62	0.03	ug/L
CP-S1	upper	SD	DCE	0.73	0	0	-0.73	0	ug/L
CP-S1	upper	SD	MC	0	0	0	0	0	ug/L
CP-S1	upper	SD	PCE	0	0	0	0	0	ug/L
CP-S1	upper	SD	TCE	2.04	1.17	0.99	-1.05	-0.18	ug/L
CP-S1	upper	SD	VC	0	0	0	0	0	ug/L
CP-S4	upper	SD	TCA	0.53	0	0	-0.53	0	ug/L
CP-S4	upper	SD	DCA	0	1.95	1.38	1.38	-0.57	ug/L
CP-S4	upper	SD	DCE	0.53	0	0	-0.53	0	ug/L
CP-S4	upper	SD	MC	0	0	0	0	0	ug/L
CP-S4	upper	SD	PCE	0.65	0	0.54	-0.11	0.54	ug/L
CP-S4	upper	SD	TCE	1.81	1.78	1.83	0.02	0.05	ug/L
CP-S4	upper	SD	VC	0	0	0	0	0	ug/L
CP-S5	upper	SD	TCA	0	0	0	0	0	ug/L
CP-S5	upper	SD	DCA	0	0	0	0	0	ug/L
CP-S5	upper	SD	DCE	0	0	0	0	0	ug/L
CP-S5	upper	SD	MC	0	0	0	0	0	ug/L
CP-S5	upper	SD	PCE	0	0	0	0	0	ug/L
CP-S5	upper	SD	TCE	0	0	0	0	0	ug/L
CP-S5	upper	SD	VC	0	0	0	0	0	ug/L
CP-S6	upper	SD	TCA	0	0	0	0	0	ug/L
CP-S6	upper	SD	DCA	0	0	0	0	0	ug/L
CP-S6	upper	SD	DCE	0	0	0	0	0	ug/L
CP-S6	upper	SD	MC	0	0	0	0	0	ug/L
CP-S6	upper	SD	PCE	0	0	0	0	0	ug/L
CP-S6	upper	SD	TCE	0	0	0	0	0	ug/L
CP-S6	upper	SD	VC	0	0	0	0	0	ug/L

- 5-year results are from 2017, - 1-year results are from 2021, and current-year results are from 2022.
Analytes that exceeded clean-up criteria this reporting period are displayed in **ORANGE**.
Increases in analyte concentrations are highlighted in **RED**.
Decreases in analyte concentrations are highlighted in **BLUE**.

Figure 3-6 Upper Aquifer Compliance Wells TCA Concentrations vs. Time



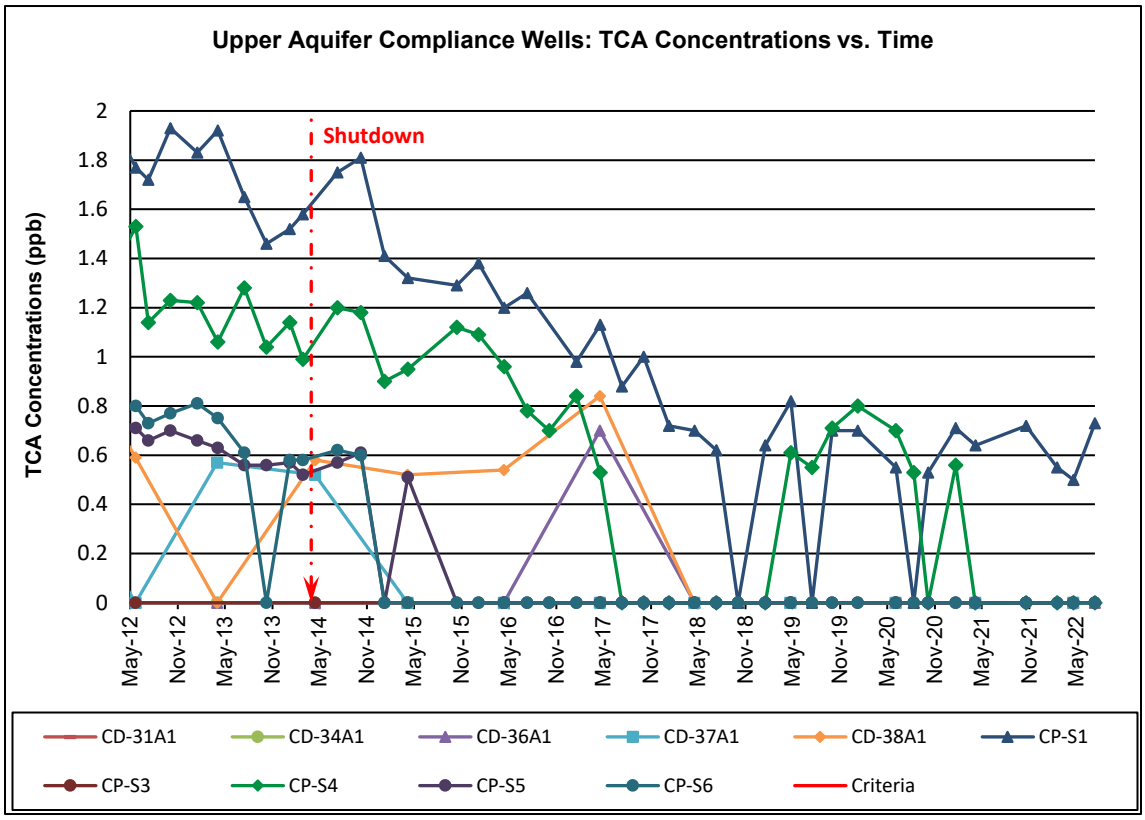
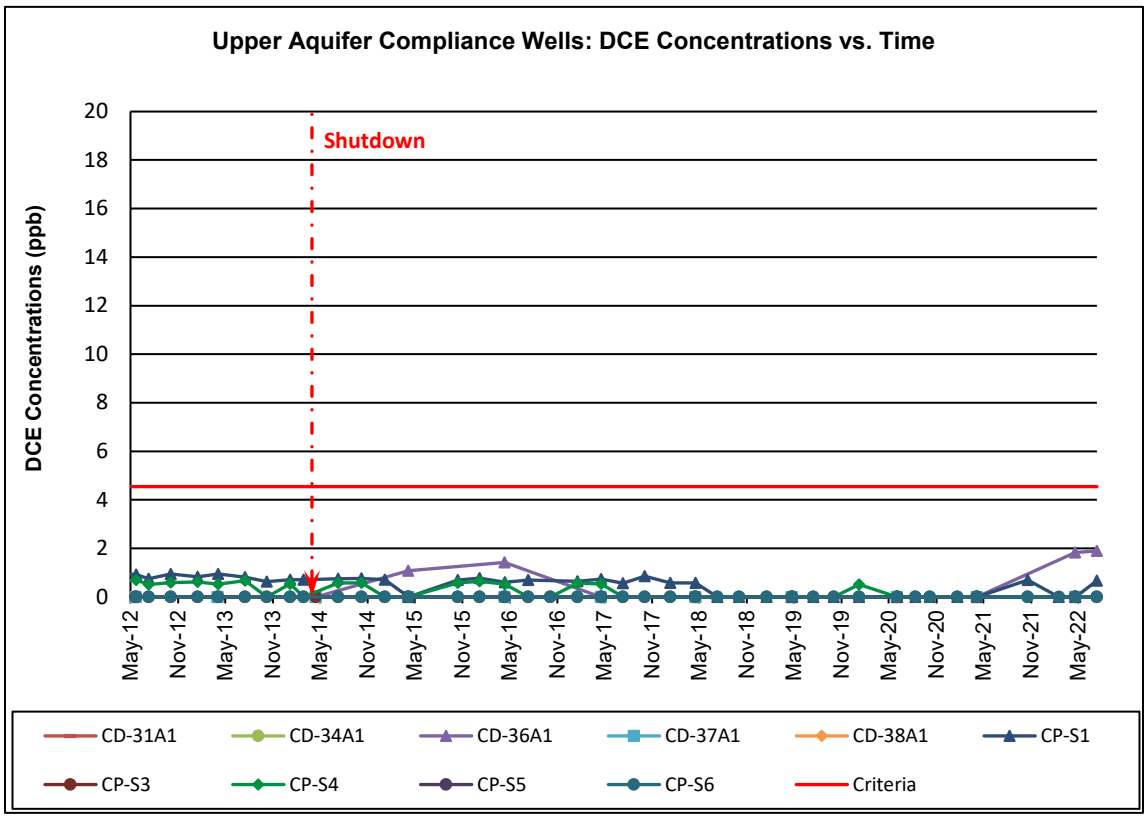


Figure 3-7 Upper Aquifer Compliance Wells DCE Concentrations vs. Time



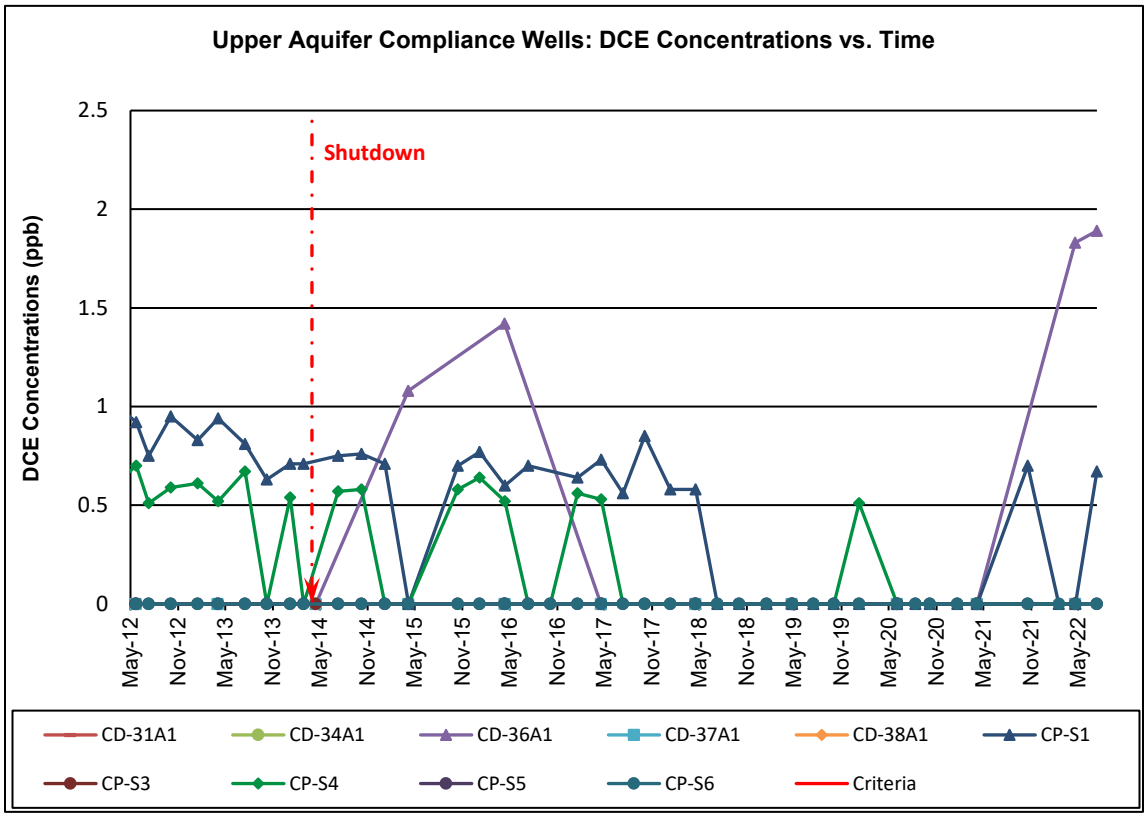
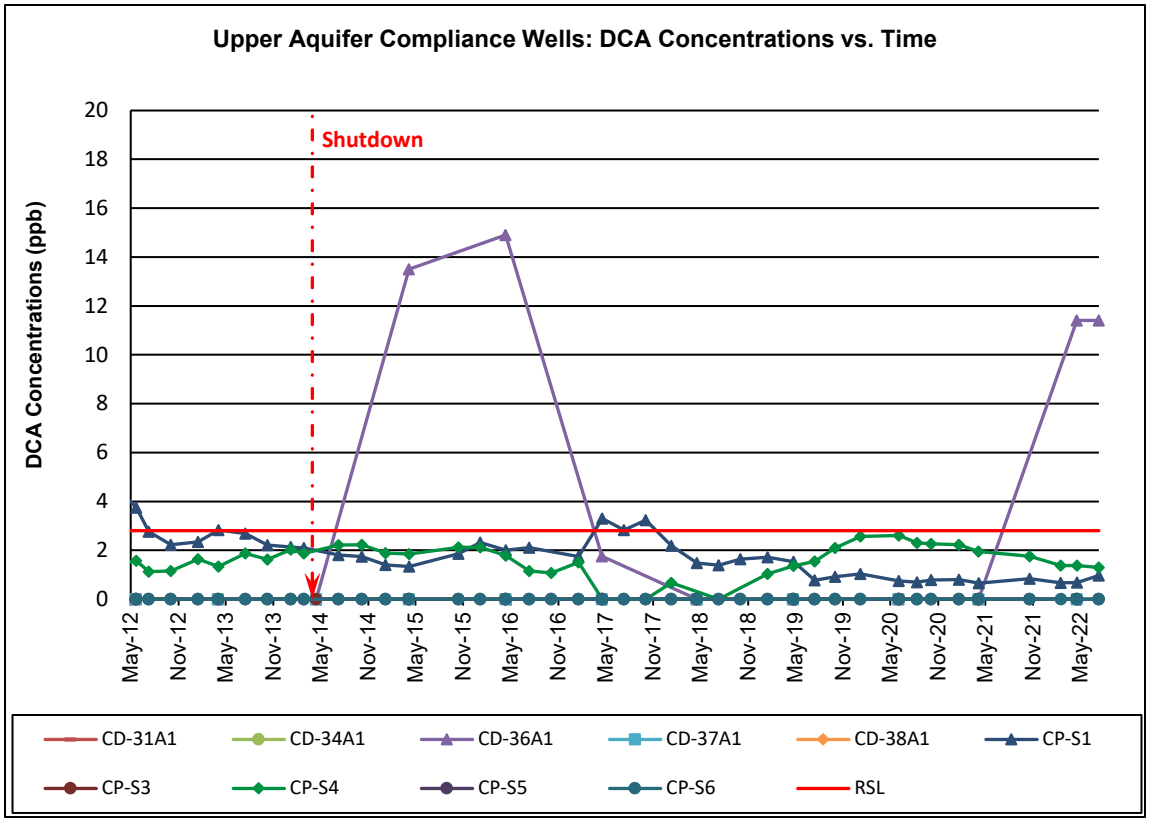


Figure 3-8 Upper Aquifer Compliance Wells DCA Concentrations vs. Time



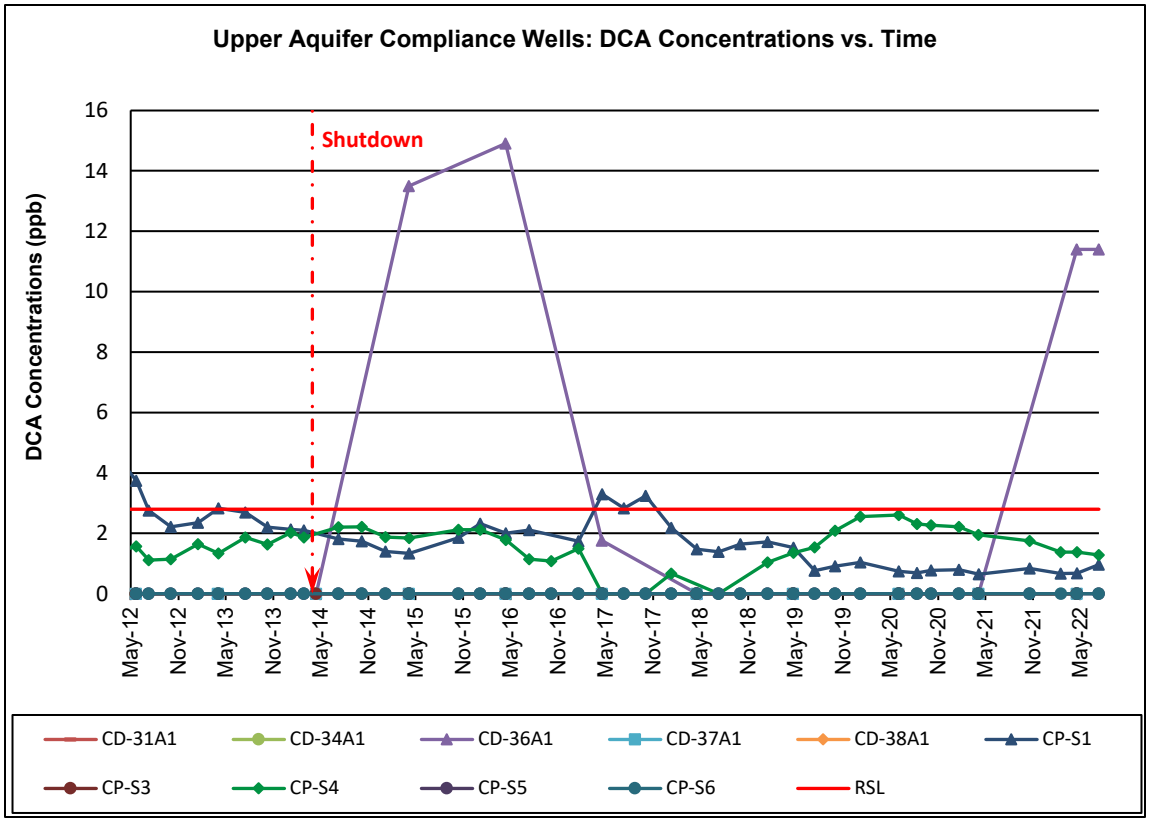
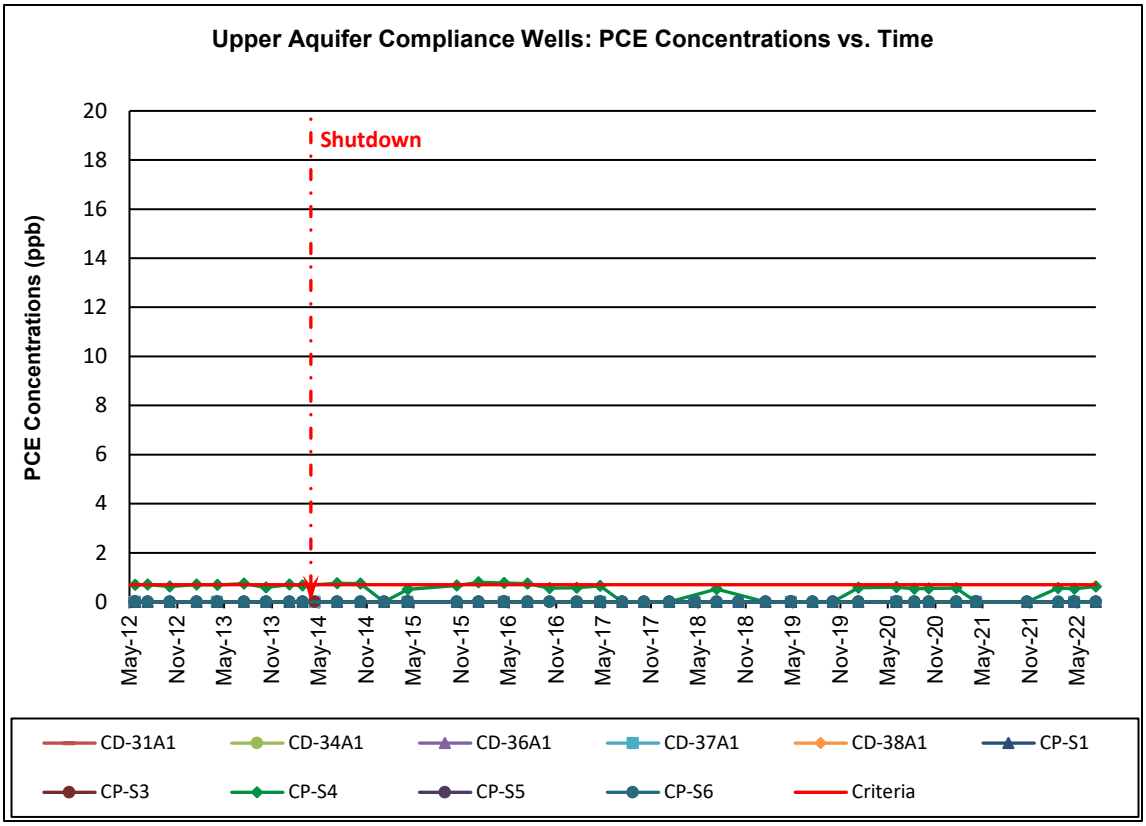


Figure 3-9 Upper Aquifer Compliance Wells PCE Concentrations vs. Time



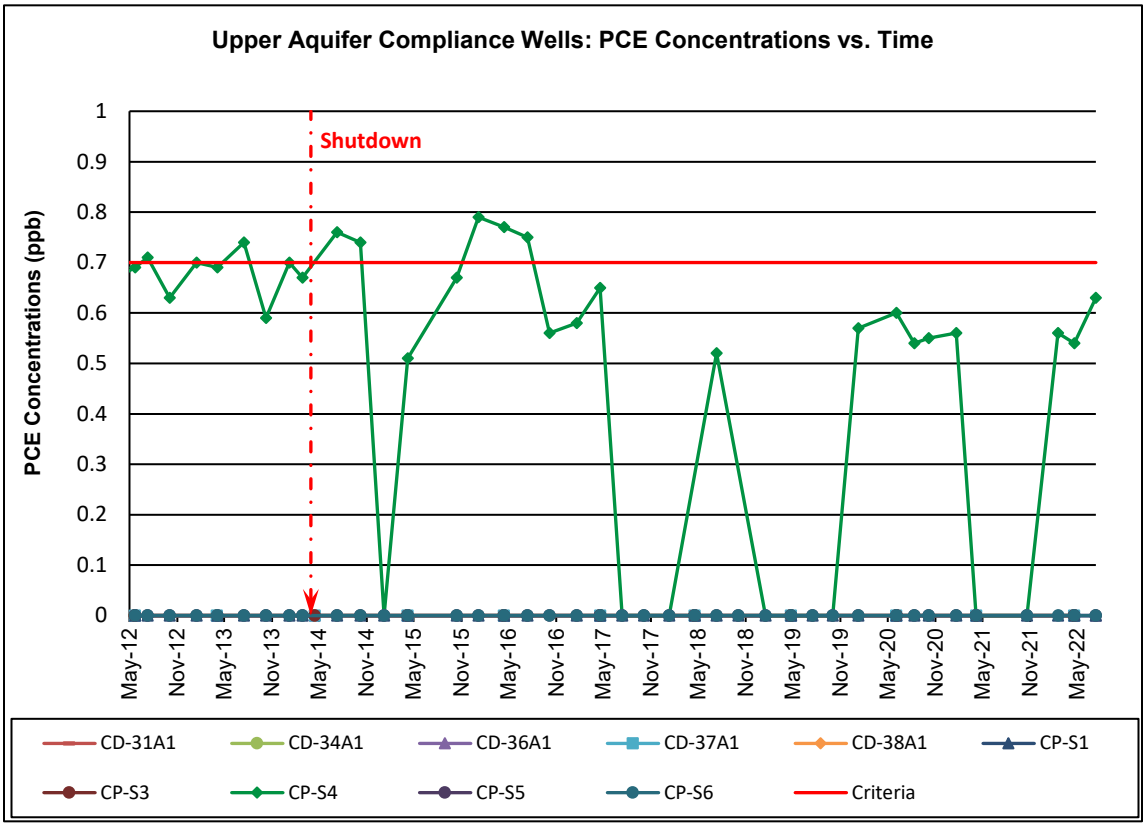
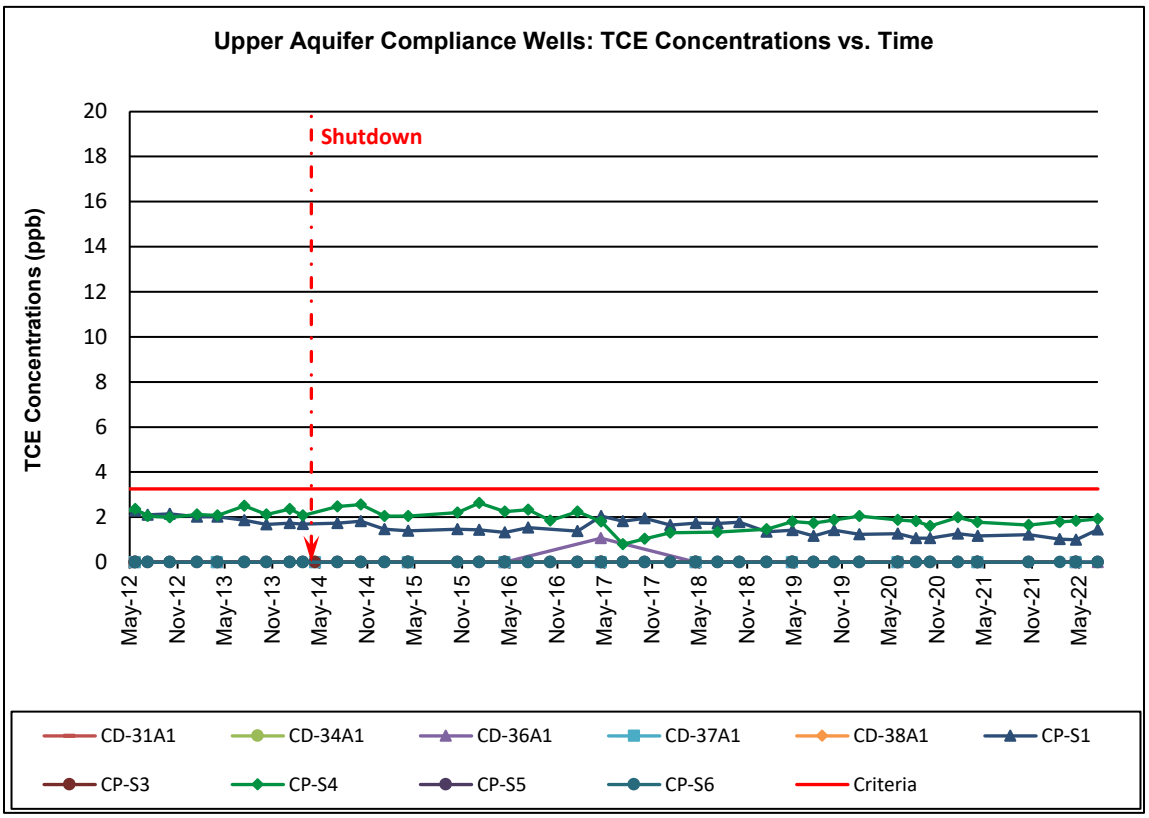


Figure 3-10 Upper Aquifer Compliance Wells TCE Concentrations vs. Time



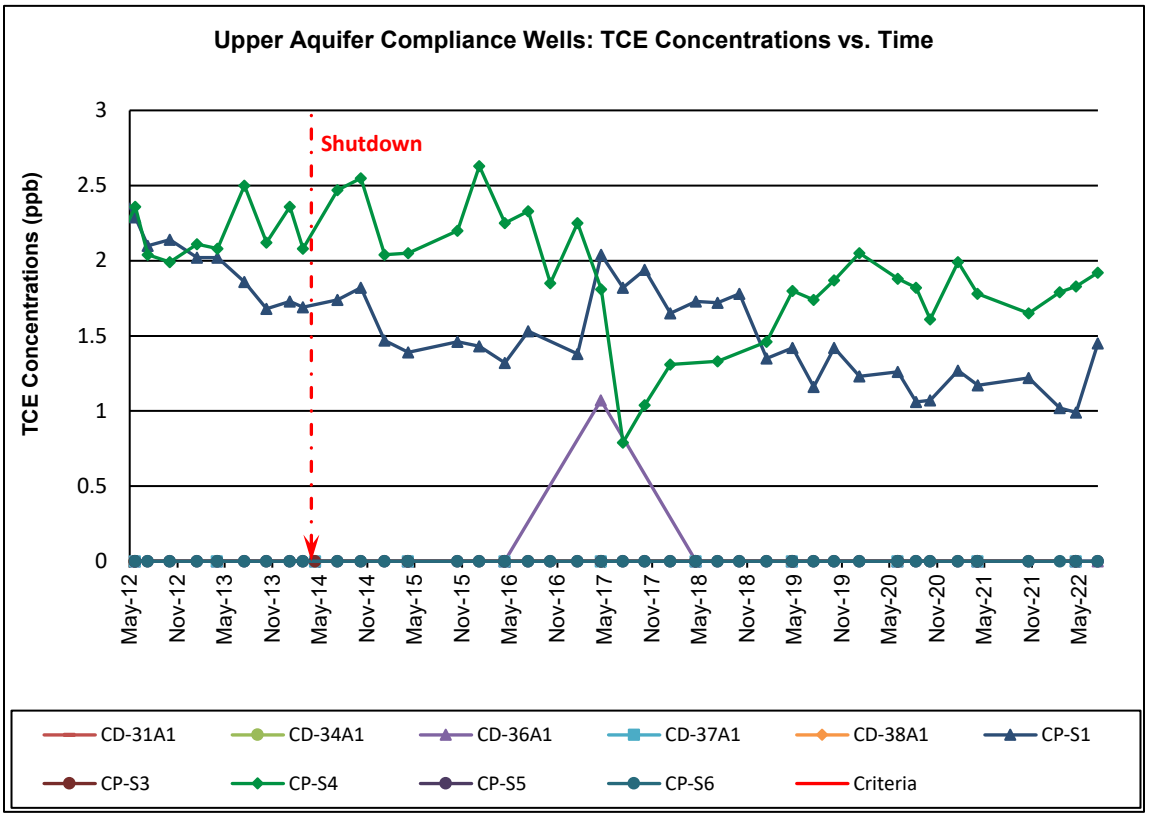


Figure 3-11 Upper Aquifer Estimated TCA Plume

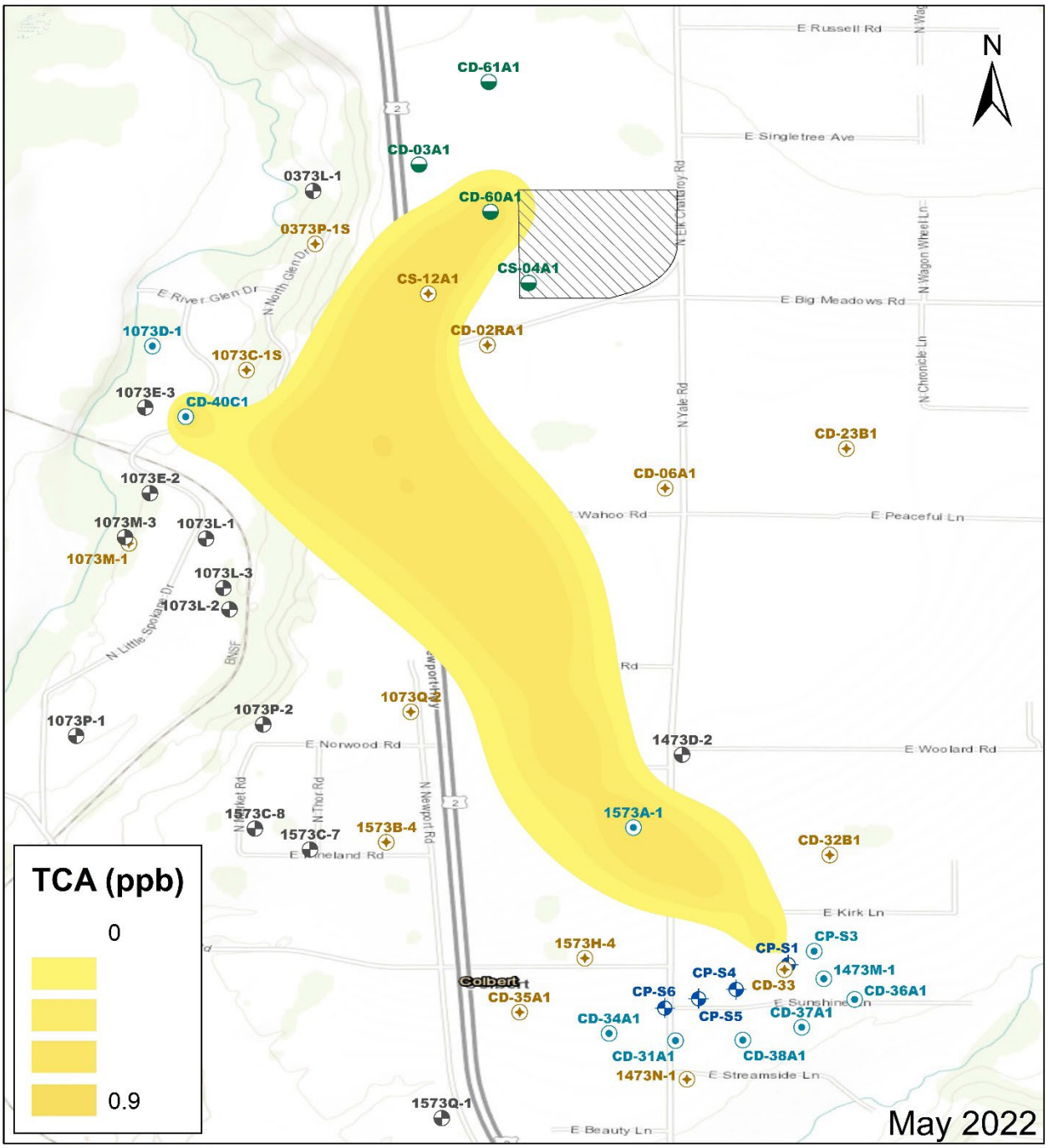


Figure 3-12 Upper Aquifer TCA Detections Map

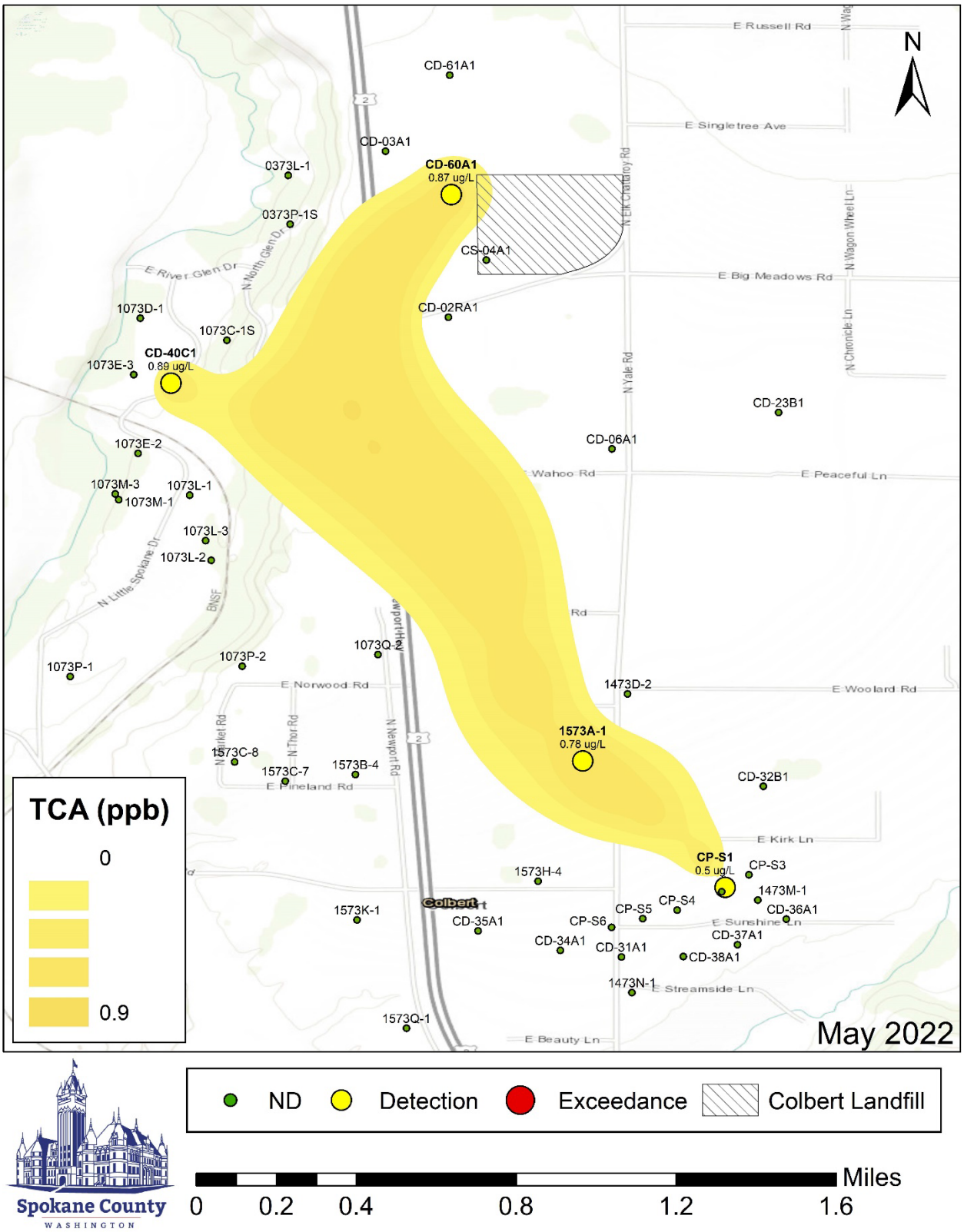


Figure 3-13 Upper Aquifer Estimated DCA Plume

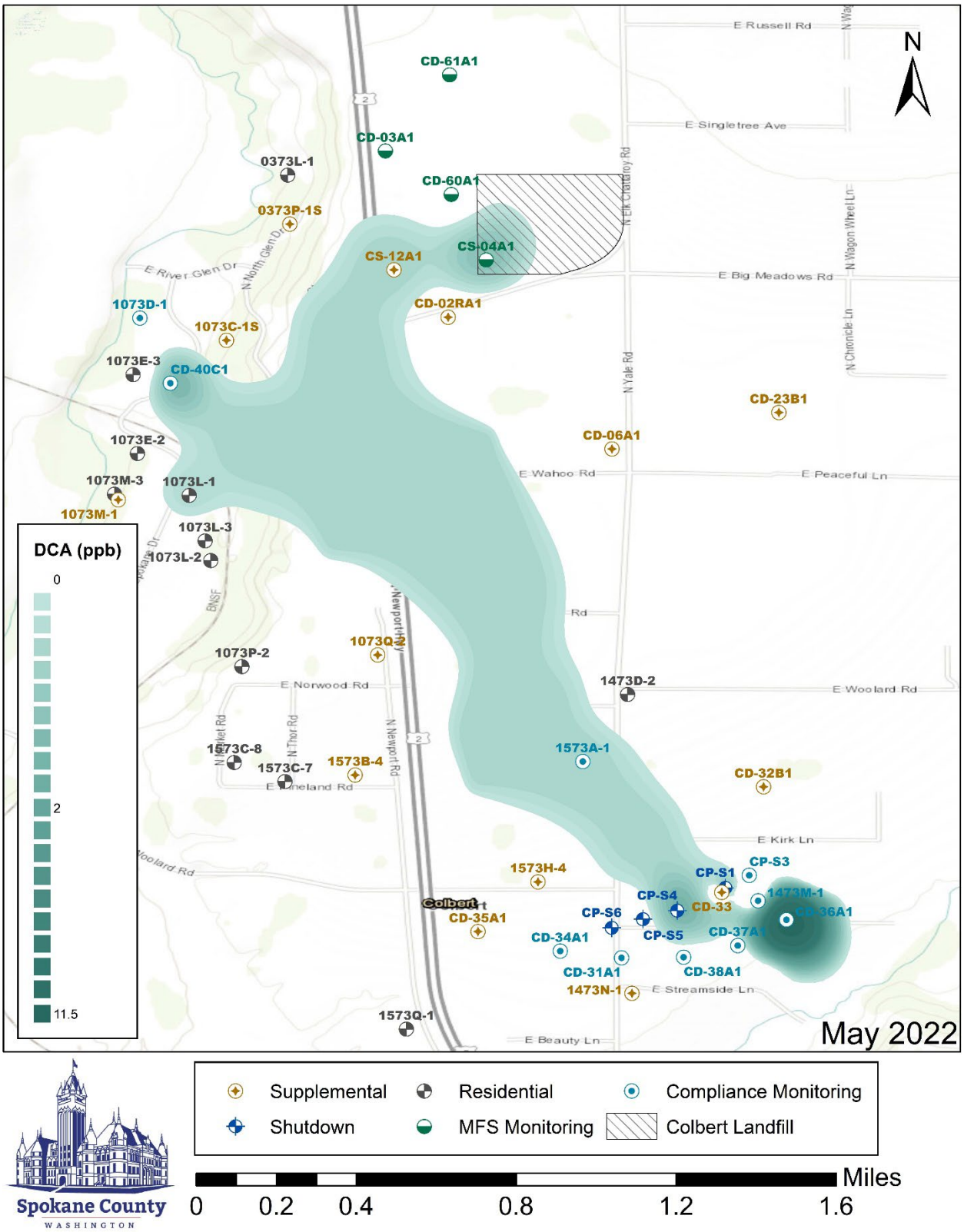


Figure 3-14 Upper Aquifer DCA Detections Map

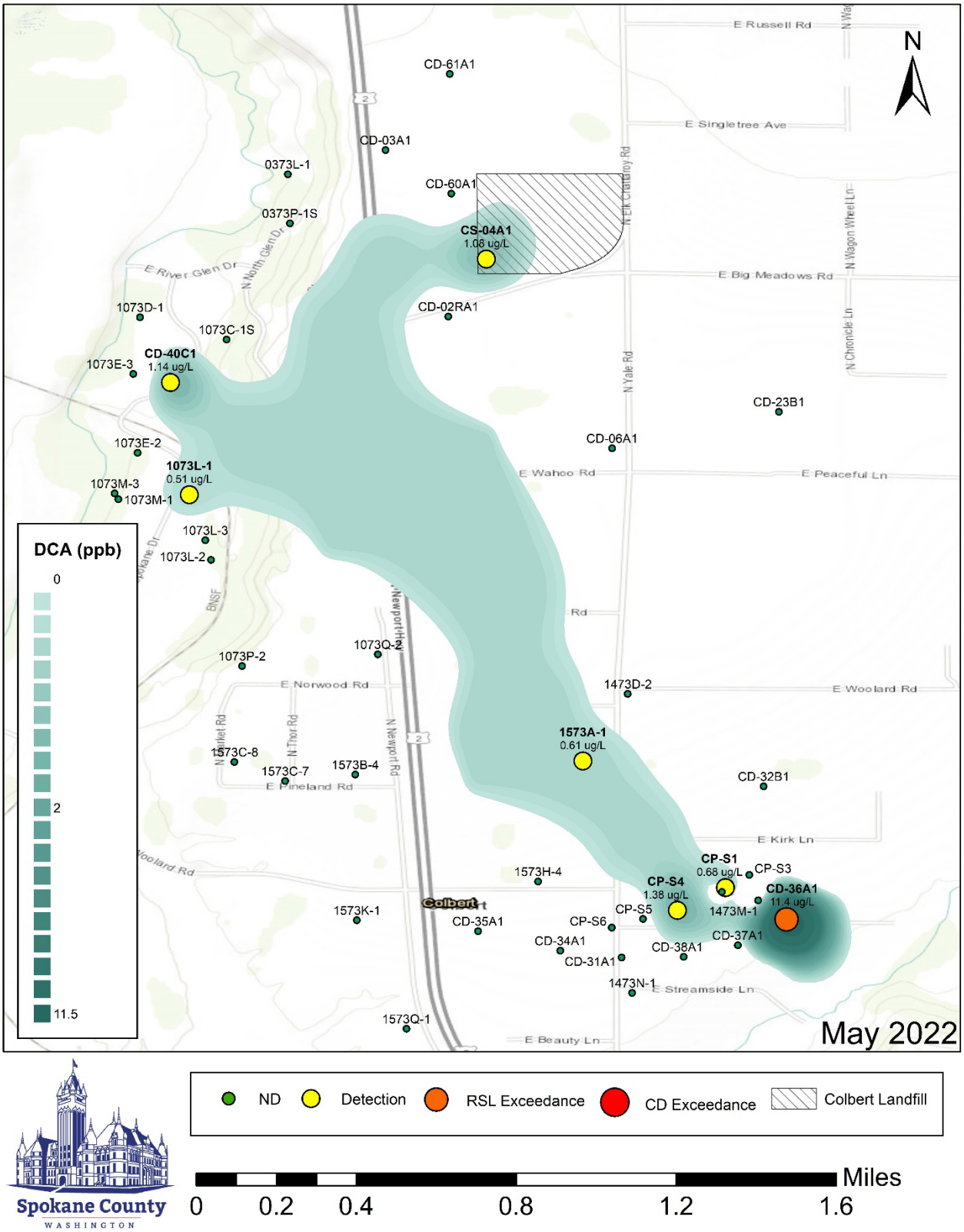


Figure 3-15 Upper Aquifer Estimated DCE Plume

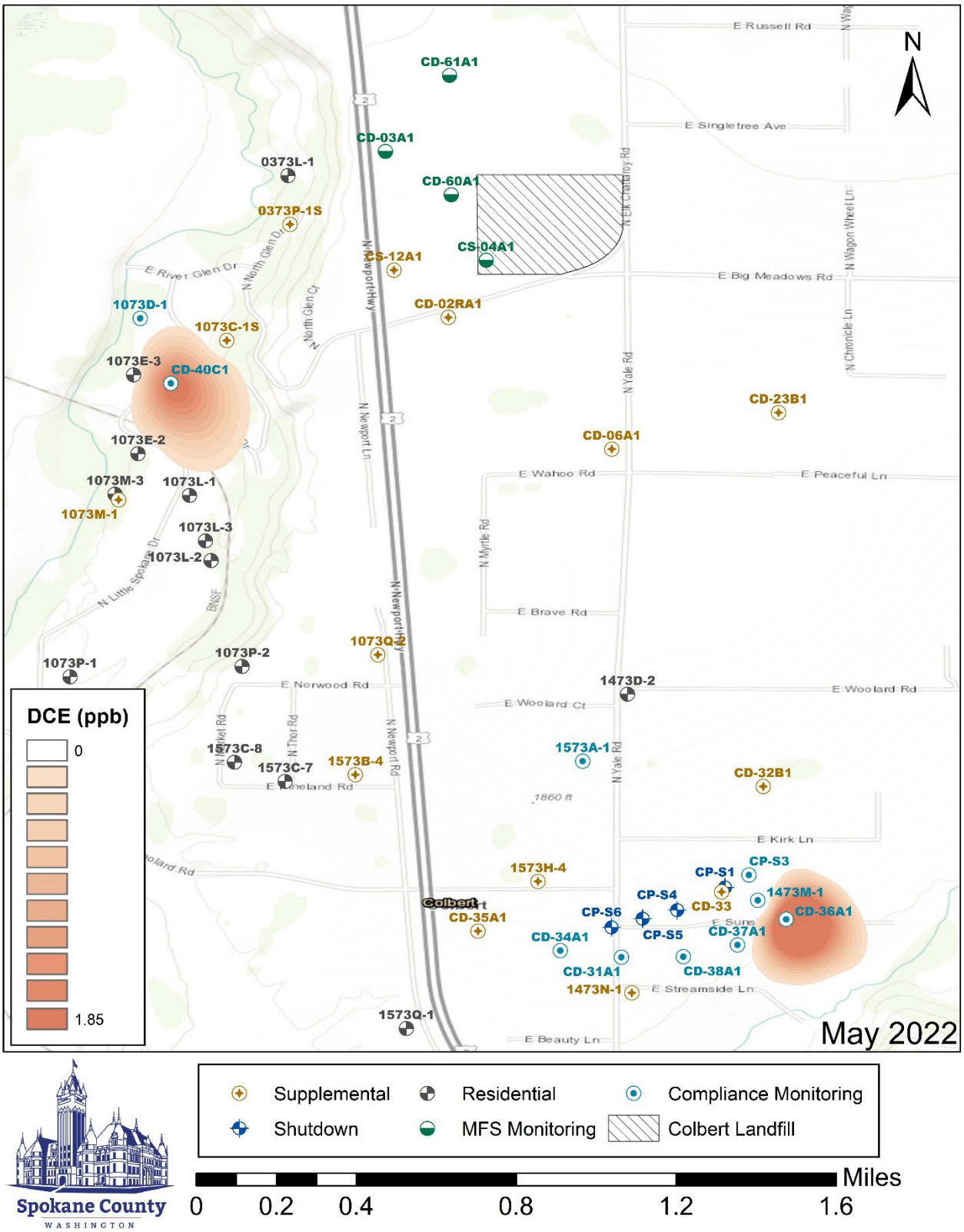


Figure 3-16 Upper Aquifer DCE Detections Map

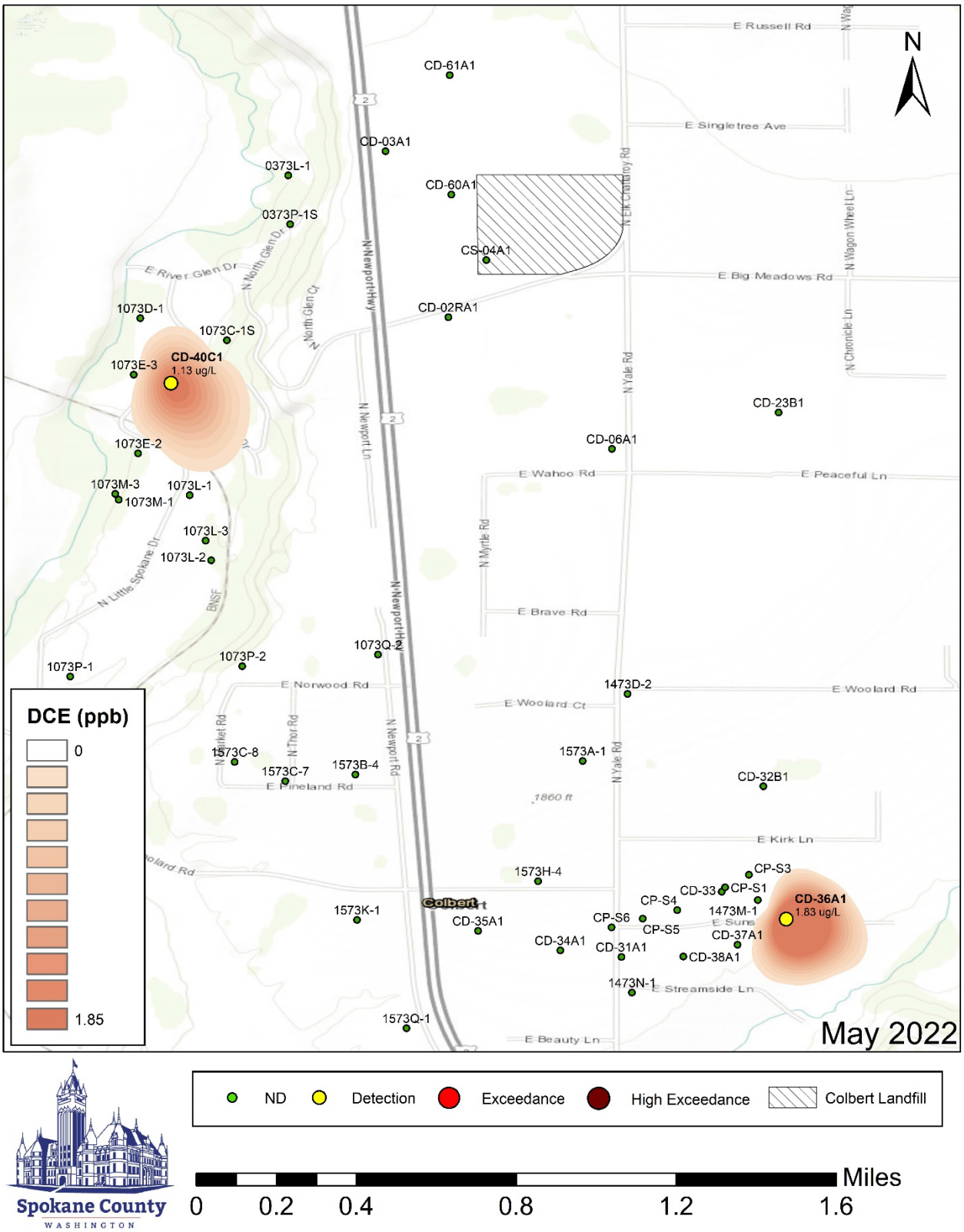


Figure 3-17 Upper Aquifer Estimated PCE Plume

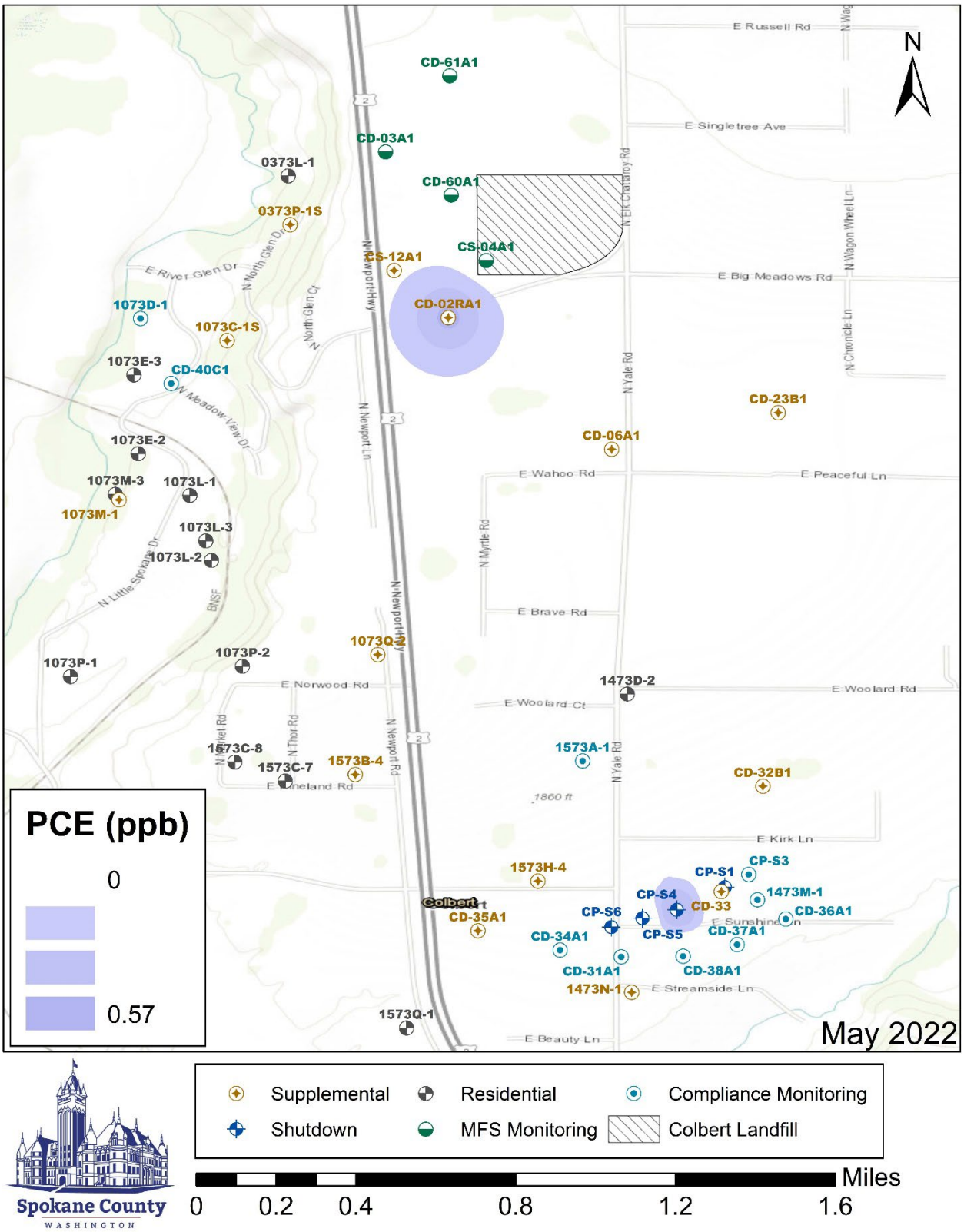


Figure 3-18 Upper Aquifer PCE Detections Map

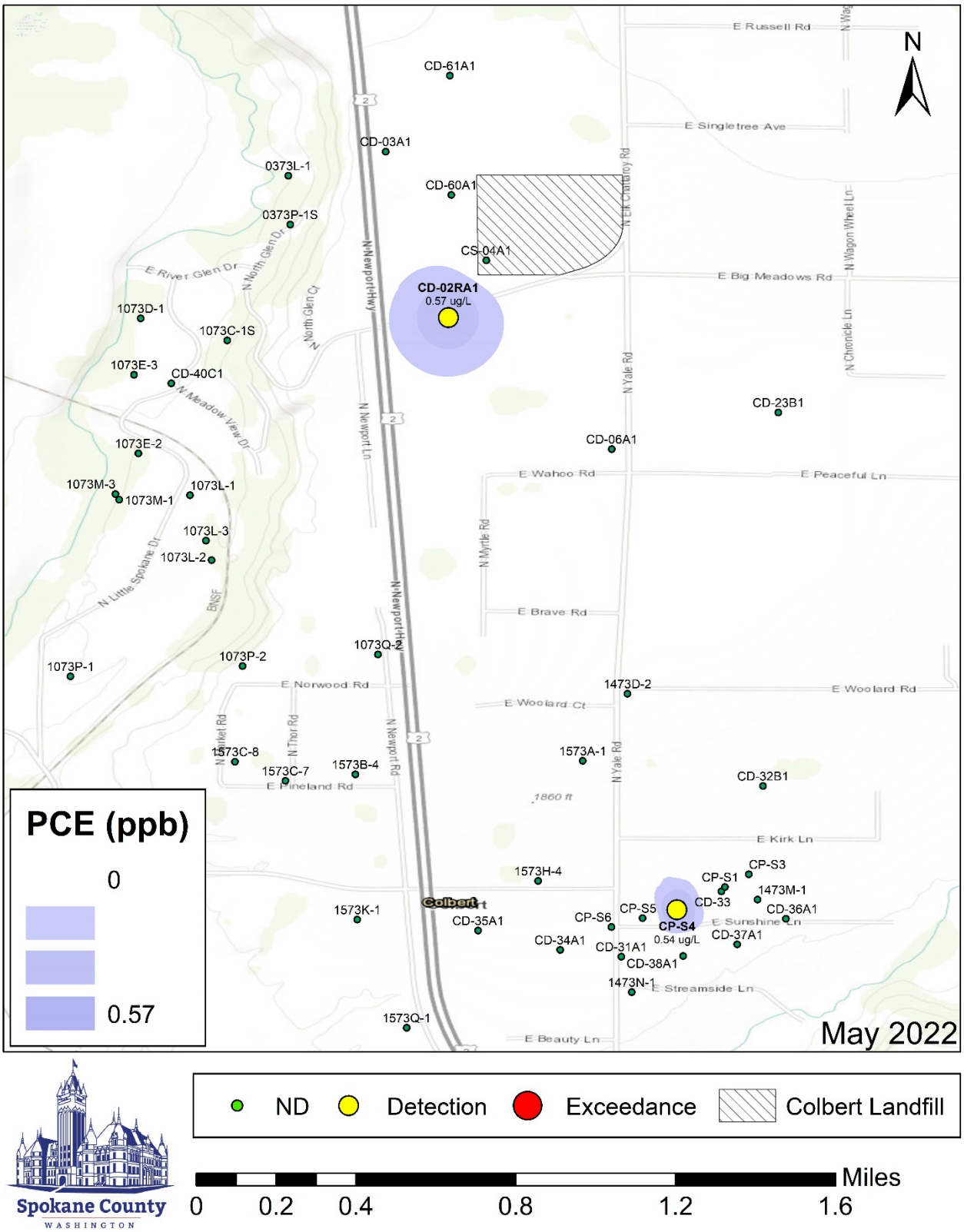


Figure 3-19 Upper Aquifer Estimated TCE Plume

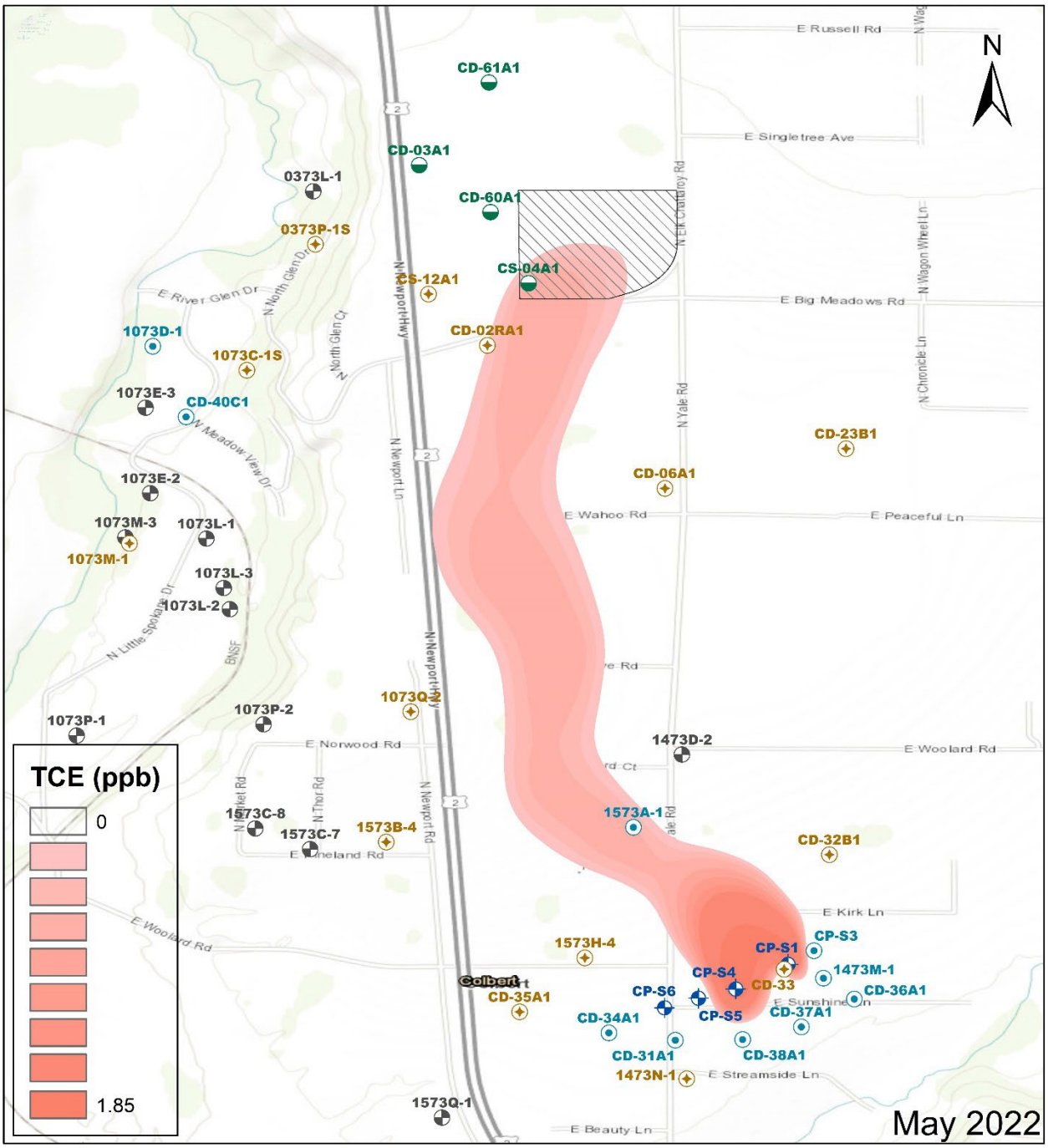


Figure 3-20 Upper Aquifer TCE Detections Map

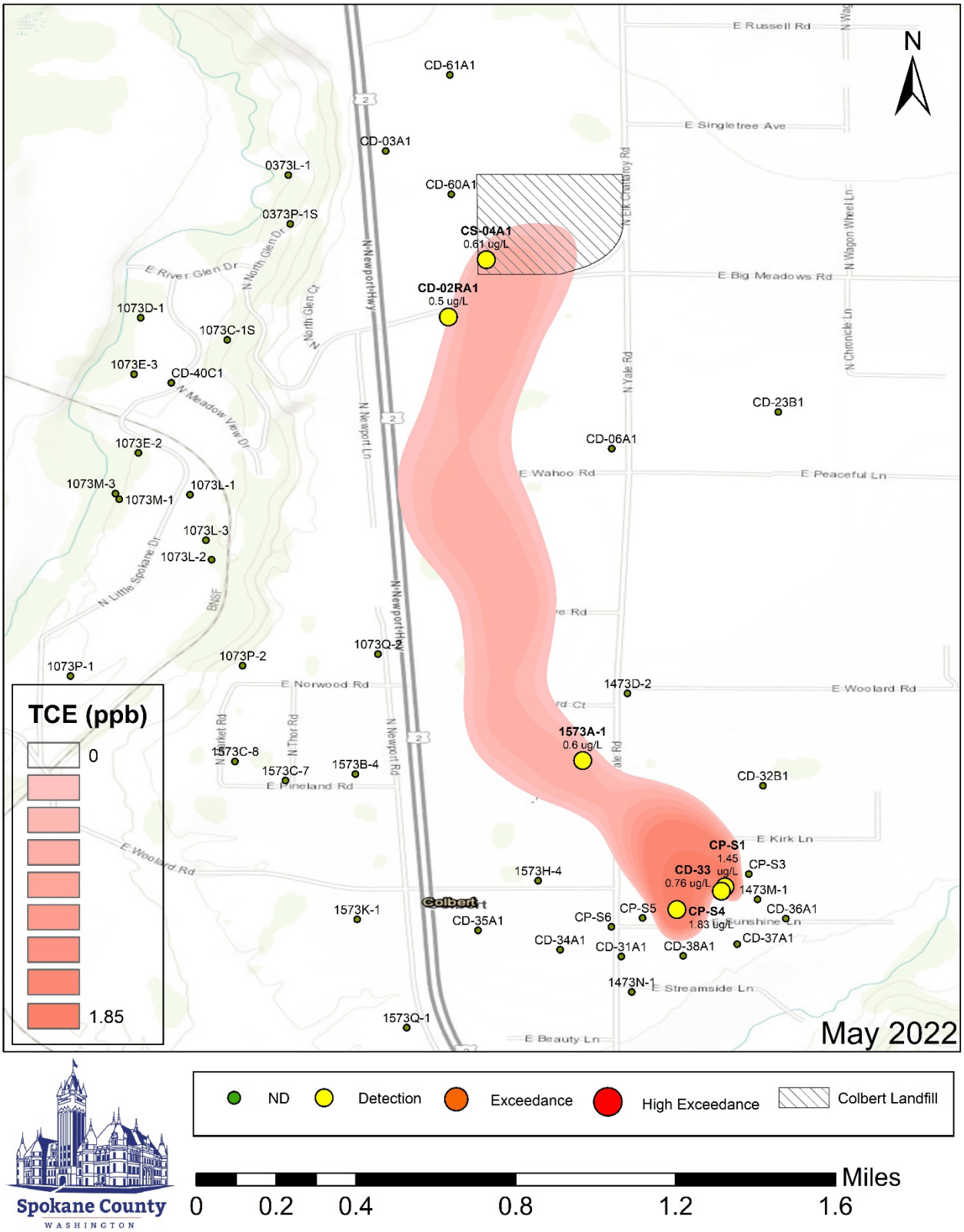


Figure 3-21 Upper Aquifer All Analytes Estimated Plume Map

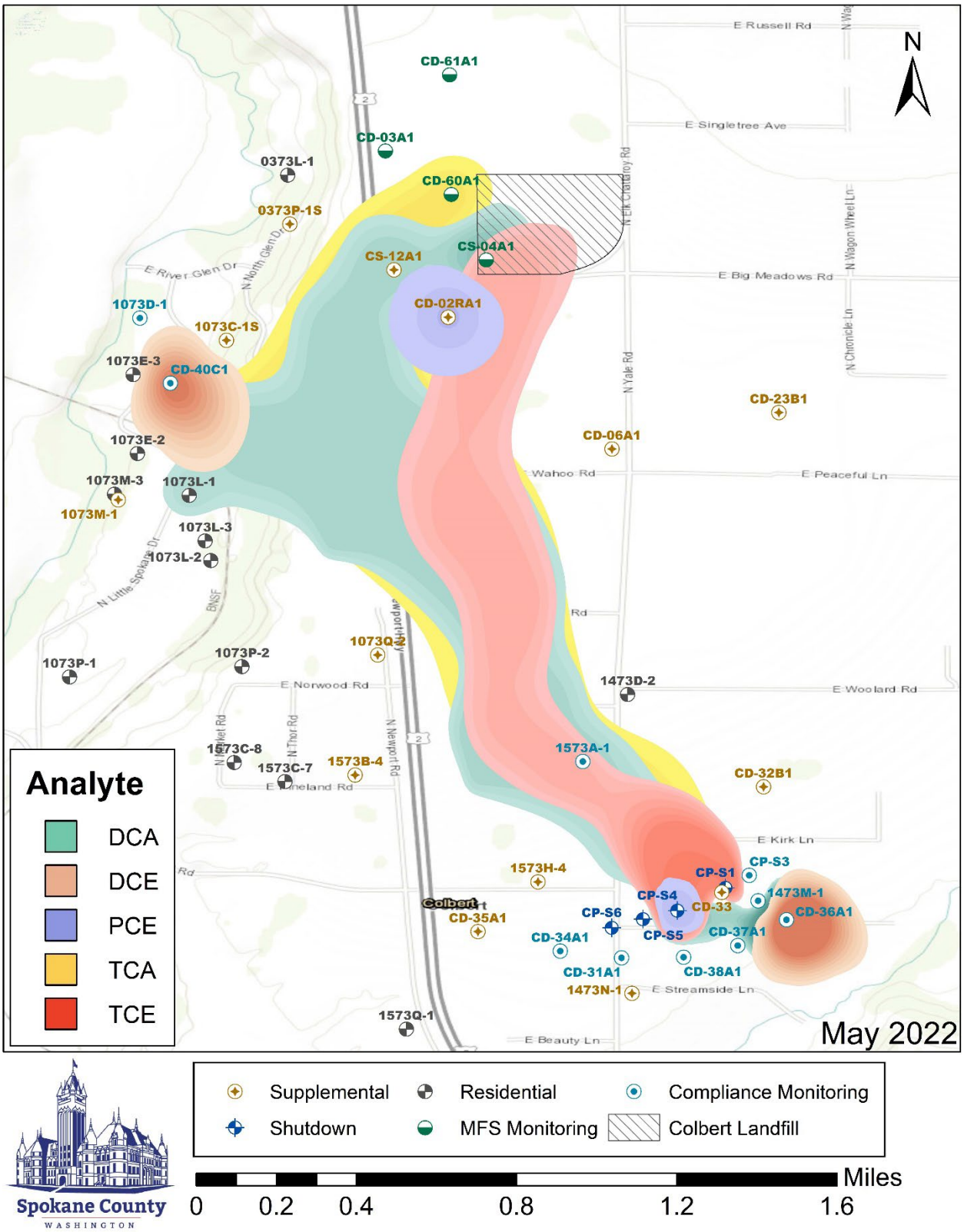
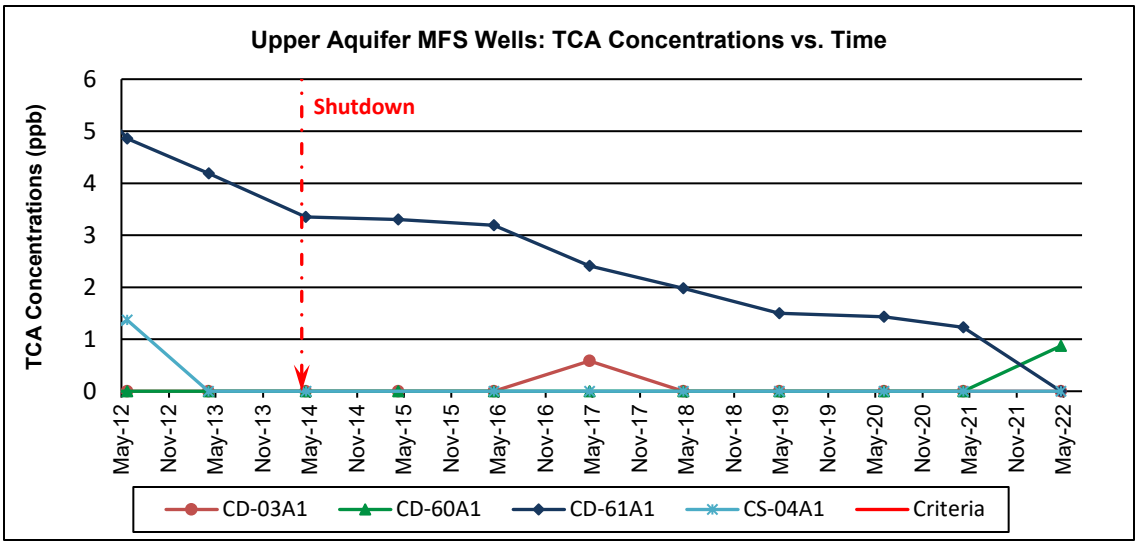
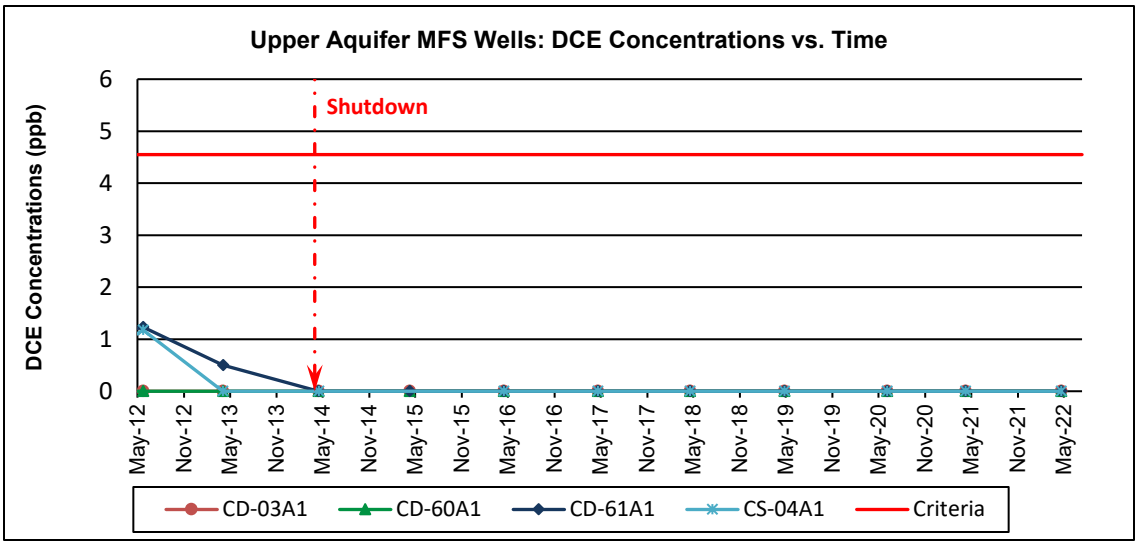


Figure 3-22 Upper Aquifer MFS Wells COC Concentrations vs. Time





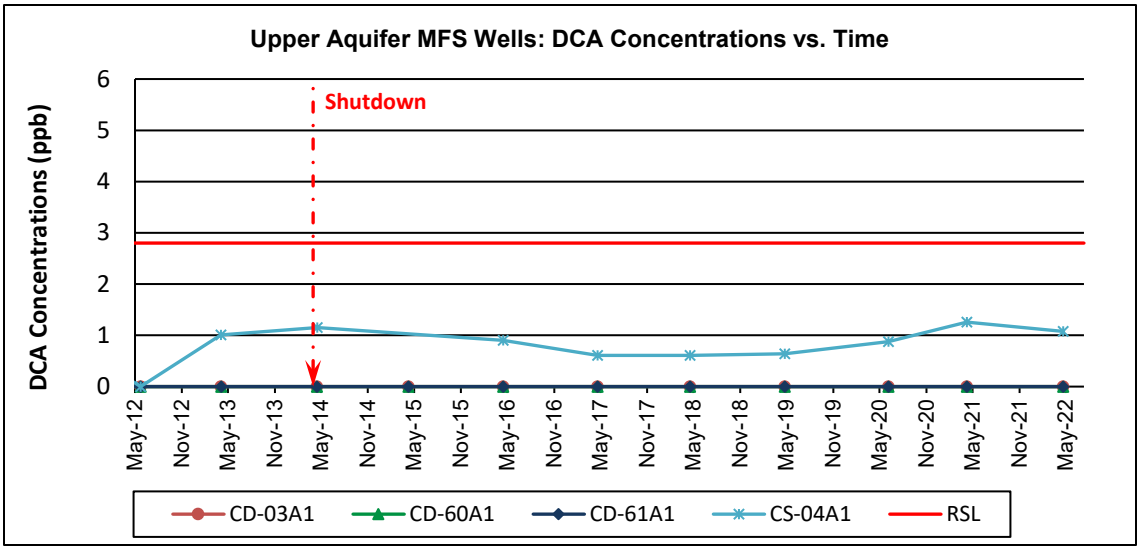


Figure 3-23 Upper Aquifer MFS Wells COC Concentrations vs. Time

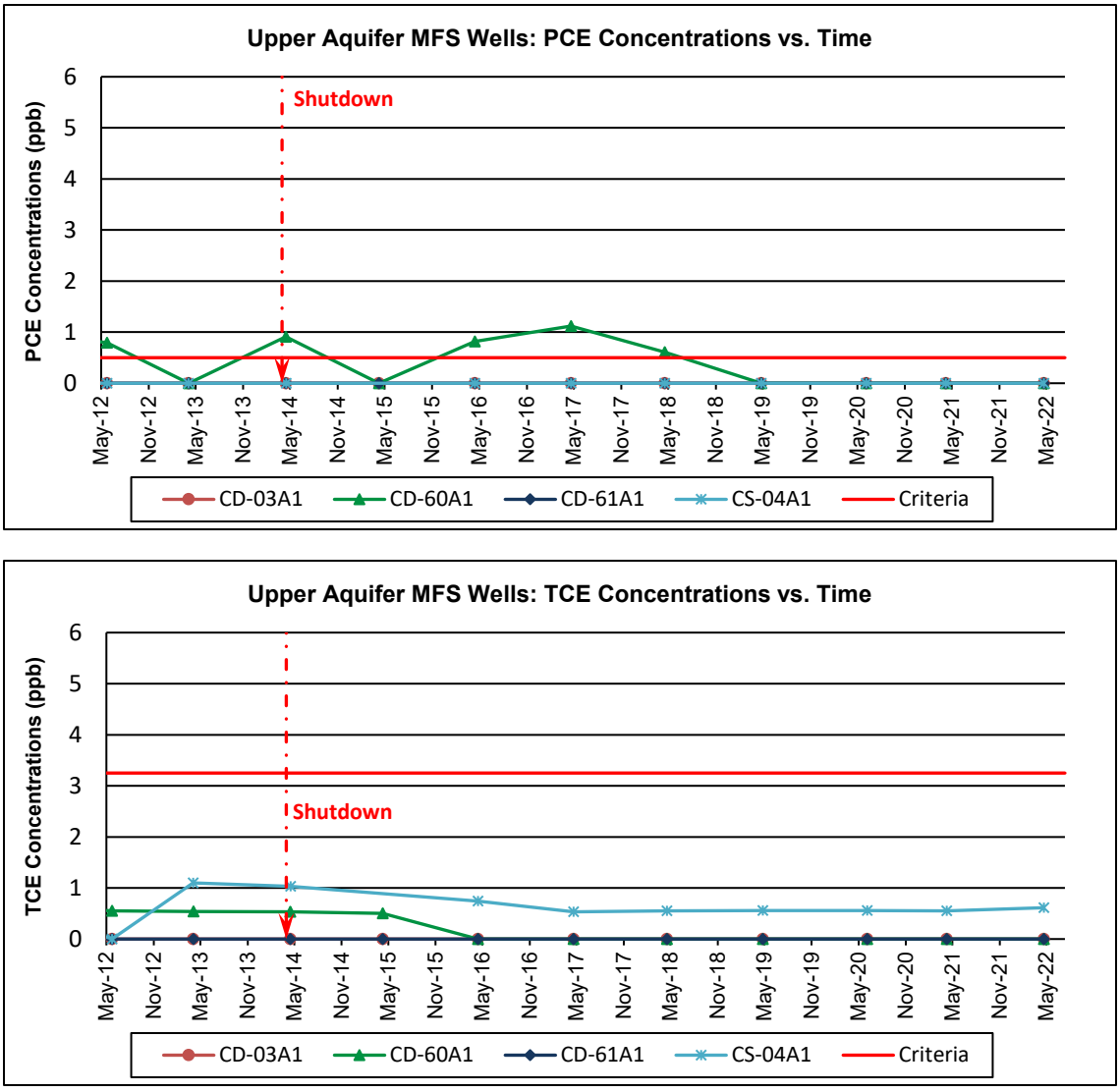
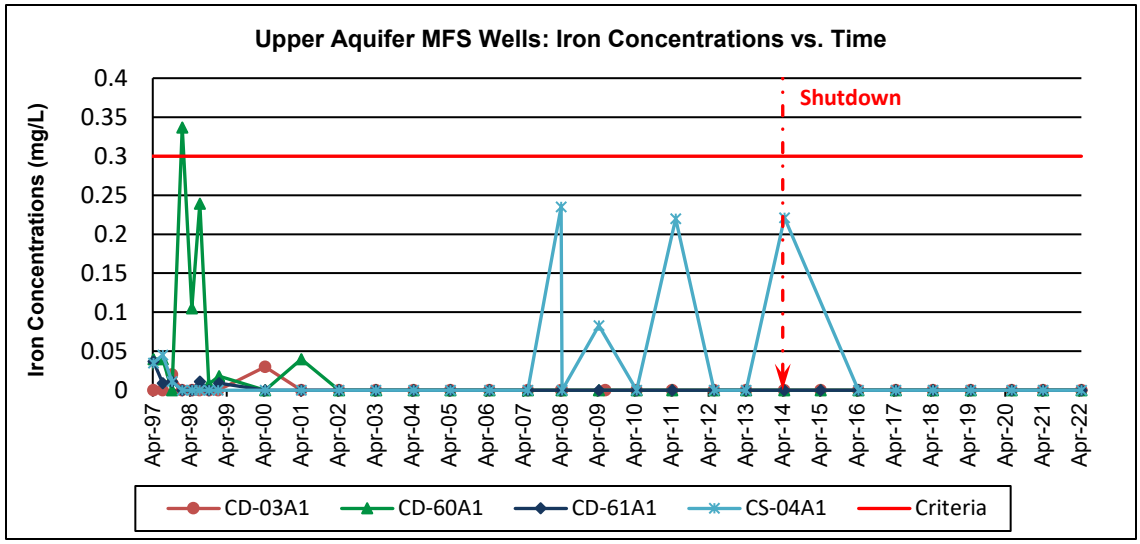
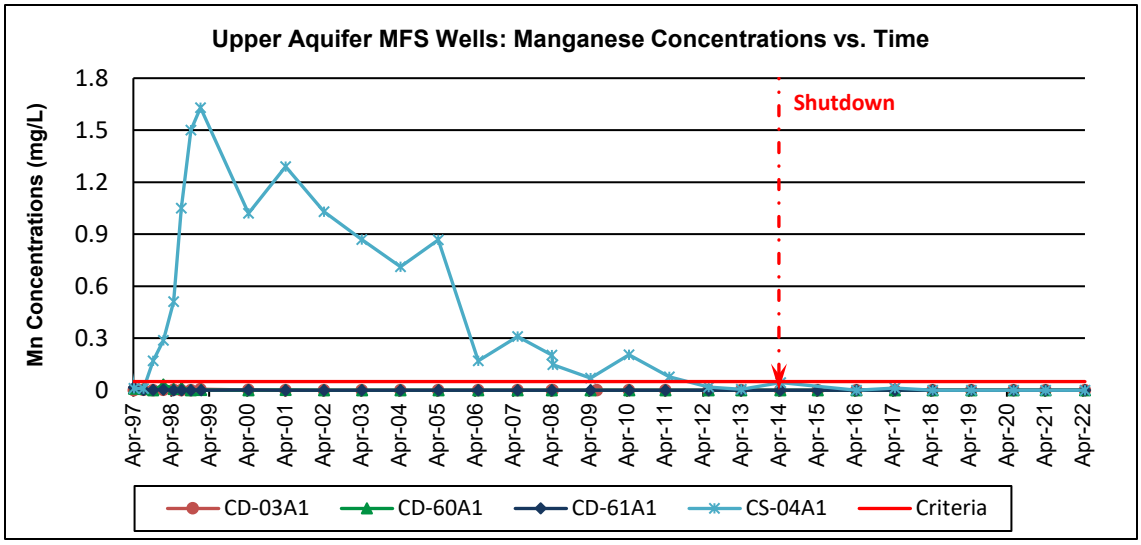


Figure 3-24 Upper Aquifer MFS Parameters vs. Time





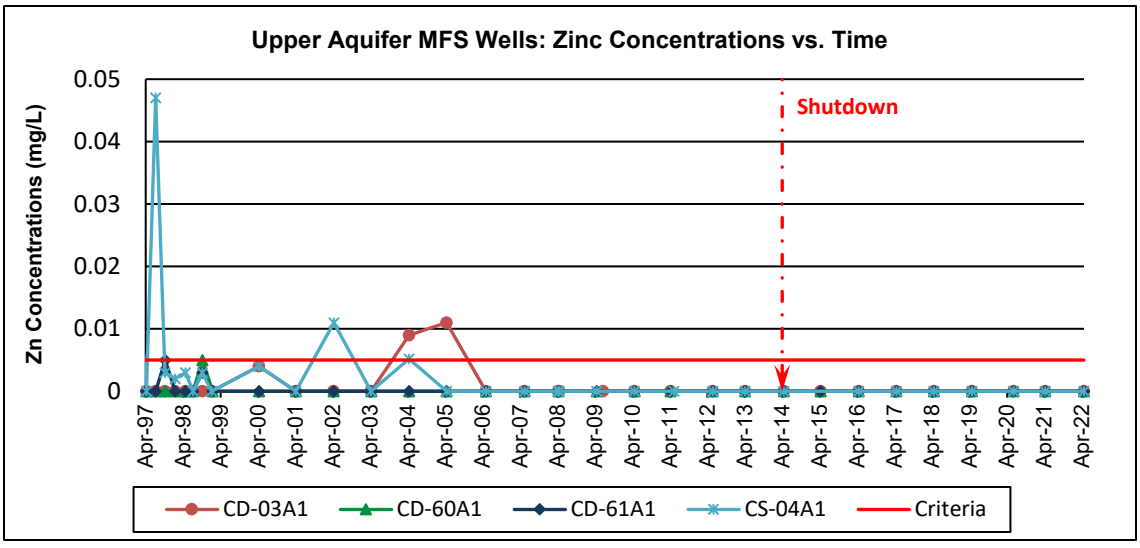
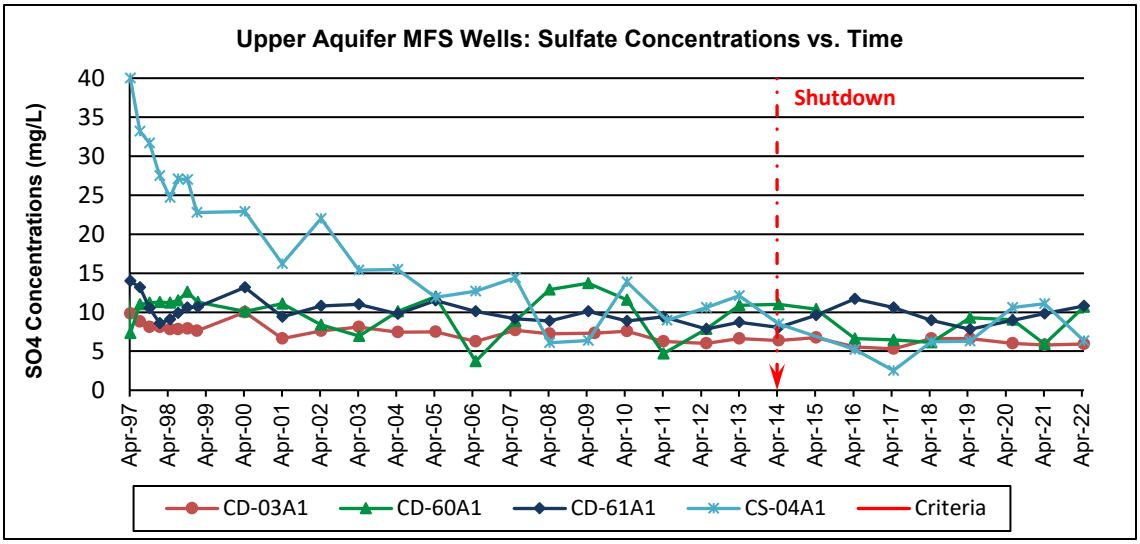
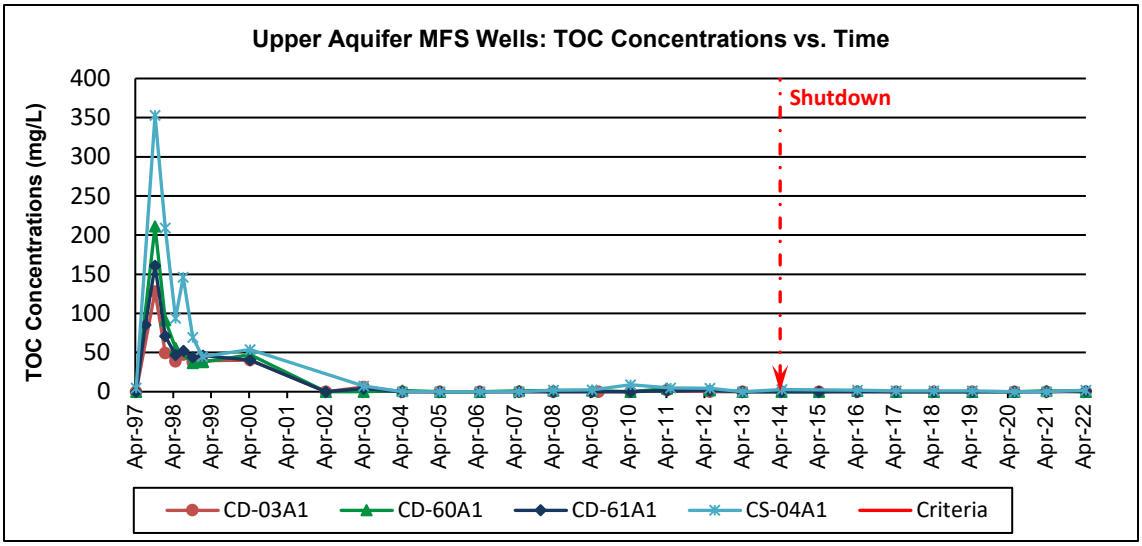


Figure 3-25 Upper Aquifer MFS Parameters vs Time





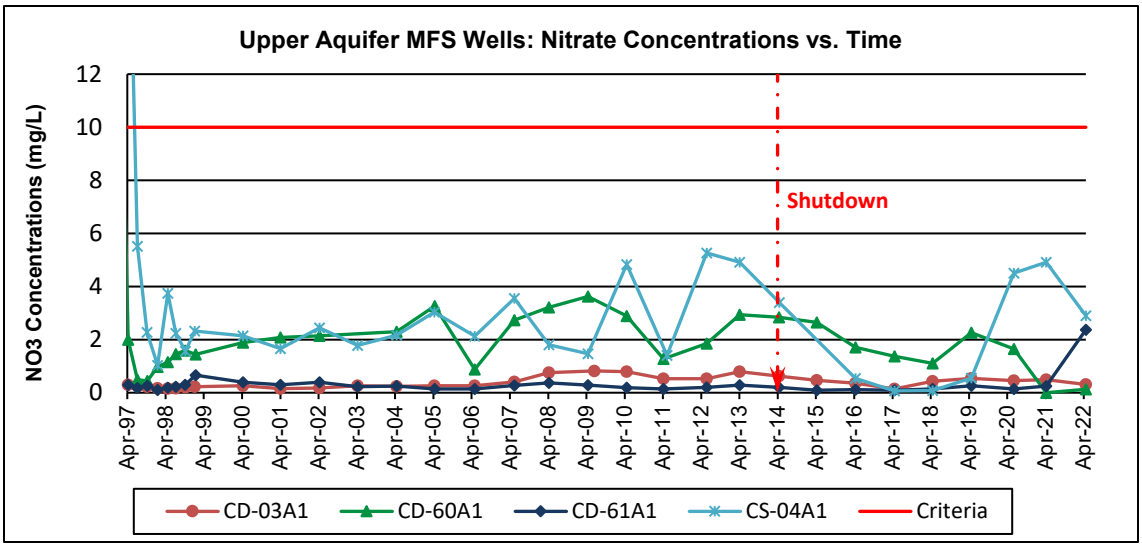


Table 3-9 Summary Results for the Mann-Whitney Nonparametric Significance Test (2022)

	Level of Significance (p)	
Constituent	**Upper Aquifer**	***Lower Aquifer (1999)**
Chloride (Cl)	**3.95E-05**	**0.006**
Chemical Oxygen Demand (COD)	0.3749	0.48
Iron (FE)	0.1522	0.17
Manganese (MN)	0.08187	0.86
Ammonia (NH3)	0.4835	0.42
Nitrite (NO2)	0.4282	1.13
Nitrate (NO3)	**1.45E-06**	0.08
Sulfate	0.5832	**0.0006**
Total Organic Carbon	0.7678	0.32
Zinc	0.06507	0.06

***** Lower aquifer results from January 1999 using CP-E2 and CD-48C2 analytical results for calculations.

Bold number indicates a level of significance under 0.05, test run as two-tailed method.

Figure 3-26 Box Plots for Background and Downgradient MFS Wells (2022)

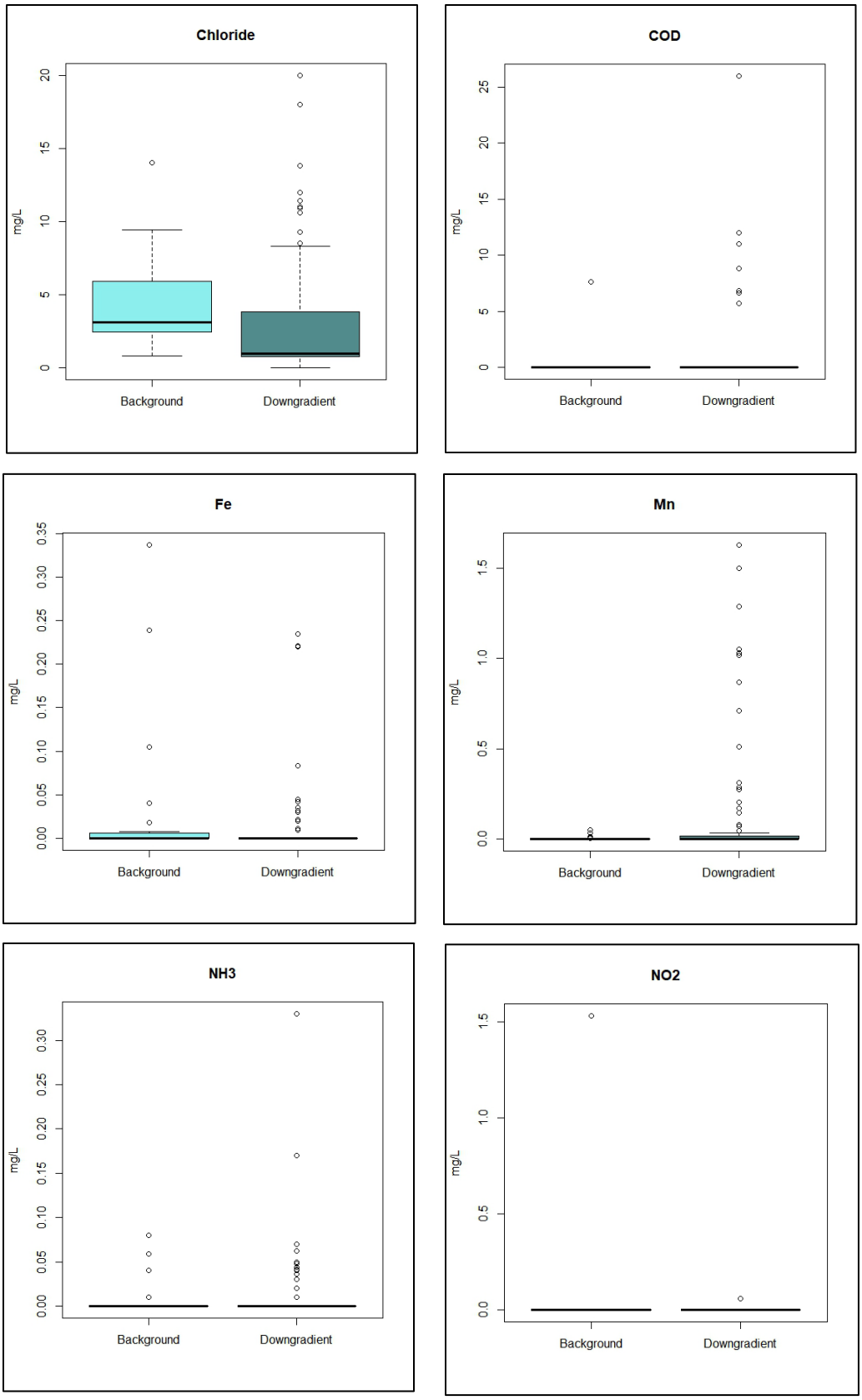
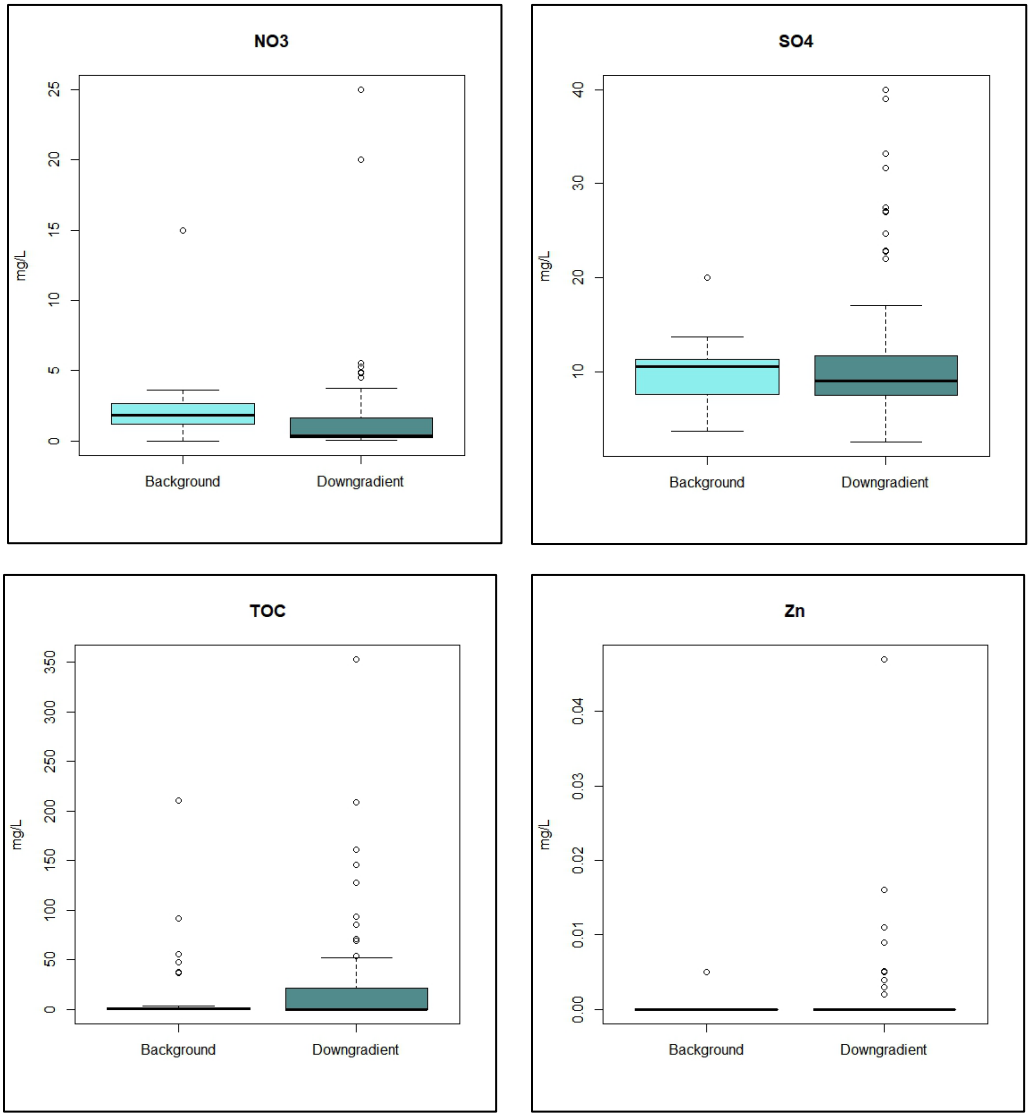


Figure 3-23 continued



4.0 Residential Program

4.1 Locations and Schedule

Current residential well sampling locations can be found in Figure 4-1. The residential sampling schedule is included in Table 4-1.

4.2 Monitoring Results and Criteria

Criteria for residential use wells were established in the Consent Decree. The Consent Decree states that if any residential well with a concentration over the evaluation criteria OR any residential well that has an average concentration over 65% of the evaluation criteria over 12 months, the county shall supply that residence with an alternative water source.

All residential well results were well below established criteria. Results from sampling are presented in Table 4-2. Time-series plots for wells with COC detections are shown in Figure 4-2 through Figure 4-4.

4.3 Data Evaluation

Only 1 residential well measured concentrations above the method detection limits for the 2021-2022 sampling year. Residential well 1073L-1 exhibited low detections of DCA (0.52 ppb to 0.91 ppb) during this reporting period.

4.4 Program Modifications

On a regular basis, the program schedule is re-evaluated to determine if any changes are needed. With the initiation of the Shut-down test, a re-evaluation was performed comparing plume maps and well locations as well as a list of residences connected to a public water supply. Some modifications to increase sampling in specific areas were made to the schedule to ensure a conservative approach concerning public health.

11 changes have been made to the schedule for the upcoming 2022-2023 sampling year. There were 8 decreases in the sampling schedule (several decreases from biennial to supplemental sampling and 1 decrease to annual sampling), 2 increases from biennial sampling to annual sampling, and 1 well that has been abandoned. Changes are not required by any documentation or work plan.

The 2022 residential well sampling schedule and changes to the program are presented in Table 4-1.

Figure 4-1 Residential Well Sampling Locations

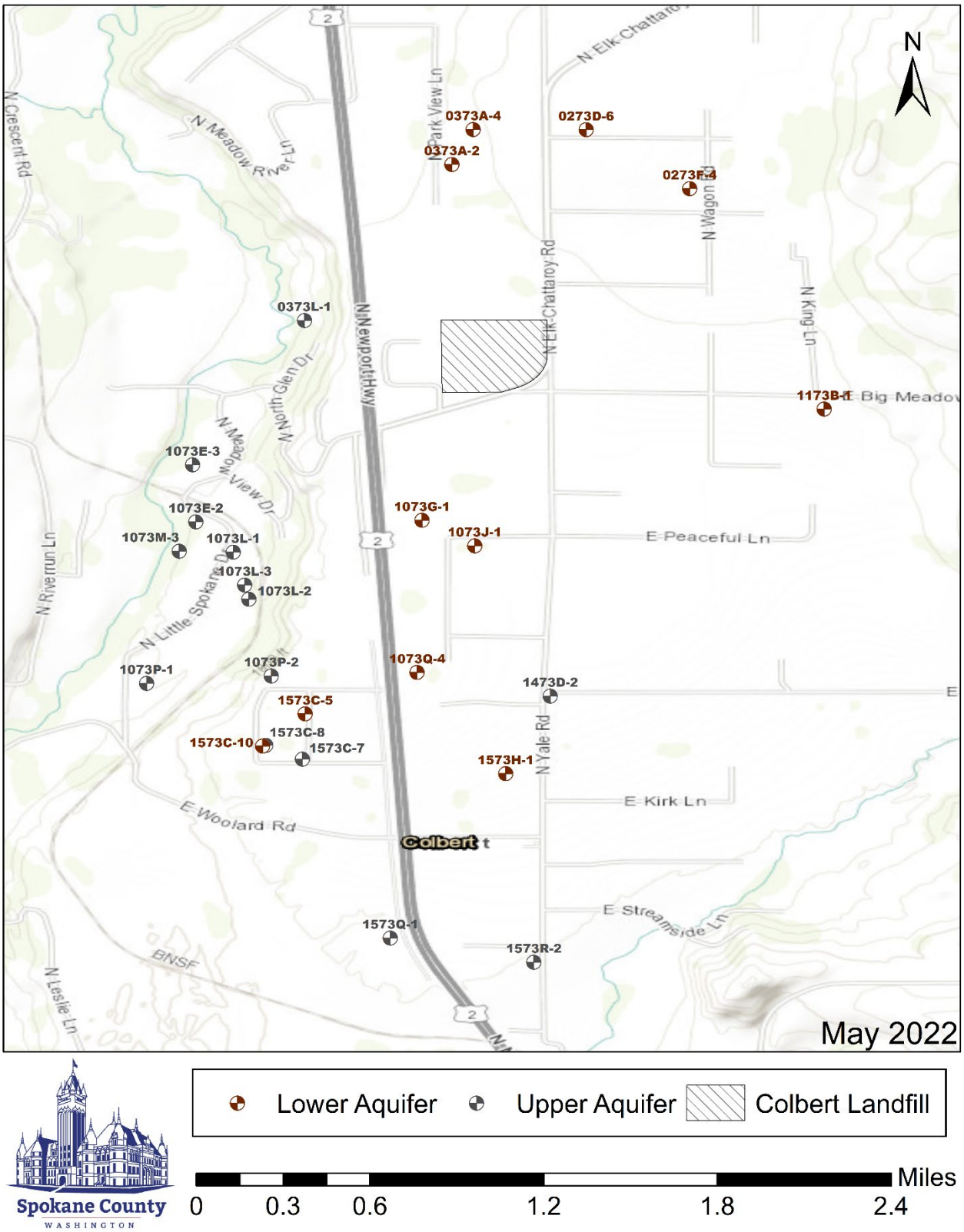


Table 4-1 Residential Well Sampling Schedule for Reporting Period

Colbert Residential Sampling Plan 2022

StationID	LastName	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Sched Comments
0273C-2	Jones/Schmidt	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Decreased to Supplemental Sampling.
0273C-3	Warden	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Decreased to Supplemental Sampling.
0273C-4	McQuesten	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Decreased to Supplemental Sampling.
0273D-6	Thornton	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	
0273F-4	Gander	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	
0373A-2	Resseman	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	Continue quarterly sampling.
0373A-4	Walker	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	
0373L-1	Sterling	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	Decreased to annual sampling (July).
1073D-1	Nerren	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	
1073E-2	Pullen	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	
1073E-3	Clark	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	
1073E-4	Carpenter	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	
1073G-1	Rux	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	
1073J-1	Moreno	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	
1073L-1	Halpin	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	
1073L-2	Countryman	☐	☐	☐	☑	☐	☐	☐	☐	☐	☑	☐	☐	
1073L-3	Anderson	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	
1073L-4	Thomas	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Decreased to Supplemental Sampling.
1073M-1	Bertholf	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Decreased to Supplemental Sampling.
1073M-3	Lane	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	
1073P-1	Greenen	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑	☐	☐	
1073P-2	Petrelli	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	
1073Q-4	NORTH MEADOWS W	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Decreased to annual sampling - January.
1173B-1	Bise	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	Decreased to annual (December).
1473C-5	Overmyer	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Decreased to Supplemental Sampling.

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StationID	LastName	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Sched Comments
1473D-2	Wardian	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	
1473M-1	Richard	☑	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐	☐	
1573C-10	Lake	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	Increased to annual sampling - June.
1573C-17	RESIDENT	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	Decreased to Supplemental Sampling.
1573C-5	Shelp	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	
1573C-7	Kirby	☐	☐	☐	☑	☐	☐	☐	☐	☐	☑	☐	☐	
1573C-8	Williams	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
1573H-1	Hunter	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	
1573Q-1	Saunder	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	Increased to annual sampling - July.
1573R-2	Bell	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	Decreased to annual sampling.

Changes made to the Colbert Residential Sampling Schedule

StationID	Still active?	Comments/changes - ColRes review on 2/22/2022
1073E-4	Yes	Moved from October to November - kept on annual.
0273C-2	Yes	Decreased to Supplemental Sampling.
0273C-3	Yes	Decreased to Supplemental Sampling.
0273C-4	Yes	Decreased to Supplemental Sampling.
0273D-6	Yes	Moved Thornton from August to September - kept on annual.
1073L-4	Yes	Decreased to supplemental - assess/remove if non-detect.
1073M-1	Yes	Decreased to Supplemental Sampling.
1073P-2	Yes	Moved Petrelli to September - annual.
1073Q-4	Yes	Decreased to annual sampling - January.
1473C-5	Yes	Decreased to supplemental. Moving Overmeyer to September 2022 sampling.
1573C-10	Yes	Increased to annual sampling in the month of June.
1573C-17	Yes	Decreased to Supplemental Sampling.
1573H-1	Yes	Moved Hunter from May to March - kept on annual.
1573K-1	No	Well abandoned - hooked up to Whitworth Water.
1573Q-1	Yes	Increased to annual sampling in the month of July.

Table 4-2 Residential Groundwater Monitoring Program Results

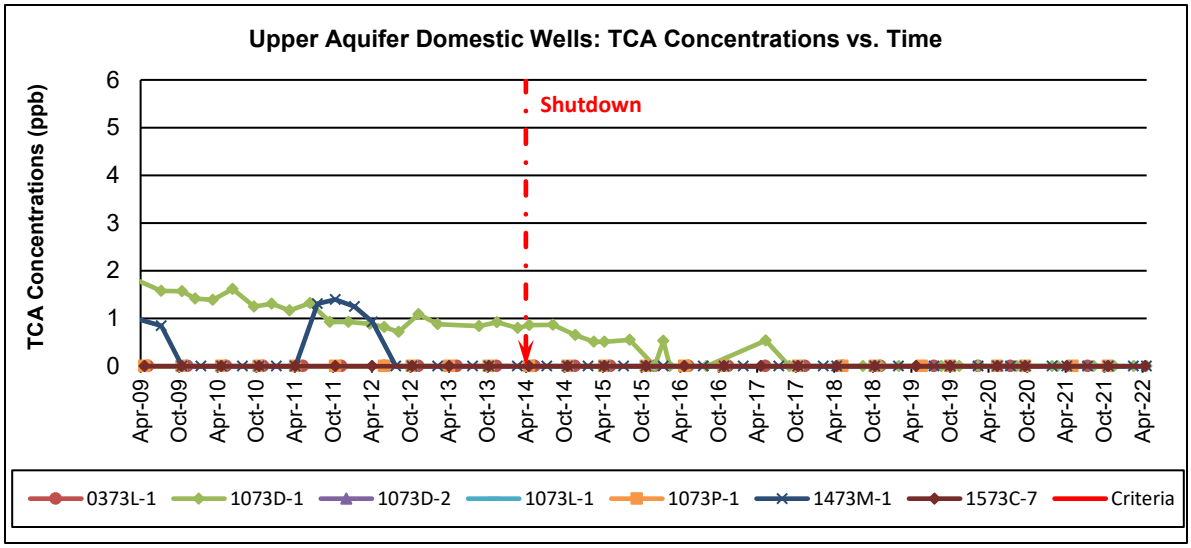
(June 2021 through May 2022)

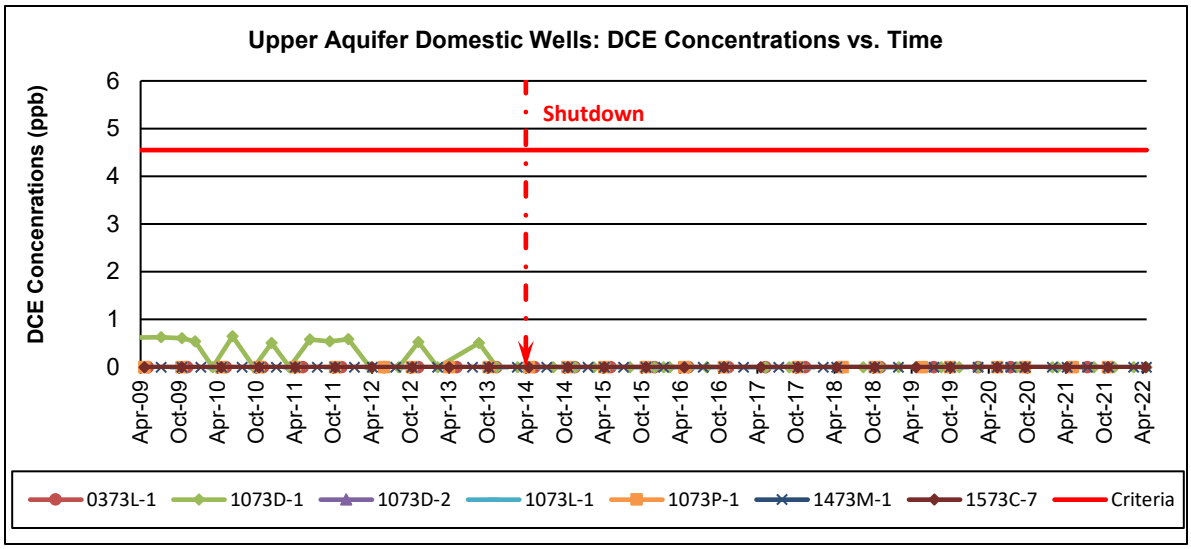
StationID	Aquifer	SampleDate	LastName	DCA	DCE	MC	PCE	TCA	TCE	VC
0273C-2	lower	5/3/2022	Jones/Schmidt	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273C-3	lower	5/3/2022	Warden	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273C-4	lower	5/3/2022	McQuesten	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273D-6	lower	8/11/2021	Thornton	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273F-4	lower	11/16/2021	Gander	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0373A-2	lower	10/20/2021	Resseman	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0373A-2	lower	4/12/2022	Resseman	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0373A-2	lower	6/22/2022	Resseman	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0373A-4	lower	6/22/2022	Walker	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0373L-1	upper	7/14/2021	Sterling	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0373L-1	upper	7/12/2022	Sterling	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073C-1S	upper	5/4/2022	Alderson SPRINGS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073D-1	upper	8/12/2021	Nerren	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073D-1	upper	11/16/2021	Nerren	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073D-1	upper	2/17/2022	Nerren	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073D-1	upper	4/19/2022	Nerren	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073E-2	upper	7/14/2021	Pullen	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073E-2	upper	10/19/2021	Pullen	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073E-2	upper	4/12/2022	Pullen	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073E-2	upper	7/12/2022	Pullen	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073E-3	upper	8/12/2021	Clark	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073E-3	upper	11/16/2021	Clark	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073E-3	upper	2/16/2022	Clark	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073E-4		10/20/2021	Carpenter	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073G-1	lower	10/20/2021	Rux	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073G-1	lower	4/13/2022	Rux	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073G-1	lower	6/22/2022	Rux	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073J-1	lower	7/14/2021	Moreno	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073J-1	lower	10/20/2021	Moreno	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073J-1	lower	4/13/2022	Moreno	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073J-1	lower	7/13/2022	Moreno	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-1	upper	10/20/2021	Halpin	**0.91**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-1	upper	4/12/2022	Halpin	**0.52**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-1	upper	6/22/2022	Halpin	**0.79**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

StationID	Aquifer	SampleDate	LastName	DCA	DCE	MC	PCE	TCA	TCE	VC
1073L-2	upper	10/19/2021	Countryman	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-2	upper	4/12/2022	Countryman	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-3	upper	8/12/2021	Anderson	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-3	upper	11/16/2021	Anderson	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-3	upper	2/16/2022	Anderson	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-4	lower	5/3/2022	Thomas	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073M-3	upper	5/3/2022	Lane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073M-3	upper	6/22/2022	Lane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073P-1	upper	10/19/2021	Greenen	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073P-2	upper	8/11/2021	Petrelli	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073Q-4	lower	2/16/2022	NORTH MEADOWS WATER	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1173B-1	lower	11/16/2021	Bise	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473C-5	lower	5/3/2022	Overmyer	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473D-2	upper	8/11/2021	Wardian	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473D-2	upper	11/16/2021	Wardian	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473D-2	upper	2/16/2022	Wardian	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473M-1	upper	7/14/2021	Richard	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473M-1	upper	10/20/2021	Richard	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473M-1	upper	2/16/2022	Richard	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473M-1	upper	4/19/2022	Richard	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473M-1	upper	7/13/2022	Richard	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573C-10	lower	5/3/2022	Lake	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573C-17	lower	4/13/2022	RESIDENT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573C-5	lower	8/11/2021	Shelp	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573C-7	upper	10/19/2021	Kirby	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573C-7	upper	4/13/2022	Kirby	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573C-8	upper	2/16/2022	Williams	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573H-1	lower	4/13/2022	Hunter	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573Q-1	upper	7/14/2021	Saunder	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573Q-1	upper	5/3/2022	Saunder	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573Q-1	upper	7/12/2022	Saunder	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

***Bold** indicates a value greater than non-detection.

Figure 4-2 Upper Aquifer Residential Wells Concentrations vs Time





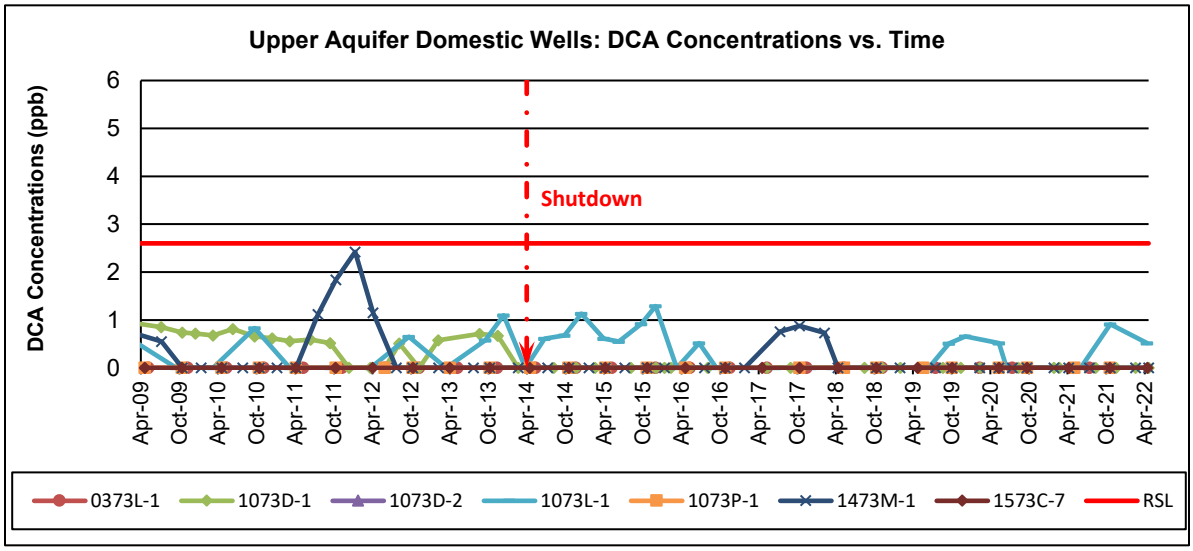
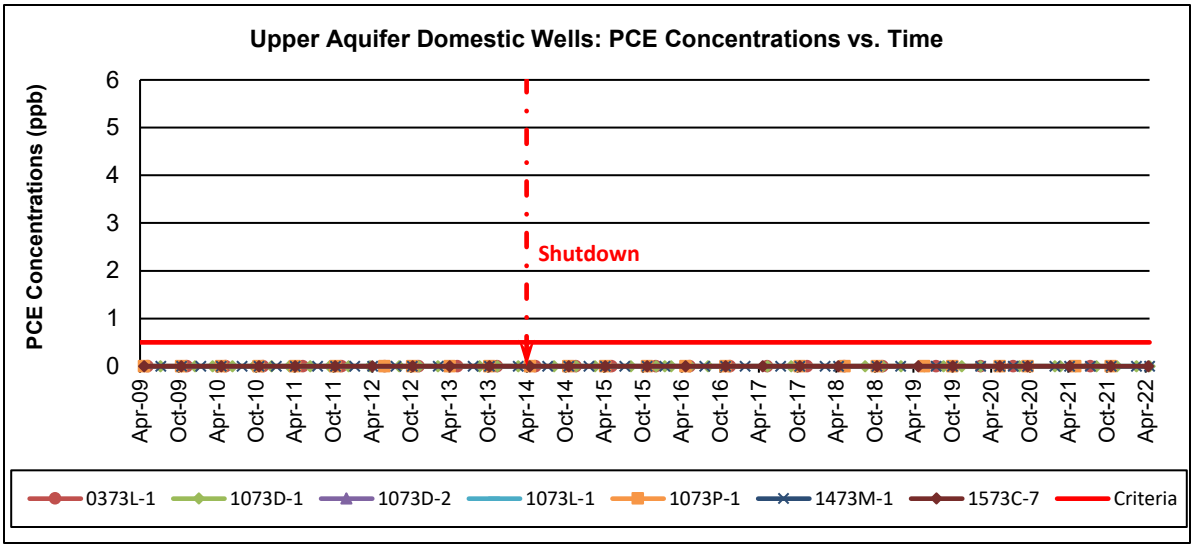


Figure 4-3 Upper Aquifer Residential Wells Concentrations vs Time



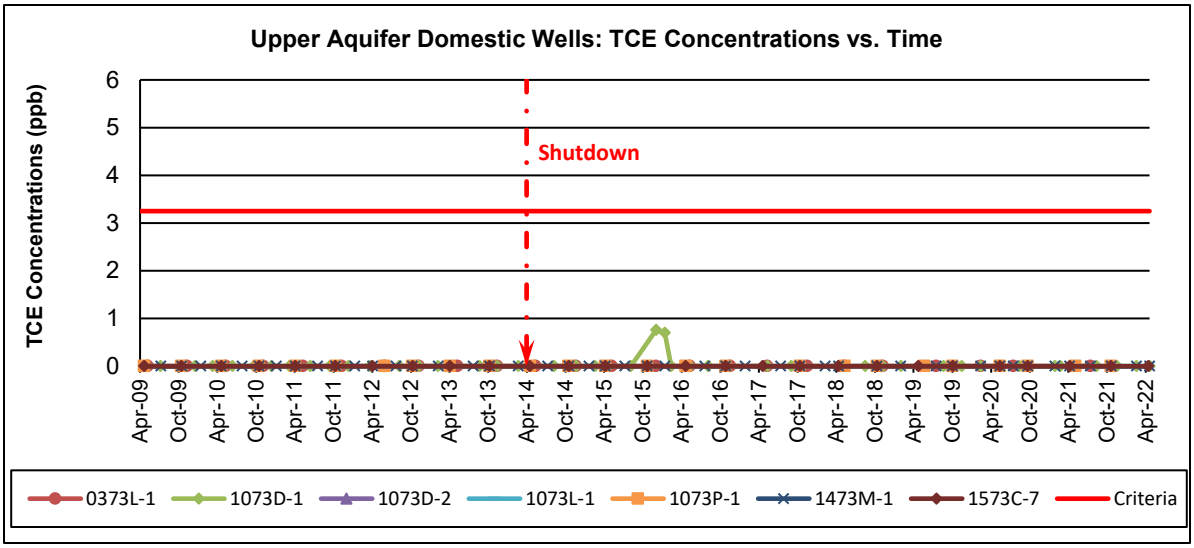
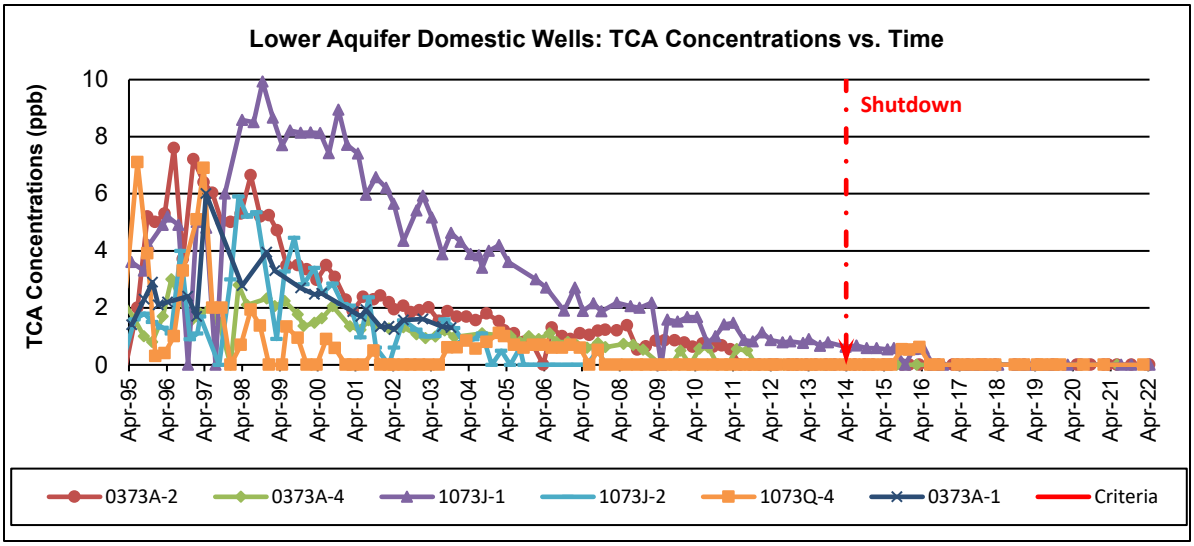
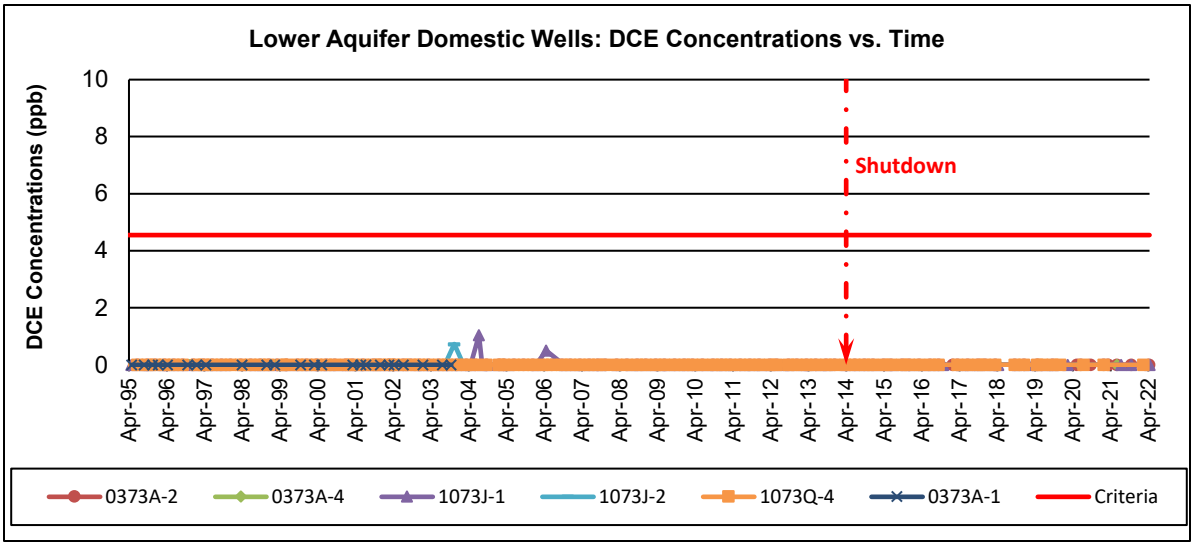


Figure 4-4 Lower Aquifer Residential Wells Concentrations vs Time





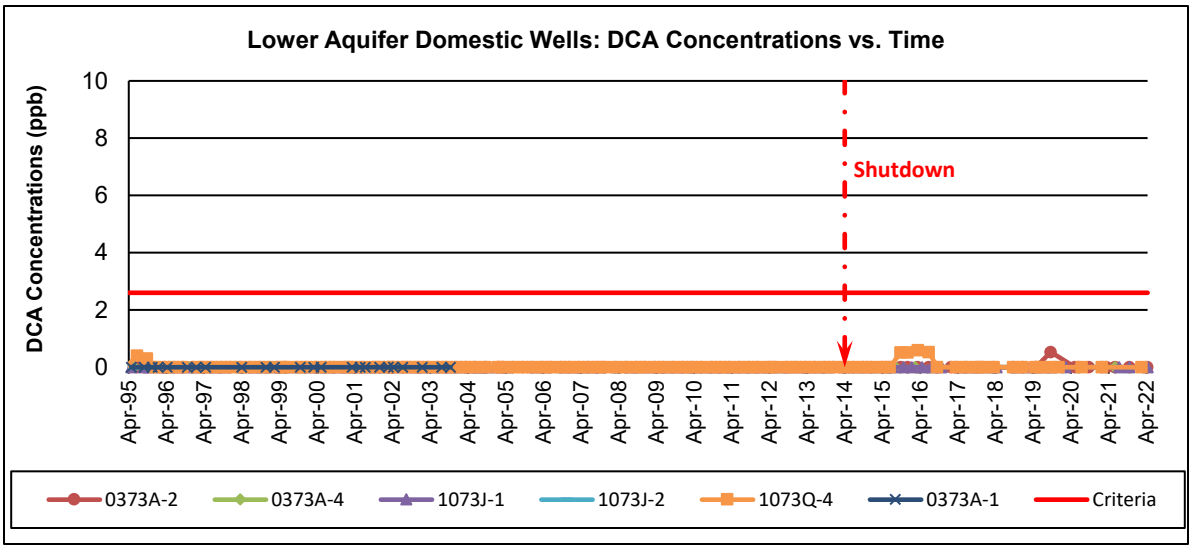
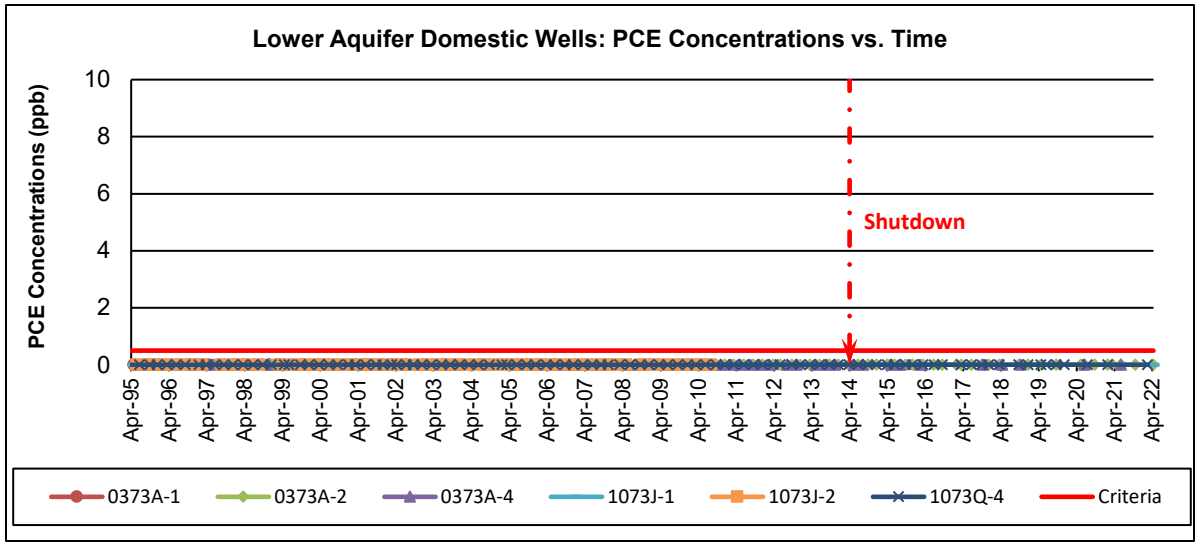
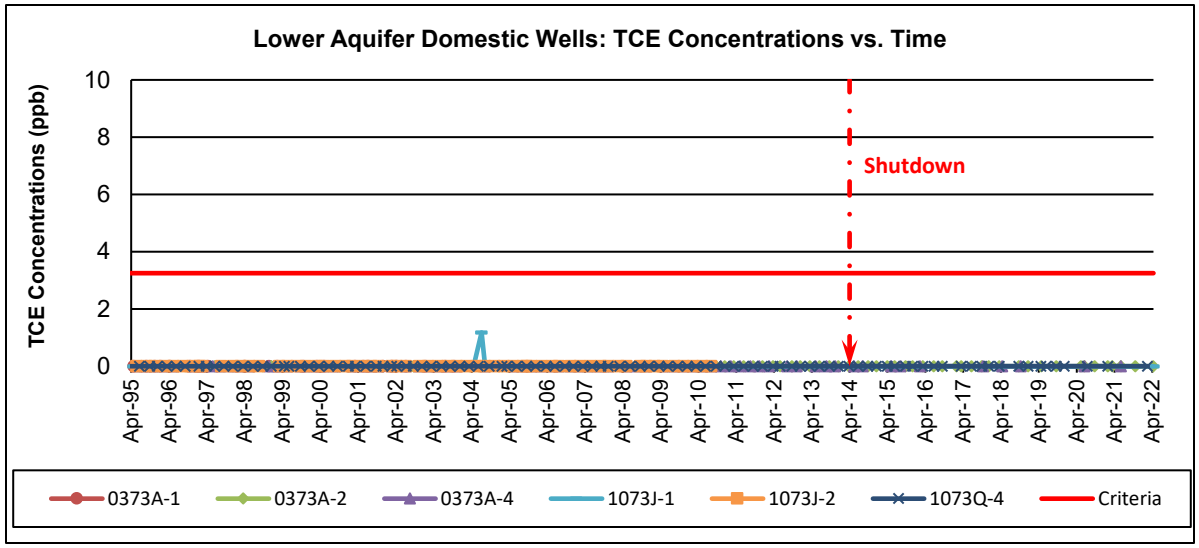


Figure 4-5 Lower Aquifer Residential Wells Concentrations vs Time





5.0 Colbert Landfill 1,4-Dioxane Sampling

During the Colbert Landfill 2019 EPA Five-Year Site Review, the EPA recommended that, "*Sampling for 1,4-Dioxane should be performed across a broader network of monitoring wells, including residential wells for at least two sampling events*" to evaluate the presence and extent of 1,4-Dioxane in post-shutdown conditions. The monitoring wells that are sampled annually for 1,4-Dioxane were selected prior to the P&T system shutdown based on sampling events conducted from 2005 – 2008, and contaminant transport/groundwater flow conditions may have changed. To evaluate the presence and extent of 1,4-Dioxane in post-shutdown conditions, Spokane County applied for a Remedial Action Grant through the Department of Ecology, and the 1,4-Dioxane sampling through the grant began in October 2021. From October 2021 to June 2023, approximately 259 1,4-Dioxane samples will be collected across over 95+ wells, which will allow Spokane County to update the Colbert Landfill 1,4-Dioxane sampling plan.

5.1 Lower Aquifer 1,4-Dioxane Results

The distribution of 1,4-Dioxane in the lower aquifer appears to be more dispersed than the 1,4-Dioxane evaluation conducted from 2005 - 2008. While the increase in 1,4-Dioxane concentrations/prevalence present in the lower aquifer could have been influenced by post-shutdown groundwater movement and/or contaminant transport, utilizing lower detection/quantitation limits for the 1,4-Dioxane laboratory analyses (0.01 ug/L) compared to the analyses conducted from 2005 - 2008 (up to 5 ug/L) is most likely a prominent factor. Table 5-1 summarizes differences between the residential/monitoring well 1,4-Dioxane results obtained from 2005 - 2008 and the results obtained in 2021/2022, and Figure 5-1 shows the geospatial distribution and concentrations of 1,4-Dioxane in the lower aquifer wells. Lower aquifer supplemental wells CD-04C1 and CD-04E1 exceeded the 1,4-Dioxane cleanup criteria during this reporting period, however, these Supplemental wells are not criteria dependent, and the criteria exceedances are used as a reference only.

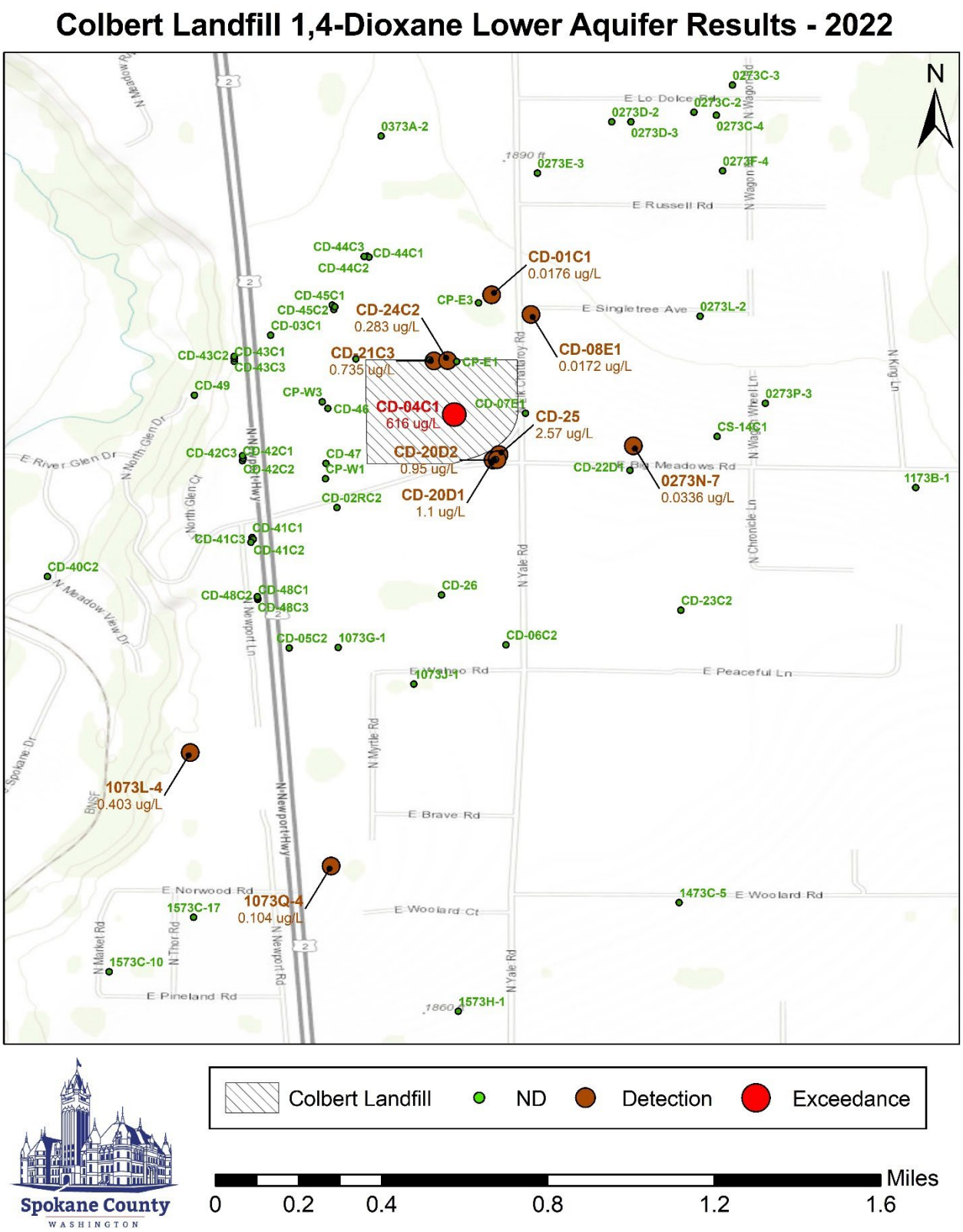
Table 5-1: Lower Aquifer 1,4-Dioxane Evaluation Results Comparison

StationID	Aquifer	Analyte	SampleDate	Conc	Units	Qualifier	SampleDate	Conc	Units	Qualifier
0273E-3	lower	1,4-Dioxane	5/11/2007	ND	ug/L	U	5/3/2022	ND	ug/L	U
0273C-3	lower	1,4-Dioxane	10/5/2005	ND	ug/L	U	5/3/2022	ND	ug/L	U
0273C-4	lower	1,4-Dioxane	2/7/2006	ND	ug/L	U	5/3/2022	ND	ug/L	U
0273F-4	lower	1,4-Dioxane	10/4/2005	ND	ug/L	U	11/16/2021	ND	ug/L	U
0273L-2	lower	1,4-Dioxane	5/9/2007	ND	ug/L	U	5/16/2022	ND	ug/L	U
0273N-7	lower	1,4-Dioxane	5/9/2007	ND	ug/L	U	5/12/2022	**0.0336**	ug/L	
0273P-3	lower	1,4-Dioxane	5/7/2007	ND	ug/L	U	5/3/2022	ND	ug/L	U
0373A-2	lower	1,4-Dioxane	10/4/2005	ND	ug/L	U	10/20/2021	ND	ug/L	U
0373A-4	lower	1,4-Dioxane	10/4/2005	ND	ug/L	U	6/22/2022	ND	ug/L	U
0373J-3	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	7/12/2022	ND	ug/L	U
1073G-1	lower	1,4-Dioxane	10/4/2005	ND	ug/L	U	10/20/2021	ND	ug/L	U
1073J-1	lower	1,4-Dioxane	1/10/2006	ND	ug/L	U	10/20/2021	ND	ug/L	U
1073L-4	lower	1,4-Dioxane	10/4/2005	ND	ug/L	U	5/3/2022	**0.403**	ug/L	
1073Q-4	lower	1,4-Dioxane	9/14/2005	ND	ug/L	UJ	2/16/2022	**0.104**	ug/L	
1173B-1	lower	1,4-Dioxane	12/12/2005	ND	ug/L	U	11/16/2021	ND	ug/L	U

StationID	Aquifer	Analyte	SampleDate	Conc	Units	Qualifier	SampleDate	Conc	Units	Qualifier
1573C-17	lower	1,4-Dioxane	10/4/2005	ND	ug/L	U	4/13/2022	ND	ug/L	U
1573H-1	lower	1,4-Dioxane	10/4/2005	ND	ug/L	U	4/13/2022	ND	ug/L	U
CD-01C1	lower	1,4-Dioxane	5/10/2007	ND	ug/L	U	5/16/2022	0.0176	ug/L	
CD-02RC2	lower	1,4-Dioxane	5/9/2007	ND	ug/L	U	5/11/2022	ND	ug/L	U
CD-03C1	lower	1,4-Dioxane	5/7/2007	ND	ug/L	U	5/9/2022	ND	ug/L	U
CD-04C1	lower	1,4-Dioxane	5/11/2007	96	ug/L	E	5/16/2022	616	ug/L	
CD-04E1	lower	1,4-Dioxane	5/11/2007	41	ug/L		5/16/2022	99.4	ug/L	
CD-05C2	lower	1,4-Dioxane	5/7/2007	ND	ug/L	U	5/4/2022	ND	ug/L	U
CD-06C2	lower	1,4-Dioxane	5/9/2007	ND	ug/L	U	5/12/2022	ND	ug/L	U
CD-07E1	lower	1,4-Dioxane	5/9/2007	ND	ug/L	U	5/4/2022	ND	ug/L	U
CD-08E1	lower	1,4-Dioxane	5/10/2007	ND	ug/L	U	5/12/2022	0.0172	ug/L	
CD-21C1	lower	1,4-Dioxane	5/10/2007	ND	ug/L	U	5/10/2022	ND	ug/L	U
CD-22D1	lower	1,4-Dioxane	5/7/2007	ND	ug/L	U	5/9/2022	ND	ug/L	U
CD-23C2	lower	1,4-Dioxane	5/10/2007	ND	ug/L	U	5/12/2022	ND	ug/L	U
CD-24C2	lower	1,4-Dioxane	5/8/2007	ND	ug/L	U	5/10/2022	0.283	ug/L	
CD-26	lower	1,4-Dioxane	5/10/2007	ND	ug/L	U	5/16/2022	ND	ug/L	U
CD-40C2	lower	1,4-Dioxane	9/14/2005	ND	ug/L	U	5/10/2022	ND	ug/L	U
CD-41C1	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-41C2	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-41C3	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-42C1	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-42C2	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-42C3	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-43C1	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-43C2	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-43C3	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-44C1	lower	1,4-Dioxane	7/20/2005	ND	ug/L	U	4/20/2022	ND	ug/L	U
CD-44C2	lower	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/20/2022	ND	ug/L	U
CD-44C3	lower	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/20/2022	ND	ug/L	U
CD-45C1	lower	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/20/2022	ND	ug/L	U
CD-45C2	lower	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/20/2022	ND	ug/L	U
CD-45C3	lower	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/20/2022	ND	ug/L	U
CD-46	lower	1,4-Dioxane	5/8/2007	ND	ug/L	U	5/12/2022	ND	ug/L	U
CD-47	lower	1,4-Dioxane	5/10/2007	ND	ug/L	U	5/11/2022	ND	ug/L	U
CD-48C1	lower	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-48C2	lower	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-48C3	lower	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CP-E1	lower	1,4-Dioxane	7/20/2005	ND	ug/L	U	7/12/2022	0.09	ug/L	
CP-E2	lower	1,4-Dioxane	10/6/2005	ND	ug/L	U	7/12/2022	1.24	ug/L	
CP-E3	lower	1,4-Dioxane	5/16/2007	ND	ug/L	U	7/12/2022	0.0206	ug/L	
CP-W1	lower	1,4-Dioxane	5/16/2007	ND	ug/L	U	4/20/2022	ND	ug/L	U
CP-W2	lower	1,4-Dioxane	7/20/2005	6.3	ug/L		7/12/2022	0.0208	ug/L	
CP-W3	lower	1,4-Dioxane	10/6/2005	ND	ug/L	U	7/12/2022	0.043	ug/L	
CS-14C1	lower	1,4-Dioxane	5/8/2007	ND	ug/L	U	5/12/2022	ND	ug/L	U

1,4-Dioxane concentration increases are displayed in **RED**, and decreases are displayed in **BLUE**. Analytes that exceeded clean-up criteria this reporting period are displayed in **ORANGE**.

Figure 5-1: Geospatial Distribution/1,4-Dioxane Concentrations – Lower Aquifer



5.2 Upper Aquifer 1,4-Dioxane Results

There were many differences observed between the 1,4-Dioxane results found in the upper aquifer during this reporting period/evaluation compared to the 1,4-Dioxane results found from the 2005 – 2008 evaluation. 1,4-Dioxane concentrations decreased in three monitoring/residential wells, and several wells exhibited detectable concentrations for 1,4-Dioxane during this evaluation that exhibited non-detectable concentrations during the 2005 – 2008 evaluation. As mentioned above in Section 5.1, while the increase in 1,4-Dioxane concentrations/prevalence could have been influenced by post-shutdown groundwater movement and/or contaminant transport, utilizing lower detection/quantitation limits for the 1,4-Dioxane laboratory analyses (0.01 ug/L) compared to the analyses conducted from 2005 - 2008 (up to 5 ug/L) is most likely a prominent factor.

All 5 annually sampled wells that are currently on the 1,4-Dioxane sampling plan remained consistent with their designated trends (increasing or plateauing), with the exception of CD-40C1. County personnel will collect additional samples to confirm 1,4-Dioxane concentrations found at these wells. The only residential/monitoring well in the upper aquifer that exceeded the 1,4-Dioxane concentrations during this reporting period was CD-36A1 at 10.4 ppb. CD-36A1 has been placed on a quarterly sampling schedule to confirm concentrations and monitor COC trends. Table 5-2 summarizes observed differences between the residential/monitoring well 1,4-Dioxane results obtained from 2005 - 2008 and the results obtained in 2021/2022, and Figure 5-2 shows the geospatial distribution/concentrations of 1,4-Dioxane in the lower aquifer wells.

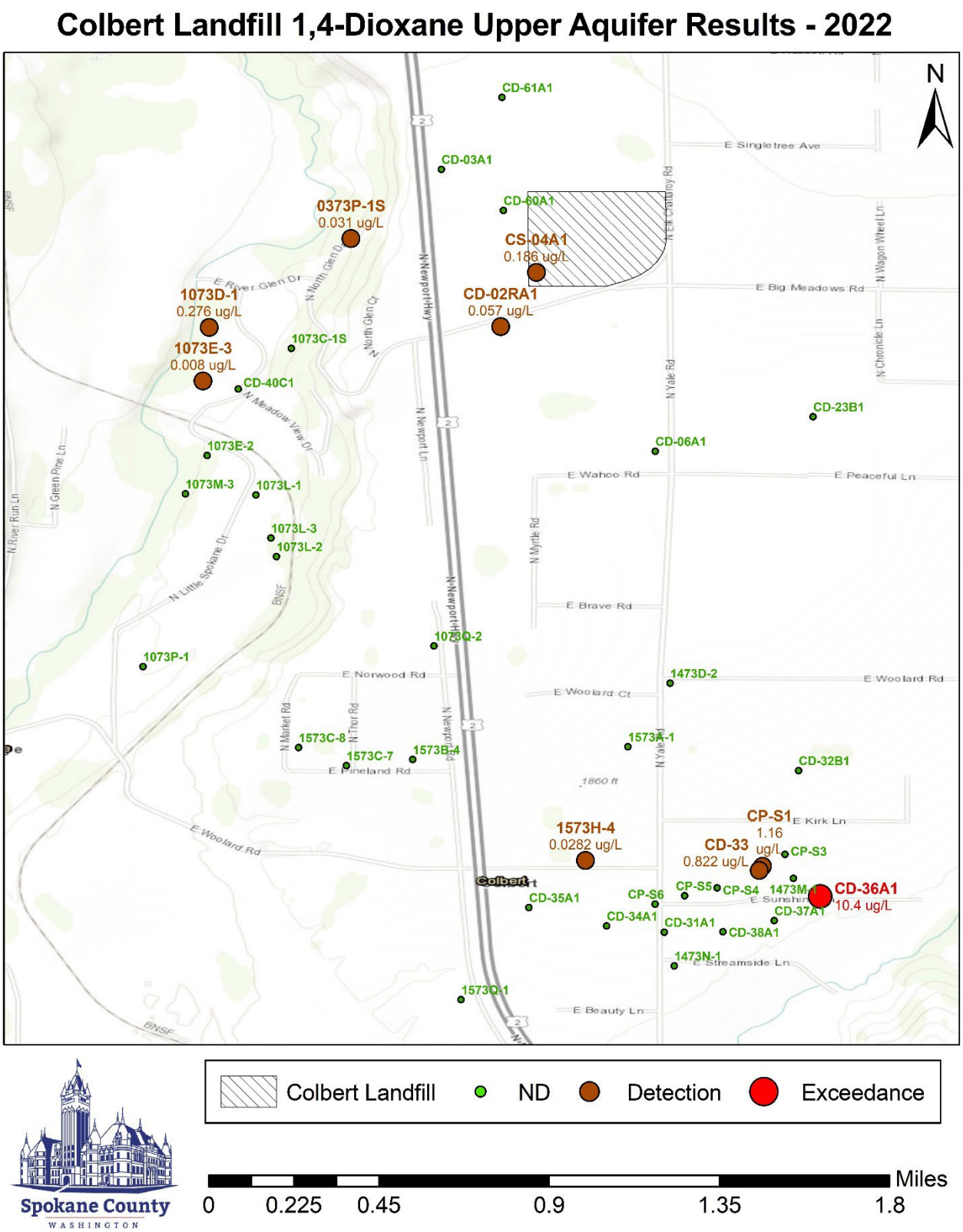
Table 5-2 Upper Aquifer 1,4-Dioxane Evaluation Results Comparison

StationID	Aquifer	Analyte	SampleDate	Conc	Units	Qualifier	SampleDate	Conc	Units	Qualifier
1073E-3	upper	1,4-Dioxane	10/5/2005	ND	ug/L	U	11/16/2021	ND	ug/L	U
1073E-2	upper	1,4-Dioxane	10/4/2005	ND	ug/L	U	10/19/2021	ND	ug/L	U
0373L-1	upper	1,4-Dioxane	11/2/2005	ND	ug/L	U	7/12/2022	ND	ug/L	U
0373P-1S	upper	1,4-Dioxane	5/11/2007	ND	ug/L	U	5/3/2022	0.031	ug/L	
1073C-1S	upper	1,4-Dioxane	5/11/2007	ND	ug/L	U	5/4/2022	ND	ug/L	U
1073D-1	upper	1,4-Dioxane	2/8/2006	ND	ug/L	U	4/19/2022	0.276	ug/L	
1073L-1	upper	1,4-Dioxane	10/4/2005	ND	ug/L	U	10/20/2021	ND	ug/L	U
1073L-2	upper	1,4-Dioxane	10/4/2005	ND	ug/L	U	10/19/2021	ND	ug/L	U
1073L-3	upper	1,4-Dioxane	10/4/2005	ND	ug/L	U	11/16/2021	ND	ug/L	U
1073P-1	upper	1,4-Dioxane	10/5/2005	ND	ug/L	U	10/19/2021	ND	ug/L	U
1073Q-2	upper	1,4-Dioxane	5/14/2007	ND	ug/L	U	5/3/2022	ND	ug/L	U
1473D-2	upper	1,4-Dioxane	11/2/2005	ND	ug/L	U	11/16/2021	ND	ug/L	U

StationID	Aquifer	Analyte	SampleDate	Conc	Units	Qualifier	SampleDate	Conc	Units	Qualifier
1473M-1	upper	1,4-Dioxane	10/5/2005	ND	ug/L	U	10/20/2021	ND	ug/L	U
1473N-1	upper	1,4-Dioxane	5/7/2007	ND	ug/L	U	5/10/2022	ND	ug/L	U
1573A-1	upper	1,4-Dioxane	5/7/2007	4.9	ug/L		4/19/2022	ND	ug/L	U
1573C-7	upper	1,4-Dioxane	10/5/2005	ND	ug/L	U	10/19/2021	ND	ug/L	U
1573C-8	upper	1,4-Dioxane	2/8/2006	ND	ug/L	U	2/16/2022	ND	ug/L	U
1573H-4	upper	1,4-Dioxane	5/8/2007	ND	ug/L	U	5/11/2022	0.0282	ug/L	
CD-02RA1	upper	1,4-Dioxane	5/8/2007	ND	ug/L	U	5/10/2022	0.057	ug/L	
CD-03A1	upper	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/21/2022	ND	ug/L	U
CD-06A1	upper	1,4-Dioxane	5/9/2007	ND	ug/L	U	5/12/2022	ND	ug/L	U
CD-23B1	upper	1,4-Dioxane	5/9/2007	ND	ug/L	U	5/10/2022	ND	ug/L	U
CD-31A1	upper	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-32B1	upper	1,4-Dioxane	5/7/2007	ND	ug/L	U	5/11/2022	ND	ug/L	U
CD-34A1	upper	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-35A1	upper	1,4-Dioxane	5/7/2007	ND	ug/L	U	5/4/2022	ND	ug/L	U
CD-36A1	upper	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/19/2022	10.4	ug/L	
CD-37A1	upper	1,4-Dioxane	5/16/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-38A1	upper	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CD-40C1	upper	1,4-Dioxane	9/14/2005	20	ug/L		4/19/2022	ND	ug/L	U
CD-60A1	upper	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/21/2022	ND	ug/L	U
CD-61A1	upper	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/21/2022	ND	ug/L	U
CP-S1	upper	1,4-Dioxane	9/14/2005	29	ug/L		7/12/2022	1.43	ug/L	
CP-S3	upper	1,4-Dioxane	5/14/2007	ND	ug/L	U	4/19/2022	ND	ug/L	U
CP-S4	upper	1,4-Dioxane	10/6/2005	ND	ug/L	U	4/20/2022	ND	ug/L	U
CP-S5	upper	1,4-Dioxane	10/6/2005	ND	ug/L	U	4/20/2022	ND	ug/L	U
CP-S6	upper	1,4-Dioxane	10/6/2005	ND	ug/L	U	4/20/2022	ND	ug/L	U
CS-04A1	upper	1,4-Dioxane	5/15/2007	ND	ug/L	U	4/21/2022	0.186	ug/L	

1,4-Dioxane concentration increases are displayed in **RED**, and decreases are displayed in **BLUE**. Analytes that exceeded clean-up criteria this reporting period are displayed in **ORANGE**.

Figure 5-2 Geospatial Distribution/1,4-Dioxane Concentrations – Upper Aquifer



6.0 Supplemental Sampling

Every five years, supplemental wells are sampled during the annual sampling event to gather additional information and data on groundwater movement and contaminant transport around the Colbert Landfill. 46 wells were sampled during the May 2022 Supplemental Sampling event.

6.1 Locations and Schedule

Sampling locations for the 2022 supplemental sampling event can be found in Figure 6-1. The supplemental sampling matrix is included in Appendix E.

6.2 Monitoring Results

Because supplemental sampling is a voluntary program, there are no criteria for monitoring or reporting. The data is primarily used to get a more accurate snapshot of the groundwater flow and contaminant movement within and around the Colbert Landfill site. For reference only (supplemental wells are not criteria dependent), criteria exceedances observed in the supplemental wells during the 2022 supplemental sampling event are presented in Table 6-3 (Consent Decree criteria) and Table 6-4 (updated criteria values from the Colbert Landfill 6th Five-year Review).

6.2.1 Field Data and Groundwater Elevations

All supplemental field parameters and groundwater elevations for this reporting period are shown in Table 6-1. Conductivity values ranged from 229 to 1127 umhos/cm. Field pH values ranged from 6.91 to 8.05. Groundwater elevations from supplemental wells were included in the creation of both the lower and upper aquifer groundwater flow geospatial maps presented in Figure 2-3 and Figure 3-3.

6.2.2 Chemical Data

Constituent of Concern concentrations time-series plots are shown in Figure 6-2. Supplemental data was used in the creation and analysis of this year's groundwater elevation contours and COC plume maps for both lower and upper aquifers.

6.3 Supplemental Sampling Summary/Observations

A comparison of the COC concentrations observed in the supplemental wells between the Supplemental Sampling events conducted in 2012, 2017, and 2022 is presented in Table 6-5. Results for the 2022 Supplemental Sampling event indicate that there have been both increases and decreases in COC concentrations compared to concentrations observed from the Supplemental Sampling results in 2017. Supplemental wells CD-01C1 and CD-26 have exhibited decreases in TCA and DCE concentrations. Supplemental well CD-04E1 exhibited decreases in TCA concentrations, but DCE concentrations have increased from observed concentrations collected in 2012. CD-24C2, CD-02RC2, and CD-07E1 mainly exhibited increases in COC concentrations from the observed concentrations collected in 2017. Data indicates (with exceptions) that most of the COC concentration decreases occurred towards the outer edges of the plume(s), while COC concentration increases occurred closer to the center(s) of the plume(s).

Figure 6-1 Supplemental Well Sampling Locations

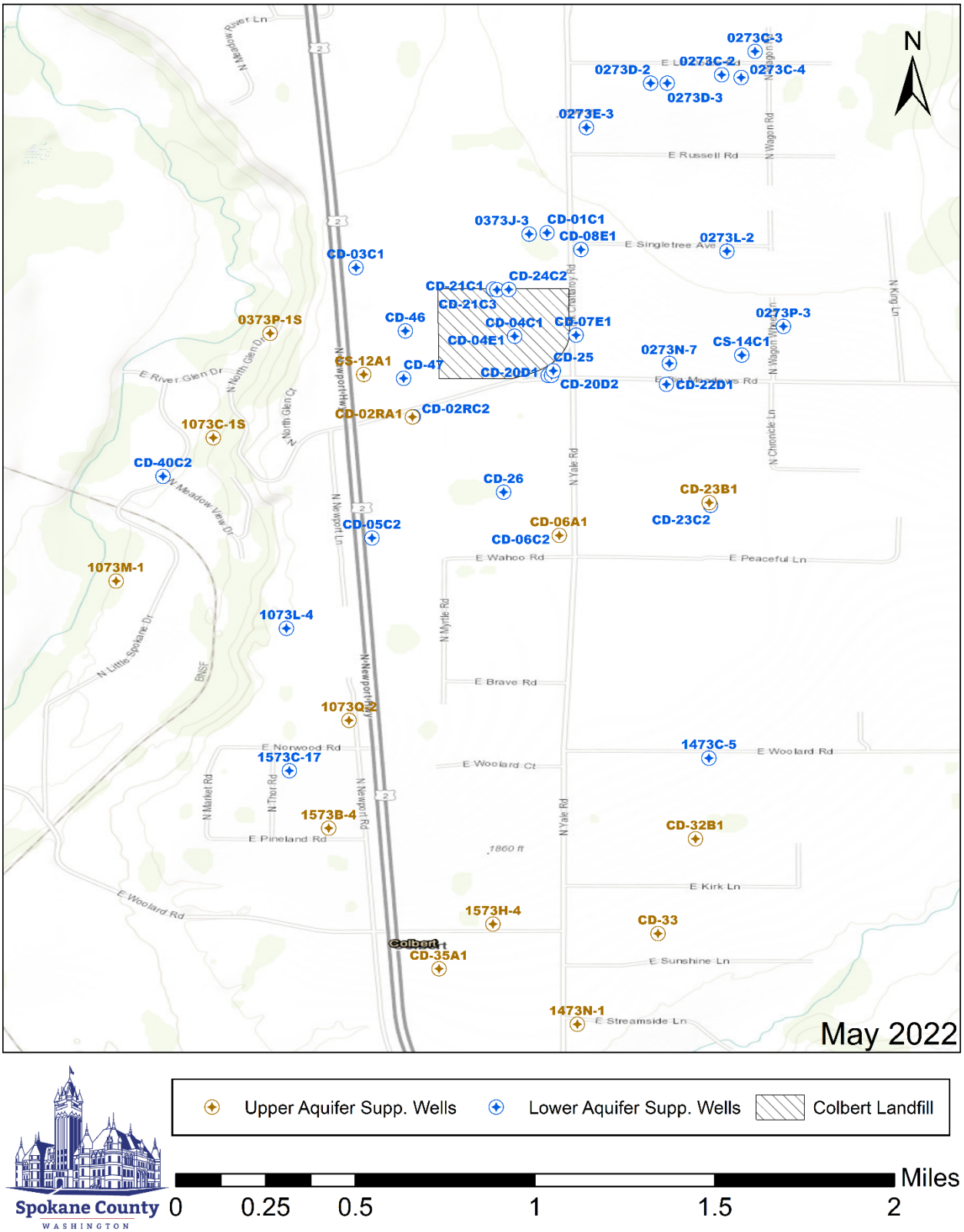


Table 6-1 Supplemental Wells Field Parameters

StationID	Aquifer	Program	SampleDate	WtrElev	Temp	PH	Conductivity	Turbidity
0273C-2	lower	SUP	5/3/2022		11.4	7.82	569	0.18
0273C-3	lower	SUP	5/3/2022		10.2	7.63	419	0.09
0273C-4	lower	SUP	5/3/2022		11.9	7.78	418	0.39
0273D-2	lower	SUP	5/10/2022		13.2	7.02	291	0.96
0273D-3	lower	SUP	5/11/2022		13.7	7.62	263	0.59
0273E-3	lower	SUP	5/3/2022		10.8	7.52	446	0.27
0273L-2	lower	SUP	5/16/2022		14.3	7.26	401	2.17
0273N-7	lower	SUP	5/12/2022		12.6	7.2	723	0.22
0273P-3	lower	SUP	5/3/2022	1784.87	11.6	7.82	383	0.11
0373J-3	lower	SUP	7/12/2022		11.1	7.04	983	0.49
1073L-4	lower	SUP	5/3/2022	1678.01	11.2	8.01	358	0.12
1473C-5	lower	SUP	5/3/2022		11.9	7.94	463	0.12
CD-01C1	lower	SUP	5/16/2022	1670.45	13.3	7.01	764	1.55
CD-02RC2	lower	SUP	5/11/2022	1670.23	12.1	7.74	475	0.47
CD-03C1	lower	SUP	5/9/2022	1669.22	10.9	7.9	465	0.49
CD-04C1	lower	SUP	5/16/2022	1723.11	12.8	7.71	598	7.29
CD-04E1	lower	SUP	5/16/2022	1670.02	14.3	7.12	938	17.1
CD-05C2	lower	SUP	5/4/2022	1676.24	10.9	7.85	494	1.21
CD-06C2	lower	SUP	5/12/2022	1684.57	13	7.88	454	0.22
CD-07E1	lower	SUP	5/4/2022	1710.12	14	6.92	319	0.18
CD-08E1	lower	SUP	5/12/2022	1678.12	13.7	7.27	676	2.18
CD-20D1	lower	SUP	5/17/2022	1707.01	12.4	7.08	1072	0.89
CD-20D2	lower	SUP	5/17/2022	1707.19	13.6	7.07	1010	0.56
CD-21C1	lower	SUP	5/10/2022	1669.79	11.6	7.02	1011	0.21
CD-21C3	lower	SUP	5/17/2022	1669.94	13.2	7.35	850	0.18
CD-22D1	lower	SUP	5/9/2022	1771.4	12.8	7.12	339	1.2
CD-23C2	lower	SUP	5/12/2022	1689.72	12.1	7.39	496	1.22
CD-24C2	lower	SUP	5/10/2022	1669.86	12.3	6.91	1127	0.31
CD-25	lower	SUP	5/16/2022	1705.88	13.5	7.41	883	0.72
CD-26	lower	SUP	5/16/2022	1678.81	12.7	7.18	837	0.89
CD-40C2	lower	SUP	5/10/2022	1668.95	10.7	8.05	266	0.71
CD-46	lower	SUP	5/12/2022	1669.5	10.9	7.56	660	1.8
CD-47	lower	SUP	5/11/2022	1669.85	11.9	7.77	484	0.18
CS-14C1	lower	SUP	5/12/2022	1784.3	11	7.56	465	10.21
0373P-1S	upper	SUP	5/3/2022		11.3	7.48	536	0.18
1073C-1S	upper	SUP	5/4/2022		9.4	7.86	620	0.48
1073Q-2	upper	SUP	5/3/2022		10.5	7.45	635	0.15
1473N-1	upper	SUP	5/10/2022	1759.81	10.6	7.4	524	2.33
1573B-4	upper	SUP	5/3/2022		10.9	7.52	582	0.81
1573H-4	upper	SUP	5/11/2022	1760.94	11	7.37	683	1.33
CD-02RA1	upper	SUP	5/10/2022	1770.08	9.4	7.07	718	0.98
CD-06A1	upper	SUP	5/12/2022	1772.42	11.8	7.62	486	0.19
CD-23B1	upper	SUP	5/10/2022	1781.61	11.7	7.65	432	0.55
CD-32B1	upper	SUP	5/11/2022	1760.32	10.9	7.93	229	0.89
CD-33	upper	SUP	5/17/2022	1758.66	10.8	7.53	528	0.12
CD-35A1	upper	SUP	5/4/2022	1760.81	11.6	7.52	749	0.46

Temp=degrees C; Conductivity=umhos/cm; Turbidity= NTU

Table 6-2 Supplemental Wells Analytical Results

StationID	SampleDate	DCA	DCE	MC	PCE	TCA	TCE
0273C-2	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273C-3	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273C-4	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273D-2	5/10/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273D-3	5/11/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273E-3	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0273L-2	5/16/2022	1.77	7.28	<0.5	<0.5	0.75	<0.5
0273N-7	5/12/2022	0.96	4.43	<0.5	<0.5	1.77	2.03
0273P-3	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0373J-3	7/12/2022	13.9	54.6	1.46	<0.5	59.5	<0.5
0373P-1S	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073C-1S	5/4/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073L-4	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1073Q-2	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473C-5	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1473N-1	5/10/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573B-4	5/3/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1573H-4	5/11/2022	<0.5	<0.5	<0.5	<0.5	<0.5	0.51
CD-01C1	5/16/2022	7.02	41	<0.5	<0.5	31.1	<0.5
CD-02RA1	5/10/2022	<0.5	<0.5	<0.5	0.57	<0.5	0.5
CD-02RC2	5/11/2022	0.6	4.29	<0.5	<0.5	9.99	1.82
CD-03C1	5/9/2022	<0.5	<0.5	<0.5	<0.5	0.79	<0.5
CD-04C1	5/16/2022	31.4	2.6	<0.5	<0.5	<0.5	<0.5
CD-04E1	5/16/2022	173	293	<0.5	2.24	8.56	12.2
CD-05C2	5/4/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-06A1	5/12/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-06C2	5/12/2022	<0.5	0.76	<0.5	<0.5	1.05	<0.5
CD-07E1	5/4/2022	0.75	5.36	<0.5	<0.5	0.77	<0.5
CD-08E1	5/12/2022	3.36	37.4	<0.5	<0.5	6.23	5.99
CD-20D1	5/17/2022	26.4	116	<0.5	0.69	38.3	107
CD-20D2	5/17/2022	26.9	117	<0.5	0.78	36.1	118
CD-21C1	5/10/2022	2.09	5.42	<0.5	<0.5	5.07	<0.5
CD-21C3	5/17/2022	84.7	558	2.92	<0.5	201	11.6
CD-22D1	5/9/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-23B1	5/10/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-23C2	5/12/2022	0.75	4.3	<0.5	<0.5	10.9	1.85
CD-24C2	5/10/2022	5.4	7.82	0.87	1.78	2.98	6.39
CD-25	5/16/2022	42.8	185	<0.5	1.59	21.6	241
CD-26	5/16/2022	6.63	14.2	<0.5	<0.5	18.8	52.4
CD-32B1	5/11/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-33	5/17/2022	<0.5	<0.5	<0.5	<0.5	<0.5	0.76
CD-35A1	5/4/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-40C2	5/10/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CD-46	5/12/2022	7.4	21.9	<0.5	<0.5	30.3	26.3
CD-47	5/11/2022	<0.5	3.8	<0.5	<0.5	3	0.63
CS-14C1	5/12/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

COC Concentrations are in ppb.

Table 6-3 Supplemental Wells Criteria Exceedances (Consent Decree criteria)

*Supplemental wells are not criteria dependent, and these exceedances are for reference only.

StationID	Aquifer	Program	SampleDate	Analyte	Result	Units	Flag
0273L-2	lower	SUP	5/16/2022	1,1-Dichloroethene	7.28	ug/L	Exceedance
0373J-3	lower	SUP	7/12/2022	1,1-Dichloroethene	54.6	ug/L	Exceedance
CD-01C1	lower	SUP	5/16/2022	1,1-Dichloroethene	39.2	ug/L	Exceedance
CD-04C1	lower	SUP	5/16/2022	1,4-Dioxane	616	ug/L	Exceedance
CD-04E1	lower	SUP	5/16/2022	1,1-Dichloroethene	293	ug/L	Exceedance
CD-04E1	lower	SUP	5/16/2022	1,4-Dioxane	99.4	ug/L	Exceedance
CD-04E1	lower	SUP	5/16/2022	Tetrachloroethene	2.24	ug/L	Exceedance
CD-04E1	lower	SUP	5/16/2022	Trichloroethene	12.2	ug/L	Exceedance
CD-08E1	lower	SUP	5/12/2022	1,1-Dichloroethene	37.4	ug/L	Exceedance
CD-08E1	lower	SUP	5/12/2022	Trichloroethene	5.99	ug/L	Exceedance
CD-20D1	lower	SUP	5/17/2022	1,1-Dichloroethene	116	ug/L	Exceedance
CD-20D1	lower	SUP	5/17/2022	Trichloroethene	107	ug/L	Exceedance
CD-20D2	lower	SUP	5/17/2022	1,1-Dichloroethene	117	ug/L	Exceedance
CD-20D2	lower	SUP	5/17/2022	Tetrachloroethene	0.78	ug/L	Exceedance
CD-20D2	lower	SUP	5/17/2022	Trichloroethene	118	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	1,1,1-Trichloroethane	201	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	1,1-Dichloroethene	558	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	Methylene Chloride	2.92	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	Trichloroethene	11.6	ug/L	Exceedance
CD-24C2	lower	SUP	5/10/2022	1,1-Dichloroethene	7.82	ug/L	Exceedance
CD-24C2	lower	SUP	5/10/2022	Tetrachloroethene	1.78	ug/L	Exceedance
CD-24C2	lower	SUP	5/10/2022	Trichloroethene	6.39	ug/L	Exceedance
CD-25	lower	SUP	5/16/2022	1,1-Dichloroethene	185	ug/L	Exceedance
CD-25	lower	SUP	5/16/2022	Tetrachloroethene	1.59	ug/L	Exceedance
CD-25	lower	SUP	5/16/2022	Trichloroethene	241	ug/L	Exceedance
CD-26	lower	SUP	5/16/2022	1,1-Dichloroethene	14.2	ug/L	Exceedance
CD-26	lower	SUP	5/16/2022	Trichloroethene	52.4	ug/L	Exceedance
CD-46	lower	SUP	5/12/2022	1,1-Dichloroethene	21.9	ug/L	Exceedance
CD-46	lower	SUP	5/12/2022	Trichloroethene	26.3	ug/L	Exceedance

Table 6-4 Supplemental Wells Criteria Exceedances (Updated criteria values)

Supplemental wells are not criteria-dependent, and these exceedances are for reference only.
**Increase for Trichloroethene (PCE) from the performance standard in the ROD (0.7 µg/L) to the current MCL (5 µg/L), and a decrease for 1,1-Dichloroethane (1,1-DCA) to the regional screening level (RSL) of 2.8 µg/L.*

StationID	Aquifer	Program	SampleDate	Analyte	Result	Units	Flag
0273L-2	lower	SUP	5/16/2022	1,1-Dichloroethene	7.28	ug/L	Exceedance
0373J-3	lower	SUP	7/12/2022	1,1-Dichloroethane	13.9	ug/L	Exceedance
0373J-3	lower	SUP	7/12/2022	1,1-Dichloroethene	54.6	ug/L	Exceedance
CD-01C1	lower	SUP	5/16/2022	1,1-Dichloroethane	6.97	ug/L	Exceedance
CD-01C1	lower	SUP	5/16/2022	1,1-Dichloroethene	39.2	ug/L	Exceedance
CD-04C1	lower	SUP	5/16/2022	1,1-Dichloroethane	31.4	ug/L	Exceedance
CD-04C1	lower	SUP	5/16/2022	1,4-Dioxane	616	ug/L	Exceedance
CD-04E1	lower	SUP	5/16/2022	1,1-Dichloroethane	173	ug/L	Exceedance
CD-04E1	lower	SUP	5/16/2022	1,1-Dichloroethene	293	ug/L	Exceedance
CD-04E1	lower	SUP	5/16/2022	1,4-Dioxane	99.4	ug/L	Exceedance
CD-04E1	lower	SUP	5/16/2022	Trichloroethene	12.2	ug/L	Exceedance
CD-08E1	lower	SUP	5/12/2022	1,1-Dichloroethane	3.36	ug/L	Exceedance
CD-08E1	lower	SUP	5/12/2022	1,1-Dichloroethene	37.4	ug/L	Exceedance
CD-08E1	lower	SUP	5/12/2022	Trichloroethene	5.99	ug/L	Exceedance
CD-20D1	lower	SUP	5/17/2022	1,1-Dichloroethane	26.4	ug/L	Exceedance
CD-20D1	lower	SUP	5/17/2022	1,1-Dichloroethene	116	ug/L	Exceedance
CD-20D1	lower	SUP	5/17/2022	Trichloroethene	107	ug/L	Exceedance
CD-20D2	lower	SUP	5/17/2022	1,1-Dichloroethane	26.9	ug/L	Exceedance
CD-20D2	lower	SUP	5/17/2022	1,1-Dichloroethene	117	ug/L	Exceedance
CD-20D2	lower	SUP	5/17/2022	Trichloroethene	118	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	1,1,1-Trichloroethane	201	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	1,1-Dichloroethane	84.7	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	1,1-Dichloroethene	558	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	Methylene Chloride	2.92	ug/L	Exceedance
CD-21C3	lower	SUP	5/17/2022	Trichloroethene	11.6	ug/L	Exceedance
CD-24C2	lower	SUP	5/10/2022	1,1-Dichloroethane	5.4	ug/L	Exceedance
CD-24C2	lower	SUP	5/10/2022	1,1-Dichloroethene	7.82	ug/L	Exceedance
CD-24C2	lower	SUP	5/10/2022	Trichloroethene	6.39	ug/L	Exceedance
CD-25	lower	SUP	5/16/2022	1,1-Dichloroethane	42.8	ug/L	Exceedance
CD-25	lower	SUP	5/16/2022	1,1-Dichloroethene	185	ug/L	Exceedance
CD-25	lower	SUP	5/16/2022	Trichloroethene	241	ug/L	Exceedance
CD-26	lower	SUP	5/16/2022	1,1-Dichloroethane	6.63	ug/L	Exceedance
CD-26	lower	SUP	5/16/2022	1,1-Dichloroethene	14.2	ug/L	Exceedance
CD-26	lower	SUP	5/16/2022	Trichloroethene	52.4	ug/L	Exceedance
CD-46	lower	SUP	5/12/2022	1,1-Dichloroethane	7.4	ug/L	Exceedance
CD-46	lower	SUP	5/12/2022	1,1-Dichloroethene	21.9	ug/L	Exceedance
CD-46	lower	SUP	5/12/2022	Trichloroethene	26.3	ug/L	Exceedance

Table 6-5 Supplemental Sampling Results Comparison/Summary

StationID	Aquifer	Analyte	2012 Year Results	2017 Year Results	Current Year Results	Difference from 2012	Difference from 2017	Units
0273D-2	lower	TCA	0	0	0	0	0	ug/L
0273D-2	lower	DCE	0	0	0	0	0	ug/L
0273D-2	lower	MC	0	0	0	0	0	ug/L
0273D-2	lower	PCE	0	0	0	0	0	ug/L
0273D-2	lower	TCE	0	0	0	0	0	ug/L
0273D-2	lower	VC	0	0	0	0	0	ug/L
0273E-3	lower	TCA	0	0	0	0	0	ug/L
0273E-3	lower	DCE	0	0	0	0	0	ug/L
0273E-3	lower	MC	0	0	0	0	0	ug/L
0273E-3	lower	PCE	0	0	0	0	0	ug/L
0273E-3	lower	TCE	0	0	0	0	0	ug/L
0273E-3	lower	VC	0	0	0	0	0	ug/L
0273L-2	lower	TCA	3.62	2.21	0.75	-2.87	-1.46	ug/L
0273L-2	lower	DCE	11.6	10.5	7.28	-4.32	-3.22	ug/L
0273L-2	lower	MC	0	0	0	0	0	ug/L
0273L-2	lower	PCE	0	0	0	0	0	ug/L
0273L-2	lower	TCE	0	0	0	0	0	ug/L
0273L-2	lower	VC	0	0	0	0	0	ug/L
0273N-7	lower	TCA	3.38	2.53	1.77	-1.61	-0.76	ug/L
0273N-7	lower	DCE	3.91	4.37	4.43	0.52	0.06	ug/L
0273N-7	lower	MC	0	0	0	0	0	ug/L
0273N-7	lower	PCE	0	0	0	0	0	ug/L
0273N-7	lower	TCE	2.21	2.24	2.03	-0.18	-0.21	ug/L
0273N-7	lower	VC	0	0	0	0	0	ug/L
0273P-3	lower	TCA	0.8	0	0	-0.8	0	ug/L
0273P-3	lower	DCE	0.55	0	0	-0.55	0	ug/L
0273P-3	lower	MC	0	0	0	0	0	ug/L
0273P-3	lower	PCE	0	0	0	0	0	ug/L
0273P-3	lower	TCE	0	0	0	0	0	ug/L
0273P-3	lower	VC	0	0	0	0	0	ug/L
0373P-1S	upper	TCA	0	0	0	0	0	ug/L
0373P-1S	upper	DCE	0	0	0	0	0	ug/L
0373P-1S	upper	MC	0	0	0	0	0	ug/L
0373P-1S	upper	PCE	0	0	0	0	0	ug/L
0373P-1S	upper	TCE	0	0	0	0	0	ug/L
0373P-1S	upper	VC	0	0	0	0	0	ug/L
1073C-1S	upper	TCA	0	0	0	0	0	ug/L
1073C-1S	upper	DCE	0	0	0	0	0	ug/L
1073C-1S	upper	MC	0	0	0	0	0	ug/L
1073C-1S	upper	PCE	0	0	0	0	0	ug/L
1073C-1S	upper	TCE	0	0	0	0	0	ug/L
1073C-1S	upper	VC	0	0	0	0	0	ug/L
1073Q-2	upper	TCA	1.11	0.91	0	-1.11	-0.91	ug/L
1073Q-2	upper	DCE	0	0	0	0	0	ug/L
1073Q-2	upper	MC	0	0	0	0	0	ug/L
1073Q-2	upper	PCE	0	0	0	0	0	ug/L
1073Q-2	upper	TCE	0	0	0	0	0	ug/L
1073Q-2	upper	VC	0	0	0	0	0	ug/L
1573B-4	upper	TCA	0	0	0	0	0	ug/L
1573B-4	upper	DCE	0	0	0	0	0	ug/L
1573B-4	upper	MC	0	0	0	0	0	ug/L
1573B-4	upper	PCE	0	0	0	0	0	ug/L
1573B-4	upper	TCE	0	0	0	0	0	ug/L
1573B-4	upper	VC	0	0	0	0	0	ug/L
1573H-4	upper	TCA	1	0	0	-1	0	ug/L
1573H-4	upper	DCE	0	0	0	0	0	ug/L
1573H-4	upper	MC	0	0	0	0	0	ug/L
1573H-4	upper	PCE	0	0	0	0	0	ug/L
1573H-4	upper	TCE	0	0	0.51	0.51	0.51	ug/L

StationID	Aquifer	Analyte	2012 Year Results	2017 Year Results	Current Year Results	Difference from 2012	Difference from 2017	Units
1573H-4	upper	VC	0	0	0	0	0	ug/L
CD-01C1	lower	TCA	106	56.9	30.1	-75.9	-26.8	ug/L
CD-01C1	lower	DCE	46.9	53	39.2	-7.7	-13.8	ug/L
CD-01C1	lower	MC	0	0	0	0	0	ug/L
CD-01C1	lower	PCE	0	0	0	0	0	ug/L
CD-01C1	lower	TCE	0.72	0	0	-0.72	0	ug/L
CD-01C1	lower	VC	0	0	0	0	0	ug/L
CD-02RA1	upper	TCA	0	0	0	0	0	ug/L
CD-02RA1	upper	DCE	0	0	0	0	0	ug/L
CD-02RA1	upper	MC	0	0	0	0	0	ug/L
CD-02RA1	upper	PCE	0.68	0.58	0.57	-0.11	-0.01	ug/L
CD-02RA1	upper	TCE	0.67	0.68	0.5	-0.17	-0.18	ug/L
CD-02RA1	upper	VC	0	0	0	0	0	ug/L
CD-02RC2	lower	TCA	6.42	9.86	9.99	3.57	0.13	ug/L
CD-02RC2	lower	DCE	3.99	3.88	4.29	0.3	0.41	ug/L
CD-02RC2	lower	MC	0	0	0	0	0	ug/L
CD-02RC2	lower	PCE	0	0	0	0	0	ug/L
CD-02RC2	lower	TCE	0.57	1.39	1.82	1.25	0.43	ug/L
CD-02RC2	lower	VC	0	0	0	0	0	ug/L
CD-03C1	lower	TCA	0	0	0.79	0.79	0.79	ug/L
CD-03C1	lower	DCE	0	0	0	0	0	ug/L
CD-03C1	lower	MC	0	0	0	0	0	ug/L
CD-03C1	lower	PCE	0	0	0	0	0	ug/L
CD-03C1	lower	TCE	0	0	0	0	0	ug/L
CD-03C1	lower	VC	0	0	0	0	0	ug/L
CD-05C2	lower	TCA	0	0	0	0	0	ug/L
CD-05C2	lower	DCE	0	0	0	0	0	ug/L
CD-05C2	lower	MC	0	0	0	0	0	ug/L
CD-05C2	lower	PCE	0	0	0	0	0	ug/L
CD-05C2	lower	TCE	0	0	0	0	0	ug/L
CD-05C2	lower	VC	0	0	0	0	0	ug/L
CD-06A1	upper	TCA	0	0	0	0	0	ug/L
CD-06A1	upper	DCE	0	0	0	0	0	ug/L
CD-06A1	upper	MC	0	0	0	0	0	ug/L
CD-06A1	upper	PCE	0	0	0	0	0	ug/L
CD-06A1	upper	TCE	0	0	0	0	0	ug/L
CD-06A1	upper	VC	0	0	0	0	0	ug/L
CD-06C2	lower	TCA	6.24	0.71	1.05	-5.19	0.34	ug/L
CD-06C2	lower	DCE	2.16	0	0.76	-1.4	0.76	ug/L
CD-06C2	lower	MC	0	0	0	0	0	ug/L
CD-06C2	lower	PCE	0	0	0	0	0	ug/L
CD-06C2	lower	TCE	0	0	0	0	0	ug/L
CD-06C2	lower	VC	0	0	0	0	0	ug/L
CD-07E1	lower	TCA	0	0	0.77	0.77	0.77	ug/L
CD-07E1	lower	DCE	0.65	1.87	5.36	4.71	3.49	ug/L
CD-07E1	lower	MC	0	0	0	0	0	ug/L
CD-07E1	lower	PCE	0	0	0	0	0	ug/L
CD-07E1	lower	TCE	0	0	0	0	0	ug/L
CD-07E1	lower	VC	0	0	0	0	0	ug/L
CD-08E1	lower	TCA	19.2	10.2	6.23	-12.97	-3.97	ug/L
CD-08E1	lower	DCE	37.4	32.6	37.4	0	4.8	ug/L
CD-08E1	lower	MC	0	0	0	0	0	ug/L
CD-08E1	lower	PCE	0	0	0	0	0	ug/L
CD-08E1	lower	TCE	6.78	6.49	5.99	-0.79	-0.5	ug/L
CD-08E1	lower	VC	0	0	0	0	0	ug/L
CD-21C1	lower	TCA	3.87	23	5.07	1.2	-17.93	ug/L
CD-21C1	lower	DCE	1.24	5.72	5.42	4.18	-0.3	ug/L
CD-21C1	lower	MC	0	0	0	0	0	ug/L
CD-21C1	lower	PCE	0	0	0	0	0	ug/L
CD-21C1	lower	TCE	0	0	0	0	0	ug/L
CD-21C1	lower	VC	0	0	0	0	0	ug/L

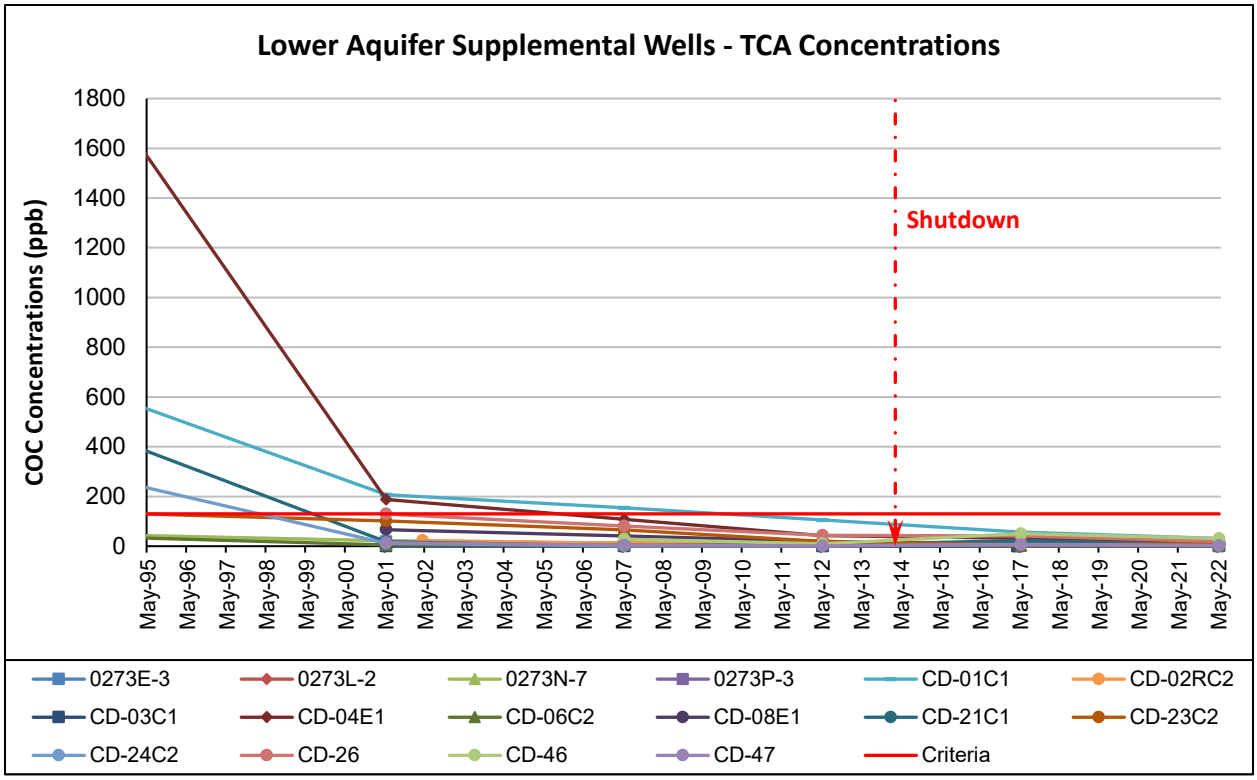
StationID	Aquifer	Analyte	2012 Year Results	2017 Year Results	Current Year Results	Difference from 2012	Difference from 2017	Units
CD-22D1	lower	TCA	0	0	0	0	0	ug/L
CD-22D1	lower	DCE	0	0	0	0	0	ug/L
CD-22D1	lower	MC	0	0	0	0	0	ug/L
CD-22D1	lower	PCE	0	0	0	0	0	ug/L
CD-22D1	lower	TCE	0	0	0	0	0	ug/L
CD-22D1	lower	VC	0	0	0	0	0	ug/L
CD-23B1	upper	TCA	0	0	0	0	0	ug/L
CD-23B1	upper	DCE	0	0	0	0	0	ug/L
CD-23B1	upper	MC	0	0	0	0	0	ug/L
CD-23B1	upper	PCE	0	0	0	0	0	ug/L
CD-23B1	upper	TCE	0	0	0	0	0	ug/L
CD-23B1	upper	VC	0	0	0	0	0	ug/L
CD-23C2	lower	TCA	19.9	5.49	10.9	-9	5.41	ug/L
CD-23C2	lower	DCE	8.03	4.95	4.3	-3.73	-0.65	ug/L
CD-23C2	lower	MC	0	0	0	0	0	ug/L
CD-23C2	lower	PCE	0	0	0	0	0	ug/L
CD-23C2	lower	TCE	3.31	0	1.85	-1.46	1.85	ug/L
CD-23C2	lower	VC	0	0	0	0	0	ug/L
CD-24C2	lower	TCA	1.27	8.24	2.98	1.71	-5.26	ug/L
CD-24C2	lower	DCE	0	6.88	7.82	7.82	0.94	ug/L
CD-24C2	lower	MC	0	0	0.87	0.87	0.87	ug/L
CD-24C2	lower	PCE	0	0	1.78	1.78	1.78	ug/L
CD-24C2	lower	TCE	0	1.27	6.39	6.39	5.12	ug/L
CD-24C2	lower	VC	0	0	0	0	0	ug/L
CD-26	lower	TCA	43.8	41.3	18.8	-25	-22.5	ug/L
CD-26	lower	DCE	30.7	18.9	14.2	-16.5	-4.7	ug/L
CD-26	lower	MC	0	0	0	0	0	ug/L
CD-26	lower	PCE	0	0	0	0	0	ug/L
CD-26	lower	TCE	59.3	67.6	52.4	-6.9	-15.2	ug/L
CD-26	lower	VC	0	0	0	0	0	ug/L
CD-35A1	upper	TCA	0	0	0	0	0	ug/L
CD-35A1	upper	DCE	0	0	0	0	0	ug/L
CD-35A1	upper	MC	0	0	0	0	0	ug/L
CD-35A1	upper	PCE	0	0	0	0	0	ug/L
CD-35A1	upper	TCE	0	0	0	0	0	ug/L
CD-35A1	upper	VC	0	0	0	0	0	ug/L
CD-40C2	lower	TCA	0	0	0	0	0	ug/L
CD-40C2	lower	DCE	0	0	0	0	0	ug/L
CD-40C2	lower	MC	0	0	0	0	0	ug/L
CD-40C2	lower	PCE	0	0	0	0	0	ug/L
CD-40C2	lower	TCE	0	0	0	0	0	ug/L
CD-40C2	lower	VC	0	0	0	0	0	ug/L
CD-46	lower	TCA	9.85	50.7	30.3	20.45	-20.4	ug/L
CD-46	lower	DCE	7.35	30.2	21.9	14.55	-8.3	ug/L
CD-46	lower	MC	0	0	0	0	0	ug/L
CD-46	lower	PCE	0	0	0	0	0	ug/L
CD-46	lower	TCE	1.25	31.9	26.3	25.05	-5.6	ug/L
CD-46	lower	VC	0	0	0	0	0	ug/L
CD-47	lower	TCA	1.46	5.46	3	1.54	-2.46	ug/L
CD-47	lower	DCE	0.91	4.16	3.8	2.89	-0.36	ug/L
CD-47	lower	MC	0	0	0	0	0	ug/L
CD-47	lower	PCE	0	0	0	0	0	ug/L
CD-47	lower	TCE	0	0	0.63	0.63	0.63	ug/L
CD-47	lower	VC	0	0	0	0	0	ug/L
CS-14C1	lower	TCA	2.04	2.55	0	-2.04	-2.55	ug/L
CS-14C1	lower	DCE	1.52	2.62	0	-1.52	-2.62	ug/L
CS-14C1	lower	MC	0	0	0	0	0	ug/L
CS-14C1	lower	PCE	0	0	0	0	0	ug/L
CS-14C1	lower	TCE	0	0	0	0	0	ug/L
CS-14C1	lower	VC	0	0	0	0	0	ug/L
0373J-5	lower	TCA	0	N/A	N/A	N/A	N/A	ug/L

StationID	Aquifer	Analyte	2012 Year Results	2017 Year Results	Current Year Results	Difference from 2012	Difference from 2017	Units
0373J-5	lower	DCE	0	N/A	N/A	N/A	N/A	ug/L
0373J-5	lower	MC	0	N/A	N/A	N/A	N/A	ug/L
0373J-5	lower	PCE	0	N/A	N/A	N/A	N/A	ug/L
0373J-5	lower	TCE	0	N/A	N/A	N/A	N/A	ug/L
0373J-5	lower	VC	0	N/A	N/A	N/A	N/A	ug/L
1073K-1	upper	TCA	1.37	N/A	N/A	N/A	N/A	ug/L
1073K-1	upper	DCE	0.54	N/A	N/A	N/A	N/A	ug/L
1073K-1	upper	MC	0	N/A	N/A	N/A	N/A	ug/L
1073K-1	upper	PCE	0	N/A	N/A	N/A	N/A	ug/L
1073K-1	upper	TCE	0.8	N/A	N/A	N/A	N/A	ug/L
1073K-1	upper	VC	0	N/A	N/A	N/A	N/A	ug/L
1473N-1	upper	TCA	0	N/A	0	0	N/A	ug/L
1473N-1	upper	DCE	0	N/A	0	0	N/A	ug/L
1473N-1	upper	MC	0	N/A	0	0	N/A	ug/L
1473N-1	upper	PCE	0	N/A	0	0	N/A	ug/L
1473N-1	upper	TCE	0	N/A	0	0	N/A	ug/L
1473N-1	upper	VC	0	N/A	0	0	N/A	ug/L
1573B-2	upper	TCA	0.85	N/A	N/A	N/A	N/A	ug/L
1573B-2	upper	DCE	0	N/A	N/A	N/A	N/A	ug/L
1573B-2	upper	MC	0	N/A	N/A	N/A	N/A	ug/L
1573B-2	upper	PCE	0	N/A	N/A	N/A	N/A	ug/L
1573B-2	upper	TCE	0	N/A	N/A	N/A	N/A	ug/L
1573B-2	upper	VC	0	N/A	N/A	N/A	N/A	ug/L
CD-04C1	lower	TCA	0	N/A	0	0	N/A	ug/L
CD-04C1	lower	DCE	2.21	N/A	2.6	0.39	N/A	ug/L
CD-04C1	lower	MC	0	N/A	0	0	N/A	ug/L
CD-04C1	lower	PCE	0	N/A	0	0	N/A	ug/L
CD-04C1	lower	TCE	0.64	N/A	0	-0.64	N/A	ug/L
CD-04C1	lower	VC	0.6	N/A	0	-0.6	N/A	ug/L
CD-04E1	lower	TCA	42.1	N/A	8.56	-33.54	N/A	ug/L
CD-04E1	lower	DCE	271	N/A	293	22	N/A	ug/L
CD-04E1	lower	MC	0	N/A	0	0	N/A	ug/L
CD-04E1	lower	PCE	2.17	N/A	2.24	0.07	N/A	ug/L
CD-04E1	lower	TCE	13.9	N/A	12.2	-1.7	N/A	ug/L
CD-04E1	lower	VC	3.07	N/A	1.85	-1.22	N/A	ug/L
CD-32B1	upper	TCA	0	N/A	0	0	N/A	ug/L
CD-32B1	upper	DCE	0	N/A	0	0	N/A	ug/L
CD-32B1	upper	MC	0	N/A	0	0	N/A	ug/L
CD-32B1	upper	PCE	0	N/A	0	0	N/A	ug/L
CD-32B1	upper	TCE	0	N/A	0	0	N/A	ug/L
CD-32B1	upper	VC	0	N/A	0	0	N/A	ug/L
0273C-2	lower	TCA	N/A	N/A	0	N/A	N/A	ug/L
0273C-2	lower	DCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-2	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
0273C-2	lower	PCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-2	lower	TCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-2	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
0273C-3	lower	TCA	N/A	N/A	0	N/A	N/A	ug/L
0273C-3	lower	DCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-3	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
0273C-3	lower	PCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-3	lower	TCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-3	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
0273C-4	lower	TCA	N/A	N/A	0	N/A	N/A	ug/L
0273C-4	lower	DCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-4	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
0273C-4	lower	PCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-4	lower	TCE	N/A	N/A	0	N/A	N/A	ug/L
0273C-4	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
0273D-3	lower	TCA	N/A	N/A	0	N/A	N/A	ug/L
0273D-3	lower	DCE	N/A	N/A	0	N/A	N/A	ug/L

StationID	Aquifer	Analyte	2012 Year Results	2017 Year Results	Current Year Results	Difference from 2012	Difference from 2017	Units
0273D-3	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
0273D-3	lower	PCE	N/A	N/A	0	N/A	N/A	ug/L
0273D-3	lower	TCE	N/A	N/A	0	N/A	N/A	ug/L
0273D-3	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
0373J-3	lower	TCA	N/A	N/A	59.5	N/A	N/A	ug/L
0373J-3	lower	DCE	N/A	N/A	54.6	N/A	N/A	ug/L
0373J-3	lower	MC	N/A	N/A	1.46	N/A	N/A	ug/L
0373J-3	lower	PCE	N/A	N/A	0	N/A	N/A	ug/L
0373J-3	lower	TCE	N/A	N/A	0	N/A	N/A	ug/L
0373J-3	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
1073L-4	lower	TCA	N/A	N/A	0	N/A	N/A	ug/L
1073L-4	lower	DCE	N/A	N/A	0	N/A	N/A	ug/L
1073L-4	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
1073L-4	lower	PCE	N/A	N/A	0	N/A	N/A	ug/L
1073L-4	lower	TCE	N/A	N/A	0	N/A	N/A	ug/L
1073L-4	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
1473C-5	lower	TCA	N/A	N/A	0	N/A	N/A	ug/L
1473C-5	lower	DCE	N/A	N/A	0	N/A	N/A	ug/L
1473C-5	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
1473C-5	lower	PCE	N/A	N/A	0	N/A	N/A	ug/L
1473C-5	lower	TCE	N/A	N/A	0	N/A	N/A	ug/L
1473C-5	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
CD-20D1	lower	TCA	N/A	N/A	38.3	N/A	N/A	ug/L
CD-20D1	lower	DCE	N/A	N/A	116	N/A	N/A	ug/L
CD-20D1	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
CD-20D1	lower	PCE	N/A	N/A	0.69	N/A	N/A	ug/L
CD-20D1	lower	TCE	N/A	N/A	107	N/A	N/A	ug/L
CD-20D1	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
CD-20D2	lower	TCA	N/A	N/A	36.1	N/A	N/A	ug/L
CD-20D2	lower	DCE	N/A	N/A	117	N/A	N/A	ug/L
CD-20D2	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
CD-20D2	lower	PCE	N/A	N/A	0.78	N/A	N/A	ug/L
CD-20D2	lower	TCE	N/A	N/A	118	N/A	N/A	ug/L
CD-20D2	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
CD-21C3	lower	TCA	N/A	N/A	201	N/A	N/A	ug/L
CD-21C3	lower	DCE	N/A	N/A	558	N/A	N/A	ug/L
CD-21C3	lower	MC	N/A	N/A	2.92	N/A	N/A	ug/L
CD-21C3	lower	PCE	N/A	N/A	0	N/A	N/A	ug/L
CD-21C3	lower	TCE	N/A	N/A	11.6	N/A	N/A	ug/L
CD-21C3	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
CD-25	lower	TCA	N/A	N/A	21.6	N/A	N/A	ug/L
CD-25	lower	DCE	N/A	N/A	185	N/A	N/A	ug/L
CD-25	lower	MC	N/A	N/A	0	N/A	N/A	ug/L
CD-25	lower	PCE	N/A	N/A	1.59	N/A	N/A	ug/L
CD-25	lower	TCE	N/A	N/A	241	N/A	N/A	ug/L
CD-25	lower	VC	N/A	N/A	0	N/A	N/A	ug/L
CD-33	upper	TCA	N/A	N/A	0	N/A	N/A	ug/L
CD-33	upper	DCE	N/A	N/A	0	N/A	N/A	ug/L
CD-33	upper	MC	N/A	N/A	0	N/A	N/A	ug/L
CD-33	upper	PCE	N/A	N/A	0	N/A	N/A	ug/L
CD-33	upper	TCE	N/A	N/A	0.76	N/A	N/A	ug/L
CD-33	upper	VC	N/A	N/A	0	N/A	N/A	ug/L

Current-year results are the Supplemental Sampling results collected during April/May 2022.
Increases in analyte concentrations are highlighted in **RED**.
Decreases in analyte concentrations are highlighted in **BLUE**.

Figure 6-2 Supplemental WellS TCA Concentrations vs. Time Graphs



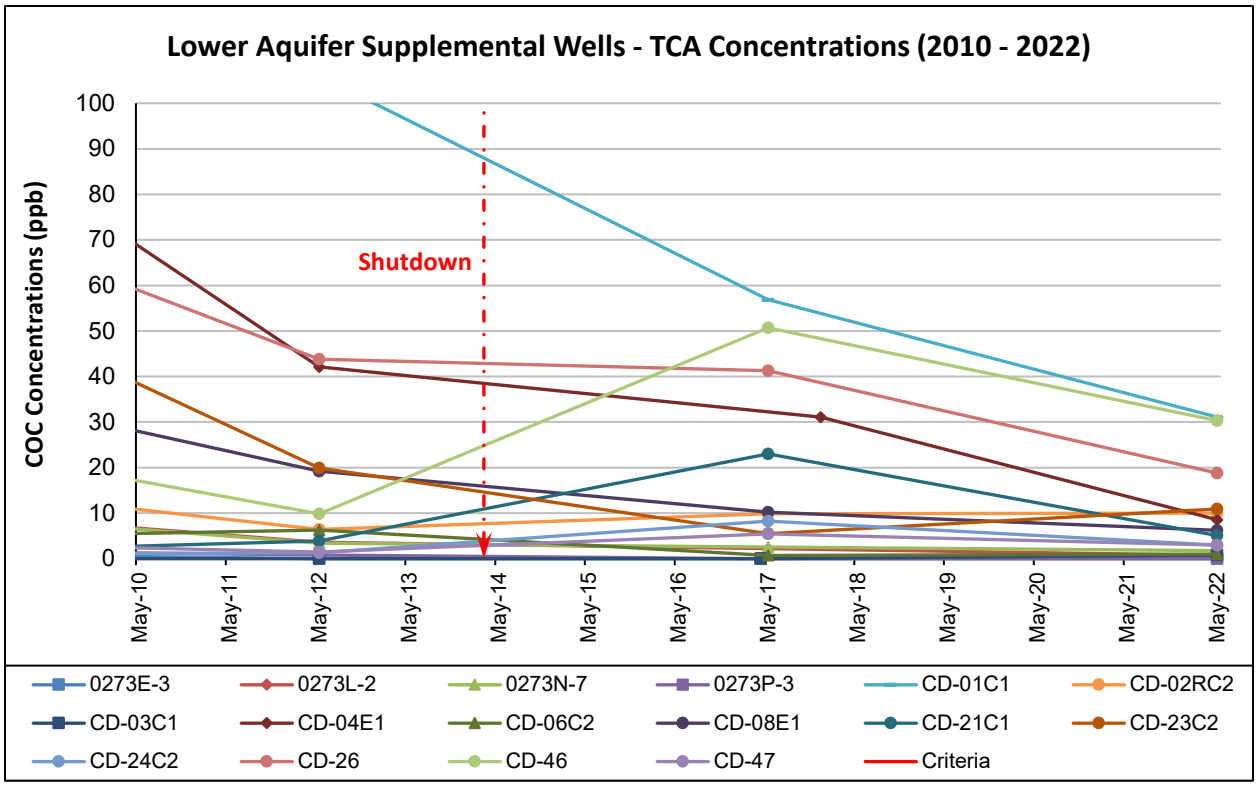
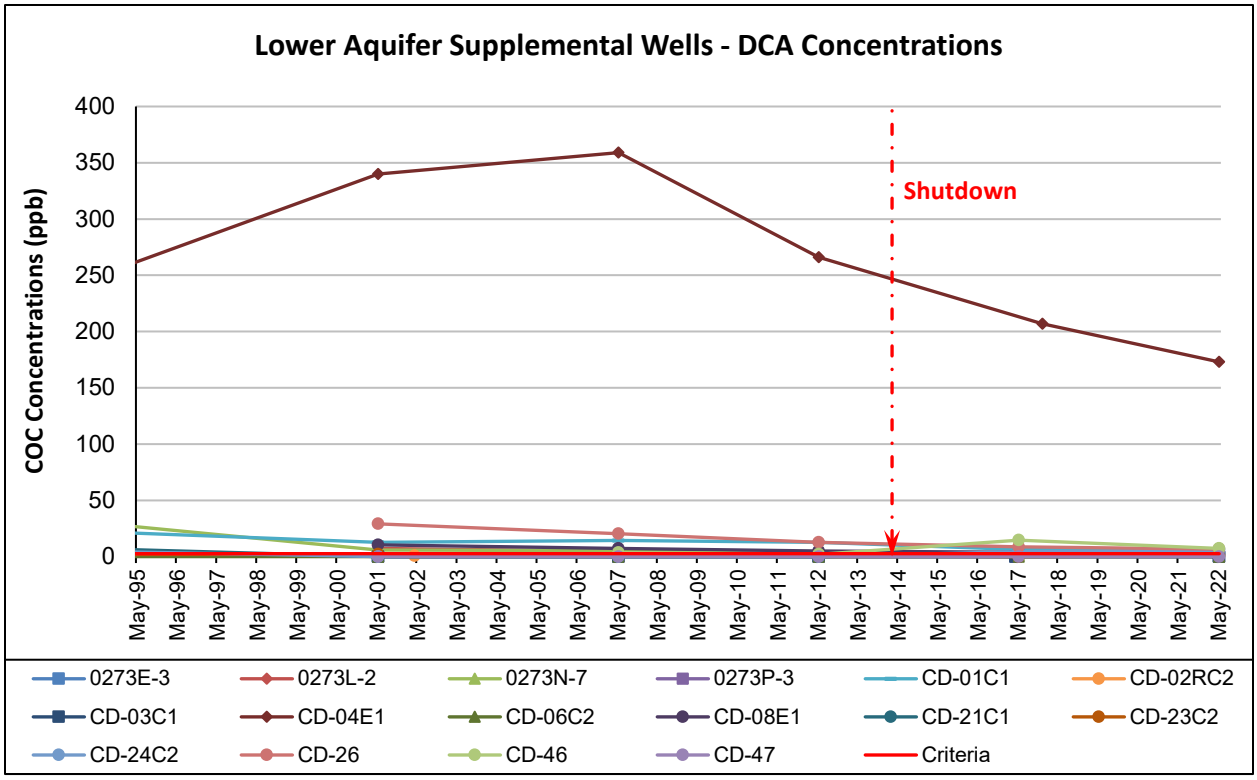


Figure 6-3 Supplemental Wells DCA Concentrations vs. Time Graphs



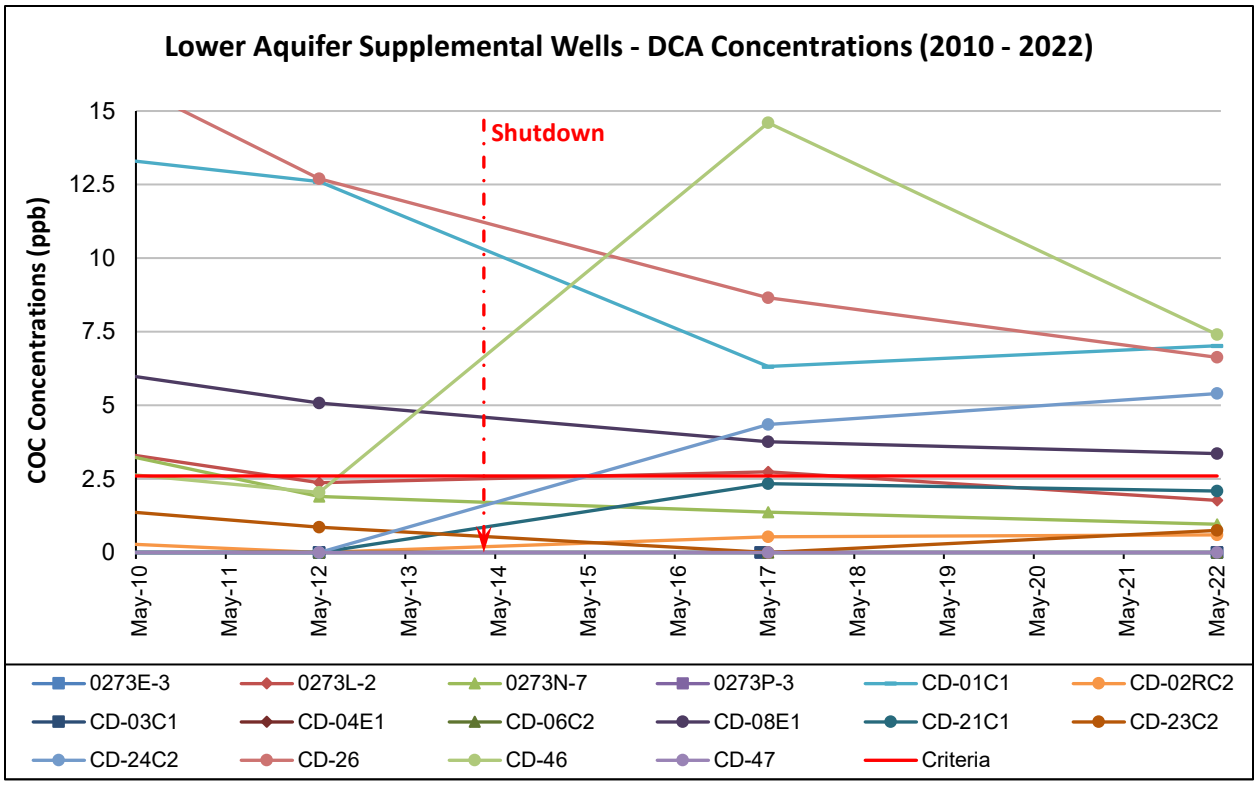
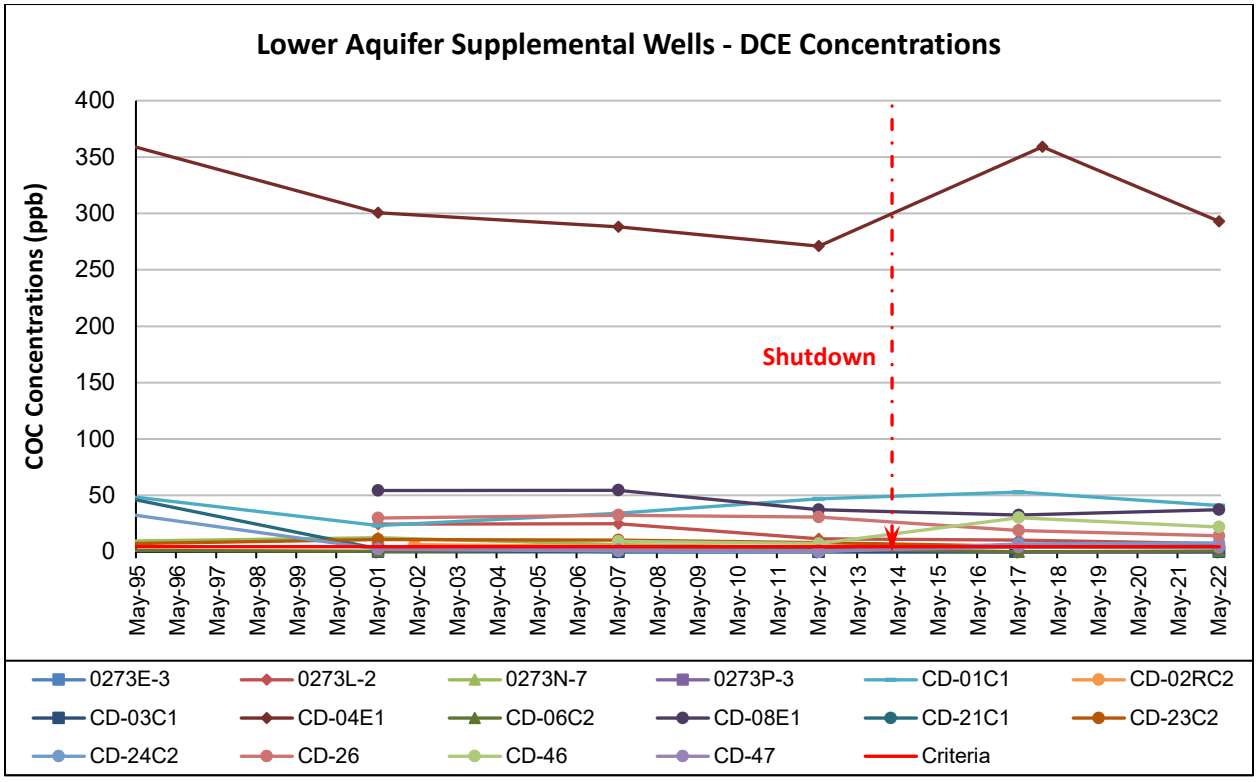


Figure 6-4 Supplemental Wells DCE Concentrations vs. Time Graphs



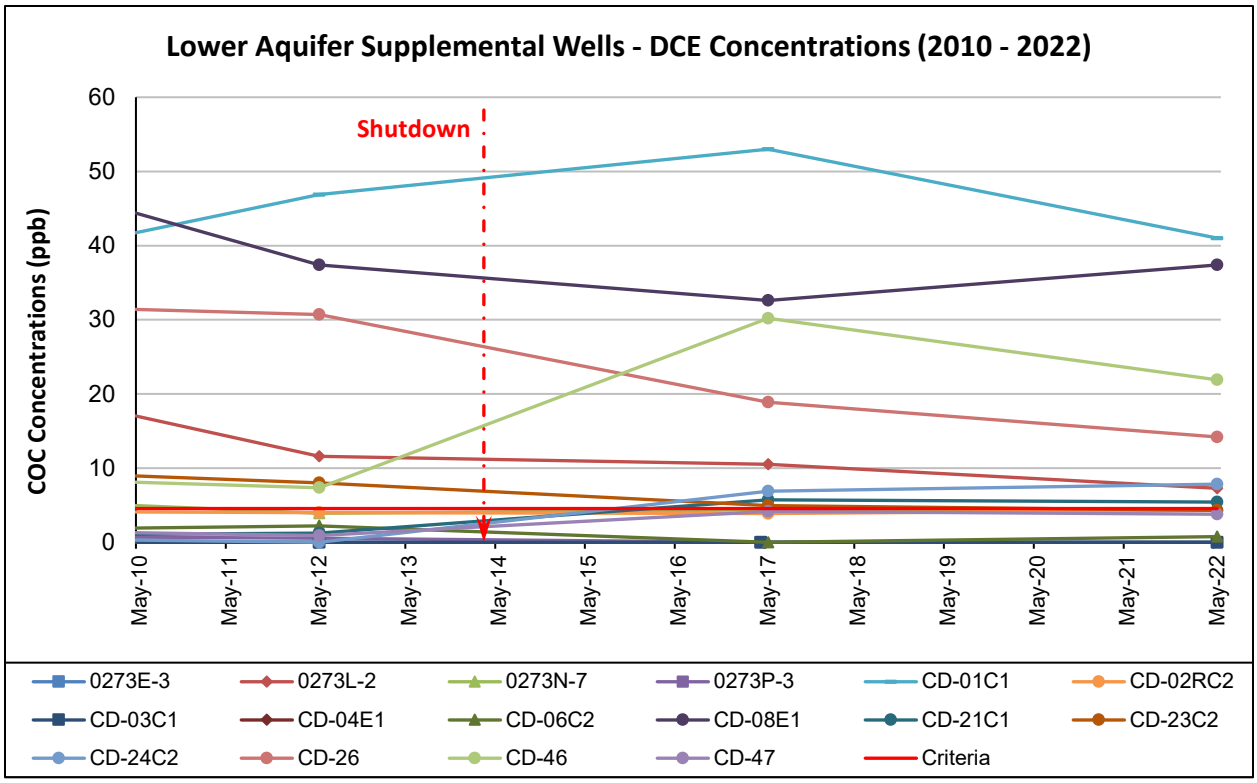
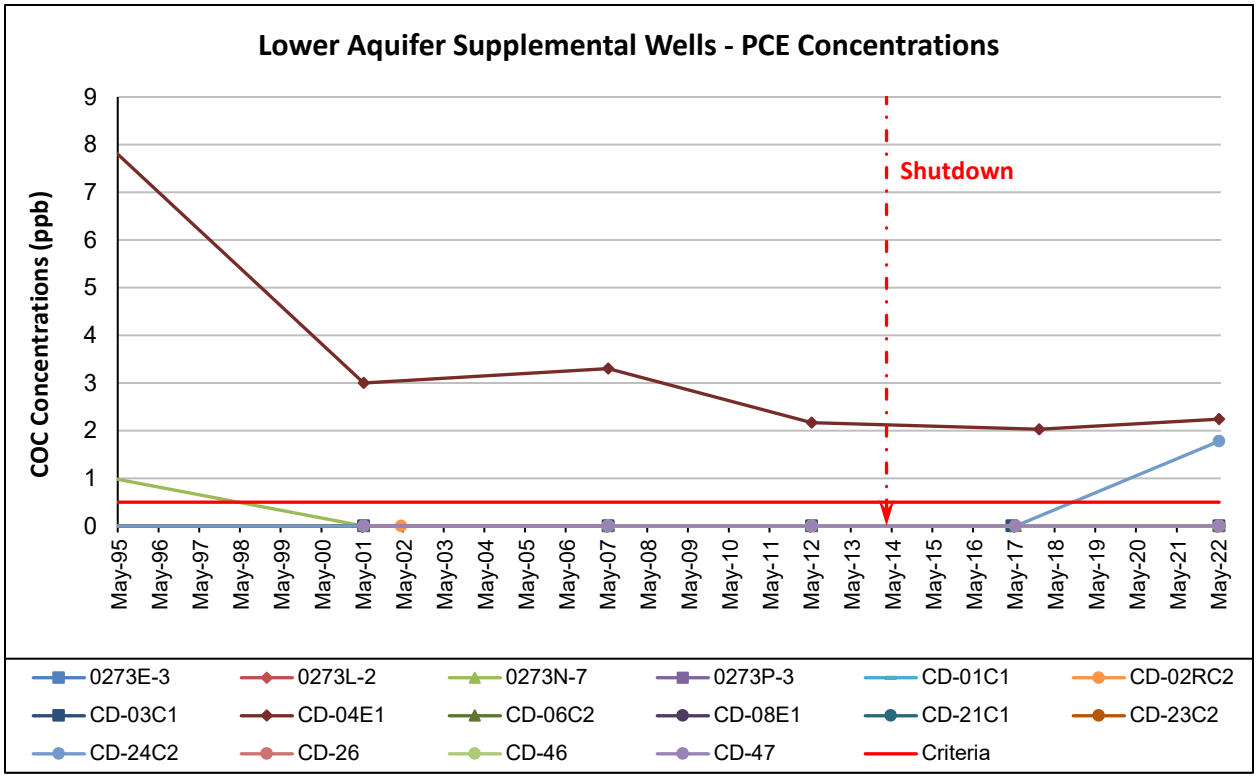


Figure 6-5 Supplemental Wells PCE Concentrations vs. Time Graphs



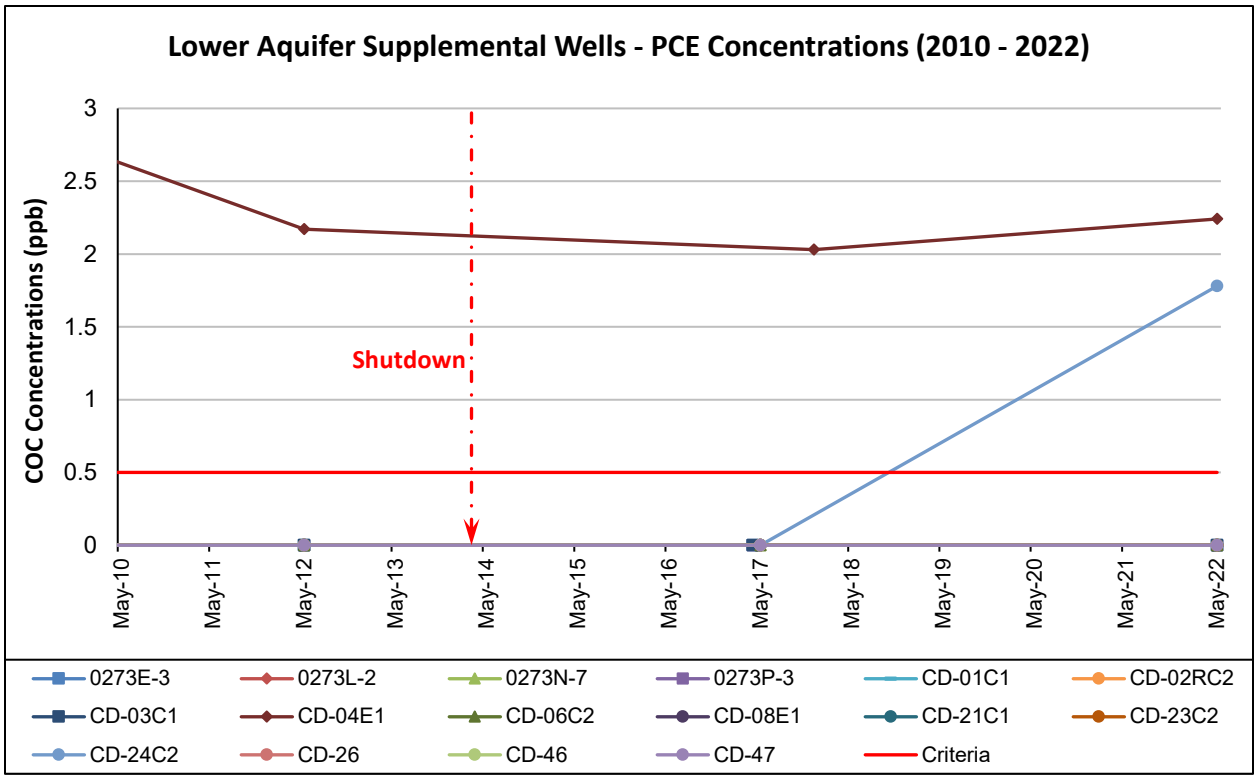
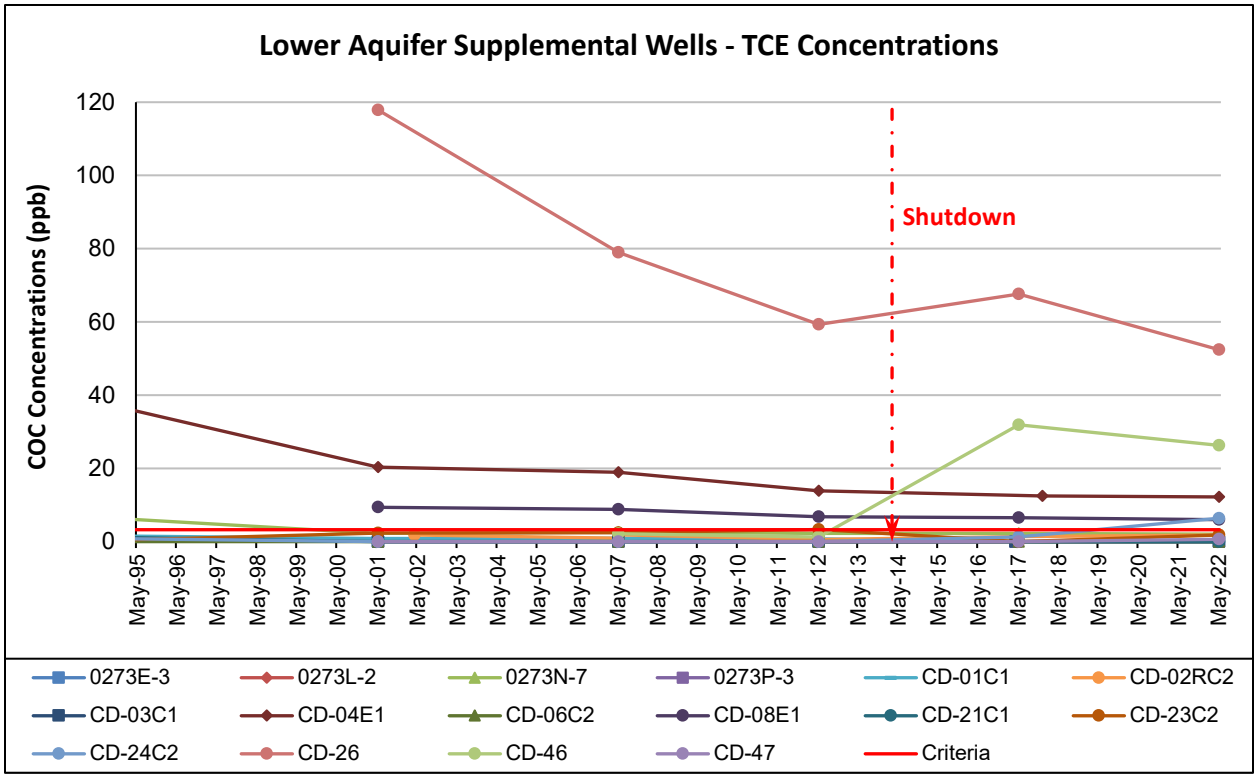


Figure 6-6 Supplemental Wells TCE Concentrations vs. Time Graphs



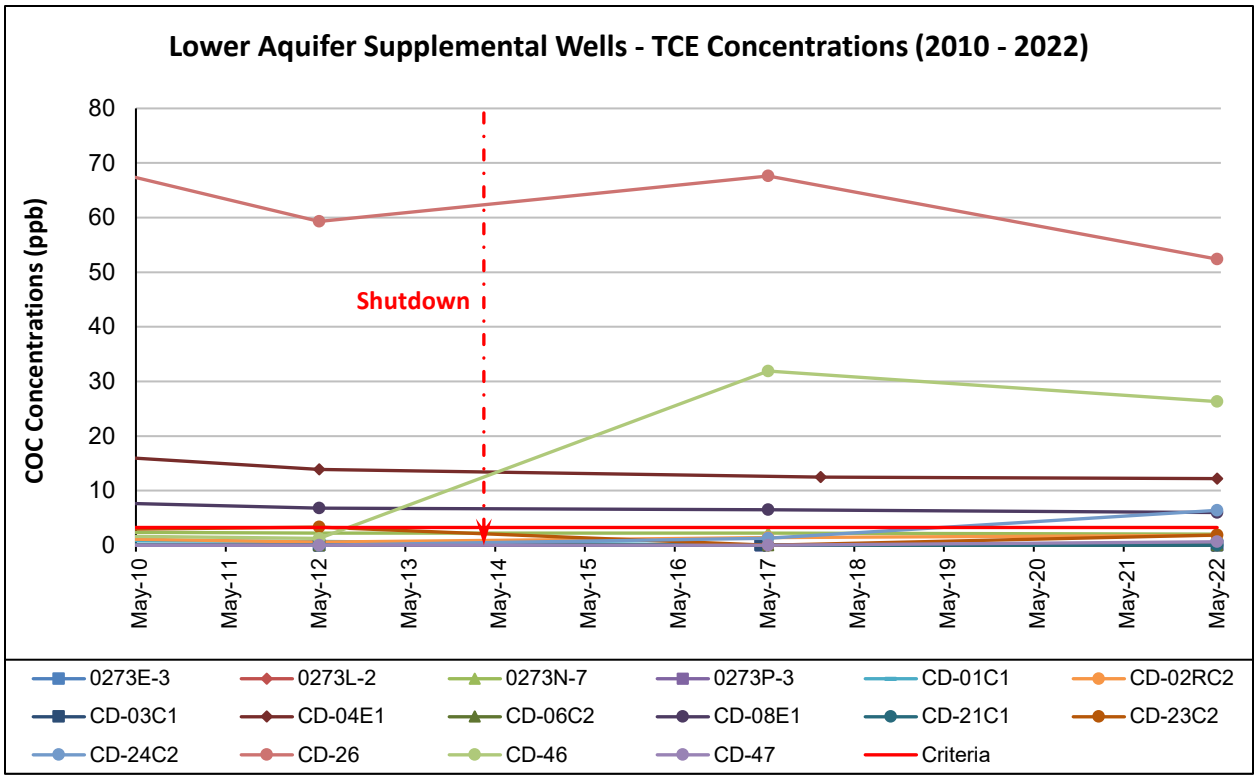
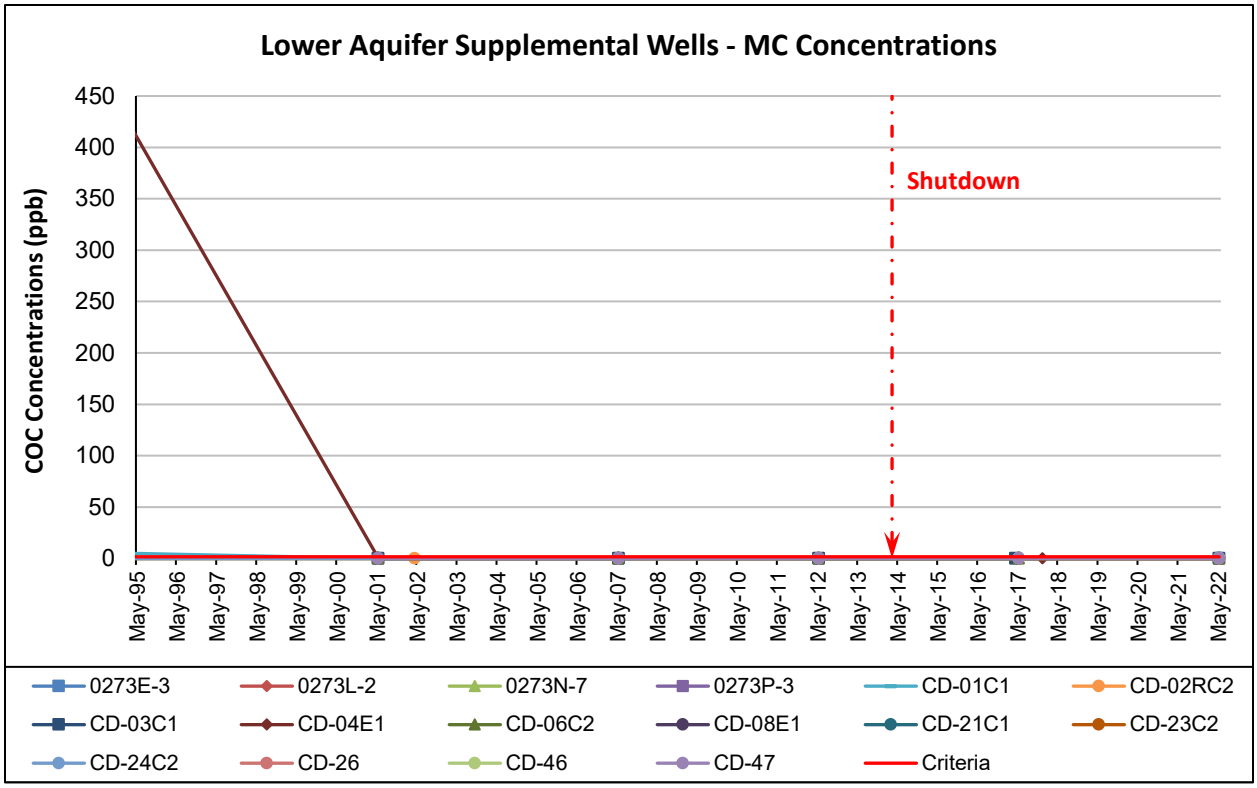


Figure 6-7 Supplemental Wells MC Concentrations vs. Time Graphs



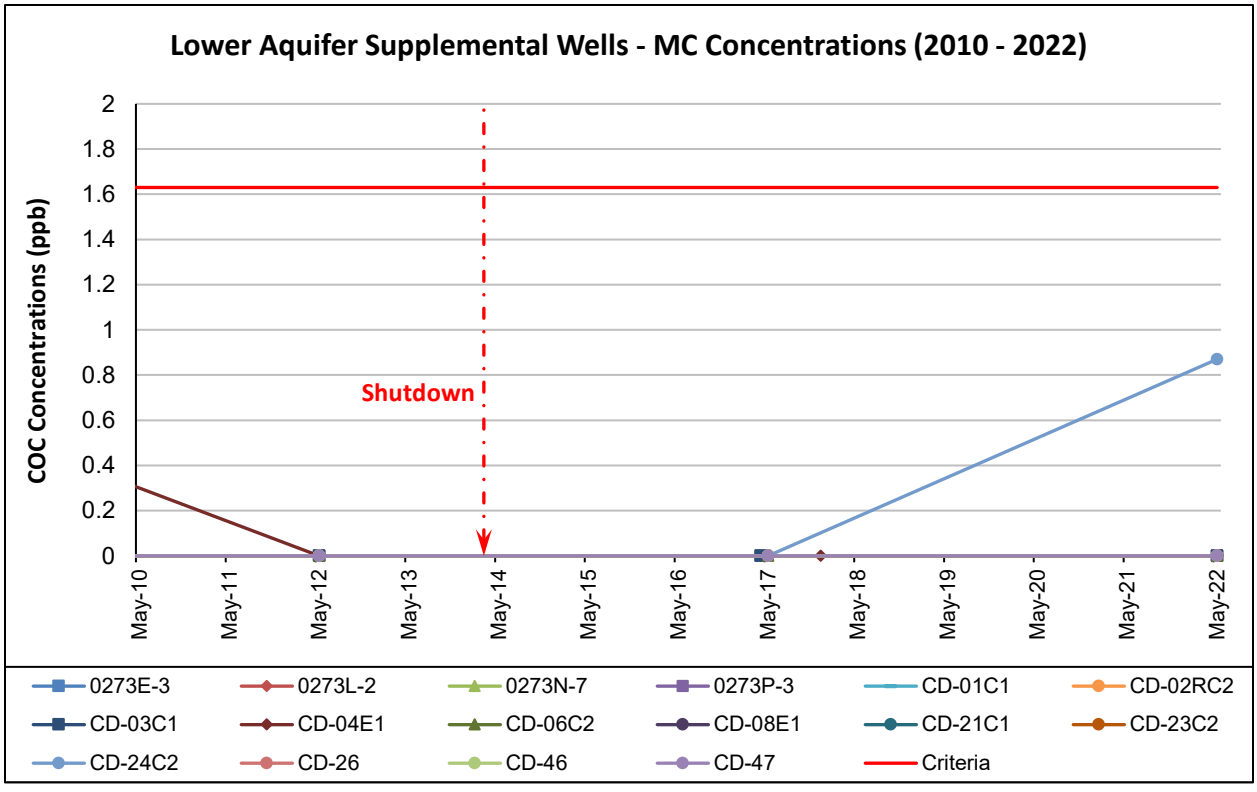
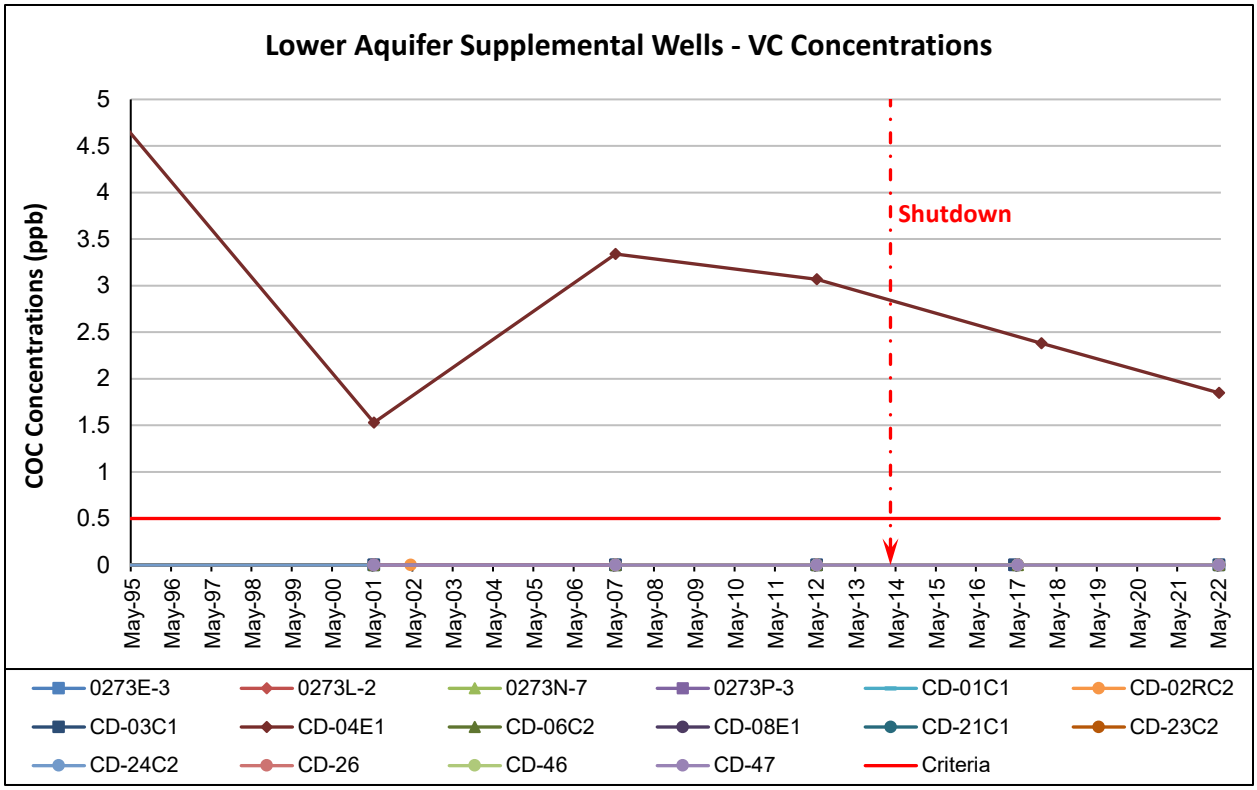
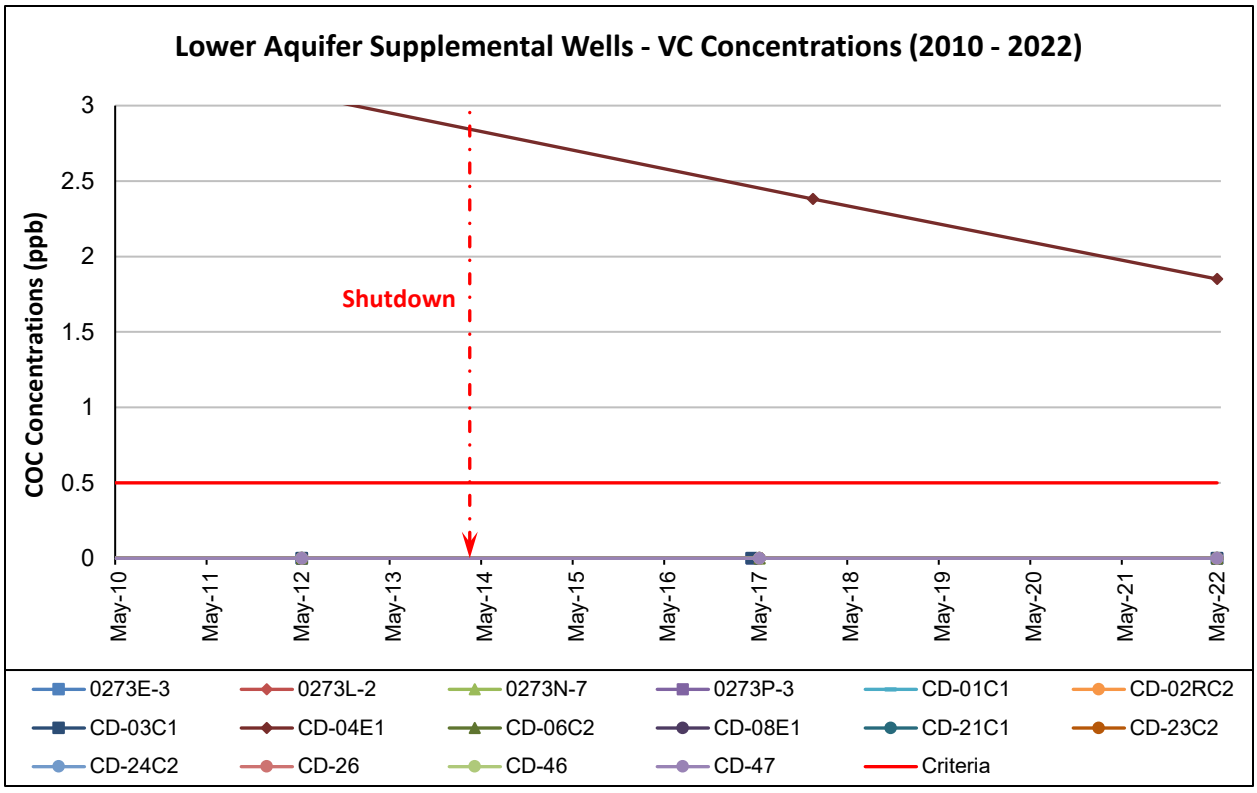


Figure 6-8 Supplemental Wells VC Concentrations vs. Time Graphs





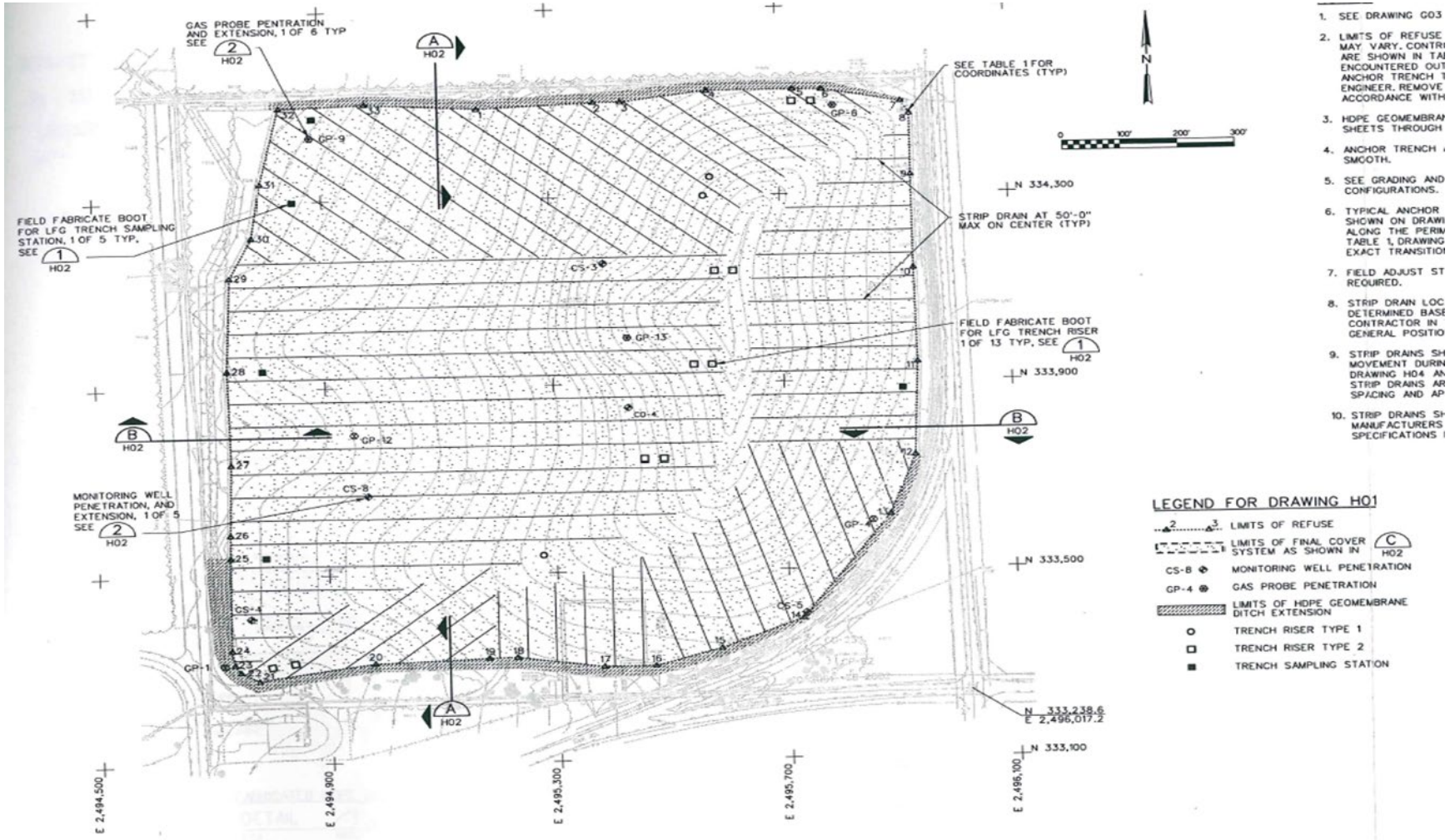
7.0 Colbert Landfill Gas System

7.1 Colbert Landfill Gas Collection System Summary

The landfill gas (LFG) system was installed to prevent off-site gas migration and to prevent build-up of gas pressure. The Colbert Landfill gas collection system uses a combination of interior and perimeter gas collection trenches connected through a main gas manifold. The Colbert Landfill gas collection system is presented in Figure 6-1.

The gas is moved toward the control system with the use of a 15-hp blower (no VFD) at the main facility. Landfill condensate is collected in both an underground storage tank and an above-ground storage tank. The amount of gas collected from each area of the interior and perimeter system is controlled through valve adjustments in the trench riser wellhead assemblies installed in each of the gas collection trenches. The overall amount of vacuum available for gas collection in the manifold is controlled by valve adjustments at the main facility. The gas collection station includes a condensate knockout vessel, a gas exhauster, several carbon adsorber vessels, and an exhaust stack. The landfill gas is passed through the carbon adsorber (granular activated carbon, or GAC) vessels to remove VOC's and is then exhausted out of the stack. Monitoring is performed at sample ports before and after the carbon vessels, at each trench riser, and at interior and perimeter gas probes.

Figure 7-1 Colbert Landfill Gas Collection System



7.2 Colbert Landfill Gas Monitoring

Monitoring for gas at the Colbert Landfill is performed at sample ports before and after the carbon vessels, at each trench riser, and at interior and perimeter gas probes. Spokane County personnel perform monthly monitoring of the gas probes and exhaust system, monthly condensate tank level checks, monthly gas fan maintenance (greasing, belt tension adjustments, etc.), and VOC analyses on an annual basis (Method TO-15). TO-15 sampling is typically conducted in the months of July or August during the reporting period. TO-15 results and the Colbert Landfill Perimeter Gas Probe results/summary are presented in Appendix A. In summary, there are only non-detections or very low concentrations of landfill gas at the perimeter gas probes.

The most recent Carbon vessel change-out was conducted on 9/1/2021, and the following landfill gas monitoring activities were conducted during this reporting period:

- Landfill gas sampling and analysis (Method TO-15) was performed in July 2022.
- Monthly monitoring of gas probes and exhaust system.
- Monthly gas fan maintenance (greasing, belt tension adjustments, etc.)
- Quarterly monitoring of trench risers (June, October, February, and April).

<u>Other notable items include:</u>

A cost-benefit analysis was conducted for the option to switch from the activated carbon gas filtration system to a biofilter system at the Colbert site in the fall of 2017. The practice had been to change out the activated carbon every 6 months, but due to the rising costs of purchasing new carbon material and disposing of the old, the annual cost of this practice had risen to $25,000. Taking into account the higher upfront costs of constructing a biofilter, with lower lifetime costs of this system, we found that the financial break-even point over a 20 year period would be to change out the activated carbon every 1.5 years. In other words, if the activated carbon required changing more frequently than once every 1.5 years, it is financially beneficial to undertake the construction and maintenance of a biofilter system.

From the fall of 2016 to the spring of 2018, Environmental technicians sampled the effluent gas every 3 months for signs of "break-out," or when compounds were no longer adsorbing to the carbon material. TO-15 samples for the study were collected on 12/14/2016, 3/30/2017, 11/21/2017, and 3/21/2018. After a year and a half, the quarterly samples began to show small signs of mal-adsorption, with emissions of just a few compounds still less than De Minimus thresholds. Because of the financial modeling and the quarterly sampling results, the staff feel comfortable with a new plan to change out the activated carbon material once every 1.5 years now instead of the unnecessary 6-month change out.

8.0 Landfill Operations and Maintenance

Spokane County personnel conduct O&M activities in accordance with the Colbert Landfill 1999 O&M Plan. From May 2021 through April 2022, the following O&M activities were conducted at the Colbert Landfill:

- Monthly inspections of the gas probes and exhaust system
- Monthly condensate tank levels/inspections
- Monthly gas fan maintenance (greasing, belt tension adjustments, etc.)
- Quarterly inspections of trench risers (June, October, February, and April).
- Cover and ditch weed control was ongoing throughout the growing season.

Additional O&M activities were conducted for the Colbert landfill gas system and the groundwater extraction system/extraction wells. The Colbert Landfill gas system monitoring and maintenance is described above in section 7.2. The landfill cover assessments/settlement marker surveying occur every 2 years, and are described below in section 8.1. Inspections for the P&T extraction wells are conducted on a quarterly basis. Extraction well inspection reports can be found in Appendix C and include (but are not limited to) the following:

- Sump evaluation: Hi-Float Alarm, cleaning, and pertinent notes.
- VFD evaluation: cleaning the filters, and inspecting wiring and components.
- Piping evaluation: exercising gate valves, inspect piping, inspect air/vac valve.
- Pit evaluation: inspection for leaks, checking for zero reading(s).
- PCP evaluation: inspecting wiring/relays/comp, checking indicator lights, clean filters.
- Vault evaluation: inspecting ladder bolts/rungs/lower and upper lid bolts.
- Final inspections and other pertinent notes.

All additional relevant operations and maintenance documentation (field notes summarizing field activities and results, field sheets for sampling events within the reporting period, etc.) is presented in Appendix B.

8.1 Colbert Landfill Settlement

- Spokane County installed 10 new settlement markers (CSM10 – CSM19) in June 2019 across several known areas of concern to monitor settlement on the landfill. These settlement markers will be surveyed every 2 years, and will be monitored for any additional settling that might occur on the Colbert landfill.

Figure 8-1: Colbert Landfill Settlement Marker Locations

The last settlement survey that was conducted for the Colbert landfill settlement markers occurred on 5/25/2021. The next landfill settlement survey will occur in 2023. The following table shows the difference in elevation for each settlement marker from 2019 to 2021:

Table 8-1: Settlement Elevation Summary

Settlement Marker ID	Elevation - 2021	Difference in Elevation from 2019		Difference in Elevation from 1999
CSM1	**1863.85**	**-0.020**	▼	-0.093
CSM2	**1865.26**	**-0.011**	▼	-0.063
CSM3	**1875.50**	**-0.034**	▼	-0.184
CSM4	**1869.07**	**-0.024**	▼	-0.252
CSM5	**1856.76**	**-0.012**	▼	-0.101
CSM6	**1857.11**	**-0.008**	▼	-0.328
CSM10	**1860.76**	**-0.053**	▼	N/A
CSM11	**1860.87**	**-0.107**	▼	N/A
CSM12	**1863.12**	**-0.073**	▼	N/A
CSM13	**1860.50**	**-0.148**	▼	N/A
CSM14	**1861.48**	**-0.120**	▼	N/A
CSM15	**1863.34**	**-0.121**	▼	N/A
CSM16	**1684.59**	**-0.062**	▼	N/A
CSM17	**1860.65**	**-0.043**	▼	N/A
CSM18	**1858.08**	**-0.029**	▼	N/A
CSM19	**1856.56**	**-0.024**	▼	N/A

9.0 Institutional Controls

The goal of Spokane County's Institutional Control (IC) Program is to ensure the protection of public health and the environment in the Colbert Landfill Superfund Site vicinity. Institutional Controls are defined as non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human and ecological exposure to contamination and/or protect the integrity of the remedy. Although Spokane County's IC program has proven effective since its implementation, the County created an Institutional Control Implementation and Assurance Plan (ICIAP) in March 2021 to describe the process for recordable and enforceable controls, along with the key strategies to ensure the protection of public health and the environment in the area surrounding the Colbert Landfill. The ICIAP document can be found on the Spokane County Solid Waste website. The County will conduct the following activities to ensure the success of the Institutional Controls program:

- Generate Constituent of Concern (COC) plume maps using geospatial analysis to define plume boundaries/areas of concern.

- Report plume maps/boundaries to the SRHD to establish boundaries and areas of concern regarding potential well drilling. This will ensure that if an individual/organization is interested in drilling a new well or planning a well use change, the SRHD will have boundaries/areas of concern to reference.

- Coordinate with the Spokane Regional Health District (SRHD) to investigate any individuals/ interested in drilling wells or changing a well use in any areas of concern within the annual reporting period timeframe.

- Report plume maps/boundaries to the Washington Department of Ecology (Ecology) to establish boundaries and areas of concern regarding potential well drilling. This will ensure that if an individual/organization applies for a permit to drill a new well or change an established well's use, Ecology will have boundaries/areas of concern to reference.

- Coordinate with Ecology to investigate any individuals/organizations interested in drilling wells or changing a well use in any areas of concern within the annual reporting period timeframe.

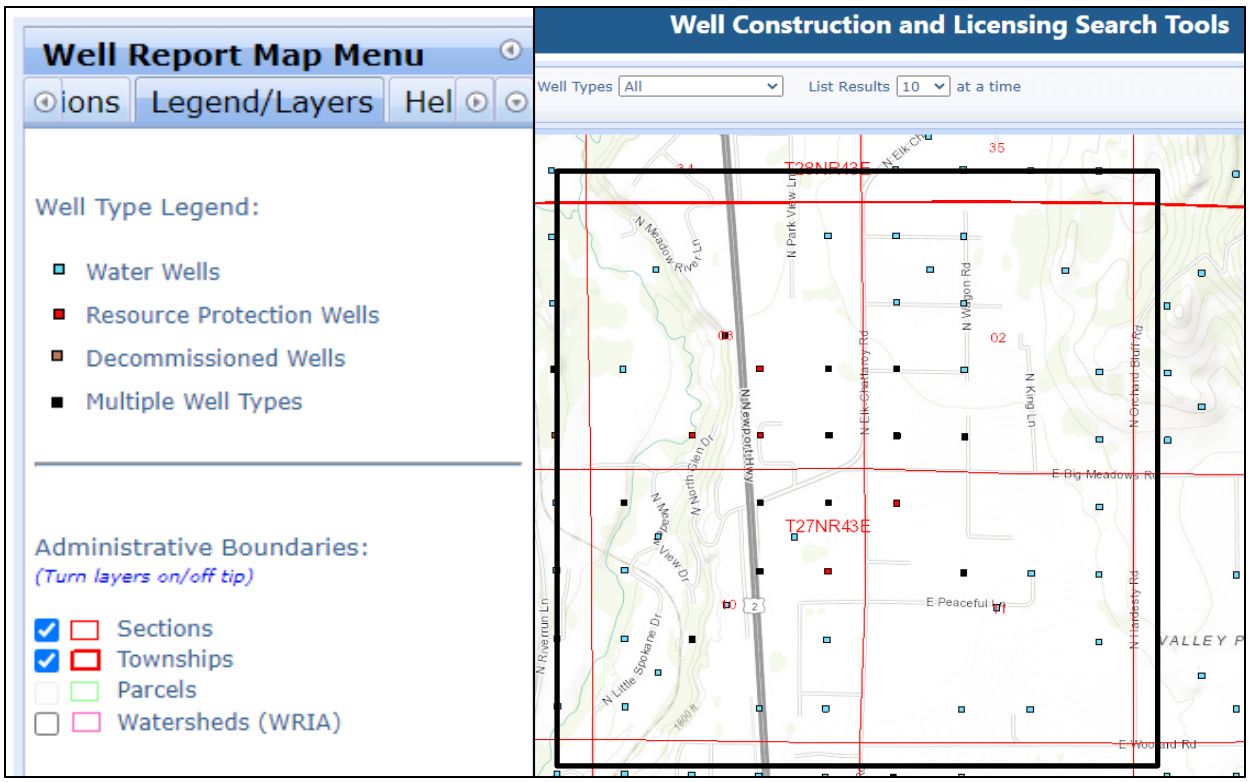
- Utilize the Well Construction and Licensing Search Tools to account for any new or unknown well construction that may have occurred near any areas of concern.

Records of IC Evaluation Activities for 2022

The following activities have been conducted/completed by Spokane County, Washington Department of Ecology, and Spokane Regional Health District personnel:

- Completed the Colbert Landfill ICIAP on March 2021/EPA fully approved the ICIAP document in June 2021.

- Spokane County personnel consulted the contamination plume maps created for 2022 and used the Washington Department of Ecology's Well Construction and Licensing Search Tools to define a search area to evaluate for new well installs/well use changes:



Spokane County personnel reviewed the most recent well data based on the listed well completion date(s), the well report received date, and well type/proximity to the plumes/landfill. Using the same search boundaries that were used in 2021, County personnel found 4 additional domestic wells/well reports that were added to the Department of Ecology's Well Construction and Licensing Database since investigating in 2021. The new wells found in the database include Well Tag ID BJG578 (2016), Well Tag ID BKW128 (2018), Well Tag ID BLG858 (2018), and Well Tag ID BMH798 (2020). All of the domestic well locations were evaluated in relation to the upper and lower aquifer plume boundaries, and all of the domestic wells were outside of the contamination plume areas of concern.

The well reports that had "blank" well completion dates/well report received dates were also investigated, and included wells with the Well Report IDs: 209225 through 209232, 209885, 209896, 209897, 209898, 209899, 294656 through 294669, 294712, and 294713. All of these wells are either Spokane County-owned wells, wells on the Colbert Landfill residential monitoring program, or decommissioned.

- Spokane County personnel sent the 2022 contamination plume maps to the Washington Department of Ecology and the Spokane Regional Health District on 6/15/2022 and inquired about their findings regarding an evaluation for new well requests/well use changes in the Colbert Landfill vicinity. The Washington Department of Ecology evaluated the wells in the area and consulted the Well Drilling Coordinator, and found no new domestic well requests. The Spokane Regional Health District also evaluated the wells in the area and consulted with the Well Inspection and Liquid Waste program, and found no recent well construction activities within the vicinity of the Colbert Landfill.

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Displaying well reports 176 → 179 of 179 | Sort results by: Well Completion Date | Results Per Page: 25

#	Well Details	Location Details
176. View PDF	Well Owner: **James Patterson** Well Tag ID: BJG578 Notice of Intent Number: WE25230 Group Number: Not Applicable Well Report ID: 1595068 Well Diameter: 6 in. Well Depth: 340 ft.	Tax Parcel Number: 370139029 Well Address: 22826 N Orchard Bluff Rd County: SPOKANE Public Land Survey: NW-SW / S-01 / T-27-N / R-43-E Well Type: Water / Subtype: Water Well Completion Date: 08-31-2016 Well Report Received Date: 11-10-2016
177. View PDF	Well Owner: **Lisa Burnett** Well Tag ID: BKW128 Notice of Intent Number: WE31303 Group Number: Not Applicable Well Report ID: 1785203 Well Diameter: 6 in. Well Depth: 301 ft.	Tax Parcel Number: 370139039 Well Address: N. Orchard Bluff Rd. County: SPOKANE Public Land Survey: NW-SW / S-01 / T-27-N / R-43-E Well Type: Water / Subtype: Water Well Completion Date: 07-05-2018 Well Report Received Date: 09-17-2018
178. View PDF	Well Owner: **Jeffrey Cummings** Well Tag ID: BLG858 Notice of Intent Number: WE33093 Group Number: Not Applicable Well Report ID: 1856274 Well Diameter: 6 in. Well Depth: 320 ft.	Tax Parcel Number: 383539029 Well Address: TBD County: SPOKANE Public Land Survey: SW-SW / S-35 / T-28-N / R-43-E Well Type: Water / Subtype: Water Well Completion Date: 10-09-2018 Well Report Received Date: 11-14-2018
179. View PDF	Well Owner: **Jeff and Lynn Edison** Well Tag ID: BMH798 Notice of Intent Number: WE39611 Group Number: Not Applicable Well Report ID: 1970299 Well Diameter: 6 in. Well Depth: 79 ft.	Tax Parcel Number: 383450502 Well Address: 24910 N Crescent Road County: SPOKANE Public Land Survey: SE-SW / S-34 / T-28-N / R-43-E Well Type: Water / Subtype: Water Well Completion Date: 06-26-2020 Well Report Received Date: 08-03-2020

1 2 3 4 5 6 7 **8**

Total Result Pages: 8

10.0 References

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Appendix A

Colbert Landfill Perimeter Gas Probe and TO-15 Results

COLBERT PERIMETER GAS MONITORING REPORT

Barometer: 30.01

Tech: MT

Calibration: Zeroed CH4 to AB air CALGAS-> CH4 reading 14.8% cal to15.0%; CO2 reading 14.9% cal to 15.0%; Zeroed O2 to CALGAS-> O2 reading 20.8% to AB air cal to 20.9%

FanFlow: 51

Weather Clear 70's

Equipment: Gem 500 #410

Location	Date	Time	CH4	CO2	O2	Balance	Static Press	Diff. Press.	Comments
CGP0001L	9/16/2021		0	3.3	16.2	80.5	0	0	
CGP0001L	7/27/2022		0	2.9	15.8	81.3	0	-0.01	
CGP0001L	12/1/2021		0	2.8	17	80.2	0	-0.01	
CGP0001L	6/1/2022		0	2.3	16.8	80.9	0	0	
CGP0001L	4/22/2022		0	2.1	17.1	80.8	0	-0.01	
CGP0001L	10/27/2021		0	3.5	16	80.5	0	-0.01	
CGP0001L	8/18/2021		0	3.1	16.4	80.5	0	-0.02	
CGP0001L	2/25/2022		0	6.1	16.3	77.6	0	0	
CGP0001L	7/23/2021		0	3.1	16.4	80.5	0	0	
CGP0001L	6/4/2021		0	2.9	16.6	80.5	0	0	
CGP0001L	11/18/2021		0	3.4	15.8	80.8	0	0	
CGP0001U	7/23/2021		0	6.3	5.5	88.2	0	-0.01	
CGP0001U	6/4/2021		0	6.1	5.7	88.2	0	0	
CGP0001U	12/1/2021		0	5.9	13.3	80.8	0	-0.02	
CGP0001U	2/25/2022		0	2.9	5.7	91.4	0	0	
CGP0001U	8/18/2021		0	5.8	12.6	81.6	0	-0.02	
CGP0001U	9/16/2021		0	6.1	5.7	88.2	0	0	
CGP0001U	10/27/2021		0	6.1	5.7	88.2	0	0	
CGP0001U	11/18/2021		0	5.9	5.9	88.2	0	0	
CGP0001U	4/22/2022		0	5.7	14.6	79.7	0	0	
CGP0001U	6/1/2022		0	5.2	13.3	81.5	0	0	
CGP0001U	7/27/2022		0	5.3	12.1	82.6	0	-0.03	
CGP0002L	12/1/2021		0	1.6	19	79.4	0	-0.01	
CGP0002L	7/23/2021		0	5.6	6.5	87.9	0	0	
CGP0002L	2/25/2022		0	2.5	9.8	87.7	0	0	
CGP0002L	8/18/2021		0	5.4	14.6	80	0	-0.01	
CGP0002L	9/16/2021		0	5.7	6.4	87.9	0	-0.01	
CGP0002L	10/27/2021		0	6.1	6.6	87.9	0	0	
CGP0002L	11/18/2021		0	6.1	6.6	87.9	0	0	
CGP0002L	7/27/2022		0	4.9	13.9	81.2	0	-0.02	
CGP0002L	6/1/2022		0	6	13.2	80.8	0	0	

COLBERT PERIMETER GAS MONITORING REPORT

Barometer: 29.98

Tech: MT

Calibration: zeroed CH4 to AB air->CALGAS CH4 reading 14.9 cal to 15.0%; CO2 reading 15.1 cal to 15.0%; zeroed O2 to CALGAS-> O2 reading 20.5 AB air cal to 20.9%

FanFlow: 54

Weather Partly cloudy 80's

Equipment: Gem 500 #410

Location	Date	Time	CH4	CO2	O2	Balance	Static Press	Diff. Press.	Comments
CGP0002L	6/4/2021		0	5.6	6.5	87.9	0	0	
CGP0002L	4/22/2022		0	5.5	7.3	87.2	0	-0.01	
CGP0002U	8/18/2021		0	1.3	19.3	79.4	0	-0.01	
CGP0002U	7/23/2021		0	1.6	19	79.4	0	-0.01	
CGP0002U	10/27/2021		0	1.5	19.1	79.4	0	-0.01	
CGP0002U	6/4/2021		0	1.4	19.2	79.4	0	-0.01	
CGP0002U	7/27/2022		0	1.8	18.2	80	0	-0.01	
CGP0002U	2/25/2022		0	1.8	18.1	80.1	0	0	
CGP0002U	9/16/2021		0	1.6	19	79.4	0	-0.01	
CGP0002U	11/18/2021		0	1.9	18.7	79.4	0	-0.01	
CGP0002U	4/22/2022		0	2.7	17.4	79.9	0	0	
CGP0002U	6/1/2022		0	1.6	18.2	80.2	0	-0.01	
CGP0002U	12/1/2021		0	1.9	18.5	79.6	0	-0.02	
CGP0003L	7/27/2022		0	7.5	10.6	81.9	0	-0.01	
CGP0003L	12/1/2021		0	9.1	10.3	80.6	0	-0.03	
CGP0003L	2/25/2022		0	8.7	5.5	85.8	0	0	
CGP0003L	7/23/2021		0	8.3	5.2	86.5	0	0	
CGP0003L	8/18/2021		0	7.9	11.6	80.5	0	-0.01	
CGP0003L	9/16/2021		0	8.3	5.1	86.6	0	0	
CGP0003L	10/27/2021		0	8.5	4.9	86.6	0	0	
CGP0003L	11/18/2021		0	8.8	4.5	86.7	0	0	
CGP0003L	6/1/2022		0	8.8	9.7	81.5	0	-0.03	
CGP0003L	6/4/2021		0	8.1	5.4	86.5	0	-0.01	
CGP0003L	4/22/2022		0	8.8	5.1	86.1	0	-0.02	
CGP0003U	8/18/2021		0	2	18.6	79.4	0	0	
CGP0003U	6/1/2022		0	1.3	18.2	80.5	0	0	
CGP0003U	4/22/2022		0	2.7	19.9	79.4	0	-0.01	
CGP0003U	11/18/2021		0	3.5	16.8	79.7	0	-0.1	
CGP0003U	9/16/2021		0	2.8	17.6	79.6	0	0	
CGP0003U	7/23/2021		0	2.6	17.8	79.6	0	0	
CGP0003U	2/25/2022		0	1.5	17.2	81.3	0	0	

COLBERT PERIMETER GAS MONITORING REPORT

Barometer: 29.98

Tech: MT

Calibration: zeroed CH4 to AB air->CALGAS CH4 reading 14.9 cal to 15.0%; CO2 reading 15.1 cal to 15.0%; zeroed O2 to CALGAS-> O2 reading 20.5 AB air cal to 20.9%

FanFlow: 54

Weather Partly cloudy 80's

Equipment: Gem 500 #410

Location	Date	Time	CH4	CO2	O2	Balance	Static Press	Diff. Press.	Comments
CGP0003U	6/4/2021		0	2.5	17.9	79.6	0	0	
CGP0003U	12/1/2021		0	1.3	19.4	79.3	0	0	
CGP0003U	7/27/2022		0	1.7	17.4	80.9	0	0	
CGP0003U	10/27/2021		0	3.1	17.3	79.6	0	-0.1	
CGP0004L	8/18/2021		0	4.5	15.6	79.9	0	0	
CGP0004L	10/27/2021		0	4.4	6.8	88.8	0	-0.01	
CGP0004L	6/4/2021		0	3.9	7.3	88.8	0	0	
CGP0004L	7/23/2021		0	4.1	7.1	88.8	0	0	
CGP0004L	9/16/2021		0	4.4	6.8	88.8	0	-0.01	
CGP0004L	4/22/2022		0	6.5	5.1	88.4	0	-0.01	
CGP0004L	7/27/2022		0	4.1	14.3	81.6	0	-0.01	
CGP0004L	6/1/2022		0	5.2	13.3	81.5	0	-0.01	
CGP0004L	12/1/2021		0	4.8	14.6	80.6	0	-0.02	
CGP0004L	2/25/2022		0	5.5	7.1	87.4	0	0	
CGP0004L	11/18/2021		0	4.8	7.5	87.7	0	-0.01	
CGP0004U	11/18/2021		0	4.4	15.2	80.4	0	-0.01	
CGP0004U	2/25/2022		0	2.9	15.9	81.2	0	-0.01	
CGP0004U	7/23/2021		0	3.5	16.1	80.4	0	-0.01	
CGP0004U	8/18/2021		0	2.5	17.7	79.8	0	-0.02	
CGP0004U	10/27/2021		0	4.1	15.5	80.4	0	-0.01	
CGP0004U	4/22/2022		0	2.1	15.9	82	0	0	
CGP0004U	6/1/2022		0	3	15.8	81.2	0	0	
CGP0004U	12/1/2021		0	3.1	16.9	80	0	0	
CGP0004U	7/27/2022		0	2.6	16	81.4	0	0	
CGP0004U	6/4/2021		0	3.3	16.3	80.4	0	-0.01	
CGP0004U	9/16/2021		0	3.8	15.8	80.4	0	0	
CGP0005L	11/18/2021		0	8.5	4.1	87.4	0	0	
CGP0005L	7/27/2022		0	4.1	13	82.9	0	-0.02	
CGP0005L	6/4/2021		0	8.9	3.1	88	0	-0.01	
CGP0005L	12/1/2021		0	7.1	10.5	82.4	0	-0.01	
CGP0005L	6/1/2022		0	5.6	11.3	83.1	0	-0.03	

COLBERT PERIMETER GAS MONITORING REPORT

Barometer: 0

Tech: MT **Calibration:** **FanFlow:** 52 **Weather**

Equipment:

Location	Date	Time	CH4	CO2	O2	Balance	Static Press	Diff. Press.	Comments
CGP0005L	4/22/2022		0	6.3	2	91.7	0	0	
CGP0005L	9/16/2021		0	9.1	2.9	88	0	-0.01	
CGP0005L	8/18/2021		0	4.6	14.4	81	0	0	
CGP0005L	7/23/2021		0	9.3	2.7	88	0	-0.01	
CGP0005L	2/25/2022		0	6.6	3.5	89.9	0	-0.01	
CGP0005L	10/27/2021		0	8.9	3.1	88	0	0	
CGP0005U	10/27/2021		0	2.9	5.9	91.2	0	-0.01	
CGP0005U	7/27/2022		0	1.2	17.3	81.5	0	0	
CGP0005U	12/1/2021		0	1.7	18.4	79.9	0	0	
CGP0005U	6/1/2022		0	1.2	17.9	80.9	0.1	-0.01	
CGP0005U	11/18/2021		0	3.1	5.7	91.2	0	-0.01	
CGP0005U	9/16/2021		0	3.1	5.7	91.2	0	0	
CGP0005U	7/23/2021		0	2.7	6.1	91.2	0	0	
CGP0005U	2/25/2022		0	1.7	5.9	92.4	0	0	
CGP0005U	6/4/2021		0	2.4	6.4	91.2	0	-0.02	
CGP0005U	8/18/2021		0	1	19.2	79.8	0	0	
CGP0005U	4/22/2022		0	1.5	15.1	83.4	0	0	
CGP0007L	4/22/2022		0	1.1	20.7	78.2	0	-0.01	
CGP0007L	2/25/2022		0	2.4	19.2	78.4	0	-0.01	
CGP0007L	7/23/2021		0	2.1	19.3	78.6	0	0	
CGP0007L	12/1/2021		0	2.5	18.9	78.6	0	-0.01	
CGP0007L	8/18/2021		0	1.9	18.1	80	0	-0.01	
CGP0007L	6/4/2021		0	1.7	19.7	78.6	0	0	
CGP0007L	9/16/2021		0	2.3	19.1	78.6	0	0	
CGP0007L	11/18/2021		0	2.4	18.1	79.5	0	-0.01	
CGP0007L	6/1/2022		0	0.6	19.5	79.9	0	-0.02	
CGP0007L	7/27/2022		0	0.6	18.8	80.6	0	0	
CGP0007L	10/27/2021		0	2.5	18.9	78.6	0	0	
CGP0007U	10/27/2021		0	1.7	18.6	79.7	0	-0.01	
CGP0007U	6/4/2021		0	0.6	19.8	79.6	0	0	
CGP0007U	7/27/2022		0	2.1	16.5	81.4	0	-0.03	

COLBERT PERIMETER GAS MONITORING REPORT

Barometer: 0

Tech: MT **Calibration:** **FanFlow:** 52 **Weather**

Equipment:

Location	Date	Time	CH4	CO2	O2	Balance	Static Press	Diff. Press.	Comments
CGP0007U	4/22/2022		0	3.1	18.7	78.1	0	0	
CGP0007U	2/25/2022		0	1.1	18.1	80.8	0	0	
CGP0007U	7/23/2021		0	1.1	19.3	79.6	0	0	
CGP0007U	8/18/2021		0	0.9	18.9	80.8	0	0	
CGP0007U	9/16/2021		0	1.5	18.9	79.6	0	0	
CGP0007U	11/18/2021		0	0.9	18.4	80.7	0	-0.01	
CGP0007U	6/1/2022		0	2.7	16.2	81.1	0	-0.02	
CGP0007U	12/1/2021		0	1.7	18.6	79.7	0	0	
CGP0010L	11/18/2021		0	5.8	5	89.2	0	0	
CGP0010L	6/4/2021		0	5.1	5.5	89.4	0	0	
CGP0010L	4/22/2022		0	3.4	16.8	79.8	0	0	
CGP0010L	10/27/2021		0	5.5	5.3	89.2	0	-0.01	
CGP0010L	9/16/2021		0	5.1	5.5	89.4	0	0	
CGP0010L	8/18/2021		0	5.3	13	81.7	0	0	
CGP0010L	7/23/2021		0	5.1	5.5	89.4	0	0	
CGP0010L	2/25/2022		0	3.1	6.5	90.4	0	-0.01	
CGP0010L	6/1/2022		0	4.4	13.2	82.4	0	-0.02	
CGP0010L	7/27/2022		0	4.3	12.5	83.2	0	-0.03	
CGP0010L	12/1/2021		0	2.2	18.1	79.7	0	0	
CGP0010U	12/1/2021		0	2.1	18.1	79.8	0	0	
CGP0010U	2/25/2022		0	2.3	18.5	79.2	0	0	
CGP0010U	7/23/2021		0	2.1	17.9	80	0	-0.01	
CGP0010U	8/18/2021		0	2.5	17.3	80.2	0	0	
CGP0010U	9/16/2021		0	2.1	17.9	80	0	-0.01	
CGP0010U	10/27/2021		0	2.3	18.1	79.6	0	0	
CGP0010U	11/18/2021		0	2.5	17.9	79.6	0	0	
CGP0010U	4/22/2022		0	2.4	17.8	79.8	0	0	
CGP0010U	7/27/2022		0	2.2	16.1	81.7	0	-0.02	
CGP0010U	6/1/2022		0	1.8	16.8	81.4	0	0	
CGP0010U	6/4/2021		0	1.9	18.1	80	0	-0.01	
CGP0011L	6/1/2022		0	0.3	19.5	80.2	0	-0.03	

COLBERT PERIMETER GAS MONITORING REPORT

Barometer: 29.98

Tech: MT

Calibration: zeroed CH4 to AB air->CALGAS CH4 reading 14.9 cal to 15.0%; CO2 reading 15.1 cal to 15.0%; zeroed O2 to CALGAS-> O2 reading 20.5 AB air cal to 20.9%

FanFlow: 54

Weather Partly cloudy 80's

Equipment: Gem 500 #410

Location	Date	Time	CH4	CO2	O2	Balance	Static Press	Diff. Press.	Comments
CGP0011L	6/4/2021		0	1.1	19.8	79.1	0	-0.01	
CGP0011L	2/25/2022		0	1.1	18.8	80.1	0	-0.01	
CGP0011L	7/23/2021		0	1.5	19.4	79.1	0	-0.01	
CGP0011L	8/18/2021		0	3.7	5.6	90.7	0	0	
CGP0011L	9/16/2021		0	1.7	19.2	79.1	0	0	
CGP0011L	10/27/2021		0	1.6	18.9	79.5	0	0	
CGP0011L	11/18/2021		0	1.1	18.8	80.1	0	-0.01	
CGP0011L	7/27/2022		0	0.2	19.3	80.5	0	0	
CGP0011L	12/1/2021		0	1.6	18.9	79.5	0	-0.01	
CGP0011L	4/22/2022		0	0.4	19.9	79.7	0	0	
CGP0011U	7/27/2022		0	3.1	14.3	82.6	0	0	
CGP0011U	2/25/2022		0	3.2	16	80.8	0	0	
CGP0011U	7/23/2021		0	2.7	16.1	81.2	0	0	
CGP0011U	8/18/2021		0	0.7	19.5	79.8	0	-0.01	
CGP0011U	9/16/2021		0	2.9	15.9	81.2	0	0	
CGP0011U	10/27/2021		0	3.1	16.1	80.8	0	0	
CGP0011U	11/18/2021		0	3	16	79	0	0	
CGP0011U	4/22/2022		0	2.6	17.8	79.6	0	-0.01	
CGP0011U	6/1/2022		0	2.9	15.2	81.9	0	-0.03	
CGP0011U	6/4/2021		0	2.5	16.3	81.2	0	0	
CGP0011U	12/1/2021		0	3.1	16.1	80.8	0	-0.01	
CTS00001	8/18/2021		0	2.8	6.2	91	0	0	
CTS00002	8/18/2021		0	3.6	6.2	90.2	0	0	
CTS00003	8/18/2021		0	1.8	6.2	92	0	0	
CTS00004	8/18/2021		0	2.2	5.1	92.7	0	-0.01	
CTS00005	8/18/2021		0	8.1	5.5	86.4	0	-0.01	

eurofins | Air Toxics

7/18/2022
Mr. Mike Terris
Spokane County Utilities
22515 N. Elk Chattaroy Road

Colbert WA 99005

Project Name: COLBERT LANDFILL
Project #:
Workorder #: 2207273

Dear Mr. Mike Terris

The following report includes the data for the above referenced project for sample(s) received on 7/11/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Monica Tran at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Monica Tran

Project Manager

eurofins | Air Toxics

WORK ORDER #: 2207273

Work Order Summary

CLIENT:	Mr. Mike Terris Spokane County Utilities 22515 N. Elk Chattaroy Road Colbert, WA 99005	**BILL TO:**	Mr. Mike Terris Spokane County Utilities 22515 N. Elk Chattaroy Road Colbert, WA 99005
PHONE:	509-238-6607	**P.O. #**	
FAX:	509-238-6812	**PROJECT #**	COLBERT LANDFILL
DATE RECEIVED:	07/11/2022	**CONTACT:**	Monica Tran
DATE COMPLETED:	07/18/2022		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	CGI-003-220707	TO-15	4.3 "Hg	1.9 psi
02A	CGE-001-220707	TO-15	2.6 "Hg	1.6 psi
03A	Lab Blank	TO-15	NA	NA
04A	CCV	TO-15	NA	NA
05A	LCS	TO-15	NA	NA
05AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/18/22

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Spokane County Utilities
Workorder# 2207273

Two 6 Liter Summa Canister samples were received on July 11, 2022. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample CGI-003-220707 due to matrix interference.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: CGI-003-220707

Lab ID#: 2207273-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	13	210	65	1000
Freon 114	13	34	92	240
Vinyl Chloride	13	92	34	240
Chloroethane	53	84	140	220
Freon 11	13	24	74	130
1,1-Dichloroethene	13	27	52	110
Hexane	13	100	46	360
1,1-Dichloroethane	13	20	53	82
cis-1,2-Dichloroethene	13	120	52	470
Tetrahydrofuran	13	61	39	180
Cyclohexane	13	57	45	200
2,2,4-Trimethylpentane	13	44	62	210
Benzene	13	22	42	70
Heptane	13	85	54	350
Toluene	13	24	50	92
Chlorobenzene	13	16	61	76
Ethyl Benzene	13	380	57	1600
m,p-Xylene	13	730	57	3200
o-Xylene	13	77	57	340
Cumene	13	24	65	120
Propylbenzene	13	18	65	90
4-Ethyltoluene	13	45	65	220
1,3,5-Trimethylbenzene	13	51	65	250
1,2,4-Trimethylbenzene	13	120	65	600
1,4-Dichlorobenzene	13	42	79	250

Client Sample ID: CGE-001-220707

Lab ID#: 2207273-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.60	210	3.0	1000
Freon 114	0.60	55	4.2	380
Vinyl Chloride	0.60	84	1.5	220

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: CGE-001-220707

Lab ID#: 2207273-02A

Chloroethane	2.4	68	6.4	180
Freon 11	0.60	11	3.4	61
Toluene	0.60	0.85	2.3	3.2
Ethyl Benzene	0.60	3.0	2.6	13
m,p-Xylene	0.60	7.1	2.6	31
o-Xylene	0.60	1.1	2.6	4.7
4-Ethyltoluene	0.60	1.2	3.0	5.8
1,3,5-Trimethylbenzene	0.60	0.92	3.0	4.5
1,2,4-Trimethylbenzene	0.60	2.9	3.0	14
1,4-Dichlorobenzene	0.60	1.0	3.6	6.2

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Client Sample ID: CGI-003-220707

Lab ID#: 2207273-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071530**	**Date of Collection:**	**7/7/22 11:15:00 AM**
Dil. Factor:	**26.4**	**Date of Analysis:**	**7/16/22 02:02 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	13	210	65	1000
Freon 114	13	34	92	240
Chloromethane	130	Not Detected	270	Not Detected
Vinyl Chloride	13	92	34	240
1,3-Butadiene	13	Not Detected	29	Not Detected
Bromomethane	130	Not Detected	510	Not Detected
Chloroethane	53	84	140	220
Freon 11	13	24	74	130
Ethanol	130	Not Detected	250	Not Detected
Freon 113	13	Not Detected	100	Not Detected
1,1-Dichloroethene	13	27	52	110
Acetone	130	Not Detected	310	Not Detected
2-Propanol	53	Not Detected	130	Not Detected
Carbon Disulfide	53	Not Detected	160	Not Detected
3-Chloropropene	53	Not Detected	160	Not Detected
Methylene Chloride	130	Not Detected	460	Not Detected
Methyl tert-butyl ether	53	Not Detected	190	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	52	Not Detected
Hexane	13	100	46	360
1,1-Dichloroethane	13	20	53	82
2-Butanone (Methyl Ethyl Ketone)	53	Not Detected	160	Not Detected
cis-1,2-Dichloroethene	13	120	52	470
Tetrahydrofuran	13	61	39	180
Chloroform	13	Not Detected	64	Not Detected
1,1,1-Trichloroethane	13	Not Detected	72	Not Detected
Cyclohexane	13	57	45	200
Carbon Tetrachloride	13	Not Detected	83	Not Detected
2,2,4-Trimethylpentane	13	44	62	210
Benzene	13	22	42	70
1,2-Dichloroethane	13	Not Detected	53	Not Detected
Heptane	13	85	54	350
Trichloroethene	13	Not Detected	71	Not Detected
1,2-Dichloropropane	13	Not Detected	61	Not Detected
1,4-Dioxane	53	Not Detected	190	Not Detected
Bromodichloromethane	13	Not Detected	88	Not Detected
cis-1,3-Dichloropropene	13	Not Detected	60	Not Detected
4-Methyl-2-pentanone	13	Not Detected	54	Not Detected
Toluene	13	24	50	92
trans-1,3-Dichloropropene	13	Not Detected	60	Not Detected
1,1,2-Trichloroethane	13	Not Detected	72	Not Detected
Tetrachloroethene	13	Not Detected	90	Not Detected
2-Hexanone	53	Not Detected	220	Not Detected

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Client Sample ID: CGI-003-220707

Lab ID#: 2207273-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071530**	**Date of Collection: 7/7/22 11:15:00 AM**	
Dil. Factor:	**26.4**	**Date of Analysis: 7/16/22 02:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	13	Not Detected	110	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
Chlorobenzene	13	16	61	76
Ethyl Benzene	13	380	57	1600
m,p-Xylene	13	730	57	3200
o-Xylene	13	77	57	340
Styrene	13	Not Detected	56	Not Detected
Bromoform	13	Not Detected	140	Not Detected
Cumene	13	24	65	120
1,1,2,2-Tetrachloroethane	13	Not Detected	91	Not Detected
Propylbenzene	13	18	65	90
4-Ethyltoluene	13	45	65	220
1,3,5-Trimethylbenzene	13	51	65	250
1,2,4-Trimethylbenzene	13	120	65	600
1,3-Dichlorobenzene	13	Not Detected	79	Not Detected
1,4-Dichlorobenzene	13	42	79	250
alpha-Chlorotoluene	13	Not Detected	68	Not Detected
1,2-Dichlorobenzene	13	Not Detected	79	Not Detected
1,2,4-Trichlorobenzene	53	Not Detected	390	Not Detected
Hexachlorobutadiene	53	Not Detected	560	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	109	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: CGE-001-220707

Lab ID#: 2207273-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071518**	**Date of Collection:**	**7/7/22 11:45:00 AM**
Dil. Factor:	**1.21**	**Date of Analysis:**	**7/15/22 07:07 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.60	210	3.0	1000
Freon 114	0.60	55	4.2	380
Chloromethane	6.0	Not Detected	12	Not Detected
Vinyl Chloride	0.60	84	1.5	220
1,3-Butadiene	0.60	Not Detected	1.3	Not Detected
Bromomethane	6.0	Not Detected	23	Not Detected
Chloroethane	2.4	68	6.4	180
Freon 11	0.60	11	3.4	61
Ethanol	6.0	Not Detected	11	Not Detected
Freon 113	0.60	Not Detected	4.6	Not Detected
1,1-Dichloroethene	0.60	Not Detected	2.4	Not Detected
Acetone	6.0	Not Detected	14	Not Detected
2-Propanol	2.4	Not Detected	5.9	Not Detected
Carbon Disulfide	2.4	Not Detected	7.5	Not Detected
3-Chloropropene	2.4	Not Detected	7.6	Not Detected
Methylene Chloride	6.0	Not Detected	21	Not Detected
Methyl tert-butyl ether	2.4	Not Detected	8.7	Not Detected
trans-1,2-Dichloroethene	0.60	Not Detected	2.4	Not Detected
Hexane	0.60	Not Detected	2.1	Not Detected
1,1-Dichloroethane	0.60	Not Detected	2.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.4	Not Detected	7.1	Not Detected
cis-1,2-Dichloroethene	0.60	Not Detected	2.4	Not Detected
Tetrahydrofuran	0.60	Not Detected	1.8	Not Detected
Chloroform	0.60	Not Detected	3.0	Not Detected
1,1,1-Trichloroethane	0.60	Not Detected	3.3	Not Detected
Cyclohexane	0.60	Not Detected	2.1	Not Detected
Carbon Tetrachloride	0.60	Not Detected	3.8	Not Detected
2,2,4-Trimethylpentane	0.60	Not Detected	2.8	Not Detected
Benzene	0.60	Not Detected	1.9	Not Detected
1,2-Dichloroethane	0.60	Not Detected	2.4	Not Detected
Heptane	0.60	Not Detected	2.5	Not Detected
Trichloroethene	0.60	Not Detected	3.2	Not Detected
1,2-Dichloropropane	0.60	Not Detected	2.8	Not Detected
1,4-Dioxane	2.4	Not Detected	8.7	Not Detected
Bromodichloromethane	0.60	Not Detected	4.0	Not Detected
cis-1,3-Dichloropropene	0.60	Not Detected	2.7	Not Detected
4-Methyl-2-pentanone	0.60	Not Detected	2.5	Not Detected
Toluene	0.60	0.85	2.3	3.2
trans-1,3-Dichloropropene	0.60	Not Detected	2.7	Not Detected
1,1,2-Trichloroethane	0.60	Not Detected	3.3	Not Detected
Tetrachloroethene	0.60	Not Detected	4.1	Not Detected
2-Hexanone	2.4	Not Detected	9.9	Not Detected

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Client Sample ID: CGE-001-220707

Lab ID#: 2207273-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071518**	**Date of Collection: 7/7/22 11:45:00 AM**	
Dil. Factor:	**1.21**	**Date of Analysis: 7/15/22 07:07 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.60	Not Detected	5.2	Not Detected
1,2-Dibromoethane (EDB)	0.60	Not Detected	4.6	Not Detected
Chlorobenzene	0.60	Not Detected	2.8	Not Detected
Ethyl Benzene	0.60	3.0	2.6	13
m,p-Xylene	0.60	7.1	2.6	31
o-Xylene	0.60	1.1	2.6	4.7
Styrene	0.60	Not Detected	2.6	Not Detected
Bromoform	0.60	Not Detected	6.2	Not Detected
Cumene	0.60	Not Detected	3.0	Not Detected
1,1,2,2-Tetrachloroethane	0.60	Not Detected	4.2	Not Detected
Propylbenzene	0.60	Not Detected	3.0	Not Detected
4-Ethyltoluene	0.60	1.2	3.0	5.8
1,3,5-Trimethylbenzene	0.60	0.92	3.0	4.5
1,2,4-Trimethylbenzene	0.60	2.9	3.0	14
1,3-Dichlorobenzene	0.60	Not Detected	3.6	Not Detected
1,4-Dichlorobenzene	0.60	1.0	3.6	6.2
alpha-Chlorotoluene	0.60	Not Detected	3.1	Not Detected
1,2-Dichlorobenzene	0.60	Not Detected	3.6	Not Detected
1,2,4-Trichlorobenzene	2.4	Not Detected	18	Not Detected
Hexachlorobutadiene	2.4	Not Detected	26	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: Lab Blank

Lab ID#: 2207273-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071506**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/15/22 12:23 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 2207273-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071506**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/15/22 12:23 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: CCV

Lab ID#: 2207273-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071502**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/15/22 09:53 AM**

Compound	%Recovery
Freon 12	100
Freon 114	94
Chloromethane	84
Vinyl Chloride	83
1,3-Butadiene	87
Bromomethane	85
Chloroethane	87
Freon 11	107
Ethanol	88
Freon 113	98
1,1-Dichloroethene	87
Acetone	82
2-Propanol	88
Carbon Disulfide	76
3-Chloropropene	73
Methylene Chloride	93
Methyl tert-butyl ether	92
trans-1,2-Dichloroethene	88
Hexane	89
1,1-Dichloroethane	95
2-Butanone (Methyl Ethyl Ketone)	76
cis-1,2-Dichloroethene	92
Tetrahydrofuran	95
Chloroform	95
1,1,1-Trichloroethane	106
Cyclohexane	82
Carbon Tetrachloride	109
2,2,4-Trimethylpentane	105
Benzene	90
1,2-Dichloroethane	107
Heptane	87
Trichloroethene	103
1,2-Dichloropropane	100
1,4-Dioxane	91
Bromodichloromethane	108
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	113
Toluene	105
trans-1,3-Dichloropropene	87
1,1,2-Trichloroethane	86
Tetrachloroethene	89
2-Hexanone	85

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Client Sample ID: CCV

Lab ID#: 2207273-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/15/22 09:53 AM**	

Compound	%Recovery
Dibromochloromethane	95
1,2-Dibromoethane (EDB)	89
Chlorobenzene	91
Ethyl Benzene	90
m,p-Xylene	95
o-Xylene	93
Styrene	99
Bromoform	110
Cumene	102
1,1,2,2-Tetrachloroethane	87
Propylbenzene	102
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	101
1,2,4-Trimethylbenzene	100
1,3-Dichlorobenzene	94
1,4-Dichlorobenzene	94
alpha-Chlorotoluene	96
1,2-Dichlorobenzene	98
1,2,4-Trichlorobenzene	77
Hexachlorobutadiene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: LCS

Lab ID#: 2207273-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/15/22 10:18 AM**	

Compound	%Recovery	Method Limits
Freon 12	107	70-130
Freon 114	102	70-130
Chloromethane	85	70-130
Vinyl Chloride	90	70-130
1,3-Butadiene	96	70-130
Bromomethane	92	70-130
Chloroethane	87	70-130
Freon 11	116	70-130
Ethanol	100	70-130
Freon 113	104	70-130
1,1-Dichloroethene	94	70-130
Acetone	82	70-130
2-Propanol	100	70-130
Carbon Disulfide	84	70-130
3-Chloropropene	80	70-130
Methylene Chloride	97	70-130
Methyl tert-butyl ether	99	70-130
trans-1,2-Dichloroethene	95	70-130
Hexane	96	70-130
1,1-Dichloroethane	103	70-130
2-Butanone (Methyl Ethyl Ketone)	88	70-130
cis-1,2-Dichloroethene	101	70-130
Tetrahydrofuran	101	70-130
Chloroform	101	70-130
1,1,1-Trichloroethane	116	70-130
Cyclohexane	93	70-130
Carbon Tetrachloride	118	70-130
2,2,4-Trimethylpentane	111	70-130
Benzene	96	70-130
1,2-Dichloroethane	116	70-130
Heptane	92	70-130
Trichloroethene	120	70-130
1,2-Dichloropropane	107	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	113	70-130
cis-1,3-Dichloropropene	116	70-130
4-Methyl-2-pentanone	119	70-130
Toluene	111	70-130
trans-1,3-Dichloropropene	96	70-130
1,1,2-Trichloroethane	93	70-130
Tetrachloroethene	96	70-130
2-Hexanone	94	70-130

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Client Sample ID: LCS

Lab ID#: 2207273-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/15/22 10:18 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	105	70-130
1,2-Dibromoethane (EDB)	99	70-130
Chlorobenzene	98	70-130
Ethyl Benzene	98	70-130
m,p-Xylene	100	70-130
o-Xylene	100	70-130
Styrene	110	70-130
Bromoform	119	70-130
Cumene	108	70-130
1,1,2,2-Tetrachloroethane	91	70-130
Propylbenzene	108	70-130
4-Ethyltoluene	112	70-130
1,3,5-Trimethylbenzene	108	70-130
1,2,4-Trimethylbenzene	109	70-130
1,3-Dichlorobenzene	107	70-130
1,4-Dichlorobenzene	108	70-130
alpha-Chlorotoluene	113	70-130
1,2-Dichlorobenzene	110	70-130
1,2,4-Trichlorobenzene	117	70-130
Hexachlorobutadiene	120	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	109	70-130
1,2-Dichloroethane-d4	112	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: LCSD

Lab ID#: 2207273-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/15/22 10:43 AM**	

Compound	%Recovery	Method Limits
Freon 12	107	70-130
Freon 114	101	70-130
Chloromethane	85	70-130
Vinyl Chloride	90	70-130
1,3-Butadiene	91	70-130
Bromomethane	88	70-130
Chloroethane	89	70-130
Freon 11	113	70-130
Ethanol	100	70-130
Freon 113	104	70-130
1,1-Dichloroethene	93	70-130
Acetone	85	70-130
2-Propanol	98	70-130
Carbon Disulfide	81	70-130
3-Chloropropene	81	70-130
Methylene Chloride	96	70-130
Methyl tert-butyl ether	98	70-130
trans-1,2-Dichloroethene	94	70-130
Hexane	94	70-130
1,1-Dichloroethane	99	70-130
2-Butanone (Methyl Ethyl Ketone)	86	70-130
cis-1,2-Dichloroethene	99	70-130
Tetrahydrofuran	100	70-130
Chloroform	99	70-130
1,1,1-Trichloroethane	112	70-130
Cyclohexane	91	70-130
Carbon Tetrachloride	116	70-130
2,2,4-Trimethylpentane	109	70-130
Benzene	95	70-130
1,2-Dichloroethane	112	70-130
Heptane	90	70-130
Trichloroethene	118	70-130
1,2-Dichloropropane	106	70-130
1,4-Dioxane	98	70-130
Bromodichloromethane	109	70-130
cis-1,3-Dichloropropene	115	70-130
4-Methyl-2-pentanone	118	70-130
Toluene	110	70-130
trans-1,3-Dichloropropene	97	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	96	70-130
2-Hexanone	92	70-130

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Client Sample ID: LCSD

Lab ID#: 2207273-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a071504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/15/22 10:43 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	103	70-130
1,2-Dibromoethane (EDB)	98	70-130
Chlorobenzene	99	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	98	70-130
o-Xylene	99	70-130
Styrene	109	70-130
Bromoform	118	70-130
Cumene	106	70-130
1,1,2,2-Tetrachloroethane	90	70-130
Propylbenzene	107	70-130
4-Ethyltoluene	108	70-130
1,3,5-Trimethylbenzene	110	70-130
1,2,4-Trimethylbenzene	107	70-130
1,3-Dichlorobenzene	107	70-130
1,4-Dichlorobenzene	107	70-130
alpha-Chlorotoluene	113	70-130
1,2-Dichlorobenzene	111	70-130
1,2,4-Trichlorobenzene	116	70-130
Hexachlorobutadiene	121	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	100	70-130

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Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2207273

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: SPOKANE COUNTY
Project Name: COLBERT LANDFILL
Project Manager: A. STEWART Project # COLBERT
Sampler: MIKE TERRIS
Site Name: COLBERT LANDFILL

Special Instructions/Notes: PLEASE EMAIL RESULTS TO mterris@SPOKANECOUNTY.ORG & astewart@SPOKANECOUNTY.ORG.

Turnaround Time (Rush surcharges may apply)
Standard (X) Rush _____(specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	EPA TO-15			
01A	CGI-003-220707	00647	2005	7/7/22	1100	7/7/22	1115	29	0			X			
02A	CGE-001-220707	4611	2121	7/7/22	1130	7/7/22	1145	25.4	0			X			

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature]	7/7/2022	1345	[signature] FAL	07/11/22	0925
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: FedEx | Custody Seals Intact? | Yes | No | None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

TECH: M. TERRIS WEATHER: CLEAR LOW 70'S

CARBON TUB INFORMATION

DATE:	9/1/2021 WED
FAN HOURS:	3159
FAN FLOW:	52 CFM
GAS TEMP:	19.1°C
INLET TUBE READ:	

DIRECTIONS

- CURRENTLY ACTIVE
- SPENT
- WAS ACTIVE, NOW SPENT AND TAKEN OFFLINE
- NEWLY ACTIVE
- CLEAN

	TUB 1	TUB 2	TUB 3	TUB 4
STATUS BEFORE CHANGES:	○	○	○	↑
TUBE READINGS:				
PRESSURE:				

	TUB 1	TUB 2	TUB 3	TUB 4
STATUS AFTER CHANGES:	○	○	↘	● ↗
TUBE READINGS:				
PRESSURE:				

COMMENTS: TUB 4 IS STILL ONLINE BUT VALVES ARE CLOSED TUB 3 IS NEW ACTIVE TUB WITH BOTH VALVES OPEN (UPPER/LOWER)

TUB #1 & #2 ARE CLEAN AND SITTING OFF LINE. AS BACK UPS

CARBON TUB INFORMATION

(THURS)

DATE:	8/27/20
FAN HOURS:	45085
FAN FLOW:	52 CFM
GAS TEMP:	83.8°C
INLET TUBE READ:	—

DIRECTIONS

- CURRENTLY ACTIVE
- SPENT
- WAS ACTIVE, NOW SPENT AND TAKEN OFFLINE
- NEWLY ACTIVE
- CLEAN

	TUB 1	TUB 2	TUB 3	TUB 4
STATUS BEFORE CHANGES:	●	●	●	↑
TUBE READINGS:				
PRESSURE:				

	TUB 1	TUB 2	TUB 3	TUB 4
STATUS AFTER CHANGES:	○	○	○	↑
TUBE READINGS:				
PRESSURE:	↗ (OFF LINE)	↑	↗ (ONLINE)	↑

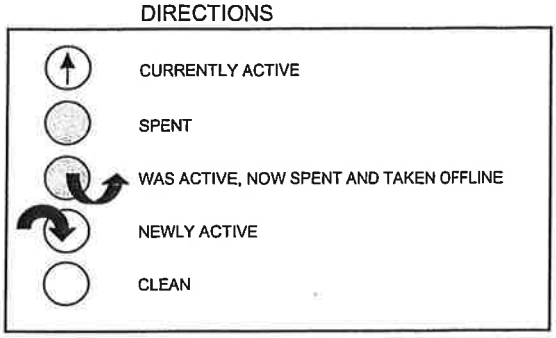
COMMENTS: EVOQUA WAS OUT TODAY TO CLEAN 3 CARBON UNITS (#1, #2 & #3) UNITS 1 & 2 WERE OFF LINE. MT TOOK CARBON UNIT 3 OF LINE TO BE CLEANED THEN PUT BACK ON LINE W/ VALVES STILL CLOSED

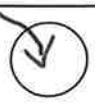
SO AS OF TODAY TUB #4 IS STILL ON LINE & ACTIVE VALVES OPEN, TUB #3 IS ON LINE AS A BACK-UP VALVES CLOSED. TUBS #1 & #2 ARE CLEAN OFF LINE.

CARBON TUB INFORMATION

DATE:	2-13-2020
FAN HOURS:	41335
FAN FLOW:	54 CFM
GAS TEMP:	10.9°C
INLET TUBE READ:	- NA-

DIRECTIONS



	TUB 1	TUB 2	TUB 3	TUB 4
STATUS BEFORE CHANGES:				
TUBE READINGS:				
PRESSURE:				

	TUB 1	TUB 2	TUB 3	TUB 4
STATUS AFTER CHANGES:				
TUBE READINGS:				
PRESSURE:				

COMMENTS: TURNED VALVES OFF OF TUB #3 (STILL ON LINE) OPENED VALVES ON TUB #4 NOW ACTIVE

*SAMPLE A PROFILE FROM TUB # 3

Appendix B

Colbert Annual Sampling Field Sheets/Paperwork

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
StationID: CP-S3
Sample ID: CP-S3-220419
QA/QC Sample ID:

Field Personnel: M. TERRIS
Weather: SLI CLOUDY 36°F
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennett, PDB, Hydrasleeve

Well Depth: 99
Screens from: To
Casing Size (in):

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 87.66'
Water Column Depth: 11.34' x Gallons per linear foot: 1.50 = Calc. Purge vol./casing vol.: 17.01=18 x3 well volumes = Total Purge Vol. (gal): 54 GAL

Purge Rate: 1GPM
Purge Begin Time: 0745

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0803	18GAL	7.51	624	11.9		SLI CLOUDY + RUSTY
0821	36GAL	7.54	627	11.8		CLEAR
0839	54GAL	7.54	628	11.6		CLEAR
Stabilization Criteria:	√ or 2	+/- 0.1 unit	+/- 5%		0.87	(must meet criteria within 3 consecutive measurements)

Sample Time: 0840
QAQC Sample Time: -NA-

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: CD-31A1
Weather: SU CLOUDY, 37°F
Sample ID: CD-31A1-220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: -NA-

Well Depth: 110
Screens from: 103 To 108
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 93.86
Water Column Depth: 16.14 -x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 4.19:45 x3 well volumes = Total Purge Vol. (gal): 13.5 GAL

Purge Rate:
Purge Begin Time: 0940

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0914	4.5GAL	7.67	667	10.1		CLEAR
0929	9.0GAL	7.61	659	9.9		CLEAR
0945	13.5GAL	7.61	660	9.9		CLEAR
Stabilization Criteria:	√ ok	+/- 0.1 unit	+/- 5%		0.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 0945
QAQC Sample Time: -NA-

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: CD-34A1
Weather: SLI CLOUDY 36°F
Sample ID: CD-34A1 -220419
Purge Method: Disp. bailer, Ded. Grundfos, (Ded. Bladder), Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: -NA-

Well Depth: 110 Screens from: 100 To 110 Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 97.97
= Water Column Depth: 12.03' x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 3.12=35 x3 well volumes = Total Purge Vol. (gal): 10.5GAL

Purge Rate:
Purge Begin Time: 0645

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0659	3.5GAL	7.49	610	11.1°c		CLEAR
0714	7.0GAL	7.51	610	11.0°c		CLEAR
0729	10.5GAL	7.51	611	10.9°c		CLEAR
Stabilization Criteria:	✓OK	+/- 0.1 unit	+/- 5%		0.32	(must meet criteria within 3 consecutive measurements)

Sample Time: 0730
QAQC Sample Time: -NA-

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 243	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: CD-36A1
Weather: P.C 47°F
Sample ID: CD-36A1 - 220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: - NA -

Well Depth: 102
Screens from: To
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 90.32'
Water Column Depth: 11.68' x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 3.03:35 x3 well volumes = Total Purge Vol. (gal): 10.5 GAL

Purge Rate: 12 MPW
Purge Begin Time: 1109

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1121	3.5 GAL	7.67	625	10.6		CLEAR
1133	7.0 GAL	7.71	621	10.4		CLEAR
1147	10.5 GAL	7.70	621	10.2		CLEAR
Stabilization Criteria:	√ OK	+/- 0.1 unit	+/- 5%		0.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 1150
QAQC Sample Time: - NA -

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: CD-37A1
Weather: MOSTLY CLOUDY 45°F SHOWERS
Sample ID: CD-37A1-220419
Purge Method: Disp. bailer, Ded. Grundfos, (Ded. Bladder), Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: -NA-

Well Depth: 104
Screens from: To
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 90.97
Water Column Depth: 13.03 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 3.38=3.5 x3 well volumes = Total Purge Vol. (gal): 10.5

Purge Rate: 17 MPW
Purge Begin Time: 1225

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1242	3.5GAL	7.44	710	11.2		CLEAR
1259	7.0GAL	7.40	711	11.0		CLEAR
1316	10.5GAL	7.39	710	11.0		CLEAR
Stabilization Criteria:	✓ VOL	+/- 0.1 unit	+/- 5%		0.11	(must meet criteria within 3 consecutive measurements)

Sample Time: 1320
QAQC Sample Time: -NA-

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: CD-38A1
Weather: MOSTLY CLOUDY 43°F
Sample ID: CD-38A1-220419
Purge Method: Disp. bailer, Ded. Grundfos, (Ded. Bladder), Ded. Bennett, Env. Tech ES 40, Port. Grundfos, ~~Port. Bennet~~, PDB, Hydrasleeve
QA/QC Sample ID: -NA-

Well Depth: 111
Screens from: ____ To ____
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
(2.5)	(0.26)
4	0.66
6	1.5
8	2.6

Depth to Water: 90.92'
Water Column Depth: 20.08 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 5.22-5.50 x3 well volumes = Total Purge Vol. (gal): 16.5 GAL

Purge Rate: 20 MIN PER WELL VOL.
Purge Begin Time: 1000

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1018	5.5 GAL	7.65	594	10.6		CLEAR
1036	11.0 GAL	7.63	589	10.5		"
1057	16.5 GAL	7.64	589	10.4		"
Stabilization Criteria:	√ 0.2	+/- 0.1 unit	+/- 5%		0.22	(must meet criteria within 3 consecutive measurements)

Sample Time: 1100
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: CD-40C1
Weather: P.C 50°F
Sample ID: CD-40C1 -220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: CD-50-220419

Well Depth: 46 Screens from: 36 To 46 Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

− Depth to Water: 10.06

= Water Column Depth: 35.94 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 9.34:10 x3 well volumes = Total Purge Vol. (gal): 30GAL

Purge Rate: 19MPW ✓ Purge Begin Time: 1327

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1349	10 GAL	7.89	551	10.6		CLEAR
1408	20 GAL	7.88	553	10.3		CLEAR
1428	30GAL	7.89	554	10.3		CLEAR
Stabilization Criteria:	✓ 0IL	+/- 0.1 unit	+/- 5%		0.17	(must meet criteria within 3 consecutive measurements)

Sample Time: 1430
QAQC Sample Time: 1400

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
*	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
*	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

MT TOOK A DUPE HERE FOR BOTH SETS OF VOCS & 1,4 DIOXANE.

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: 1473M-1
Weather: P.CLOUDY 53°F
Sample ID: 1473M-1 -220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: -NA-
COLES WELL

Well Depth: ~~170~~ 105'
Screens from: To
Casing Size (in)
Depth to Water: 80'
Water Column Depth: 25' ~~30~~ x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 45GAL x3 well volumes = Total Purge Vol. (gal): 135GAL
60PT = 195 TOTAL GAL
Purge Rate: 8.5GPM
Purge Begin Time: 1617

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1627	85GAL	7.82	569	10.9		CLEAR
1637	170GAL	7.85	566	10.7		CLEAR
1647	255GAL	7.83	565	10.7		CLEAR
Stabilization Criteria:	VOL	+/- 0.1 unit	+/- 5%		0.22	(must meet criteria within 3 consecutive measurements)

Sample Time: 1650
QAQC Sample Time: -NA-

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: *UNABLE TO GET WL FROM THIS LOCATION PUMP IS BLOCKED USING 80' APPROX. SINCE THAT IS WHAT S-1 IS AROUND.

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: 1573A-1
Weather: P.C. 52°F SHOWERS
Sample ID: 1573A-1 - 220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: - NA -
COLRES WELL

Well Depth: 105
Screens from: To
Casing Size (in): 6
CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 94.08'
= Water Column Depth: 10.92 x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 16.3=20GAL x3 well volumes = Total Purge Vol. (gal): 60GAL
PT 80GAL = 140GAL/3=46G
Purge Rate: 8.5 GPM
Purge Begin Time: 1540 ~~1547~~

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1549	77GAL	7.83	503	10.9		CLEAR
1559	162GAL	7.83	504	10.8		CLEAR
1609	247GAL	7.82	502	10.8		CLEAR
Stabilization Criteria:	√ok	+/- 0.1 unit	+/- 5%		0.29	(must meet criteria within 3 consecutive measurements)

Sample Time: 1610
QAQC Sample Time: NT-

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

SAMPLED @ YARD HYDRANT NEXT (NORTH) SIDE OF BACK PORCH.

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/19/2022
Field Personnel: M. TERRIS
StationID: 1073D-1
Weather: P.C. 53°F
Sample ID: 1073D-1 -220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve COLRES
QA/QC Sample ID: -NA-

Well Depth: 76
Screens from: 58 To 64
Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 3.21'
Water Column Depth: 72.79 x Gallons per linear foot: 1.50 = Calc. Purge vol./casing vol.: 109.1=110 x3 well volumes = Total Purge Vol. (gal): 330 GAL
20 GAL P.T 350 GAL

Purge Rate: 12 GPM
Purge Begin Time: 1500

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1510	120 GAL	8.03	375	10.9		CLEAR
1519	240 GAL	8.01	377	10.8		CLEAR
1529	360 GAL	8.01	376	10.8		CLEAR
Stabilization Criteria:	10%	+/- 0.1 unit	+/- 5%		0.17	(must meet criteria within 3 consecutive measurements)

Sample Time: 1530
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

HOSE BIB IN PUMP HOUSE.

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22
Field Personnel: GF, AS
StationID: CD-41C1
Weather: mstly cldy, 49°
Sample ID: CD-41C1 -220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 233
Screens from: 214 To 233
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 177.42
Water Column Depth: 55.58 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 14.5 use 15 x3 well volumes = Total Purge Vol. (gal): 45

Purge Rate: 2.5
Purge Begin Time: 1425

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1432	15	7.86	421	11.6		clear
1439	30	7.86	423	11.6		clear
1446	45	7.85	419	12.0		clear
Stabilization Criteria:	VOL	+/- 0.1 unit	+/- 5%		0.19	(must meet criteria within 3 consecutive measurements)

Sample Time: 1447
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: ECtestr 11+	Hach 2100P
S/N 476085	S/N 7810	~~S/N 940700005619~~/ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22
Field Personnel: GF, AS
StationID: CD-41C2
Weather: pt ly cldy, 42°
Sample ID: CD-41C2 -220419
Purge Method: Disp. bailer, ~~Ded. Grundfos~~, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 291
Screens from: 271 To 291
Casing Size (in): 2.5
Depth to Water: 177.93
Water Column Depth: 113.07 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 29.4 use 30 x3 well volumes = Total Purge Vol. (gal): 90
Purge Rate: 2.5
Purge Begin Time: 1344

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1356	30	7.95	442	11.4		clear
1408	60	7.95	450	11.5		clear
1420	90	7.95	444	11.7		clear
Stabilization Criteria:	Vol	+/- 0.1 unit	+/- 5%		0.17	(must meet criteria within 3 consecutive measurements)

Sample Time: 1421
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22

Field Personnel: GF, AS

StationID: CD-41C3

Weather: mstly cldy, 42°

Sample ID: CD-41C3 - 220419

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA

Well Depth: 403 Screens from: 384 To 403 Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 178.06

Water Column Depth: 224.94 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 58.5 use 59 x3 well volumes = Total Purge Vol. (gal): 177

Purge Rate: 2.6 Purge Begin Time: 1345

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1408	59	7.83	483	12.0		Clear
1431	118	7.83	484	11.9		Clear
1454	177	7.83	484	12.1		Clear
Stabilization Criteria:	√ vol	+/- 0.1 unit	+/- 5%		0.15	(must meet criteria within 3 consecutive measurements)

Sample Time: 1455

QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22

Field Personnel: GF, AS

StationID: CD-42C1

Weather: Cldy, 37°

Sample ID: CD-42C1 -220419

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA

Well Depth: 227 Screens from: 208 To 227 Casing Size (in): 2.5

− Depth to Water: 174.44

= Water Column Depth: 52.56 -x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 13.7 use 14 x3 well volumes = Total Purge Vol. (gal): 42

Purge Rate: 2.5

Purge Begin Time: 1105

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1112	14	7.82	495	12.0		Clear
1118	28	7.80	496	12.0		Clear
1124	42	7.81	496	11.9		Clear
Stabilization Criteria:	√ OK	+/- 0.1 unit	+/- 5%		0.12	(must meet criteria within 3 consecutive measurements)

Sample Time: 1125

QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC testr 11	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22
StationID: CD-42C2
Sample ID: CD-42C2 -220419
QA/QC Sample ID: NA

Field Personnel: GF, AS
Weather: Cldy, 37°
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Well Depth: 312
Screens from: 293 To 312
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 174.38
Water Column Depth: 137.62 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 35.8 use 36 x3 well volumes = Total Purge Vol. (gal): 108

Purge Rate: 2.6
Purge Begin Time: 1009

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1023	36	7.87	497	11.7		Clear
1037	72	7.89	498	11.8		Clear
1051	108	7.87	494	11.8		Clear
Stabilization Criteria:	√ 0.2	+/- 0.1 unit	+/- 5%		0.17	(must meet criteria within 3 consecutive measurements)

Sample Time: 1053
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: ExTech	Meter: ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005618~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22
Field Personnel: GF, AS
StationID: CD-42C3
Weather: cldy, 37°
Sample ID: CD-42C3 - 220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 402 Screens from: 383 To 402 Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 173.99
Water Column Depth: 228.01 -x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 59.3 use 60 x3 well volumes = Total Purge Vol. (gal): 180

Purge Rate: 2.2
Purge Begin Time: 1013

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1041	60	7.83	418	12.4		Clear
1109	120	7.87	426	12.4		Clear
1137	180	7.87	428	12.5		Clear
Stabilization Criteria:	✓ dL	+/- 0.1 unit	+/- 5%		0.45	(must meet criteria within 3 consecutive measurements)

Sample Time: 1139
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22 | Field Personnel: GF AS

StationID: CD-43C1 | Weather: cldy, 38°

Sample ID: CD-43C1 – 220419

QA/QC Sample ID: NA

Purge Method: Disp. bailer, (Ded. Grundfos), Ded. Bladder, Ded. Bennett, Env. Tech ES 40, ~~Port. Grundfos~~, Port. Bennet, PDB, Hydrasleeve

Well Depth: 230 | Screens from: 211 To 230 | Casing Size (in): 2.5

– Depth to Water: 171.56

= Water Column Depth: 58.44 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 15.2 use 16.0 x3 well volumes = Total Purge Vol. (gal): 48

Purge Rate: 2.3 | Purge Begin Time:

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0924	16	7.92	514	10.5		Clear
0931	32	7.92	514	10.1		Clear
0938	48	7.93	514	10.1		Clear
Stabilization Criteria:	√ ok	+/- 0.1 unit	+/- 5%		0.13	(must meet criteria within 3 consecutive measurements)

Sample Time: 0939 | QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-2022
Field Personnel: GF, AS
StationID: CD-43C2
Weather: Cldy 35°
Sample ID: CD-43C2 -220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 299
Screens from: 280 To 299
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 171.25
Water Column Depth: 127.75 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 33.2 use 34 x3 well volumes = Total Purge Vol. (gal): 102

Purge Rate: 3.0 gpm
Purge Begin Time: 0825

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0837	34	8.01	389	10.7		Clear
0849	68	8.05	394	10.6		Clear
0901	102	8.00	399	10.6		Clear
Stabilization Criteria:	✓ 10%	+/- 0.1 unit	+/- 5%		0.13	(must meet criteria within 3 consecutive measurements)

Sample Time: 0903
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: ECTestr11+	Hach 2100P
S/N 476085	S/N 7810	S/N 940700005619/24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22

Field Personnel: GF, AS

StationID: CD-43C3

Weather: Cldy, 38°

Sample ID: CD-43C3 - 220419

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA

Well Depth: 401 — Screens from: 382 To 401 — Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 170.81'

Water Column Depth: 230.19 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 59.8 use 60 x3 well volumes = Total Purge Vol. (gal): 180

Purge Rate: 3.0

Purge Begin Time: 0820

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0840	60	7.84	317	11.1		Clear
0900	120	7.86	318	11.5		clear
0920	180	7.85	322	11.3		Clear
Stabilization Criteria:	VOR	+/- 0.1 unit	+/- 5%		0.44	(must meet criteria within 3 consecutive measurements)

Sample Time: 0921

QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005819~~/ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22 | Field Personnel: GF, AS

StationID: CD-48C1 | Weather: Cldy, 39°

Sample ID: CD-48C1 – 220419 | Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA

Well Depth: 243 | Screens from: 220.5 To 240.5 | Casing Size (in): 2.5

Depth to Water: ~~18~~ 176.46'

Water Column Depth: 66.54 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 17.3 use 18 x3 well volumes = Total Purge Vol. (gal): 54

Purge Rate: 2.3 | Purge Begin Time: 1255

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1303	18	7.76	519	11.5		Clear
1311	36	7.75	518	11.5		Clear
1319	54	7.71	522	11.5		Clear
Stabilization Criteria:	√ 0.2	+/- 0.1 unit	+/- 5%		0.21	(must meet criteria within 3 consecutive measurements)

Sample Time: 1321 | QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
✓	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22
Field Personnel: G, F, AS
StationID: CD-48C2
Weather: cldy, 39
Sample ID: CD-48C2 -220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 302
Screens from: 279.7 To 299.7
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 177.09'
Water Column Depth: 124.91 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 32.5 use 33 x3 well volumes = Total Purge Vol. (gal): 99

Purge Rate: 2.7
Purge Begin Time: 1209

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1222	33	7.84	494	11.1		Clear
1235	66	7.87	492	11.2		Clear
1248	99	7.86	489	11.2		Clear
Stabilization Criteria:	✓ 10%	+/- 0.1 unit	+/- 5%		0.38	(must meet criteria within 3 consecutive measurements)

Sample Time: 1249
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~/ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-19-22
Field Personnel: GF, AS
StationID: CD-48C3
Weather: cldy, 39°
Sample ID: CD-48C3 - 220419
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 386
Screens from: 374 To 384
Casing Size (in): 2.5
Depth to Water: 177.01'
Water Column Depth: 208.99 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 54.3 use 55 x3 well volumes = Total Purge Vol. (gal): 165
Purge Rate: 3.0
Purge Begin Time: 1209

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1227	55	7.83	483	11.4		Clear
1246	110	7.81	492	11.5		Clear
1305	165	7.81	480	11.8		Clear
Stabilization Criteria:	√ 0.2	+/- 0.1 unit	+/- 5%		0.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 1307
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
StationID: CP-S1
Sample ID: CP-S1-220420
QA/QC Sample ID: MS/MSD

Field Personnel: M TERRIS
Weather: SLI CLOUDY 38°F
Purge Method: Disp. bailer, (Ded. Grundfos), Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Well Depth: 103
Screens from: 104 To 109
Casing Size (in): 6

Depth to Water: 80.71'
Water Column Depth: 22.29' x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 33.43-35 x3 well volumes = Total Purge Vol. (gal): 105 GAL

Purge Rate: 20 GPM
Purge Begin Time: 0700

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
(6)	(1.5)
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0703	60 GAL	7.61	562	9.9		CLEAR
0706	120 GAL	7.61	561	9.7		CLEAR
0709	180 GAL	7.61	561	9.7		CLEAR
Stabilization Criteria:	√ 0.2	+/- 0.1 unit	+/- 5%		0.70	(must meet criteria within 3 consecutive measurements)

Sample Time: 0710

QAQC Sample Time: 0710 SAME AS SAMPLE

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
*	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
*	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

*MS/MSD TAKEN HERE, FILLED 9-40 ml & 6-60 ml VOCS FOR 524.3 & 1,4 DIOXANE ID CP-S1-220420 CP-S1-220420 MS CP-S1-220420 MSD

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
StationID: CP-S4
Sample ID: CP-S4-220420
QA/QC Sample ID: -NA-

Field Personnel: M. TERRIS
Weather: B CLOUDY 38°F

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Well Depth: 104
Screens from: To
Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 87.66'
Water Column Depth: 16.34' x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 30GAL 24.51= x3 well volumes = Total Purge Vol. (gal): 90 GAL

Purge Rate: 20 GPM
Purge Begin Time: 0720

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0723	60 GAL	7.29	671	10.1		CLEAR
0726	120GAL	7.31	674	10.0		CLEAR
0729	180GAL	7.31	674	10.1		CLEAR
Stabilization Criteria:	√ OK	+/- 0.1 unit	+/- 5%		0.79	(must meet criteria within 3 consecutive measurements)

Sample Time: 0730
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
Field Personnel: M. TERRIS
StationID: CP-S5
Weather: P. CLOUDY 41°F
Sample ID: CP-S5-220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: -NA-

Well Depth: 101
Screens from: To
Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 80'
Water Column Depth: 21' x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 35GAL = 31.5GAL x3 well volumes = Total Purge Vol. (gal): 105GAL

Purge Rate: 25GPM
Purge Begin Time: 0736

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0739	75GAL	7.29	671	10.1		CLEAR
0741	150GAL	7.31	669	10.0		CLEAR
0744	225GAL	7.30	671	10.0		CLEAR
Stabilization Criteria:	Vol	+/- 0.1 unit	+/- 5%		0.61	(must meet criteria within 3 consecutive measurements)

Sample Time: 0745
QAQC Sample Time:

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
StationID: CP-S6
Sample ID: CP-S6 - 220420
QA/QC Sample ID: -NA-

Field Personnel: M. TERRIS
Weather: P.CLOUDY 41°F

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES-40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Well Depth: 106 Screens from: To Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 87.26

Water Column Depth: 18.74 x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 30GAL / 28.11 x3 well volumes = Total Purge Vol. (gal): 90 GAL

Purge Rate: 30GPM

Purge Begin Time: 0755

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0759	120GAL	7.51	662	10.1		CLEAR
0803	240GAL	7.49	659	10.0		CLEAR
0806	360GAL	7.48	660	10.0		CLEAR
Stabilization Criteria:	√ 0.1L	+/- 0.1 unit	+/- 5%		0.29	(must meet criteria within 3 consecutive measurements)

Sample Time: 0810

QAQC Sample Time:

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
Field Personnel: M. TERRIS
StationID: CP-E1
Weather: P. CLOUDY LOWER 40's
Sample ID: CP-E1 - 220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: - NA -

Well Depth: 257 Screens from: 235 To 258 Casing Size (in): 8

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 184.33
= Water Column Depth: 72.67 x Gallons per linear foot: 2.6 = Calc. Purge vol./casing vol.: 200GAL / 188.9 x3 well volumes = Total Purge Vol. (gal): 600GAL

Purge Rate: 105 GPM
Purge Begin Time: 0919

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
			1010			
0922	315GAL	6.96	~~998~~	11.9		CLEAR
0926	735GAL	6.96	1020	11.7		CLEAR
0929	1050GAL	6.96	1020	11.7		CLEAR
Stabilization Criteria:	√ ok	+/- 0.1 unit	+/- 5%		0.89	(must meet criteria within 3 consecutive measurements)

Sample Time: 0930
QAQC Sample Time: NA -

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	3-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:
STARTED LEVEL @ 34.21 Hz 50 FLOW 5 GPM PRESS 0
RUNNING LEVEL @ 27.91 Hz 50 FLOW 105.5 PRESS 0
OFF LEVEL @ 34.58 Hz 0 FLOW 0 PRESS 1 PSI

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
Field Personnel: M. TERRIS
StationID: CP-E2
Weather: PCLOUDY 40S
Sample ID: CP-E2 - 220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: - NA

Well Depth: 188
Screens from: To
Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
(6)	(1.5)
8	2.6

Depth to Water: 150.29
Water Column Depth: 37.71
Gallons per linear foot: x 1.5
Calc. Purge vol./casing vol.: = 60GAL 56.56
x3 well volumes
Total Purge Vol. (gal): = 180GAL

Purge Rate: 3 GPM
Purge Begin Time: 0645

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0815	270GAL	7.26	976	12.6		CLEAR
0945	540GAL	7.21	992	12.9		CLEAR
1105	840GAL	7.27	997	13.1		CLEAR
Stabilization Criteria:	√ OK	+/- 0.1 unit	+/- 5%		0.94	(must meet criteria within 3 consecutive measurements)

Sample Time: 1110
QAQC Sample Time:

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
(X)	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

* STARTED THIS WELL FIRST THING IN MORNING SLOW PURGE @ 2.5 GPM

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
StationID: CP-E3
Sample ID: CP-E3-220420
QA/QC Sample ID: -NA-

Field Personnel: M. TERRIS
Weather: P.CLOUDY LOWER 40S
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Well Depth: 264
Screens from: ____ To ____
Casing Size (in): 8

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 183.56
Water Column Depth: 80.44 x Gallons per linear foot: 2.6 = Calc. Purge vol./casing vol.: 210GAL 209.1 x3 well volumes = Total Purge Vol. (gal): 630GAL

Purge Rate: 130GPM
Purge Begin Time: 0820

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0823	390GAL	7.29	859	10.9		CLEAR
0826	780GAL	7.31	859	10.7		CLEAR
0829	1170GAL	7.31	861	10.6		CLEAR
Stabilization Criteria:	√ 0.1L	+/- 0.1 unit	+/- 5%		0.89	(must meet criteria within 3 consecutive measurements)

Sample Time: 0830
QAQC Sample Time: -NA-

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
Field Personnel: M. TERRIS
StationID: CP-W1
Weather:
Sample ID: CP-W1-220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 301
Screens from: 280 To 300
Casing Size (in): 8

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 175.02'
Water Column Depth: 125.98' x Gallons per linear foot: 2.6 = Calc. Purge vol./casing vol.: 330GAL 327.5 x3 well volumes = Total Purge Vol. (gal): 990GAL

Purge Rate: 140GPM
Purge Begin Time: 1040

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1044	560GAL	7.81	511	10.9		CLEAR
1048	1120GAL	7.79	514	10.9		CLEAR
1053	1820GAL	7.80	513	10.8		CLEAR
Stabilization Criteria:	VOL	+/- 0.1 unit	+/- 5%		0.89	(must meet criteria within 3 consecutive measurements)

Sample Time: 1055
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr 11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
Field Personnel: M. TERRIS
StationID: CP-W2
Weather: P. CLOUDY 45°F
Sample ID: CP-W2-220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: -NA-

Well Depth: 278 Screens from: To Casing Size (in): 8

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

− Depth to Water: 170.69
= Water Column Depth: 107.31 -x Gallons per linear foot: 2.6 = Calc. Purge vol./casing vol.: 280GAL 279.01 x3 well volumes = Total Purge Vol. (gal): 840GAL

Purge Rate: 180GPM
Purge Begin Time: 0950

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0953	540G	7.63	691	10.4		CLEAR
0956	1080G	7.65	698	10.2		CLEAR
0959	1620G	7.66	698	10.2		CLEAR
Stabilization Criteria:	√ 0L	+/- 0.1 unit	+/- 5%		0.51	(must meet criteria within 3 consecutive measurements)

Sample Time: 1000
QAQC Sample Time: -NA-

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/20/2022
StationID: CP-W3
Sample ID: CP-W3 - 220420
QA/QC Sample ID: CD-52-220420

Field Personnel: M. TERRIS
Weather: PCLOUDY 45°F

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Well Depth: 275
Screens from: To
Casing Size (in): 8

− Depth to Water: 172.22'
= Water Column Depth: 102.78' -x Gallons per linear foot: 2.8 = Calc. Purge vol./casing vol.: 300GAL 287.7 x3 well volumes = Total Purge Vol. (gal): 900GAL

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Purge Rate: 150GPM
Purge Begin Time: 1010

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1013	450G	7.52	701	10.9		CLEAR
1016	900G	7.55	709	10.9		CLEAR
1019	1350G	7.56	710	10.8		CLEAR
Stabilization Criteria:	VOL	+/- 0.1 unit	+/- 5%		1.11	(must meet criteria within 3 consecutive measurements)

Sample Time: 1020
QAQC Sample Time: ~~NA~~ 1000

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
*	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
*	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

*DUPE TAKEN HERE, FILLED 1 EXTRA SET OF VOCS FOR 5243 AND 1,4 DIOXANE (522)

BEFORE PCP LEVEL 51.17 Ø FLOW Ø HZ PRESS 1
RUNNING PCP LEVEL 48.98 150GPM 42 HZ 10 PSI
END PCP LEVEL 51.21 Ø FLOW Ø HZ 10 PSI

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-20-22
Field Personnel: GF
StationID: CD-44C1
Weather: mstly cldy, 38°
Sample ID: CD-44C1 – 220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 200
Screens from: 187 To 197
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

– Depth to Water: 174.18'
= Water Column Depth: 25.82 -x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 6.7 use 7.0 x3 well volumes = Total Purge Vol. (gal): 21

Purge Rate: 0.16 *
Purge Begin Time: 0937

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0958	3.5	7.62	467	13.6	X	clear
1020	7.0	7.62	480	14.6		clear
1045	10.5	7.64	482	14.8		clear
1117	14	7.64	478	15.0		clear
1152	17.5	7.61	474	15.7		clear
1225	21	7.65	471	16.2		clear
Stabilization Criteria:	vol	+/- 0.1 unit	+/- 5%		0.27	(must meet criteria within 3 consecutive measurements)

Sample Time: 1226
QAQC Sample Time: NA –

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005819~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

* Very low recharge well. Purge matches well recovery @ 0.16 gpm

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-20-22
Field Personnel: GF
StationID: CD-44C2
Weather: mstly cldy, 38°
Sample ID: CD-44C2 -220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 247
Screens from: 228 To 247
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

− Depth to Water: 173.63'
= Water Column Depth: 73.37 -x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 19.1 use 20 x3 well volumes = Total Purge Vol. (gal): 60

Purge Rate: 2.3
Purge Begin Time: 1035

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1044	20	7.60	446	11.2		Clear
1053	40	7.59	450	11.3		Clear
1102	60	7.60	452	11.1		Clear
Stabilization Criteria:	√ vol	+/- 0.1 unit	+/- 5%		0.15	(must meet criteria within 3 consecutive measurements)

Sample Time: 1103
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~/ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-20-22
Field Personnel: GF
StationID: CD-44C3
Weather: mstly cldy, 38°
Sample ID: CD-44C3 - 220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 295
Screens from: 282 To 292
Casing Size (in): 2.5
− Depth to Water: 173.62'
= Water Column Depth: 121.38 -x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 31.6 use 32 x3 well volumes = Total Purge Vol. (gal): 96

CASING INFO DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Purge Rate: 2.4
Purge Begin Time: 0942

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0956	32	7.64	451	11.2		Clear
1010	64	7.63	449	11.3		Clear
1024	96	7.62	442	11.3		Clear
Stabilization Criteria:		+/- 0.1 unit	+/- 5%		0.55	(must meet criteria within 3 consecutive measurements)

Sample Time: 1025
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: Ectestr11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005819~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-20-22
Field Personnel: GF
StationID: CD-45C1
Weather: ptly cldy, 38°
Sample ID: CD-45C1 -220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 200
Screens from: 187 To 197
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

− Depth to Water: 170.62
= Water Column Depth: 29.38 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 7.6 use 10 x3 well volumes = Total Purge Vol. (gal): 30

Purge Rate: 2.0
Purge Begin Time: 0843

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0848	10	7.75	516	10.5		Clear
0853	20	7.74	510	10.5		clear
0858	30	7.75	515	10.5		Clear
Stabilization Criteria:		+/- 0.1 unit	+/- 5%		0.08	(must meet criteria within 3 consecutive measurements)

Sample Time: 0901
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr 11+	Hach 2100P
S/N 476085	S/N 7910	S/N ~~940700005619/~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-20-22
Field Personnel: GF
StationID: CD-45C2
Weather: p.cldy, 38°
Sample ID: CD-45C2 - 220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 247
Screens from: 222 To 246
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

− Depth to Water: 171.29'
Gallons per linear foot:
Calc. Purge vol./casing vol.:
Total Purge Vol. (gal)
= Water Column Depth: 75.71 -x 0.26 = 19.7 use 20 x3 well volumes = 60

Purge Rate 2.8
Purge Begin Time 0810

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0818	20	7.71	448	10.9		Clear
0826	40	7.73	454	10.9		Clear
0834	60	7.72	452	10.9		Clear
Stabilization Criteria:		+/- 0.1 unit	+/- 5%		0.13	(must meet criteria within 3 consecutive measurements)

Sample Time: 0835
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-20-22
Field Personnel: GF
StationID: CD-45C3
Weather: ptly cldy, 38°
Sample ID: CD-45C3 - 220420
Purge Method: Disp. bailer, ~~Ded. Grundfos~~, Ded. Bladder, Ded. Bennett, Env. Tech ES ~~40, Port.~~ Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 339
Screens from: 325.2 To 335.2
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 171.76'
Water Column Depth: 167.24 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 43.5 use 44 x3 well volumes = Total Purge Vol. (gal): 132

Purge Rate: 2.8
Purge Begin Time: 0807

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0823	44	8.03	397	10.8		Clear
0839	88	8.04	397	10.7		Clear
0855	132	8.06	398	10.6		Clear
Stabilization Criteria:		+/- 0.1 unit	+/- 5%		0.14	(must meet criteria within 3 consecutive measurements)

Sample Time: 0857
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~/ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4-20-22
Field Personnel: GF
StationID: CD-49
Weather: ptly cldy 45°
Sample ID: CD-49-220420
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 241.5
Screens from: 218 To 238
Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Depth to Water: 167.29
Water Column Depth: 74.21 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 19.2 use 20 x3 well volumes = Total Purge Vol. (gal): 60

Purge Rate: 1.4
Purge Begin Time: 1256

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1312	20	7.82	497	12.9		Clear
1327	40	7.82	507	12.8		Clear
1342	60	7.84	508	12.8		Clear
Stabilization Criteria:		+/- 0.1 unit	+/- 5%		0.15	(must meet criteria within 3 consecutive measurements)

Sample Time: 1343
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: ECTestr11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005819~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.2)	
	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: * pump will fail if pumped > 1.5 gpm. It will likely need replacement in a couple years. Still pumps good enough for now.
YZ

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/21/22
StationID: CD-60A1
Sample ID: CD-60A1-220421
QA/QC Sample ID: NA

Field Personnel: GF
Weather: Cldy, 39°
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Well Depth: 96.2 — Depth to Water: 80.54' = Water Column Depth: 15.66 × Gallons per linear foot: 0.17 = Calc. Purge vol./casing vol.: 2.7 use 3 x3 well volumes = Total Purge Vol. (gal): 9

Screens from: ____ To ____ Casing Size (in): ____

Purge Rate *: 1.0 gpm
Purge Begin Time: 0818

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0821	3	7.61	410	10.2		Clear
0824	6	7.62	411	10.0		Clear
0827	9	7.62	413	10.1		Clear
Stabilization Criteria:	Vol	+/- 0.1 unit	+/- 5%		0.19	(must meet criteria within 3 consecutive measurements)

Sample Time: 0829
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: EC Testr11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~/ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
*	3-40ml Glass w/HCl- VOC's (524.2)	
*	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
*	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
*	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
*	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

*Purge Flow reduced since volume low - well capable of 3gpm+

Comments:

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/21/2022
Field Personnel: M. TERRIS
StationID: CS-04A1
Weather: CLOUDY, SHOWERS 41°F
Sample ID: CS-04A1-220421
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: NA

Well Depth: 89.51
Screens from: To
Casing Size (in)
Depth to Water: 85' (NT)
Water Column Depth: 4.51 x Gallons per linear foot: 0.17 = Calc. Purge vol./casing vol.: 1 GAL / 0.76 x3 well volumes = Total Purge Vol. (gal): 3 GAL
Purge Rate: 10 MPWV
Purge Begin Time: 0800

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0810	1 GAL	6.91	669	9.6		CLEAR
0820	2 GAL	6.89	671	9.5		CLEAR
0830	3 GAL	6.88	671	9.5		CLEAR
Stabilization Criteria:	NOIL	+/- 0.1 unit	+/- 5%		049	(must meet criteria within 3 consecutive measurements)

Sample Time: 0830
QAQC Sample Time: NA

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
X	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
X	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
X	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: WL NOT TAKEN STICKS AROUND 13'
SLOW PURGE, 10 MPWV. GW REACHES DISCHARGE HOSE @ 5 MIN.

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/21/22 | Field Personnel: GF

StationID: CD-61A1 | Weather: Cldy, 39°, Light rains

Sample ID: CD-61A1-220421 | Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: MS/MSD

Well Depth: 75.9 | Screens from: | To | Casing Size (in):

Depth to Water: 69.78'

Water Column Depth: 6.12' x Gallons per linear foot: 0.17 = Calc. Purge vol./casing vol.: 1.04 use 2.0 x3 well volumes = Total Purge Vol. (gal): 6

Purge Rate: 0.5 | Purge Begin Time: 0901

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0905	2	7.06	553	10.3		Clear
0909	4	7.07	550	10.5		Clear
0913	6	7.08	551	10.5		Clear
Stabilization Criteria:	VOL	+/- 0.1 unit	+/- 5%		0.14	(must meet criteria within 3 consecutive measurements)

Sample Time: 0914 | QAQC Sample Time: AS SAMPLE MS/MSD SAME TIME

Meters:

pH	Conductivity	Turbidity
Meter: Extech	Meter: ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N 940700005619/ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
*	3-40ml Glass w/HCl- VOC's (524.2)	
*	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
*	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
*	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
*	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

* MS/MSD TAKEN HERE, FILLED 2 EXTRA SETS OF BOTTLES FOR EACH PARAMETER ABOVE.

Comments:

* Due to low overall purge volume, purge rate reduced to 0.5gpm so I could keep up. well capable of 3gpm.

COLBERT LANDFILL ANNUAL GROUNDWATER SAMPLING

Date: 4/21/2022
Field Personnel: M. TERRIS
StationID: CD-03A1
Weather: CLOUDY LT SHOWERS 43°
Sample ID: CD-03A1-220421
Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve
QA/QC Sample ID: CD-51-220421

Well Depth: 98
Screens from: 70 To 90
Casing Size (in): 2

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
4	0.66
6	1.5
8	2.6

− Depth to Water: 71.88'
= Water Column Depth: 26.12 -x Gallons per linear foot: 0.17 = Calc. Purge vol./casing vol.: 5 GAL 4.44= x3 well volumes = Total Purge Vol. (gal): 15 GAL

Purge Rate: 17 MPW
Purge Begin Time: 0915

Field Parameters

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0933	5 GAL	7.70	363	11.1		CLEAR
0948	10 GAL	7.72	365	10.9		CLEAR
1006	15 GAL	7.71	366	10.9		CLEAR
Stabilization Criteria:	√ OL	+/- 0.1 unit	+/- 5%		0.47	(must meet criteria within 3 consecutive measurements)

Sample Time: 1010
QAQC Sample Time: 0900

Meters:

pH	Conductivity	Turbidity
Meter: EXTECH 100	Meter: ECTestr11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.2)	
X	1-500mL Poly w/H2SO4- TOC/COD/Ammonia (415.1/410.1/350.1)	
X	1-500mL Poly unpreserv.- Cl/NO3/NO2/SO4 (300.0/300.0/354.0/300.0)	
X	1-500mL Poly w/HNO3 Field Filtered- Fe/Mn/Zn (6010)	
X	1-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:
* DUPE TAKEN HERE, FILLED 1 EXTRA SET OF BOTTLES FOR EACH PARAMETER ABOVE.

COLBERT LANDFILL WATER LEVEL FIELD SHEET

QTR

Aquifer	Station ID	Other Name	Reference Elev.	Date	Depth to Water	Initials
lower	0273C-1	WAKEFIELD	1887.69			
lower	0273E-3	COSTELLO	1889.09			
lower	0273F-4	Gander	1884.75			
lower	0273P-3	Griffen	1863.53			
lower	0373A-2	RESSEMAN	1837.21			
lower	0373J-5	Carter	1860.41			
upper	1073K-1	BURGESS	1843.74			
lower	1073L-4	Thomas	1841.52			
upper	1073P-2	PETRELLI	1838.67			
upper	1573A-1	Johnson	1854.6			
upper	1573F-3	CLARK	1840.58			
upper	1573H-4	MOORE LNDSCP	1856.95			
upper	1573R-1	BAKER	1851.75			
lower	CD-01C1	CD-1	1863.75	4/18/22	193.49	
upper	CD-02RA1	CD-2A1 Repla	1852.57	↓	82.41	
lower	CD-02RC2	CD-2C2 Repla	1853.28		182.99	
upper	CD-03A0	CD-3U	1845			
upper	CD-03A1	CD-3M	1844.7			
lower	CD-03C1	CD-3L	1845			
lower	CD-04C1	CD-4U	1872.13			
lower	CD-04E1	CD-4L	1872.11			
lower	CD-05C2	CD-5	1854.33	4/18/22	178.19	
upper	CD-06A1	CD-6U	1861.94			
lower	CD-06C2	CD-6L	1861.8			
lower	CD-07E1	CD-7L	1866.94	4/18/22	157.39	
lower	CD-08E1	CD-8M	1866.76			
lower	CD-08F1	CD-8L	1866.74			
lower	CD-20D1		1864.62	4/18/22	157.41	
lower	CD-20D2		1865.06		157.80	
lower	CD-21C1		1855.88			
lower	CD-21C3		1857.41			
lower	CD-22D1	CD-22D1	1865.35			
upper	CD-23B1		1860.61	4/18/22	79.11	
lower	CD-23C2		1861.08		171.29	
lower	CD-24C2		1859.85		189.89	

W-1 CODE 5218

COLBERT LANDFILL WATER LEVEL FIELD SHEET

QTR

Aquifer	Station ID	Other Name	Reference Elev.	Date	Depth to Water	Initials
lower	CD-25		1865	4/18/22	158.87'	
lower	CD-26		1860.79		177.96'	
upper	CD-30A1		1845.95		87.35'	
upper	CD-31A1		1853.6		93.86'	
upper	CD-32B1		1853.44		NT	
upper	CD-33		1846.57		87.91'	
upper	CD-34A1		1858.17		97.97'	
upper	CD-35A1		1855.01		94.47'	
upper	CD-36A1		1844.27		90.39'	
upper	CD-37A1		1846.4		90.79'	
upper	CD-38A1		1847.91		90.92'	
upper	CD-40C1		1671.67		10.06'	
lower	CD-40C2		1671.84		3.63'	
lower	CD-40C3		1672.29		8.55'	
lower	CD-41C1		1848.64		177.42'	
lower	CD-41C2		1849.1		177.93'	
lower	CD-41C3		1849.41		178.06'	
lower	CD-42C1		1844		174.44'	
lower	CD-42C2		1843.72		174.38'	
lower	CD-42C3		1843.63		173.99'	
lower	CD-43C1		1839.98		171.56'	
lower	CD-43C2		1840.01		171.25'	
lower	CD-43C3		1840.52		170.81'	
lower	CD-44C1		1844.84			
lower	CD-44C2		1844.28			
lower	CD-44C3		1844.24			
lower	CD-45C1		1840.75			
lower	CD-45C2		1841.4			
lower	CD-45C3		1841.89			
lower	CD-46		1852.7	4/18/22	183.15'	
lower	CD-47		1850.73		180.80'	
lower	CD-48C1		1849.73		176.46'	
lower	CD-48C2		1850.42		177.09'	
lower	CD-48C3		1850.08		177.01'	
lower	CD-49		1835.41		167.29'	

COLBERT LANDFILL WATER LEVEL FIELD SHEET

MTH

Aquifer	Station ID	Other Name	Reference Elev.	Date	Depth to Water	Initials
upper	CD-60A1		1852.82			
upper	CD-61A1		1842.87			
lower	CP-E1		1854.2	4/18/22	184.33'	
lower	CP-E2		1857.7		150.29'	
lower	CP-E3		1853.29		183.56'	
upper	CP-S1		1839.59		80.71'	
upper	CP-S3		1845.49		87.66'	
upper	CP-S4		1843.52		83.79'	
upper	CP-S5		1847.48		* NT BLOCKED MT	
upper	CP-S6		1847.68		87.26'	
lower	CP-W1		1845.02		175.02'	
lower	CP-W2		1840.36		170.69'	
lower	CP-W3		1841.72		172.22'	
upper	CS-04A1	CS-4	1858.38		NT - STICKING @ 13'	
upper	CS-12A1		1848.48		NT DRY	
lower	CS-14C1	CS-14U	1868.25			
lower	CS-14D1	CS-14L	1868.19			

COLBERT LANDFILL WATER LEVEL FIELD SHEET

QTR

4/18/22

Aquifer	Station ID	Other Name	Reference Elev.	Date	Depth to Water	Initials
lower	0273C-1	WAKEFIELD	1887.69		85.65'	GF
lower	0273E-3	COSTELLO	1889.09		Not found of nibbling goats	- No SWL Taken GF
lower	0273F-4	Gander	1884.75		90.85	Active well GF
lower	0273P-3	Griffen	1863.53		78.73'	Yes to supplemental sampling. wants report GF
lower	0373A-2	RESSEMAN	1837.21		168.77-5.08 163.69.	GF
lower	0373J-5	Carter	1860.41		188.43'	GF
upper	1073K-1	BURGESS	1843.74		79.52'	combo 0-10-35 GF
lower	1073L-4	Thomas/warner	1841.52		163.40'	GF
upper	1073P-2	PETRELLI	1838.67		74.24'	GF
upper	1573A-1	Johnson	1854.6		94.15'	GF
upper	1573F-3	CLARK	1840.58		159.66'	GF
upper	1573H-4	MOORE LNDSCP	1856.95		96.03'	GF
upper	1573R-1	BAKER	1851.75		90.99'	GF
lower	CD-01C1	CD-1	1863.75			
upper	CD-02RA1	CD-2A1 Repla	1852.57			
lower	CD-02RC2	CD-2C2 Repla	1853.28			
upper	CD-03A0	CD-3U	1845		46.31'	GF
upper	CD-03A1	CD-3M	1844.7		71.88'	GF
lower	CD-03C1	CD-3L	1845		175.55'	GF
lower	CD-04C1	CD-4U	1872.13			
lower	CD-04E1	CD-4L	1872.11			
lower	CD-05C2	CD-5	1854.33			
upper	CD-06A1	CD-6U	1861.94		89.53'	GF
lower	CD-06C2	CD-6L	1861.8		177.24'	GF
lower	CD-07E1	CD-7L	1866.94			
lower	CD-08E1	CD-8M	1866.76		188.51	GF
lower	CD-08F1	CD-8L	1866.74		189.67'	GF
lower	CD-20D1		1864.62			
lower	CD-20D2		1865.06			
lower	CD-21C1		1855.88		185.82	GF
lower	CD-21C3		1857.41		187.28	GF
lower	CD-22D1	CD-22D1	1865.35			
upper	CD-23B1		1860.61			
lower	CD-23C2		1861.08			
lower	CD-24C2		1859.85			

COLBERT LANDFILL WATER LEVEL FIELD SHEET

QTR

Aquifer	Station ID	Other Name	Reference Elev.	Date	Depth to Water	Initials
lower	CD-25		1865	4/18/22		
lower	CD-26		1860.79			
upper	CD-30A1		1845.95			
upper	CD-31A1		1853.6			
upper	CD-32B1		1853.44			
upper	CD-33		1846.57			
upper	CD-34A1		1858.17			
upper	CD-35A1		1855.01			
upper	CD-36A1		1844.27			
upper	CD-37A1		1846.4			
upper	CD-38A1		1847.91			
upper	CD-40C1		1671.67			
lower	CD-40C2		1671.84			
lower	CD-40C3		1672.29			
lower	CD-41C1		1848.64			
lower	CD-41C2		1849.1			
lower	CD-41C3		1849.41			
lower	CD-42C1		1844			
lower	CD-42C2		1843.72			
lower	CD-42C3		1843.63			
lower	CD-43C1		1839.98			
lower	CD-43C2		1840.01			
lower	CD-43C3		1840.52			
lower	CD-44C1		1844.84		174.18	GF
lower	CD-44C2		1844.28		173.63	GF
lower	CD-44C3		1844.24		173.62	GF
lower	CD-45C1		1840.75		170.62	GF
lower	CD-45C2		1841.4		171.29	GF
lower	CD-45C3		1841.89		171.76	GF
lower	CD-46		1852.7			
lower	CD-47		1850.73			
lower	CD-48C1		1849.73			
lower	CD-48C2		1850.42			
lower	CD-48C3		1850.08			
lower	CD-49		1835.41			

COLBERT LANDFILL WATER LEVEL FIELD SHEET

MTH

Aquifer	Station ID	Other Name	Reference Elev.	Date	Depth to Water	Initials
upper	CD-60A1		1852.82	4/18/22	80.54'	GF
upper	CD-61A1		1842.87	4/18/22	69.78'	GF
lower	CP-E1		1854.2			
lower	CP-E2		1857.7			
lower	CP-E3		1853.29			
upper	CP-S1		1839.59			
upper	CP-S3		1845.49			
upper	CP-S4		1843.52			
upper	CP-S5		1847.48			
upper	CP-S6		1847.68			
lower	CP-W1		1845.02			
lower	CP-W2		1840.36			
lower	CP-W3		1841.72			
upper	CS-04A1	CS-4	1858.38			
upper	CS-12A1		1848.48			
lower	CS-14C1	CS-14U	1868.25			
lower	CS-14D1	CS-14L	1868.19			

COLBERT QT

DATE: 2/15/2022 (TUES)
TECH: M. TERRIS / G. FISETTE
WEATHER: P. CLOUDY 40'S

* MT/GF WENT OUT TO EACH LOCATION AND SAMPLED WL'S COMPLETED IN PM.

COLBERT QT SAMPLING

DATE: 2/16/2022 (WED)
WEATHER: P.C 40'S TECH: M. TERRIS / G. FISETTE

THE FOLLOWING LOCATIONS WERE SAMPLED:

LOCATION	SAMPLE ID	TIME	TECH	VOC'S	COMM
CP-S1	CP-S1-220216	0930	GF	*	MS/MSD
CP-S4	CP-S4-220216	1029	GF	*	
CP-S5	(NO SAMPLE)		GF		VFD BAD
~~CP-S6~~	~~CP-S6-220216~~	TRANSFORMER BAD (FIXED)			
CP-E1	CP-E1-220216	1439	GF	*	
CP-E2	CP-E2-220216	1538	GF/MT	*	RAN ALL DAY
CP-E3	CP-E3-220216	1517	GF/MT	*	
CP-W1	CP-W1-220216	1303	GF	*	
CP-W2	CP-W2-220216	1411	GF	*	DUPE HERE
" DUPE	CD-50-220216	1349	GF	*	DUPE ID
CP-W3	CP-W3-220216	1333	GF	*	

* ALL SAMPLES ABOVE WERE HELD OVERNIGHT IN REFER TO BE SHIP ON 2/16/22

COLBERT QT

DATE 2/17/2022 (CT HRS)
WEATHER: P.C. 40'S TECHS MT/GF

THE FOLLOWING LOCATIONS WERE SAMPLED:

LOCATION	SAMPLE ID	TIME	TECH	VOCS	COMM
CP-S6 ~~22~~	CP-S6-220217	0943	GF	*	TRANS FIXED
CD-49	CD-49-220217	1139	GF	*	CAVISTA)
CD-43C1	CD-43C1-220217	1035	GF	*	
COLBERT TRIPS (2)					

MT PACKED ABOVE AND SAMPLES TAKEN ON 2/16/22 ~~WITH~~ ALONG W 8 DOUBLE PACKED ICE PACKS ALONG W/ COOLER SAMPLES W/2 SEPERATE COC. GF HAND DEL COOLER #8 TO ANATEK LAB IN MOSCOW ID VIA UPS.

PLEASE SEE F.S ~~A~~COC/WCS FOR FUNCTION INFO

DATE: 4/18/2022 (MON)
TECH: M. TERRIS & G. FISETTE
WEATHER: CLOUDY → P. CLOUDY MID-40S

* TECHS PERFORMED AND COMPLETED ALL QT/ANNUAL WATER LEVELS

COLBERT ANNUAL

DATE: 4/19/2022 (TUES) TECHS: MT/GF
WEATHER: SLI CLOUDY AM MID-30'S P.C PM MID-50'S

THE FOLLOWING LOCATIONS WERE SAMPLED:

WELL	S. ID	TIME	TECH	VOC'S	1,4 DIOXANE	COMM
CP-53	CP-53-220419	0840	MT	X	X	
CD-31A1	CD-31A1-220419	0945	MT	X	X	
CD-34A1	CD-34A1-220419	0730	MT	X	X	
CD-36A1	CD-36A1-220419	1150	MT	X	X	
CD-37A1	CD-37A1-220419	1320	MT	X	X	
CD-38A1	CD-38A1-220419	1100	MT	X	X	
CD-40C1	CD-40C1-220419	1430	MT	X	X	DUPE HERE
"DUPE	CD-50-220419	1400	MT	X	X	DUPE ID
1473M-1	1473M-1-220419	1650	MT	X	X	COLBES
1573A-1	1573A-1-220419	1610	MT	X	X	COLBES
1073D-1	1073D-1-220419	1530	MT	X	X	
CD-41C1	CD-41C1-220419	1447	GF	X	X	
CD-41C2	CD-41C2-220419	1421	GF	X	X	
CD-41C3	CD-41C3-220419	1455	GF	X	X	
CD-42C1	CD-42C1-220419	1125	GF	X	X	
CD-42C2	CD-42C2-220419	1053	GF	X	X	
CD-42C3	CD-42C3-220419	1139	GF	X	X	
CD-43C1	CD-43C1-220419	0939	GF	X	X	
CD-43C2	CD-43C2-220419	0903	GF	X	X	
CD-43C3	CD-43C3-220419	0921	GF	X	X	
CD-48C1	CD-48C1-220419	1321	GF	X	X	
CD-48C2	CD-482C-220419	1249	GF	X	X	
CD-48C3	CD-48C3-220419	1307	GF	X	X	

* ALL VOC'S & 1,4 DIOXANE SAMPLE HELD IN REFER (SAMPLE) OVERNIGHT WILL SHIP ON WED 4/20/22 (PM)

COLBERT ANNUAL 4/2022

DATE: 4/20/22 (WED) TECHS: MT/GF
WEATHER: SLI CLOUDY AM UPPER 30'S P. CLOUDY PM 40'S

THE FOLLOWING LOCATION WERE SAMPLED TODAY:

WELL ID	SAMPLE ID	TIME	TECH	VOC	1,4 DX	COMM
CP-S1	CP-S1-220420	0710	MT	X	X	MS/MSD
CP-S4	CP-S4-220420	0730	MT	X	X	
CP-S5	CP-S5-220420	0745	MT	X	X	
CP-S6	CP-S6-220420	0810	MT	X	X	
CP-E1	CP-E1-220420	0930	MT	X	X	
CP-E2	CP-E2-220420	1110	MT	X	X	RAN ALL MORNING
CP-E3	CP E3-220420	0830	MT	X	X	
CP-W1	CP-W1-220420	1055	MT	X	X	
CP-W2	CP-W2-220420	1000	MT	X	X	
CP-W3	CP-W3-220420	1020	MT	X	X	DUPE HERE
"DUPE	CD-52-220420	1000	MT	X	X	DUPE ID
CD-44C1	CD-44C1-220420	1226	GF	X	X	SLOW PURGE
CD-44C2	CD-44C2-220420	1103	GF	X	X	
CD-44C3	CD-44C3-220420	1025	GF	X	X	
CD-45C1	CD-45C1-220420	0901	GF	X	X	
CD-45C2	CD-45C2-220420	0835	GF	X	X	
CD-45C3	CD-45C3-220420	0857	GF	X	X	
CD-49	CD-49-220420	1345	GF	X	X	

TRIP BLANK #1 (4/19 & 4/20)
MT/AS PLACED ALL 1,4 DIOXANE SAMPLES INTO COOLER #75 ALONG WITH TRIPS #1 & COC
MT PACKED COOLER #75 W/8 LG REG WET ICE PACKS TO KEEP COOLER COOL. GF HAND DEL. COOLER #75 TO ANATEK LAB HERE IN SPOKANE FOR OVERNIGHT VIA ANATEK PERSONAL ON 4/21/22

MT/AS PLACED ALL VOCS TAKEN ON 4/19 & 4/20 INTO COOLER #8 ALONG WITH TRIPS #1 & COC
MT PACKED LG. COOLER #8 W/8 LG. REG WET ICE PACKS TO KEEP COOLER COOL DURING SHIP. GF HAND DEL. COOLER #8 TO UPS FOR PRIORITY OVERNIGHT TO ~~SK~~ ANATEK LAB IN MOSCOW ID ON 4/21/22 AM

COLBERT ANNUAL 4/2022

DATE: 4/21/2022 (THURS) TECH: MT/GF
WEATHER CLOUDY A FEW SHOWER UPPER 30'S / LOW 40'S

THE FOLLOWING LOCATIONS WERE SAMPLED:

WELL ID	SAMPLE ID	TIME	TECH	ALL PAR	COMM
CD-60A1	CD-60A1-220421	0829	GF	*	
CS-04A1	CS-04A1-220421	0830	MT	*	NO WL
CD-61A1	CD-61A1-220421	0914	GF	*	MS/MSD
CD-03A1	CD-03A1-220421	1010	MT	*	DUPE HERE
"DUPE	CD-51-220421	0900	MT	*	DUPE ID
TRIPS	TRIP-BLANKS #2				

MT PLACED ALL TOC/COD/AMMONIA, CONVENTIONALS & METALS SAMPLES INTO COOLER #4 ALONG W/8 LG REG. WET ICE PACKS TO KEEP COOL MT HAND DEL. COOLER #4 TO UPS FOR PRIORITY OVERNIGHT TO SVL IN KELLOGG ID ON 4/22/22 AM.

MT PLACED ALL VOCS & 1,4 DIOXANE SAMPLES (W/SEPARATE COC) INTO COOLER #21 ALONG W/6 LG. REG. WET ICE PACKS TO KEEP SAMPLES COOL APROX 4°C. MT HAND DEL. COOLER #21 TO UPS FOR OVERNIGHT PRIORITY TO ANATEK LAB IN MOSCOW ID. ON 4/22/22 AM

* ANNUAL SAMPLING COMPLETE

COLBERT QT

DATE: 7/12/22 (TUES)
WEATHER: CLEAR 60/70S AM CLEAR 80S/90S PM
TECH: M. TERRIS / G FISETTE

THE FOLLOWING LOCATIONS WERE SAMPLED:

LOCATION	S ID	TIME	TECH	VOC/1,4	COM
0373J-3	0373J-3-220712	1220	MT	*	SUPPWELL
CD-43C1	CD-43C1-220712	0851	GF	*	
CD-49	CD-49-220712	0959	GF	*	
CD-36A	CD-36A-220712	1400	MT	*	RESAMPLE
CP-S1	CP-S1-220712	0655	MT	*	MS/MSD
CP-S4	CP-S4-220712	0715	MT	*	
CP-S5	CP-S5-220712	0730	MT	*	
CP-S6	CP-S6-220712	0750	MT	*	
CP-E1	CP-E1-220712	0845	MT	*	
CP-E2	CP-E2-220712	1030	MT	*	SLOUGHNAT
CP-E3	CP-E3-220712	0820	MT	*	
CP-W1	CP-W1-220712	1015	MT	*	
CP-W2	CP-W2-220712	0905	MT	*	DUPE WELL
" DUPE	CD-50-220712	0900	MT	*	DUPE ID
CP-W3	CP-W3-220712	0940	MT	*	

COLBERT TRIPS (2) VOCS
COLBERT TRIPS (2) 1,4 DIOXANE

- 0373J-3 WAS FOR A SUPPLEMENTAL ROUND UNABLE TO SAMPLE DURING RD. MAKE-UP
- CD-36A1 PER AUSTIN REQUEST THIS IS A RESAMPLE.

* ALL VOCS WERE PLACED INTO COOLER #19 ON 7/13 W/8 DOUBLE BAG REG. WET LEG COOLER #19 WAS DEL TO UPS FOR OVER NIGHT TO ANATEK LAB → NORMAL PROTOCAL WAS TAKEN.

* ALL 1,4 DIOXANE SAMPLES WERE PLACED INTO COOLER # 13 ON 7/14/22 AM DEL TO ANATEK LAB IN SPOKANE. LOCAL ANATEK COURIER WILL DEL TO ANATEK MOSCOW PM

Colbert Residential Field Data Sheet

12-Apr-22

Well **1073L-2**

TC **TA**
R R Steve Countryman
N 21202 Little Spokane River D

Colbert Wa 99005

Home Phone **Work Phone**
(509) 466-2232

Last Sample Date 5/10/2011 **Sample I.D.** 1073L-2-110510

FIELD PARAMETERS	**Previous**	**Current**		**Sample Date**	4|12|2022
				Sample Time	1300
pH	8.01	7.92		**Start Purge**	1230
Cond (uMhos)	322	334		**End Purge**	1304
Temp	10.5	11.0°C		**Rate (gpm)**	12 GPM
SWL (Feet)	11.97	11.05'		**Purge Vol (gal)**	408GAL

PURGE VOLUME CALCULATIONS

				Casing Size	**Gal/Foot**
Total Depth (ft)	67	**Casing Vol (gal)**	82.2: 85G	**2"**	**0.16**
SWL (ft)	11.05'	**Casing Vol X 3**	255GAL	**4"**	**0.65**
Water Column (ft)	55.95	**PT Vol (gal)**	100	**6"**	**1.47**
Casing Size (in)	6	**Total Vol (gal)**	355GAL	**8"**	**2.61**

Previous Sample Point

Special Instructions Splitter; Teflon tubing.

Comment MT SAMPLED FROM HOSE BIB BACK O FPUMP HOUSE.

* MT SAMPLED FROM HOSE BIB BACK (WEST) OF PUMP HOUSE, FILLED 3-40ml VOC'S FOR 5243 AND ~~2H~~ 2-60ml VOC'S FOR 1,4 DIOXANE.

* NEW ID 1073L-2-220412

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well 0373A-2

TC **TA**
R R Dennis Resseman
N 23511 Elk Chattaroy Road

Colbert Wa 99005

Home Phone (509) 238-4588 **Work Phone**

Last Sample Date 12/12/2013 **Sample I.D.** 0373A-2-131212

FIELD PARAMETERS	Previous	Current	Sample Date 4-12-2022
			Sample Time 1400
pH	7.55	7.62	Start Purge 1320
Cond (uMhos)	445	441	End Purge 1406
Temp	7.1	10.1°C	Rate (gpm) 10GPM
SWL (Feet)	(NT)	170' APPROX	Purge Vol (gal) 460 GAL

PURGE VOLUME CALCULATIONS

				Casing Size	Gal/Foot
Total Depth (ft)	208	Casing Vol (gal)	55 86-60 GAL	2"	0.16
SWL (ft)	170'	Casing Vol X 3	180 GAL	4"	0.65
Water Column (ft)	38'	PT Vol (gal)	80	6"	1.47
Casing Size (in)	6	Total Vol (gal)	260 GAL	8"	2.61

Previous Sample Point Yard Hydrant in house shop

Special Instructions Black widows in well vault; Call about dog.

Comment Dupe taken here

* MS/MSD TAKEN HERE

*MT SAMPLED @ YARD HYDRANT IN BARN BY HORSES. FILLED 9-40 ml VOC'S FOR 524.3 & 6-60 ml VOC'S FOR & 1,4 DIOXANE BY ANATEK LAB IN MOSCOW ID

*NEW ID 0373A-2-220412
0373A-2-220412 MS
0373A-2-220412 MSD

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well **1073E-2**

TC	TA		Home Phone	Work Phone
R	R	John Pullen N 21611 Little Spokane Drive Colbert Wa 99005	(509) 466-8950	(509) 466-6312

Last Sample Date 7/14/2021 **Sample I.D.** 1073E-2-210714

FIELD PARAMETERS	Previous	Current		Sample Date	4.12.2022
				Sample Time	1450
pH	7.71	7.52		Start Purge	1415
Cond (uMhos)	342	329		End Purge	1453
Temp	11.9	11.1°		Rate (gpm)	11 GPM
SWL (Feet)	17.41	16.98'		Purge Vol (gal)	418 GAL

PURGE VOLUME CALCULATIONS

				Casing Size	Gal/Foot
Total Depth (ft)	84	Casing Vol (gal)	98.52×100	2"	0.16
SWL (ft)	16.98'	Casing Vol X 3	300	4"	0.65
Water Column (ft)	67.02'	PT Vol (gal)	60	6"	1.47
Casing Size (in)	6	Total Vol (gal)	360 GAL	8"	2.61

Previous Sample Point Hose bib front of house

Special Instructions TEFLON SPLITTER

Comment MS/MSD taken here

* MT SAMPLED @ HOSE BIB FRONT OF HOUSE. FILLED 3-40ml VOCs & 2-60ml (524.3) VOCs FOR 1,4 DIOXANE. FROM ANATEK LAB

- NEW ID 1073E-2-220412

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well **1073L-1**

TC **TA**
R R Tim & Vickie Halpin
N 21420 Little Spokane Drive

Colbert Wa 99005

Home Phone **Work Phone**
(509) 466-9319

Last Sample Date 3/21/2000 **Sample I.D.** 1073L-1-000321

FIELD PARAMETERS	Previous	Current		Sample Date	4-12-2022 DUPE
				Sample Time	1525 1500
pH	7.8	7.71		Start Purge	1500
Cond (uMhos)	300	312		End Purge	1530
Temp	9.1	9.7°C		Rate (gpm)	12GPM
SWL (Feet)	10.01	9.98'		Purge Vol (gal)	360GAL

PURGE VOLUME CALCULATIONS

				Casing Size	Gal/Foot
Total Depth (ft)	52	Casing Vol (gal)	61.76:65G	2"	0.16
SWL (ft)	9.98	Casing Vol X 3	195 GAL	4"	0.65
Water Column (ft)	42.02	PT Vol (gal)	100	6"	1.47
Casing Size (in)	6	Total Vol (gal)	295 GAL	8"	2.61

Previous Sample Point

Special Instructions HYDRANT 20 FT. SOUTH OF PUMP HOUSE. TOTAL PURGE 194 GAL. BY

Comment MT SAMPLED FROM YARD HYDRANT 20' FROM PORCH. MT FILLED 6-40 ML VOA'S W/HCL FOR 524.2 (3 REG + 3 DUPES) BY SVL. NEW ID REG SAMPLES 1073L-1-000321. DUPE ID 2073L-1-000321 @ 09:00.

* DUPE TAKEN HERE

* MT SAMPLED @ YARD HYDRANT NEXT TO FRONT PORCH. FILLED 6-40 ml VOC'S 5243 & 4-60 ml VOC'S FOR 1,4 DIOXANE

- NEW ID 1073L-1-220412
DUPE ID 2073L-1-220412

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well **1073J-1**

TC **TA**
R R Alfonso Moreno
E 4024 Wahoo Road

Colbert Wa 99005

Home Phone (509) 953-7215 **Work Phone**

Last Sample Date 7/17/2019 **Sample I.D.** 1073J-1-190717

FIELD PARAMETERS	**Previous**	**Current**		**Sample Date**	4/13/2022
				Sample Time	0900
pH	7.84	7.99		**Start Purge**	0800
Cond (uMhos)	469	451		**End Purge**	0905
Temp	10.7	10.9°C		**Rate (gpm)**	9 GPM
SWL (Feet)		NT		**Purge Vol (gal)**	

PURGE VOLUME CALCULATIONS

				Casing Size	**Gal/Foot**
Total Depth (ft)	260	**Casing Vol (gal)**	132.3=140	**2"**	**0.16**
SWL (ft)	APRox 170'	**Casing Vol X 3**	420	**4"**	**0.65**
Water Column (ft)	90'	**PT Vol (gal)**	30	**6"**	**1.47**
Casing Size (in)	6	**Total Vol (gal)**	450GAL	**8"**	**2.61**

Previous Sample Point Hose bib by front gate

Special Instructions TEFLON SPLITTER

Comment

* STARTED PURGING WELL FROM INSIDE GARAGE BY PUMP P.T. SHOW MR. MORENO DAUGHTER SYSTEM.

SAMPLE @ HOSE BIB INSIDE GARAGE, FILLED 3-40 ml VOC'S & 2-60 ml 1,4DIOXANE BY ANATEK LAB IN MOSCOW ID.

-NEW ID 1073J-1-220413

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well **1073G-1**

TC **TA**
R R Troy Rux
E 4003 Wahoo Road

Colbert Wa 99005

Home Phone	**Work Phone**
(509) 238-9540	(509) 533-3774

Last Sample Date 1/24/2000 **Sample I.D.** 1073G-1-000124

FIELD PARAMETERS **Previous** **Current** **Sample Date** 4-13-2022

			Sample Time	1000
pH	7.8	7.79	**Start Purge**	0910
Cond (uMhos)	470	461	**End Purge**	1004
Temp	11.1	10.7°C	**Rate (gpm)**	12GPM
SWL (Feet)	175.01	176.41'	**Purge Vol (gal)**	648 GALS

PURGE VOLUME CALCULATIONS

				Casing Size	**Gal/Foot**
Total Depth (ft)	269	**Casing Vol (gal)**	136-140G	**2"**	**0.16**
SWL (ft)	176.41'	**Casing Vol X 3**	420GAL	**4"**	**0.65**
Water Column (ft)	92.59'	**PT Vol (gal)**	200	**6"**	**1.47**
Casing Size (in)	6	**Total Vol (gal)**	620GAL	**8"**	**2.61**

Previous Sample Point

Special Instructions PLASTIC Y, TEFLON TUBING, PURGE HOSE

Comment MT sampled from yard hydrant 75' S.E. from pump house, filled 3-40 ml. Voa's with HCL for 524.2 analyses by SVL. New ID 1073G-1-000124

*MT SAMPLED @ YARD HYDRANT 75' SW OF PUMP HOUSE. FILLED 3-40ml VOC'S FOR 5243 & 2-60ml VOC'S FOR 1,4 DIOXANE. BY ANATEK LAB IN MOSCOW ID

- NEW ID 1073G-1-220413

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well **1573H-1**

TC **TA**
R R Keith Hunter
N 20211 Yale Road
P.O. BOX 274
Colbert Wa 99005

Home Phone **Work Phone**
(509) 238-6498

Last Sample Date 1/25/2000 **Sample I.D.** 1573H-1-000125

FIELD PARAMETERS	**Previous**	**Current**		**Sample Date** 4-13-2022
				Sample Time 1100
pH	8.1	8.01		**Start Purge** 1085
Cond (uMhos)	350	361		**End Purge** 1102
Temp	9.3	9.9°C		**Rate (gpm)** 10GPM
SWL (Feet)	161.87	WL NOT WELL ON		**Purge Vol (gal)** 360GAL

PURGE VOLUME CALCULATIONS

				Casing Size	**Gal/Foot**
Total Depth (ft)	300	**Casing Vol (gal)**		**2"**	**0.16**
SWL (ft)	*1	**Casing Vol X 3**		**4"**	**0.65**
Water Column (ft)		**PT Vol (gal)**	80	**6"**	**1.47**
Casing Size (in)	6	**Total Vol (gal)**		**8"**	**2.61**

Previous Sample Point

Special Instructions A "Y" AND A HOSE.

Comment MT SAMPLED FROM HOSE BIB FRONT OF HOUSE, FILLED 3-40 ML VOA'S W/HCL FOR 524.2 ANALYSES BY SVL.

*1 WATER HAS BEEN RUNNING PURGED LINES FOR 25 MIN TO MAKE SURE LINES ARE CLEAR AND PURGED.

* MT SAMPLED @ HOSE BIB FRONT OF HOUSE. FILLED 3-40ml VOC'S FOR 5243 AND 2-60ml VOC'S for 1,4 DIOXANE.
- NEW ID 1573H-1-220413

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well **1573C-17**

TC **TA** **Home Phone** **Work Phone**

R R RESIDENT
20518 N. Thor Rd.

COLBERT Wa 99005

Last Sample Date 4/15/2014 **Sample I.D.** 1573C-17-140415

FIELD PARAMETERS	**Previous**	**Current**		**Sample Date**	4-13-2022
				Sample Time	1200
pH	7.96	7.91		**Start Purge**	1115
Cond (uMhos)	328	332		**End Purge**	1202
Temp	10.9	10.8°C		**Rate (gpm)**	85 GPM
SWL (Feet)		NT		**Purge Vol (gal)**	400 GAL

PURGE VOLUME CALCULATIONS

				Casing Size	**Gal/Foot**
Total Depth (ft)	260	**Casing Vol (gal)**		**2"**	**0.16**
SWL (ft)	NT	**Casing Vol X 3**		**4"**	**0.65**
Water Column (ft)		**PT Vol (gal)**	50	**6"**	**1.47**
Casing Size (in)	6	**Total Vol (gal)**		**8"**	**2.61**

Previous Sample Point Yard hydrant front of house

Special Instructions YARD HYDRANT IN FRONT OF HOUSE.

Comment

MTE YARD HYDRANT NEXT TO PUMP HOUSE (VAULT)
MT FILLED ~~IT~~ 3-40 ml VOC's FOR 5243+
2-60 ml VOC's FOR 1,4 DIOXANE. BY ANATEK
IN MOSCOW ID
-NEW ID 1573C-17-220413

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well **1573C-7**

TC **TA**
R R Kevin/Sandy Kirby
N 20303 Thor Road

Colbert Wa 99005

Home Phone (206) 794-0221 **Work Phone**

Last Sample Date 10/26/2016 **Sample I.D.** 1573C-7-161026

FIELD PARAMETERS	Previous	Current		
			Sample Date	4-13-2022
			Sample Time	1245
pH	7.57	7.63	Start Purge	1245
Cond (uMhos)	581	562	End Purge	1248
Temp	11.4	10.9°C	Rate (gpm)	9 GPM
SWL (Feet)	80.89	80.01'	Purge Vol (gal)	297 GAL

PURGE VOLUME CALCULATIONS

				Casing Size	Gal/Foot
Total Depth (ft)	125	Casing Vol (gal)	66.1 = 70 GAL	2"	0.16
SWL (ft)	80.01'	Casing Vol X 3	210 GAL	4"	0.65
Water Column (ft)	44.99'	PT Vol (gal)	20	6"	1.47
Casing Size (in)	6	Total Vol (gal)	230 GAL	8"	2.61

Previous Sample Point Hose bib in pump house

Special Instructions DO NOT TAKE WATER LEVEL HERE TO MANY WIRES IN WELL REQUE

Comment

*MT SAMPLE @ HOSE BIB (TO SHOP) IN PUMP HOUSE. FILLED 3 40ml VOC'S W/HCl FOR 5243 + 2-60ml VOC'S W/NaSO4 FOR 1,4 DIOXANE BY ANATEK LAB IN MOSCOW ID

NEW ID 1573C-7-22043

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE:

Colbert Residential Field Data Sheet

12-Apr-22

Well **1473M-1**

TC **TA**
R R Jonathan Richard
N 19826 Yale Road

Colbert Wa 99005

Home Phone **Work Phone**
(509) 954-3762

Last Sample Date 5/12/2020 **Sample I.D.** 1473M-1-200512

FIELD PARAMETERS	Previous	Current		Sample Date	
				Sample Time	
pH	7.89			Start Purge	
Cond (uMhos)	549			End Purge	
Temp	10.9			Rate (gpm)	
SWL (Feet)				Purge Vol (gal)	

PURGE VOLUME CALCULATIONS

				Casing Size	Gal/Foot
Total Depth (ft)	105	Casing Vol (gal)		2"	0.16
SWL (ft)		Casing Vol X 3		4"	0.65
Water Column (ft)		PT Vol (gal)	50	6"	1.47
Casing Size (in)	6	Total Vol (gal)		8"	2.61

Previous Sample Point Hose bib front of house

Special Instructions TEFLON SPLITTER

Comment MS/MSD taken here

* THIS WILL BE SAMPLE FOR OUR ANNUAL VOCS | 1,4 DIOXANE
PLEASE SEE ANNUAL SAMPLE SHEET
4/2022

IF CANNOT TAKE WL, ENTER ASSUMED READING HERE: *4*

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: COLBERT-220420-
Shipping CO: ANATEK COURIER
No. Coolers: 1

DATE : 4/20/2022
PAGE 1 OF 1

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-31A1-220419	4/19/2022	945		X	75	2	
CD-34A1-220419	4/19/2022	730		X	75	2	
CD-36A1-220419	4/19/2022	1150		X	75	2	
CD-37A1-220419	4/19/2022	1320		X	75	2	
CD-38A1-220419	4/19/2022	1100		X	75	2	
CP-S3-220419	4/19/2022	840		X	75	2	
1073D-1-220419	4/19/2022	1530		X	75	2	
1473M-1-220419	4/19/2022	1650		X	75	2	
1573A-1-220419	4/19/2022	1610		X	75	2	
CD-50-220419	4/19/2022	1400		X	75	2	
CD-40C1-220419	4/19/2022	1430		X	75	2	
CD-41C1-220419	4/19/2022	1447		X	75	2	
CD-41C2-220419	4/19/2022	1421		X	75	2	
CD-41C3-220419	4/19/2022	1455		X	75	2	

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

RELINQUISHED BY:		RECEIVED BY:	
Signature:	Date: 4/20/2022	Signature:	Date:
Pint: MIKE S TERRIS	Time: 1600	Print Name:	Time:
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE		ANATEK LAB	

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: COLBERT-220420~
Shipping CO: ANATEK COURIER
No. Coolers: 1

DATE : 4/20/2022
PAGE 1 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-42C1-220419	4/19/2022	1125		X	75	2	
CD-42C2-220419	4/19/2022	1053		X	75	2	
CD-42C3-220419	4/19/2022	1139		X	75	2	
CD-43C1-220419	4/19/2022	939		X	75	2	
CD-43C2-220419	4/19/2022	903		X	75	2	
CD-43C3-220419	4/19/2022	921		X	75	2	
CD-48C1-220419	4/19/2022	1321		X	75	2	
CD-48C2-220419	4/19/2022	1249		X	75	2	
CD-48C3-220419	4/19/2022	1307		X	75	2	
CP-S1-220420	4/20/2022	710		X	75	6	MS/MSD
CP-S4-220420	4/20/2022	730		X	75	2	
CP-S5-220420	4/20/2022	745		X	75	2	
CP-S6-220420	4/20/2022	810		X	75	2	
CP-E1-220420	4/20/2022	930		X	75	2	

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

RELINQUISHED BY:		RECEIVED BY:	
Signature: Mike S Terris	Date: 4/20/2022	Signature:	Date:
Pint: MIKE S TERRIS	Time: 1600	Print Name:	Time:
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE		ANATEK LAB	

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: COLBERT-220420-
Shipping CO: ANATEK COURIER
No. Coolers: 1

DATE : 4/20/2022

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CP-E2-220420	4/20/2022	1110		X	75	2	
CP-E3-220420	4/20/2022	830		X	75	2	
CP-W1-220420	4/20/2022	1055		X	75	2	
CP-W2-220420	4/20/2022	1000		X	75	2	
CP-W3-220420	4/20/2022	1020		X	75	2	
CD-52-220420	4/20/2022	1000		X	75	2	
CD-44C1-220420	4/20/2022	1226		X	75	2	
CD-44C2-220420	4/20/2022	1103		X	75	2	
CD-44C3-220420	4/20/2022	1025		X	75	2	
CD-45C1-220420	4/20/2022	901		X	75	2	
CD-45C2-220420	4/20/2022	835		X	75	2	
CD-45C3-220420	4/20/2022	857		X	75	2	
CD-49-220420	4/20/2022	13:43		X	75	2	
COLBERT TRIP BLANKS #1	4/20/2022			X	75	2	TRIP-BLANKS

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

RELINQUISHED BY:		RECEIVED BY:	
Signature: Mike S Terris	Date: 4/20/2022	Signature:	Date:
Print: MIKE S TERRIS	Time: 1600	Print Name: ANATEK LAB	Time:
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE			

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: K273521927 7
Shipping CO: UPS
No. Coolers: 1

DATE : 4/20/2022
PAGE 1 OF 1

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-31A1-220419	4/19/2022	945	X		8	3	
CD-34A1-220419	4/19/2022	730	X		8	3	
CD-36A1-220419	4/19/2022	1150	X		8	3	
CD-37A1-220419	4/19/2022	1320	X		8	3	
CD-38A1-220419	4/19/2022	1100	X		8	3	
CP-S3-220419	4/19/2022	840	X		8	3	
1073D-1-220419	4/19/2022	1530	X		8	3	
1473M-1-220419	4/19/2022	1650	X		8	3	
1573A-1-220419	4/19/2022	1610	X		8	3	
CD-50-220419	4/19/2022	1400	X		8	3	
CD-40C1-220419	4/19/2022	1430	X		8	3	
CD-41C1-220419	4/19/2022	1447	X		8	3	
CD-41C2-220419	4/19/2022	1421	X		8	3	
CD-41C3-220419	4/19/2022	1455	X		8	3	

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

RELINQUISHED BY:
Signature: Mike Terris
Pint: MIKE S TERRIS
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 4/20/2022
Time: 1600

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: K273529277
Shipping CO: UPS
No. Coolers: 1

DATE : 4/20/2022
PAGE 1 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-42C1-220419	4/19/2022	1125	X		8	3	
CD-42C2-220419	4/19/2022	1053	X		8	3	
CD-42C3-220419	4/19/2022	1139	X		8	3	
CD-43C1-220419	4/19/2022	939	X		8	3	
CD-43C2-220419	4/19/2022	903	X		8	3	
CD-43C3-220419	4/19/2022	921	X		8	3	
CD-48C1-220419	4/19/2022	1321	X		8	3	
CD-48C2-220419	4/19/2022	1249	X		8	3	
CD-48C3-220419	4/19/2022	1307	X		8	3	
CP-S1-220420	4/20/2022	710	X		8	9	MS/MSD
CP-S4-220420	4/20/2022	730	X		8	3	
CP-S5-220420	4/20/2022	745	X		8	3	
CP-S6-220420	4/20/2022	810	X		8	3	
CP-E1-220420	4/20/2022	930	X		8	3	

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

RELINQUISHED BY:		RECEIVED BY:	
Signature: Mike S Terris	Date: 4/20/2022	Signature:	Date:
Pint: MIKE S TERRIS	Time: 1600	Print Name:	Time:
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE		ANATEK LAB	

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: 1Z27352 19277
Shipping CO: UPS

No. Coolers: 1

DATE : 4/20/2022
PAGE 1 OF 3

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CP-E2-220420	4/20/2022	1110	X		8	3	
CP-E3-220420	4/20/2022	830	X		8	3	
CP-W1-220420	4/20/2022	1055	X		8	3	
CP-W2-220420	4/20/2022	1000	X		8	3	
CP-W3-220420	4/20/2022	1020	X		8	3	
CD-52-220420	4/20/2022	1000	X		8	3	
CD-44C1-220420	4/20/2022	1226	X		8	3	
CD-44C2-220420	4/20/2022	1103	X		8	3	
CD-44C3-220420	4/20/2022	1025	X		8	3	
CD-45C1-220420	4/20/2022	901	X		8	3	
CD-45C2-220420	4/20/2022	835	X		8	3	
CD-45C3-220420	4/20/2022	857	X		8	3	
CD-49-220420	4/20/2022	1343	X		8	3	
COLBERT TRIP BLANKS #1	4/20/2022	—	X		8	2	TRIP-BLANKS

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

RELINQUISHED BY:		RECEIVED BY:	
Signature: Mike Terris	Date: 4/20/2022	Signature:	Date:
Pint: MIKE S TERRIS	Time: 1600	Print Name:	Time:
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE		ANATEK LAB	

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COC COLBERT ANNUAL GROUNDWATER SAMPLING
2022

LABORATORY:

SVL ANALYTICAL

ONE GOVERNMENT GULCH
KELLOGG, ID 83837-0929
(208) 784-1258

COLBERT LANDFILL

SPOKANE COUNTY ENVIROMENTAL

22515 N. ELK-CHATTAROY RD.
COLBERT , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: K2735219259

Shipping Co.: UPS

No. Coolers: 1

DATE: 4/21/2022

PAGE 1 OF 1

PARAMETERS:			TOC / COD AMMONIA	CHLORIDE/NITRATE NITRITE/SULFATE	METALS Fe,Mn,Zn	SAMPLERS: Gordie Fisette Mike Terris		
CONTAINERS:			1-500 ml POLY BOTTLE	1-500 ml POLY BOTTLE	1-500 ml POLY BOTTLE			
PRESERVATION:			H2SO4 to pH<2	UNPRESERVED	HNO3 to pH < 2 field filtered			
HOLDING TIME:			28 days	28 days/48 hrs 48 hrs/28 days	6 months			
METHOD:			415.1 / 410.1 350.1	300.0 /300.0 354.1 /300.0	6010	COOLER NUMBER	# BOTTLES	COMMENTS:
Sample ID:	Date:	Time:						
CD-03A1-220421	4/21/2022	1010				4	3	
CS-04A1-220421	4/21/2022	830				4	3	
CD-60A1-220421	4/21/2022	829				4	3	
CD-61A1-220421	4/21/2022	914				4	9	MS/MSD
CD-51-220421	4/21/2022	900				4	3	

RELINQUISHED BY:
Signature:
Print Name: Mike S Terris
Spokane County Uitilites Landfill Closure

Date: 4/21/2022
Time: 1500

RECEIVED BY:
Signature:
Print Name:
Company:

Date:
Time:

COMMENTS: Please email a sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: K2735219268
Shipping CO: UPS
No. Coolers: 1

DATE : 4/21/2022
PAGE 1 OF 1

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-60A1-220421	4/21/2022	829			21	2	
CS-04A1-220421	4/21/2022	830			21	2	
CD-61A1-220421	4/21/2022	914			21	6	MS/MSD
CD-51-220421	4/21/2022	900			21	2	
CD-03A1-220421	4/21/2022	1010			21	2	
Colbert Trip-Blanks #2	4/21/2022	—			21	2	Trip Blanks

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

RELINQUISHED BY:
Signature:
Print: MIKE S TERRIS
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 4/21/2022
Time: 1500

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: K2735219268
Shipping CO: UPS

No. Coolers: 1

DATE : 4/21/2022
PAGE 1 OF 1

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-60A1-220421	4/21/2022	829			21	3	
CS-04A1-220421	4/21/2022	830			21	3	
CD-61A1-220421	4/21/2022	914			21	9	MS/MSD
CD-51-220421	4/21/2022	900			21	3	
CD-03A1-220421	4/21/2022	1010			21	3	
Colbert Trip-Blanks #2	4/21/2022	—			21	2	Trip Blanks

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

RELINQUISHED BY:
Signature:
Print: MIKE S TERRIS
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 4/21/2022
Time: 1500

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

Appendix C

Extraction Well Inspections/Maintenance Checklists

TECHS: M.TERRIS
DATE(S): 4/13/22

EXTRACTION WELL MAINTENANCE

TASK	MAINTENANCE	CP-S1	CP-S4	CP-S5	CP-S6	CP-E1	CP-E2	CP-E3	CP-W1	CP-W2	CP-W3
SUMP:											
	VERIFY HI FLOAT ALARM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CLEAN AS NEEDED (SHOPVAC)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
NOTES:	ALL SUMPS WERE CLEANED → NOT AVAILABLE TO VERIFY FLOAT ALARM										
VFD:											
	CLEAN FILTER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	INSPECT WIRING/COMPONENTS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:											
PIPING:											
	EXERCISE GATE VALVE (2X)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	INSPECT PIPING FOR LEAKS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT AIR/VAC VALVE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:	SMALL LEAK IN AIR/VAC ON W-3 CLEANED SEAL WORK GREAT.										
PIT:											
	INSPECT FOR LEAKS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK ZERO READING	A	A	A	A	A	A	N	A	A	A
NOTES:	ZERO READING ✓ ON ANNUAL MAINT										
PCP:											
	CLEAN (SHOPVAC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT ALL WIRING/RELAYS/COMP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK INDICATOR LIGHTS/REPLACE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK SLC/KE CARD LIGHTS BATT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TURN FAN TO WARM/(COOL)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CLEAN FILTERS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(CHECK)/TIGHTEN ALL CABLES/RADIO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	DESSICANT CHANGE OUT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	UPS BATTERY CHECK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:	WORKING ON RADIO COMM EVERYTHING LOOK GREAT										
VAULT:											
	CLEAN AND INSPECT (SHOPVAC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT LADDER BOLTS/RUNGS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT LID BOLTS UPPER/LOWER	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK/TIGHTEN MAGNET WELL/LID	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:											
FINAL:	CONTROL FREAK ON SITE TO GET RADIOS WORKING										
	RESET RADIO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	RESET WELL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IS PIT OPEN?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IS GATE VALVE OPEN?	C	C	C	C	C	C	C	C	C	C

EXTRA NOTES: CONTROL FREAK OUT TO GET RADIO TO COMM W/PLANIC

TECHS: M. TERRIS **EXTRACTION WELL MAINTENANCE**
DATE(S): 7/7/2022 (THURS)

TASK	MAINTENANCE	CP-S1	CP-S4	CP-S5	CP-S6	CP-E1	CP-E2	CP-E3	CP-W1	CP-W2	CP-W3
SUMP:											
	VERIFY HI FLOAT ALARM	—	—	—	—	—	—	—	—	—	—
	CLEAN AS NEEDED (SHOPVAC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:											
VFD:											
	CLEAN FILTER	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT WIRING/COMPONENTS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:	ALL LOOK GREAT!!										
PIPING:											
	EXERCISE GATE VALVE (2X)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT PIPING FOR LEAKS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT AIR/VAC VALVE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:	GATE VALVE OPEN TO SAMPLE → PUT CLOSED WHEN NOT SAMPLING.										
PIT:											
	INSPECT FOR LEAKS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK ZERO READING	A	A	A	A	A	A	A	A	N/A	A
NOTES:	A= ANNUAL MAINT.										
PCP:											
	CLEAN (SHOPVAC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT ALL WIRING/RELAYS/COMP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK INDICATOR LIGHTS/REPLACE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK SLC/KE CARD LIGHTS BATT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TURN FAN TO WARM/COOL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CLEAN FILTERS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK/TIGHTEN ALL CABLES/RADIO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	DESSICANT CHANGE OUT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	UPS BATTERY CHECK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:	PCP ALL LOOK IN GOOD SHAPE										
VAULT:											
	CLEAN AND INSPECT (SHOPVAC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT LADDER BOLTS/RUNGS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT LID BOLTS UPPER/LOWER	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK/TIGHTEN MAGNET WELL/LID	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:	PRESAMPLE CLEANING & ✓ GOOD										
FINAL:											
	RESET RADIO	—	—	—	—	—	—	—	—	—	—
	RESET WELL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IS PIT OPEN?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IS GATE VALVE OPEN?	C	C	C	C	C	C	C	C	C	C

EXTRA NOTES: QT ✓ & CLEANING OF EXTRACTION WELL PRE-SAMPLING (MT)

TECHS: MT
DATE(S): 10/14/21

EXTRACTION WELL MAINTENANCE

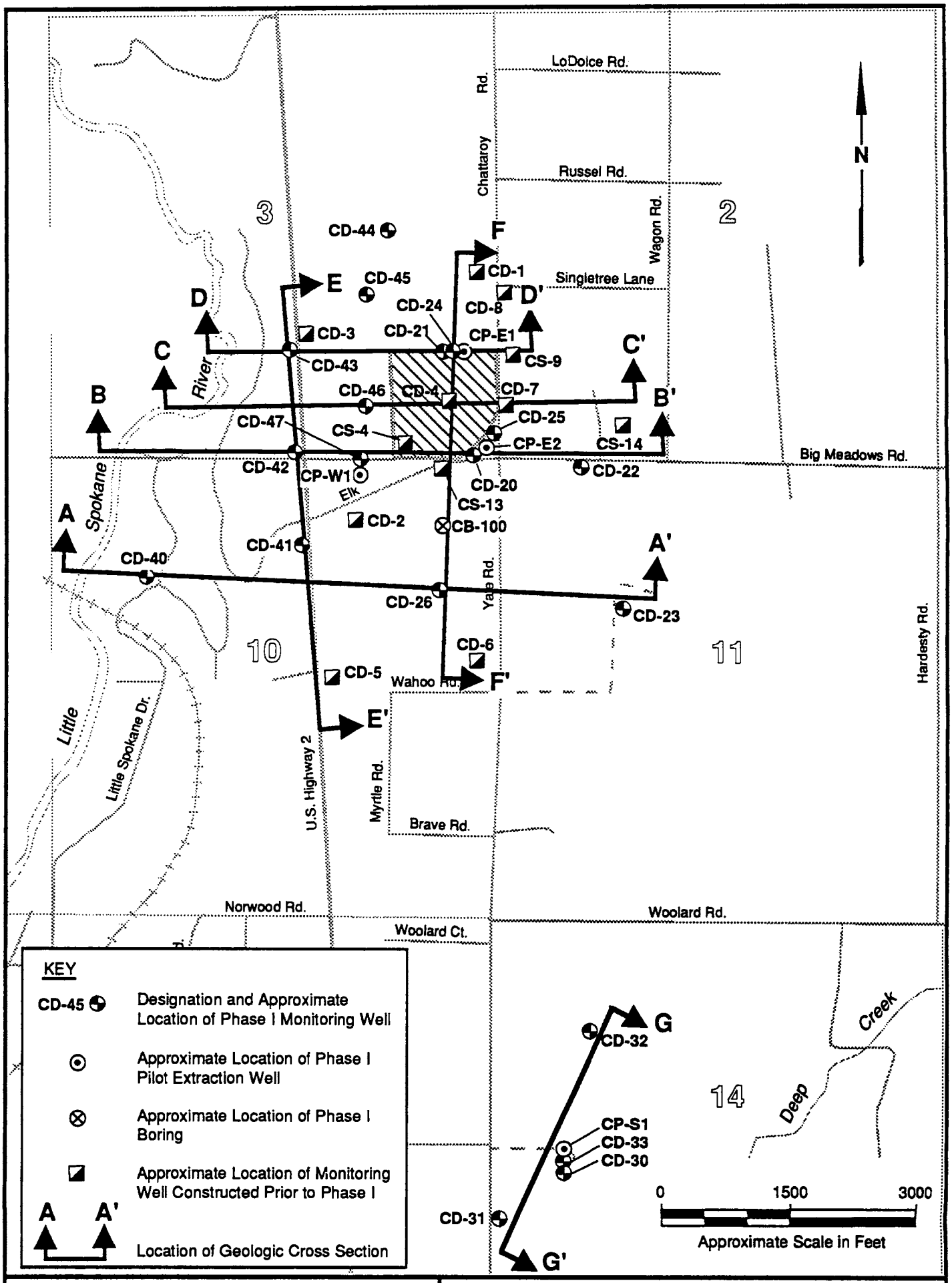
TASK	MAINTENANCE	CP-S1	CP-S4	CP-S5	CP-S6	CP-E1	CP-E2	CP-E3	CP-W1	CP-W2	CP-W3
SUMP:											
	VERIFY HI FLOAT ALARM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CLEAN AS NEEDED (SHOPVAC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:											
VFD:											
	CLEAN FILTER	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT WIRING/COMPONENTS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:											
PIPING:											
	EXERCISE GATE VALVE (2X)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT PIPING FOR LEAKS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT AIR/VAC VALVE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:	CLEANED AIRVAC W-3 LEAKING										
PIT:											
	INSPECT FOR LEAKS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK ZERO READING	—	—	—	—	—	—	—	—	—	—
NOTES:											
PCP:											
	CLEAN (SHOPVAC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT ALL WIRING/RELAYS/COMP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK INDICATOR LIGHTS/REPLACE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK SLC/KE CARD LIGHTS BATT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TURN FAN TO WARM/COOL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CLEAN FILTERS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK/TIGHTEN ALL CABLES/RADIO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	DESSICANT CHANGE OUT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	UPS BATTERY CHECK	NEW BATT →									
NOTES:	ALL ANNUAL MAINT										
VAULT:											
	CLEAN AND INSPECT (SHOPVAC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT LADDER BOLTS/RUNGS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	INSPECT LID BOLTS UPPER/LOWER	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CHECK/TIGHTEN MAGNET WELL/LID	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOTES:											
FINAL:	RADIO ARE NOT COM. W/PLANT										
	RESET RADIO	NA	NA	✓	✓	✓	✓	✓	✓	✓	✓
	RESET WELL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IS PIT OPEN?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	IS GATE VALVE OPEN?	N	N	N	N	N	N	N	N	N	N

ANNUAL MAINT

EXTRA NOTES:

Appendix D

Colbert Landfill Hydrogeologic Cross-sections



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Geologic Cross Section Location Map

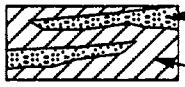
124-01.61 Spokane Co./Colbert Landfill/RD/RA Phase I /Final Engineering Report 12/91

Figure ER-4.1

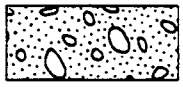
KEY TO GEOLOGIC CROSS SECTIONS

Fluvial sands, silts and gravels

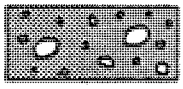
Upper Sand/Gravel Unit (Unit A), composed of gravelly, fine to coarse sand



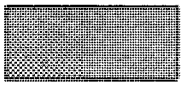
Lacustrine Unit (Unit B), composed of silt and clay with interbedded fine sand



Lower Sand/Gravel Unit (Unit C), composed of gravelly, fine to coarse sand

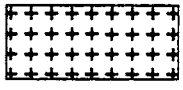


Weathered Latah Subunit (Unit D_1), composed of gravelly (basalt) silt and clayey silt

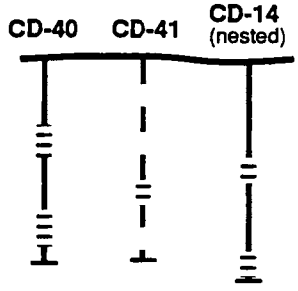


Latah Formation (Unit D), composed of silt, clayey silt and fine sand

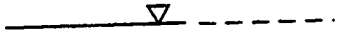
Basalt Unit (Unit E), composed of highly fractured to massive Basalt rock



Granite Unit (Unit F), composed of Pre-Tertiary granitic rock, highly weathered with zones encountered during Phase I



Approximate location and number of monitoring well cluster, with screen intervals shown for individual monitoring wells. Projected boring logs have dashed lines. Nested wells are noted, and screen intervals shown.

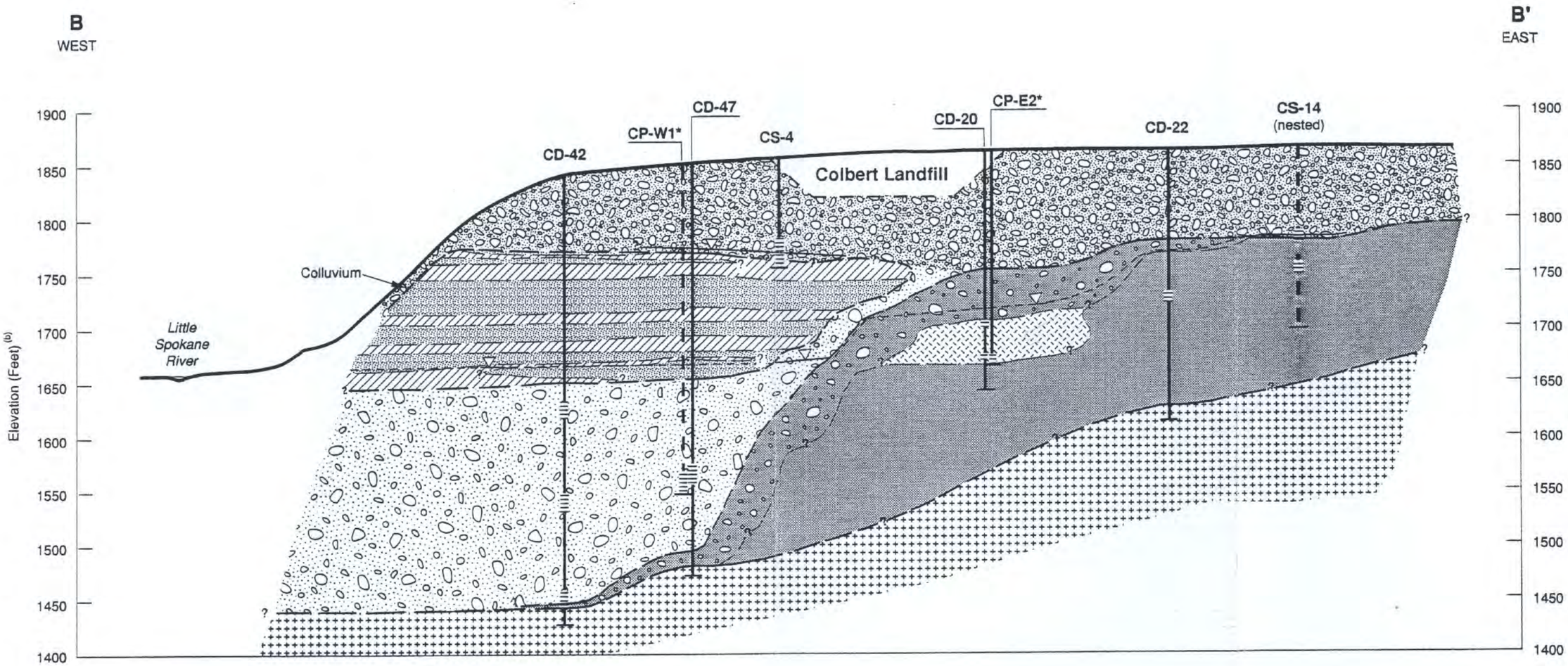


Ground water elevation line, dashed when representing a piezometric surface in a confined aquifer

Contact between stratigraphic units; question marks indicate contact projection based on limited data

LANDAU ASSOCIATES, INC.	Key to Geologic Cross Sections

Figure ER-4.2



Notes: a) Subsurface profiles shown have been generalized from data obtained during Phase I and other Site investigations. Variations between this profile and the actual soil conditions may be encountered. The boring logs and the discussion in the text of this Report must be referenced for a proper understanding of the nature of subsurface materials.

b) All elevations in feet above mean sea level (MSL) based on 1929, National Geodetic Vertical Datum.

* Pilot Well included in cross section to show screen interval, geologic information is based on adjacent monitoring well boring data.

0 600 1200
Approximate Scale in Feet
Vertical Scale Exaggeration: 6x

LANDAU ASSOCIATES, INC.

Geologic Cross Section B-B'

Figure ER-4.4

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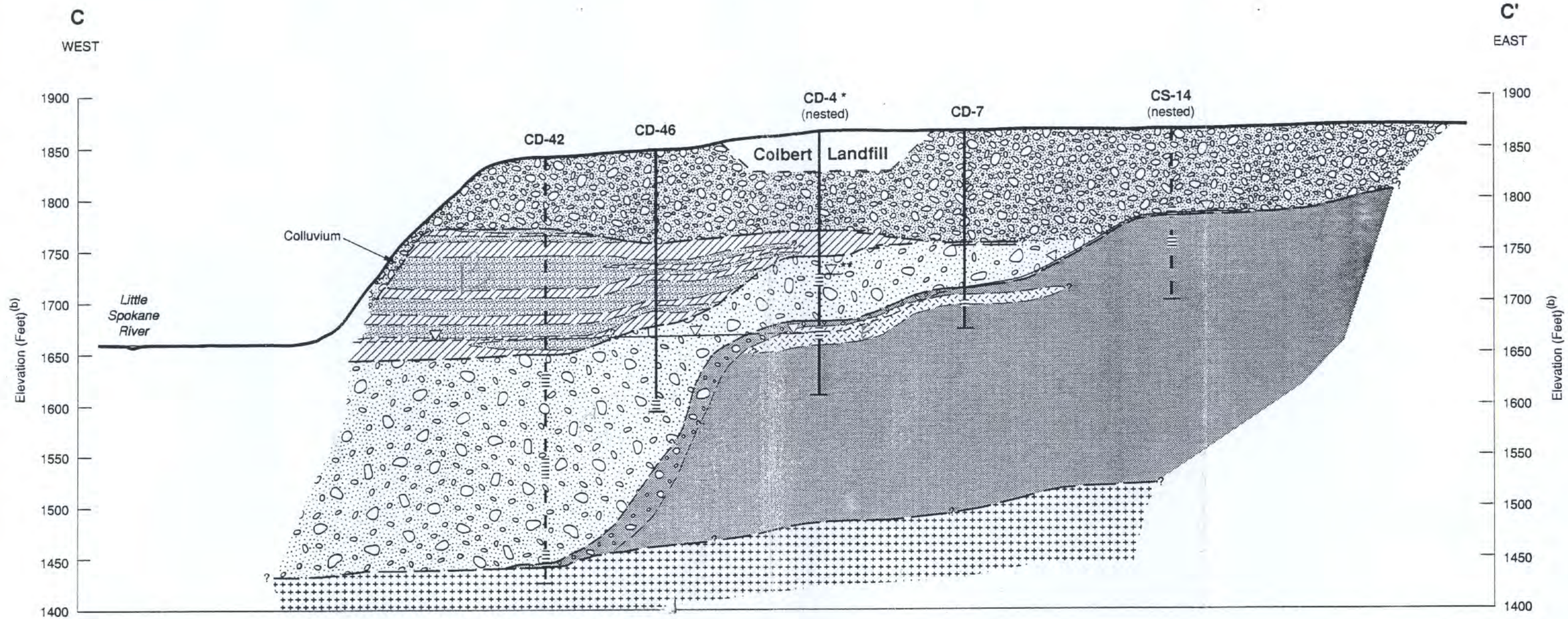


Notes: a) Subsurface profiles shown have been generalized from data obtained during Phase I and other Site investigations. Variations between this profile and the actual soil conditions may be encountered. The boring logs and the discussion in the text of this Report must be referenced for a proper understanding of the nature of subsurface materials.

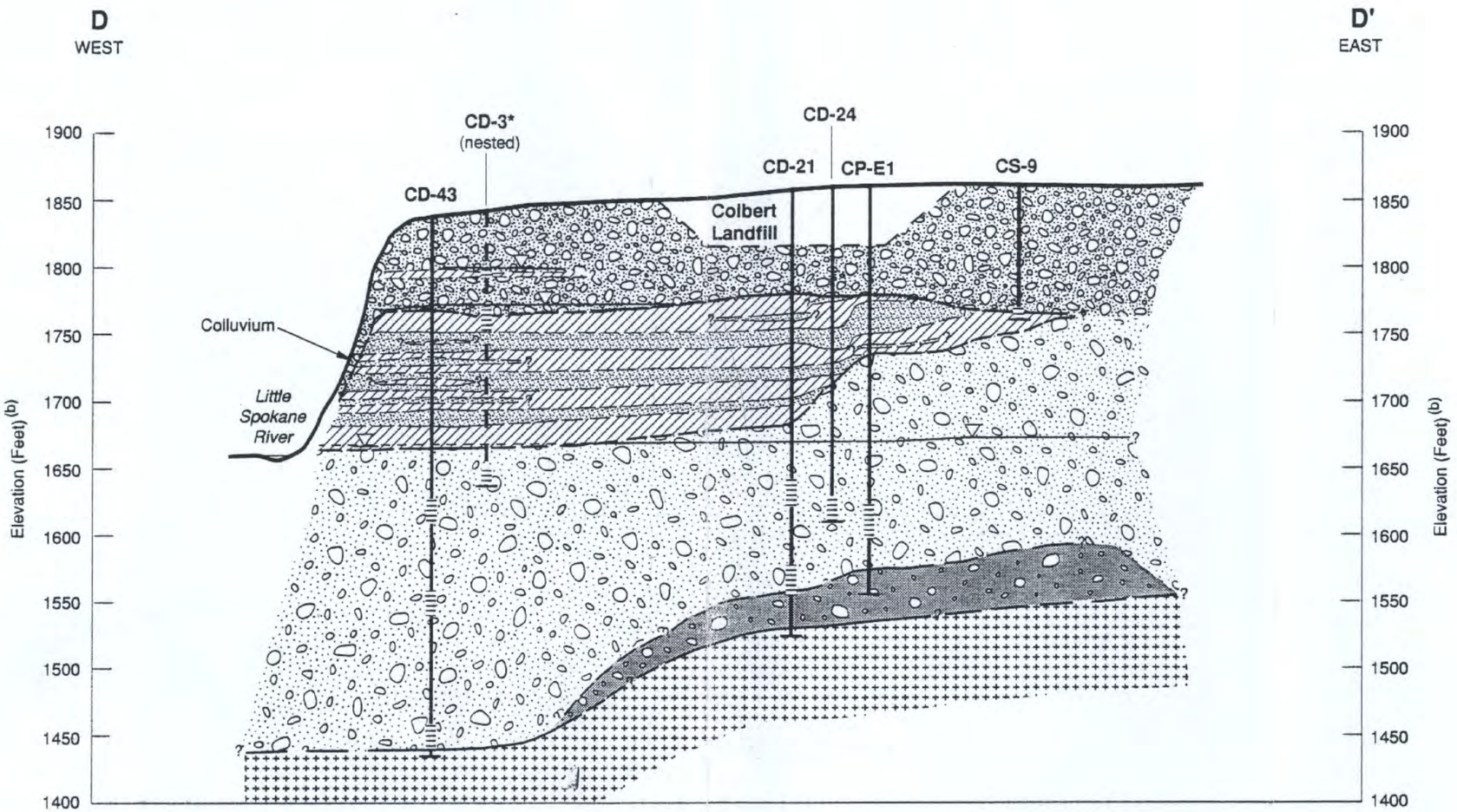
b) All elevations in feet above mean sea level (MSL) based on 1929, National Geodetic Vertical Datum.

* Well drilled by air rotary; detailed geology not identified in Lacustrine Aquitard Unit.
** Ground water in CD-4(U) appears to be perched. However, an underlying aquitard is not identified on the boring log.

LANDAU ASSOCIATES, INC.

Geologic Cross Section C-C'

Figure ER-4.5



Notes: a) Subsurface profiles shown have been generalized from data obtained during Phase I and other Site investigations. Variations between this profile and the actual soil conditions may be encountered. The boring logs and the discussion in the text of this Report must be referenced for a proper understanding of the nature of subsurface materials.

b) All elevations in feet above mean sea level (MSL) based on 1929, National Geodetic Vertical Datum.

0 600 1200
Approximate Scale in Feet
Vertical Scale Exaggeration: 6x

* Well drilled by air rotary; detailed geology in Lacustrine Aquitard Unit based on CD-43 boring data.

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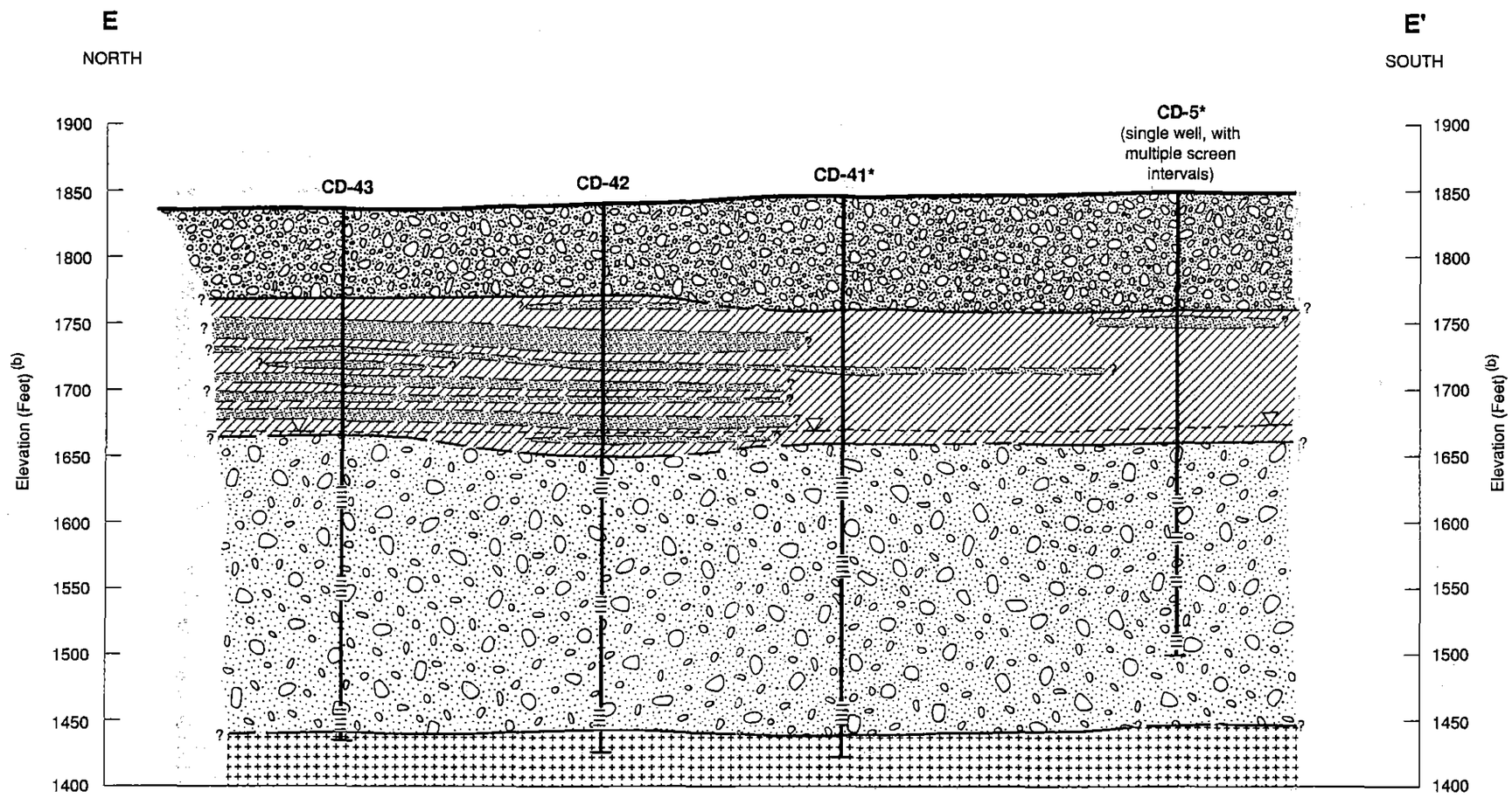
LANDAU ASSOCIATES, INC.

Geologic Cross Section D-D'

Figure ER-4.6



Notes: a) Subsurface profiles shown have been generalized from data obtained during Phase I and other Site investigations. Variations between this profile and the actual soil conditions may be encountered. The boring logs and the discussion in the text of this Report must be referenced for a proper understanding of the nature of subsurface materials.

b) All elevations in feet above mean sea level (MSL) based on 1929, National Geodetic Vertical Datum.

0 600 1200
Approximate Scale in Feet
Vertical Scale Exaggeration: 6x

* Well drilled by air rotary; detailed geology not identified in Lacustrine Aquitard Unit.

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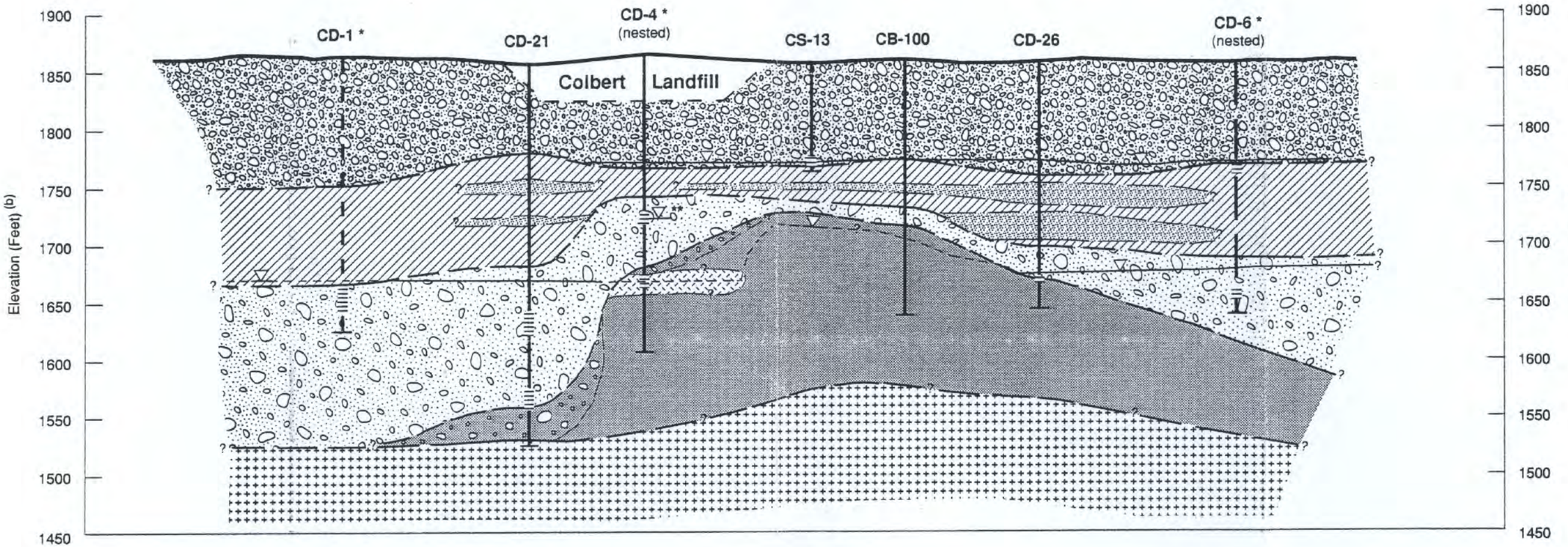
LANDAU ASSOCIATES, INC.

Geologic Cross Section E-E'

Figure ER-4.7

F

NORTH



F'

SOUTH

Notes: a) Subsurface profiles shown have been generalized from data obtained during Phase I and other Site investigations. Variations between this profile and the actual soil conditions may be encountered. The boring logs and the discussion in the text of this Report must be referenced for a proper understanding of the nature of subsurface materials.

b) All elevations in feet above mean sea level (MSL) based on 1929, National Geodetic Vertical Datum.

0 600 1200

Approximate Scale in Feet

Vertical Scale Exaggeration: 6x

* Well drilled by air rotary; detailed geology not identified in Lacustrine Aquitard Unit.

** Ground water in CD-4(U) appears to be perched. However, an underlying aquitard is not identified on the boring log.

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LANDAU ASSOCIATES, INC.

Geologic Cross Section F-F'

Figure ER-4.8

Appendix E

Supplemental Sampling Matrix/Paperwork

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5/3/22 | Address/Phone: McQuesten | Field Personnel: M. TERRIS

StationID: 0273C-4 | 4812 E Lo Dolce Rd | Weather: CLOUDY UPPER 40S

SampleID: 0273C-4-220503

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: -NA-

Dedicated Pump?: YES | COLRES WELL

PURGE INFORMATION

Screens from: ____ To ____

Press. Tank Vol: (if applicable) 100GAL

Well Depth:	131
− Depth to Water:	90.79
= Water Column Depth:	40.21

Gallons per linear foot: 1.50

Calc. Purge vol./casing vol.: 60.31: 65

Estimated Total Purge Vol. (gal): (295 GAL) 400GAL

Approx. Depth of Non-Ded. Equip: ____

Purge Rate: 8.5GPM

Purge Begin Time: 0915

Casing Size (in)	CASING INFO DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0929	128GAL 093	7.75	420	12.3		CLEAR
0944	253GAL	7.81	422	12.0		CLEAR
0959	384GAL	7.78	418	11.9		CLEAR
Stabilization Criteria	√ OIL	+/- 0.1 unit	+/- 5%		0.39	(must meet criteria within 3 consecutive measurements)

Sample Time: 1000

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 114	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/1
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLRES SAMPLE @ HOSE BIB FRONT OF HOUSE.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5/3/22 | Address/Phone: Overmyer | Field Personnel: M. TERRIS

StationID: 1473C-5 | 4710 E Woolard Rd | Weather: CLOUDY LOW 50S

SampleID: 1473C-5-220503

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES COLRES WELL

PURGE INFORMATION

Screens from: ~~136~~ 236 AS To ~~150~~ 241 AS

Press. Tank Vol: (if applicable) ~~NA~~ 50 GAL

Well Depth:	290			
− Depth to Water:	160'			
= Water Column Depth:	130'	x Gallons per linear foot: 1.50	= Calc. Purge vol./casing vol.: 195 GAL	

Estimated Total Purge Vol. (gal): 635 GAL

Approx. Depth of Non-Ded. Equip:

Purge Rate: 12 GPM

Purge Begin Time: 1025

Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1042	212 GAL	7.91	459	12.2		CLEAR
1059	224 GAL	7.94	464	12.0		CLEAR
1117	635 GAL	7.94	463	11.9		CLEAR
Stabilization Criteria	√ OIL	+/- 0.1 unit	+/- 5%		0.12	(must meet criteria within 3 consecutive measurements)

Sample Time: 1120

QAQC Sample Time:

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 117	Hach 2100P
S/N 472990	S/N 243	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
	X 3-40ml Glass w/HCl- VOC's (524.3)	
	X 2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: WL NOT TAKEN WELL VAULT LID TO OLD/HEAVY

COLRES USED 160' WL

SAMPLED @ YARD HYDRANT 150' NORTH OF HOUSE BY DRIVEWAY

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5/3/22 | Address/Phone: Lake | Field Personnel: M. TERRIS

StationID: 1573C-10 | 20406 N Market | Weather: P. CLOUDY MID-50

SampleID: 1573C-10-220503

QA/QC Sample ID: -NA-

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES COLRES WELL

PURGE INFORMATION

Screens from: To

Press. Tank Vol: (if applicable) 100 GAL

Well Depth:	220		
− Depth to Water:	150' APPROX	Gallons per linear foot:	Calc. Purge vol./casing vol.:
= Water Column Depth:	70'	x 1.50	= 105 GAL

Estimated Total Purge Vol. (gal): 450 GAL

Approx. Depth of Non-Ded. Equip:

Purge Rate: 9 GPM

Purge Begin Time: 1135

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1152	150 GAL	7.85	359	11.9		CLEAR
1209	300 GAL	7.81	361	11.6		CLEAR
1226	450 GAL	7.83	352	11.7		CLEAR
Stabilization Criteria	VOL	+/- 0.1 unit	+/- 5%		0.21	(must meet criteria within 3 consecutive measurements)

Sample Time: 1230

QAQC Sample Time:

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 1H	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
	X 3-40ml Glass w/HCl- VOC's (524.3)	
	X 2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: * WL NOT TAKEN PUMP HOUSE LOCKED

COLRES SAMPLE @ HOSE BIB FRONT OF HOUSE

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

"A"

Date: 5/3/22 | Address/Phone: Thomas | Field Personnel: M. TERRIS

StationID: 1073L-4 | 3625 E Norwood | Weather: P.CLOUDY LOW 60'S

SampleID: 1073L-4-220503

QA/QC Sample ID: - NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES COLRES WELL

PURGE INFORMATION

Screens from: ____ To ____

Press. Tank Vol: (if applicable) 200 GAL

Well Depth:	250			Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip	Casing Size (in)
− Depth to Water:	163.51'	Gallons per linear foot:	Calc. Purge vol./casing vol.:			
= Water Column Depth:	86.49	x 1.50	= 130 GAL 129.73	612 GAL		6

390 GAL + 200 PT = 590 GAL

Purge Rate: 12 GPM | Purge Begin Time: 1255

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1312	204 GAL	8.02	357	11.3		CLEAR
1329	408 GAL	7.99	358	11.2		CLEAR
1346	612 GAL	8.01	358	11.2		CLEAR
Stabilization Criteria	√ OK	+/- 0.1 unit	+/- 5%		0.12	(must meet criteria within 3 consecutive measurements)

Sample Time: 1350

QAQC Sample Time: - NA

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 114	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

*SAMPLED @ YARD HYDRANT FRONT YARD @ MAIN HOUSE → NOT THE SHOP HOUSE

Comments: *THIS LADY IS VERY MEAN, YELLS AT BOTH GF/MT WHEN WE SHOW UP TO TAKE WL/SAMPLE. @ 1210 I SHOWED UP TO SAMPLE PARKING IN NORMAL AREA BY THE PUMP HOUSE PART OF THE DIRT DRIVE AREA. SHE STARTED YELLING AT ME THAT I WAS DRIVING ON HER LAWN (LOOKED LIKE DIRT & WEEDS) I SAID I WAS SORRY →

COLRES

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5/3/22 Address/Phone: SAUNDER Field Personnel: M. TERRIS

StationID: 1573Q-1 19317 N Newport Hwy Weather: P. CLOUDY → CLEAR 60'S

SampleID: 1573Q-1 - 220503

QA/QC Sample ID: - NA -

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES COLRES

PURGE INFORMATION

Screens from: ~~100~~ AS To ~~140~~ AS

Press. Tank Vol: (if applicable) 50GAL

Well Depth:	97					
− Depth to Water:	80'					
= Water Column Depth:	17'	x Gallons per linear foot: 1.50	= Calc. Purge vol./casing vol.: 30GAL 25.5=	Estimated Total Purge Vol. (gal): 150 GAL	Approx. Depth of Non-Ded. Equip:	

(30GAL x 3 = 90GAL + 50GAL = 140 TOTAL PURGE)

Purge Rate: 10GPM Purge Begin Time: 1400

CASING INFO Casing Size (in)	DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1404	50GAL	7.66	549	11.7		CLEAR
1409	100GAL	7.65	551	11.6		CLEAR
1414	150GAL	7.66	550	11.6		CLEAR
Stabilization Criteria	VOL	+/- 0.1 unit	+/- 5%		0.29	(must meet criteria within 3 consecutive measurements)

Sample Time: 1415 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
	X 3-40ml Glass w/HCl- VOC's (524.3)	
	X 2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: *WELL VAULT LID OLD/HEAVY HOME OWNER DOES NOT WANT IT TO BE TOUCHED.

COLRES

*SAMPLE @ YARD HYDRANT NEXT TO WELL VAULT

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5/3/22 Address/Phone: Lane Field Personnel: M. TERRIS

StationID: 1073M-3 21305 N Little Spokane Weather: M. CLEAR 60S

SampleID: 1073M-3 -220503

QA/QC Sample ID: - NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES COLRES

PURGE INFORMATION

Screens from: To Press. Tank Vol: (if applicable) 40 GAL

Well Depth:	60				
− Depth to Water:	12.49				
= Water Column Depth:	~~+~~47.51 x	Gallons per linear foot: 1.50	= Calc. Purge vol./casing vol.: 75GAL 71.26	Estimated Total Purge Vol. (gal) 270G	Approx. Depth of Non-Ded. Equip

225GAL + 40GAL = 265G

Purge Rate 10GPM Purge Begin Time 1430

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1439	90GAL	7.98	364	11.1		CLEAR
1449	180GAL	7.98	361	11.1		CLEAR
1459	270GAL	8.00	363	10.9		CLEAR
Stabilization Criteria	~~Vol~~	+/- 0.1 unit	+/- 5%		0.32	(must meet criteria within 3 consecutive measurements)

Sample Time: 1500 QAQC Sample Time:

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
*	3-40ml Glass w/HCl- VOC's (524.3)	
*	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLRES * SAMPLED @ YARD HYDRANT SOUTH OF HOUSE BY WELL

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

"B"

Date: 5/3/22 | Address/Phone: ~~MOFFAT~~ VIGIL 20319 N. Newport HWY | Field Personnel: M. TERRIS

StationID: 1573B-4 | Weather: CLEAR MID-60

SampleID: 1573B-4 - 220503

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES — COLRES WELL

PURGE INFORMATION

Screens from: ____ To ____

Press. Tank Vol: (if applicable) 50 GAL

Well Depth:	100'			
− Depth to Water:	40'	Gallons per linear foot:	Calc. Purge vol./casing vol.:	
= Water Column Depth:	60'	x 1.50	= 90 GAL	

Estimated Total Purge Vol. (gal): 330 GAL

Approx. Depth of Non-Ded. Equip: —

270 GAL + 50 PT = 320 GAL / 3 = 110 GAL PER WELL VOL

Purge Rate: ____ Purge Begin Time: 1558

CASING INFO

Casing Size (in): 6

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1609	110 GAL	7.51	577	11.1		CLEAR
1620	220 GAL	7.55	581	10.9		CLEAR
1629	330 GAL	7.52	582	10.9		CLEAR
Stabilization Criteria	Vol	+/- 0.1 unit	+/- 5%		0.81	(must meet criteria within 3 consecutive measurements)

Sample Time: 1630

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

SAMPLED FROM HYDRANT 50' SOUTH OF HOUSE BY FENCE.

Comments:

USED LAST SUPPLEMENTAL ROUND WL. COULD NOT GET TO WELL.

BACK YARD AND HYDRANT SOUTH OF HOUSE IS → BY FENCE

ONLY ON WELL EVERYTHING ELSE IS ON WHITWORTH WATER

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

"B"

Date: 5-3-22 Address/Phone: Griffith (formerly Elliot) Field Personnel: GF

StationID: 0273P-3 BIG MEADOWS Weather: Cldy, 50°

SampleID: 0273P-3 -220503

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES Residential

PURGE INFORMATION

Screens from: To

Press. Tank Vol: ~~(if applicable)~~ 100 gal

Well Depth:	145			
− Depth to Water:	78.66	Gallons per linear foot:	Calc. Purge vol./casing vol.:	
= Water Column Depth:	66.34 x	1.50 =	100	

Estimated Total Purge Vol. (gal): 400

Approx. Depth of Non-Ded. Equip: NA

Purge Rate: 7.1 gpm

Purge Begin Time: 0915

Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0934	134	7.84	384	11.6		clear
0953	268	7.82	383	11.5		clear
1012	402	7.82	383	11.6		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.11	(must meet criteria within 3 consecutive measurements)

Sample Time: 1013

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Would like to know if it is safe for her dogs to play in/drink/water the lawns.
- purge/sampled from hose bib on west side of pumphouse. Owner said to run purge water into front yard

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

A

Date: 5/3/22 Address/Phone: Warden Field Personnel: GF

StationID: 0273C-3 23711 N Wagon Rd Weather: cldy, 52°

SampleID: 0273C-3 - 220503

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump? YES

PURGE INFORMATION

Screens from: To Press. Tank Vol: (if applicable) 60

Well Depth: 110

Depth to Water: * 96.07 - from 6-16-20

Water Column Depth: 13.93 x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 21 use 25

Estimated Total Purge Vol. (gal) 75+60=135

Approx. Depth of Non-Ded. Equip NA

Purge Rate 8.6 gpm Purge Begin Time 1034 6 min/vol

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1040	45	7.62	417	10.5		Clear
1046	90	7.60	419	10.3		clear
1052	135	7.63	419	10.2		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.09	(must meet criteria within 3 consecutive measurements)

Sample Time: 1053 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~94070000561~~9/ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLRES Purged/Sampled from hose bib on front of house - OKAY from owner on "Ring" doorbell to sample water

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

"A"

Date: 5/3/22 | Address/Phone: Jones/Shmidt | Field Personnel: GF

StationID: 0273C-2 | 23019 N Elk-Chattaroy | Weather: mstly cldy 54°

SampleID: 0273C-2 - 220503

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES Residential

PURGE INFORMATION

Screens from: To

Press. Tank Vol: (if applicable) assume 50 gal

Well Depth:	Depth to Water:	Water Column Depth:	Gallons per linear foot:	Calc. Purge vol./casing vol.:	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip
165	95.19 (2013)	69.81	x 1.5	= use 105/vol	365	NA

Purge Rate: 5.3 gpm

Purge Begin Time: 1139

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1202	122	7.81	566	11.2		Clear
1225	244	7.80	572	11.3		Clear
1248	366	7.82	569	11.4		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 1249

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619/~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLRES

* purge/sample from hose bib on front (north) side of home

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "B"

Date: 5-3-22 | Address/Phone: COSTELLO | Field Personnel: GF

StationID: 0273E-3 | 23410 N E-Chattaroy | Weather: ptly cldy, 55°

SampleID: 0273E-3 -220503

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES (Residential)

PURGE INFORMATION

Screens from: ~~136~~ AS 136 To 156

Press. Tank Vol: (if applicable) 60 gal

Well Depth: 263

Depth to Water: 166.44' → 10/18/21 By GF

Water Column Depth: 95.56 X 1.5 = 143 use 145/101

Gallons per linear foot: 1.5

Calc. Purge vol./casing vol.: 143 use 145/101

Estimated Total Purge Vol. (gal): 495

Approx. Depth of Non-Ded. Equip: NA

Purge Rate * 12.0

Purge Begin Time: 1325

Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1339	165	7.53	449	10.9		clear
1353	330	7.52	445	10.9		clear
1407	495	7.52	446	10.8		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.27	(must meet criteria within 3 consecutive measurements)

Sample Time: 1409

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr II+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Contact Robert/Barbara Costello at 509-999-3667 to schedule sampling (so they can clear the goats).
- Robert said OK to purge w/ 2 hoses - purge only yard hydrants since home on Whitworth water
- Purge/sample Yard hydrant NW of home. Other purge hydrant @ NE of home

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

"A"

Date: 5-3-22 | John & Kathy Babcock | C 816 90-4810

Address/Phone: KING SPRINGS

Field Personnel: GF

StationID: 0373P-1S | 22515 N Glen

Weather: Clear, 58°

SampleID: 0373P-1S -220503

Purge Method: (Disp. bailer), Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~197~~ AS To ~~217~~ AS

Press. Tank Vol: (if applicable) NA

Well Depth: Spring

Depth to Water:

Water Column Depth: NA x Gallons per linear foot: = Calc. Purge vol./casing vol.:

Estimated Total Purge Vol. (gal)

Approx. Depth of Non-Ded. Equip

Purge Rate: Spring

Purge Begin Time: 1506

Casing Size (in):

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1514	Spring	7.48	536	11.3		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 1516

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTestr11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

- Owners would like copies of the analytical results from the samples taken today.
- Sampled thru a horiz single use, pre cleaned bailer set in the flow for easier sampling.
- Samples taken from the spring downhill & west of the home.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "B"

Date: 5-3-22 | Address/Phone: PFENNIG | Field Personnel: GF

StationID: 1073Q-2 | 3701 Norwood | Weather: Clear, 60°

SampleID: 1073Q-2 -220503

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: YES Residential

PURGE INFORMATION

Screens from: To

Press. Tank Vol: (if applicable) 120gal

Well Depth: 110

Depth to Water: 40 (SWL from 5/4/2017)

Water Column Depth: 70 x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 105/315

Estimated Total Purge Vol. (gal): 435

Approx. Depth of Non-Ded. Equip: NA

Purge Rate: 13.5

Purge Begin Time: 1548

11 min/vol

Casing Size (in): 6

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1559	145	7.48	615	10.5		Clear
1610	290	7.47	630	10.4		Clear
1621	435	7.45	635	10.5		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.15	(must meet criteria within 3 consecutive measurements)

Sample Time: 1623

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Call Shirley at 509-290-9123 to schedule sampling when they are home.
- Purged from yard hydrant e. of house & also hose bib between Shops owner gave permission to purge water from both at once
- Sample taken @ yard hydrant just east of house
- Home on whitworth water yard hydrants on well.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5-4-22 | Address/Phone: Alderson SPR (formerly Batty Springs) | Field Personnel: GF

StationID: 1073C-1S | 22009 N Meadowview | Weather: mstly clear, 50°

SampleID: 1073C-1S -220504

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO Spring

PURGE INFORMATION

Screens from: To

Press. Tank Vol: (if applicable) NA

Well Depth: Spring

Depth to Water:

Water Column Depth: NA x

Gallons per linear foot:

Calc. Purge vol./casing vol.:

Estimated Total Purge Vol. (gal)

Approx. Depth of Non-Ded. Equip

Purge Rate Spring

Purge Begin Time

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0850	Spring	7.85	618	9.4		Clear
0900	Spring	7.86	620	9.4		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.48	(must meet criteria within 3 consecutive measurements)

Sample Time: 0906

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTESTR11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

- Set a pre-cleaned new, bailer in the path of the spring flow. Allowed the water to flow thru the horiz. bailer then sampled
- Sample location ≈ 200' South of home @ 22018 (owner Kathy) & ≈ 300' East of N. Meadowview up the hill ~~to~~ to a good location to sample the spring. Also ≈ 400' East of the Batty Pond

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

"A"

Date: 5/4/22 Address/Phone: CD-5 Field Personnel: M. TERRIS

StationID: CD-05C2 Weather: P.CLOUDY MID-60'

SampleID: CD-05C2-220504

QA/QC Sample ID: -NA-

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO #1

PURGE INFORMATION

Screens from: To Press. Tank Vol: (if applicable)

Well Depth:	Depth to Water:	Water Column Depth:	Gallons per linear foot:	Calc. Purge vol./casing vol.:	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip
334	178.09'	155.91' x	0.17 =	265.27G	81GAL	190'

Purge Rate: 0.75GPM Purge Begin Time: 1230 36MPWV

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1306	27GAL	7.81	497	11.1		CLOUDY SILT
1342	54GAL	7.84	495	11.0		CLOUDY
1408	81GAL	7.85	494	10.9		CLOUDY
Stabilization Criteria		+/- 0.1 unit	+/- 5%		1.21	(must meet criteria within 3 consecutive measurements)

Sample Time: 1410 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/_____
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

MT STARTED PORTABLE PUMP SAMPLING @ THIS LOCATION. PERFORMED PRE-SAMPLE DEION ON PUMP BEFORE BEGINNING PURGING.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

A

Date: 5/4/22 Address/Phone: Field Personnel: GF

StationID: CD-35A1 Weather: pt ly cldy, 65°

SampleID: CD-35A1 - 220504

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennett, PDB, Hydrasleeve → #2

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 93 To 103

Press. Tank Vol: (if applicable) NA

Well Depth: 104

Depth to Water: 94.20

Water Column Depth: 9.8 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 2.5 use 3.0

Estimated Total Purge Vol. (gal)

Approx. Depth of Non-Ded. Equip

Purge Rate

Purge Begin Time: 1256

Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1300	3	7.49	746	11.9		Clear
1304	6	7.52	755	11.6		Clear
1308	9	7.52	749	11.6		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.46	(must meet criteria within 3 consecutive measurements)

Sample Time: 1309

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ - 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

"A"

Date: 5/4/22 Address/Phone: CD-7L Field Personnel: GF

StationID: CD-07E1 Weather: ptly cldy, 68°

SampleID: CD-07E1 – 220504

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO #2

PURGE INFORMATION

Screens from: 166 To 171

Press. Tank Vol: (if applicable) NA

Well Depth:	171			
− Depth to Water:	156.82	Gallons per linear foot:	Calc. Purge vol./casing vol.:	
= Water Column Depth:	14.18	x 0.17	= 2.4 use 3.0	

Estimated Total Purge Vol. (gal):

Approx. Depth of Non-Ded. Equip:

Purge Rate:

Purge Begin Time: 1446

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
	*					
1451	3	6.97	312	14.3		Clear
1456	6	6.91	311	14.0		Clear
1504	9	6.92	319	14.0		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 1502 * actual sample time @1506 #7

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTestr11+	Hach 2100P
S/N 467085	S/N 7810	S/N ~~0407000056197~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

* well recovery slower than pumping rate so I had to slow purge rate down some

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5-9-22 Address/Phone: Ackerman Field Personnel: GF, AS

StationID: CD-22D1 4414 E Big Meadows Weather: Cldy

SampleID: CD-22D1 -220509

QA/QC Sample ID: MS/MSD

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40 (Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 137 To 151

Press. Tank Vol: (if applicable) NA

Well Depth:	152				
− Depth to Water:	93.95				
= Water Column Depth:	58.05	x Gallons per linear foot: 0.26	= Calc. Purge vol./casing vol.: 15.1 use 16 gal/vol	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip

Purge Rate 1.87 Purge Begin Time 1115

CASING INFO

Casing Size (in): 2.5

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1129	16	7.17	350	12.9		Clear
1138	32	7.13	342	12.8		clear
1147	48	7.12	339	12.8		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		1.20	(must meet criteria within 3 consecutive measurements)

Sample Time: 1148

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTestr11+	Hach 2100P
S/N 476085	S/N 280	S/N ~~040700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

MS/MSD TAKEN HERE

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5/9/22 Address/Phone: CD-3L Field Personnel: M. TERRIS

StationID: CD-03C1 Weather: CLOUDY 40S

SampleID: CD-03C1-220509

QA/QC Sample ID: -NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #1

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~58~~ 194 NS To ~~84~~ 204 NS

Press. Tank Vol: (if applicable) NA

Well Depth:	205				
− Depth to Water:	175.78	Gallons per linear foot:	Calc. Purge vol./casing vol.:	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip
= Water Column Depth:	29.52 x	0.17 =	5.5 5.02	16.5	185'

Purge Rate: 0.75GPM Purge Begin Time: 1140 8 MPWV

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
			466 MT			
1148	5.5 GAL	7.95	~~11.2~~	11.2		CLEAR
1156	11.0 GAL	7.91	466	10.9		CLEAR
1204	16.5 GAL	7.90	465	10.9		CLEAR
Stabilization Criteria	√OK	+/- 0.1 unit	+/- 5%		0.49	(must meet criteria within 3 consecutive measurements)

Sample Time: 1210 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

BENNETT #1 WENT WELL NO PROBLEMS

RON HELP ME SET PUMP AND PULL PUMP

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "B"

Date: 5/10/22 Address/Phone: CD-2A1 Repla Field Personnel: M. TERRIS

StationID: CD-02RA1 Weather: P. CLOUDY LOW 40'S

SampleID: CD-02RA1-220510

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, (Port. Bennet), PDB, Hydrasleeve #1

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 87 To 97

Press. Tank Vol: (if applicable)

Well Depth:	100
− Depth to Water:	82.49
= Water Column Depth:	17.51

Gallons per linear foot: 0.17

Calc. Purge vol./casing vol.: 3GAL 2.97

Estimated Total Purge Vol. (gal): 9GAL

Approx. Depth of Non-Ded. Equip:

Purge Rate: 1GPM

Purge Begin Time: 0850

Casing Size (in): 2

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
(2.0)	(0.17)
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0855	5GAL	7.03	683	11.0°C		SLI CLOUDY
0859	9GAL	7.06	714	9.7°C		CLEAR
0904	14GAL	7.07	718	9.4°C		CLEAR
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.98	(must meet criteria within 3 consecutive measurements)

Sample Time: 0905

QAQC Sample Time: -NA-

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 248	(S/N 940700005619/)
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

BENNETT #1 PUMP

WHILE DECONNING PUMP, PUMP FROZE UP HAD TO REPLACE WITH A BACK UP. WENT THRU THE PRE-DECON W/ NEW PUMP

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "B"

Date: 5/10/22 Address/Phone:

Field Personnel: M. TERRIS

StationID: CD-40C2

Weather: SLI CLOUDY 40S

SampleID: CD-40C2-220510

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, RDB, Hydrasleeve

QA/QC Sample ID: CD-53-220510

Dedicated Pump?: NO #2

PURGE INFORMATION

Screens from: ~~194~~ 127 AS To ~~204~~ 146 AS

Press. Tank Vol: (if applicable)

Well Depth: 145

Depth to Water: 2.89'

Water Column Depth: 142.11 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 37 GAL 36.9=

Estimated Total Purge Vol. (gal): 111 GAL

Approx. Depth of Non-Ded. Equip: 15'

Purge Rate: 1.91 GPM

Purge Begin Time: 0957 20MPWV

Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1019	37 GAL	8.07	268	10.9		CLEAR
1039	74 GAL	8.05	265	10.7		CLEAR
1059	111 GAL	8.05	266	10.7		CLEAR
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.71	(must meet criteria within 3 consecutive measurements)

Sample Time: 1100

QAQC Sample Time: 1030

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 117	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

DUPE TAKEN HERE

SAMPLED WELL USING THE PORTABLE BENNETT #2

COLBERT I NDFILL SUPPLEMENTAL GROUNDW TER SAMPLING "B"

Date: 5/10/22 Address/Phone: Field Personnel: M. TERRIS

StationID: CD-24C2 Weather: P. CLOUDY MID-50S

SampleID: CD-24C2 -220510

QA/QC Sample ID: - NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, BDB, Hydrasleeve

Dedicated Pump?: NO #1

PURGE INFORMATION

Screens from: ~~70~~ 233 FT To ~~90~~ 252 FT

Press. Tank Vol: (if applicable)

Well Depth:	252				
− Depth to Water:	189.99	Gallons per linear foot:	Calc. Purge vol./casing vol.:	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip
= Water Column Depth:	62.01 x	0.26 =	16.1 : 16.5	50 GAL	200'

Purge Rate: 0.75 GPM Purge Begin Time: 1205 22 MPW V

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1230	16.5 G	6.90	1124	12.6		CLEAR
1255	33.0 G	6.91	1128	12.4		CLEAR
1320	49.5 G	6.91	1127	12.3		CLEAR
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.31	(must meet criteria within 3 consecutive measurements)

Sample Time: 1320 ACTUAL 1322 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 243	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

SAMPLED THIS WELL USING THE PORTABLE BENNETT #2 A LITTLE SLOW BUT DID WELL. THIS AM WE HAD TO REPLACE THE PUMP ON BENNETT #1 PRE-CLEANED PUMP BEFORE SAMPLING. (MT)

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "B"

Date: 5/10/22 Address/Phone: WEST of E-1 Field Personnel: M. TERRIS

StationID: CD-21C1 Weather: P. CLOUDY 50's

SampleID: CD-21C1-220510

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #2

QA/QC Sample ID: MS/MSD ON SAMPLE Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~87~~ 216 AS To ~~97~~ 225 AS

Press. Tank Vol: (if applicable)

Well Depth: 235

Depth to Water: 186.09'

Water Column Depth: 48.91' x 0.26 (Gallons per linear foot:) = 12.7 = 13 GAL (Calc. Purge vol./casing vol.:)

Estimated Total Purge Vol. (gal): 40 GAL

Approx. Depth of Non-Ded. Equip: 200'

Purge Rate: 0.82 GPM Purge Begin Time: 1422 16 MPW

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1438						
~~1538~~	13 GAL	7.01	1007	12.6		CLEAR
1454	26 GAL	6.97	1009	12.0		CLEAR
1512	39 GAL	7.02	1011	11.6		CLEAR
Stabilization Criteria	√ OK	+/- 0.1 unit	+/- 5%		021	(must meet criteria within 3 consecutive measurements)

Sample Time: 1515 QAQC Sample Time: SAME AS SAMPLE

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

MS/MSD MS/MSD TAKEN HERE → FILLED 2 EXTRA SETS FOR EACH PAR ABOVE.

BENNETT PUMP #2

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5-10-22 | Address/Phone: Low Anderson GEWOCK | Field Personnel: GF, AS

StationID: 1473N-1 | N 19426 Yale | Weather: ptly cldy,

SampleID: 1473N-1 - 220510

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ____ To ____

Press. Tank Vol: (if applicable) ____

Well Depth:	104
− Depth to Water:	84.81
= Water Column Depth:	19.19'

x Gallons per linear foot: 1.50 = Calc. Purge vol./casing vol.: 28.8 use 30

Estimated Total Purge Vol. (gal): ____

Approx. Depth of Non-Ded. Equip: ____

Purge Rate: 3.5

Purge Begin Time: 0927

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0936	30	7.40	521	10.8		Sli orange rust color
0945	60	7.40	524	10.7		clear
0954	90	7.40	524	10.6		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		2.33	(must meet criteria within 3 consecutive measurements)

Sample Time: 0955

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTESTR11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)

		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

- 6" well in small pumphouse N. of home. Call/stop by first so owners can move items stored on lid over well vault. Bottom of well vault ≈ 8' below grade. 6" well has no cap or pump within it. Pump/tubing must be strung from the trailer to the pump house.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

509 954 4638 Rick "B"

Date: 5-10-22 | Address/Phone: Tobias | Field Personnel: GF, AS

StationID: 0273D-2 | 4510 E LoDolce Rd | Weather: ptly cldy, 60°

SampleID: 0273D-2 - 220510

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA | Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~87~~ AS To ~~87~~ AS

Press. Tank Vol: (if applicable)

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

Well Depth: 220

Depth to Water: 195.94

Water Column Depth: 24.06 x Gallons per linear foot: 1.50 = Calc. Purge vol./casing vol.: 36.1 use 37

Estimated Total Purge Vol. (gal)

Approx. Depth of Non-Ded. Equip

Purge Rate 1220 | Purge Begin Time 2.1

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1238	37	7.53	317	13.0		very sli rust color
1256	74	7.53	316	12.9		very sli rust color, almost clear
1304	111	7.40	313	13.1		Clear
1332 ~~27~~ 25	148	7.11	298	13.4		Clear
* 1350	185	7.02	291	13.2		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.96	(must meet criteria within 3 consecutive measurements)

Sample Time: ~~1305~~ AS ~~1355~~ 1351

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTestr11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Call Cindy Tobias to schedule sampling - they would like to be present.
- Currently no pump or piping in the well. 6" well is located next to the blue spruce in the back yard

* purged 5 well volumes due to unstable parameters
- Due to depth of SWL & the Grundfos ReelEZ only capable of going 200' deep we used a SWL meter in conjunction w/ pumping to make sure we didn't overpump.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "B"

Date: 5-10-22 Address/Phone: Field Personnel: GF, AS

StationID: CD-23B1 Weather: ptly cldy, 60°

SampleID: CD-23B1 -220510

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~24~~ 78 AS To ~~27~~ 88 AS

Press. Tank Vol: (if applicable) NA

Well Depth:	88				
− Depth to Water:	79.00	Gallons per linear foot:	Calc. Purge vol./casing vol.:	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip
= Water Column Depth:	9.0	x 0.26	= 2.3 use 3.0		

Purge Rate: Purge Begin Time: 1538

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1542	3	7.62	425	11.7		clear
1547	6	7.62	432	11.7		clear
1550	9	7.65	432	11.7		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.55	(must meet criteria within 3 consecutive measurements)

Sample Time: 1552 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

A

Date: 5/11/22 Address/Phone: 4612 E WOOLARD RD Field Personnel: M. TERRIS

StationID: CD-32B1 MW LOCATED SE CORNER Weather: CLEAR MID 40's

SampleID: CD-32B1 -220511

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #1

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~230~~ 99 To ~~241~~ 109 AS AS

Press. Tank Vol: (if applicable)

Well Depth: 109

Depth to Water: 93.12'

Water Column Depth: 15.88 x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 4.12=5

Estimated Total Purge Vol. (gal): 15 GAL

Approx. Depth of Non-Ded. Equip: 100'

Purge Rate: 1.25 GPM

Purge Begin Time: 0849

CASING INFO

Casing Size (in): 2.5

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0854	5 GAL	7.92	424	11.0		CLEAR
0859	10 GAL	7.93	427	10.9		CLEAR
0904	15 GAL	7.93	229	10.9		CLEAR
Stabilization Criteria	√OK	+/- 0.1 unit	+/- 5%		0.89	(must meet criteria within 3 consecutive measurements)

Sample Time: 0905

QAQC Sample Time: - NA

METERS

pH	Conductivity	Turbidity
pH Testr 100 S/N 472990	TDS Testr 11+ S/N 248	Hach 2100P S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

SAMPLED WELL W/ BENNETT #1. SEEMS LIKE HOUSE IS EMPTY NOBODY LIVES HERE ALL GATES WERE OPEN FREE ACCESS.

WELL LOCATED SE CONNOR OF PROPERTY S.C. MONITORING WELL

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

B

Date: 5/11/22 Address/Phone: MW T.S. PROP Field Personnel: M. TERRIS

StationID: CD-47 SOUTH ON PROP BY FENCE Weather: CLEAR 50'S

SampleID: CD-47 - 220511 Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #2

QA/QC Sample ID: EQ-02-220511 Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~147~~ 877 To ~~157~~ 896 AS

Press. Tank Vol: (if applicable) NA

Well Depth: 296

Depth to Water: 180.88'

= Water Column Depth: 115.12' x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 29.9=30G

Estimated Total Purge Vol. (gal): 90GAL

Approx. Depth of Non-Ded. Equip: 200'

Purge Rate: 0.91 GPM Purge Begin Time: 1000 35MPWV

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1035	30GAL	7.77	479	12.4		CLEAR
1110	60GAL	7.76	481	12.2		CLEAR
1144	90GAL	7.77	484	11.9		CLEAR
Stabilization Criteria	VOL	+/- 0.1 unit	+/- 5%		0.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 1145 QAQC Sample Time: 1100 (MARKED)

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 114	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

*FILLED 2 SETS FOR THIS LOCATION REG. SAMPLE AND EQUIPMENT BLANK SAMPLE

Comments: SAMPLED USING PORT. BENNETT #2. MT SAMPLE AN EQUIPMENT BLANK HERE AS WELL AFTER DECONNING PUMP RUNNING WATER TO CLEAN PUMP & USED DI WATER TO TAKE SAMPLE WITH TO COMPARE W/ ID CD-47-220511

ACTUAL TIME: 1305 pH: 7.66 TEMP: 16.9 COND: 0.0 NTU: 0.07

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "C"

Date: 5/11/22 Address/Phone: CD-2C2 Repla Field Personnel: M. TERRIS

StationID: CD-02RC2 ACROSS STREET NW CORNER Weather: P.CLOUDY 60S

SampleID: CD-02RC2-220511

QA/QC Sample ID: -NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #2

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~198~~ 241 AS To ~~283~~ 271 AS

Press. Tank Vol: (if applicable)

Well Depth:	Depth to Water:	Water Column Depth:	Gallons per linear foot:	Calc. Purge vol./casing vol.:	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip
274	183.05	90.95 x	0.17 =	15.4=15.5G	46.5GAL	200'

Purge Rate: 0.92GPM Purge Begin Time: 1320 17 MPWV

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1337	155GAL	7.76	477	13.0		CLEAR
1354	310GAL	7.74	474	12.3		CLEAR
1411	465GAL	7.74	475	12.1		CLEAR
Stabilization Criteria	√OK	+/- 0.1 unit	+/- 5%		0.47	(must meet criteria within 3 consecutive measurements)

Sample Time: 1415 QAQC Sample Time: -NA-

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 117	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

- MT SAMPLED USING PORTABLE BENNETT #2

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "B"

Date: 5-11-22 | Address/Phone: MOORE LNDSCP | Field Personnel: GF

StationID: 1573H-4 | 4109 E Woolard | Weather: Clear, 45°

SampleID: 1573H-4 - 220511

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: EQ-01-220511 | Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ____ To ____ | Press. Tank Vol: (if applicable) ____

Well Depth: 111

Depth to Water: 96.01'

Water Column Depth: 14.99 x Gallons per linear foot: 40 = Calc. Purge vol./casing vol.: ____

Estimated Total Purge Vol. (gal): ____ | Approx. Depth of Non-Ded. Equip: ____

Purge Rate: 3.5 | Purge Begin Time: 0822 | 12 min/vol

CASING INFO Casing Size (in)	DIA.	VOL. (gal/ft)
8	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50
	8"	2.61

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0834	40	7.34	671	11.1		Sli orange rusty color
0846	80	7.36	686	11.0		Clear
0858	120	7.37	683	11.0		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		1.33	(must meet criteria within 3 consecutive measurements)

Sample Time: 0859 | QAQC Sample Time: 1014

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~840700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: EQUIPMENT BLANK HERE. — after sampling here

EB #1

- set pump @ 106' deep

GF/AS RAN AN EQUIPMENT BLANK HERE ID ABOVE RAN 3-40 VOC'S & 1,4 DIOXANE.

TIME: 1014 PH 7.55 TEMP 13.5° COND: 0.0 TURB 0.08 NTU

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "A"

Date: 5/11/22 Address/Phone: PURDY Field Personnel: G.F, AS

StationID: 0273D-3 4610 E Lo Dolce Rd Weather: mstly clear, 58°

SampleID: 0273D-3 -220511

QA/QC Sample ID: -NA-

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: To Press. Tank Vol: (if applicable)

Well Depth:	244				
− Depth to Water:	192.67				
= Water Column Depth:	51.33	x 1.50	= 77		

Gallons per linear foot: | Calc. Purge vol./casing vol.: | Estimated Total Purge Vol. (gal) | Approx. Depth of Non-Ded. Equip

Purge Rate 2.6 Purge Begin Time 1211

30 min/vol

CASING INFO

Casing Size (in): 6

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1241	77	7.86	265	13.4		Sli orange
1310	154	7.81	267	13.4		clear
1340	231	7.73	265	13.4		clear
1410	308	7.60	264	13.4		Clear
1440	385	7.62	263	13.7		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.59	(must meet criteria within 3 consecutive measurements)

Sample Time: 1341 actual sample time @ QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr II+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Dog-Mazy. If gates are closed we are welcome to open it for access but close behind you so dog does not escape.

- Grundfos pump hose failure w/ leak. Pulled back up & repaired. Then dropped it back into the well.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "B"

Date: | Address/Phone: | Field Personnel:

StationID: CS-12A1 | Weather:

SampleID: CS-12A1 | Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: | Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 205 To 215 | Press. Tank Vol: (if applicable)

Well Depth: | Depth to Water: | Water Column Depth: | Gallons per linear foot: | Calc. Purge vol./casing vol.: | Estimated Total Purge Vol. (gal) | Approx. Depth of Non-Ded. Equip

Purge Rate | Purge Begin Time

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
Stabilization Criteria		+/- 0.1 unit	+/- 5%			(must meet criteria within 3 consecutive measurements)

*NO SAMPLE

Sample Time: | QAQC Sample Time:

METERS

pH	Conductivity	Turbidity
pH Testr_____	TDS Testr_____	Hach 2100P
S/N_____	S/N_____	S/N 940700005619/_____
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)			Bottle Batch #
		3-40ml Glass w/HCl- VOC's (524.3)	
		2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

IF WATER

NO WATER IN WELL DRY

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

"B"

Date: 5/12/22 Address/Phone: CS-14U Field Personnel: M. TERRIS

StationID: CS-14C1 Weather: P.CLOUDY LOW40S

SampleID: CS-14C1 -220512

QA/QC Sample ID: -NA-

Purge Method: (Disp. bailer), Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~230~~ 74 AS To ~~350~~ 84 AS

Press. Tank Vol: (if applicable)

Well Depth:	87					
− Depth to Water:	83.95'	Gallons per linear foot:	Calc. Purge vol./casing vol.:	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip	
= Water Column Depth:	3.05' x	0.17 =	0.51=1GAL	3GAL		
Purge Rate		Purge Begin Time	0815			

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0820	1GAL	7.54	461	10.9		CLOUDY
0824	2GAL	7.5	466	11.1		CLOUDY
0828	3GAL	7.56	465	11.0		CLEAR
Stabilization Criteria		+/- 0.1 unit	+/- 5%		10.21	(must meet criteria within 3 consecutive measurements)

Sample Time: 0830 QAQC Sample Time:

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Bailer MT ~~50~~ USED DISP BAILER - WATER LEVEL KEEP DROPPING OVER THE YEARS ONLY 3' OF WATER IN WELL. KEEP A WATCH ON THIS FOR NEXT SUPPLEMENTAL RD

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "C"

Date: 5/12/22 Address/Phone:

Field Personnel: M. TERRIS

StationID: CD-46 TSNW OF TIPPING FLOOR

Weather: P.CLOUDY

SampleID: CD-46 -220512

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #1

QA/QC Sample ID: EQ-03-220512

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~170~~ 247 AS To ~~180~~ 257 AS

Press. Tank Vol: (if applicable)

Well Depth: 257

Depth to Water: 183.20'

Water Column Depth: 73.80' X Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 19.1=19.5GAL

Estimated Total Purge Vol. (gal): 60 GAL

Approx. Depth of Non-Ded. Equip: 200'

Purge Rate: 1 GPM

Purge Begin Time: 0945

CASING INFO

Casing Size (in): 2.5

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1005	19.5GAL	7.54	658	11.2		CLEAR
~~100~~1024	39GAL	7.56	661	11.0		CLEAR
1044	58.5GAL	7.56	660	10.9		CLEAR
Stabilization Criteria	√ GOOD	+/- 0.1 unit	+/- 5%		1.80	(must meet criteria within 3 consecutive measurements)

Sample Time: 1045

QAQC Sample Time: 1000

METERS

pH

pH Testr 100

S/N 472990

Calib. to 4.0, 7.0 and 10.0

Conductivity

TDS Testr 1H

S/N 24B

STD. to 700 umhos/cm

Turbidity

Hach 2100P

S/N 940700005619/

STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: EQUIPMENT BLANK ~~HAS~~ TAKEN HERE

EB #3 MT SAMPLED AN EQUIPMENT BLANK @ THIS LOCATION AFTER DECONNING PUMP 10 GAL WASH 10 GAL RINSE 10 GALS OF DI THEN 15 GAL DI WATER IN SAMPLE TUBE

TIME: 1000 pH: 7.91 COND: 0.0 TEMP: 14.6 TURB: 0.08

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "D"

Date: 5/12/22 Address/Phone:

Field Personnel: M. TERRIS

StationID: CD-23C2

Weather: CLOUDY 50S

SampleID: CD-23C2 - 220512

QA/QC Sample ID: - NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO #2

PURGE INFORMATION

Screens from: 170 To 189

Press. Tank Vol: (if applicable)

Well Depth:	189			
− Depth to Water:	171.36	Gallons per linear foot:	Calc. Purge vol./casing vol.:	
= Water Column Depth:	17.64	x 0.26	= 4.58=5G	

Estimated Total Purge Vol. (gal): 15GAL

Approx. Depth of Non-Ded. Equip: 180'

Purge Rate: 0.92GPM

Purge Begin Time: 1245 6MPWV

CASING INFO

Casing Size (in): 2.5

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1251	5GAL	7.37	501	12.4		SLI CLOUDY
1257	10GAL	7.41	497	12.1		SLI CLOUDY
1303	15GAL	7.39	496	12.1		SLI CLOUDY
Stabilization Criteria	√ OIL	+/- 0.1 unit	+/- 5%		1.22	(must meet criteria within 3 consecutive measurements)

Sample Time: 1305

QAQC Sample Time: -NA-

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 24B	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

* NOTHING OUT OF THE ORDINARY WAS OBSERVED. MT SAMPLED WELL USING PORT BENNETT #2. HAD TO SLOW PRESSURE DOWN TO 80PSI

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

- C"

Date: 5/12/22 Address/Phone: CD-8M Field Personnel: GF, AS

StationID: CD-08E1 Weather: mstly cldy, 50

SampleID: CD-08E1 - 220512

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~198~~ 198 To ~~221~~ 203 AS

Press. Tank Vol: (if applicable)

Well Depth: 205

Depth to Water: 188.64'

Water Column Depth: 16.36 x Gallons per linear foot: 0.17 = Calc. Purge vol./casing vol.: 2.7 use 3.0

Estimated Total Purge Vol. (gal)

Approx. Depth of Non-Ded. Equip 195'

max flow rate

Purge Rate 0.8 gpm

Purge Begin Time 0928

4 min/vol

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0932	3	7.28	674	13.6		Sl cldy
0936	6	7.29	673	13.7		clear
0940	9	7.27	676	13.7		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		2.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 0941 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

- owner gave permission to drive to well w/ trailer & truck so I didn't have to haul equip across yard to well. Ask 1st next time & he may let us do it again. Owner was a cool dude.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "C"

Date: 5-12-22 Address/Phone: CD-6L Field Personnel: GF, AS

StationID: CD-06C2 Weather: mstly cldy, 50°

SampleID: CD-06C2 - 220512

QA/QC Sample ID: CD-54-220512

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~78~~ 196 AS To ~~88~~ 206 AS

Press. Tank Vol: (if applicable)

Well Depth:	208				
− Depth to Water:	177.23'				
= Water Column Depth:	30.77	x Gallons per linear foot: 0.17	= Calc. Purge vol./casing vol.: 5.2 use 6.0	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip 190'

Purge Rate 1.0 gpm Purge Begin Time 1102

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1108	6	7.86	452	12.9		Clear
1114	12	7.88	454	13.0		Clear
1120	18	7.88	454	13.0		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0,22	(must meet criteria within 3 consecutive measurements)

Sample Time: 1121 QAQC Sample Time: 1109

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC TESTR11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619/~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

~~CD-51Dupe~~ DUPE TAKEN HERE

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "C"

Date: 5-12-22 Address/Phone: CD-6U Field Personnel: GF

StationID: CD-06A1 Weather: cldy, 50°

SampleID: CD-06A1-220512

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~137~~ 87 To ~~151~~ 97 ft S

Press. Tank Vol: (if applicable)

Well Depth:	100				
− Depth to Water:	89.52'				
= Water Column Depth:	10.48	x Gallons per linear foot: 0.17	= Calc. Purge vol./casing vol.: 1.8 use 2.0	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip 97'

Purge Rate: 0.5 Purge Begin Time: 1228

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1232	2	7.61	484	11.9		Clear
1236	4	7.61	487	11.8		Clear
1240	6	7.62	486	11.8		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.19	(must meet criteria within 3 consecutive measurements)

Sample Time: 1243 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "D"

Date: 5-12-22 | Address/Phone: GOODWIN | Field Personnel: GF

StationID: 0273N-7 | 4517 Big Meadows | Weather: mstly cldy, 55°

SampleID: 0273N-7 - 220512

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40 Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: ~~YES~~ NO X

PURGE INFORMATION

Screens from: ~~233~~ 100 AS To ~~252~~ 140 AS

Press. Tank Vol: (if applicable)

Well Depth:	140				
− Depth to Water:	90.66'				
= Water Column Depth:	49.34'	X 1.5 =	74.01 use 75		

Gallons per linear foot: | Calc. Purge vol./casing vol.: | Estimated Total Purge Vol. (gal) | Approx. Depth of Non-Ded. Equip: 110'

Purge Rate: 4.2 gpm | Purge Begin Time: 1359 | 18 min/vol

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
6	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1417	75	7.22	724	12.5		Sli orange rust color
1435	150	7.23	722	12.6		Clear
1453	225	7.20	723	12.6		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.22	(must meet criteria within 3 consecutive measurements)

Sample Time: 1454

QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Contact Donna/Jack at 509-991-1001 to notify them/allow them to leave the gate open for access. Grundfos Pump - 2017.
Well located just East of property line fence East of small shed. No pump in well. This well can purge @ high volume.

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "D"

Date: 5/16/2022 Address/Phone: CD-1 Field Personnel: GF, AS

StationID: CD-01C1 Weather: mstly cldy, 60°

SampleID: CD-01C1 - 220516

QA/QC Sample ID: CD-55-220516

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40 Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~189~~ 196 AS To ~~194~~ 021 AS

Press. Tank Vol: (if applicable) NA

Well Depth: 229

Depth to Water: 193.30

Water Column Depth: 35.70 x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 54

Estimated Total Purge Vol. (gal):

Approx. Depth of Non-Ded. Equip: 198'

Purge Rate: 2.8 → calc. w/ SWL time

Purge Begin Time: 1338

20 min/vol

CASING INFO

Casing Size (in): 6

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1358	54	7.01	769	13.4		Sli rusty orange color
1418	108	6.99	762	13.4		clear
1438	162	7.01	764	13.3		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		1.55	(must meet criteria within 3 consecutive measurements)

Sample Time: 1439

QAQC Sample Time: 1417

METERS

pH	Conductivity	Turbidity
pH Testr EXtech	TDS Testr ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005610~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments: DUPE TAKEN HERE

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "C"

Date: 5-16-22 Address/Phone: HAYES Field Personnel: GF, AS

StationID: 0273L-2 E 4714 Singletree Weather: mstly cldy, windy, 55°

SampleID: 0273L-2 - 220516

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 196 To 206 Press. Tank Vol: (if applicable) NA

Well Depth: 560

Depth to Water: 129.59'

Water Column Depth: 430.41 x Gallons per linear foot: 1.5 = Calc. Purge vol./casing vol.: 646 gal/vol

Estimated Total Purge Vol. (gal):

Approx. Depth of Non-Ded. Equip: 196'

Purge Rate: 2.6 gpm (max) Purge Begin Time: 0953

CASING INFO	
Casing Size (in)	DIA. VOL. (gal/ft)
6	1.25 0.08
	2.0 0.17
	2.5 0.26
	3 0.38
	4 0.66
	~~8~~ 1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
* SEE Attached field worksheet						
Stabilization Criteria		+/- 0.1 unit	+/- 5%			(must meet criteria within 3 consecutive measurements)

Sample Time: 1234 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005819~~/ 23474
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

- Due to 1938 gal purge volume well purged until parameters stabilized (~12.5 hrs) as was done during previous supp. sampling

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

(CMON)

Date: 5/16/22 Address/Phone:

Field Personnel: M. TERRIS

StationID: CD-25 WELL IS BY E-2

Weather: PCLOUDY UPPER 60'S

SampleID: CD-25-220516

QA/QC Sample ID: -NA-

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #2

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 178 To 197

Press. Tank Vol: (if applicable)

Well Depth:	198
− Depth to Water:	159.12
= Water Column Depth:	38.88'

x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 10.1=11GAL

Estimated Total Purge Vol. (gal): 33GAL

Approx. Depth of Non-Ded. Equip: 170'

Purge Rate: 1 GPM

Purge Begin Time: 1430

Casing Size (in): 2.5

CASING INFO

DIA.	VOL. (gal/ft)
1.25	0.08
2.0	0.17
2.5	0.26
3	0.38
4	0.66
6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1441	11GAL	7.41	889	13.9		CLEAR
1452	22GAL	7.41	885	13.8		CLEAR
1503	33GAL	7.41	883	13.5		CLEAR
Stabilization Criteria	√ OK	+/- 0.1 unit	+/- 5%		0.72	(must meet criteria within 3 consecutive measurements)

Sample Time: 1505

QAQC Sample Time: -NA-

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Added to list on 5/11/2022, don't know much about the well.

MT SAMPLED THIS LOCATION USING THE PORTABLE BENNETT PUMP #2

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "D"

(MON)

Date: 5/16/22 Address/Phone: Field Personnel: M. TERRIS

StationID: CD-26 SOUTH OF COMPOST FAC. IN WOODS Weather: MOSTLY CLEAR MID-60

SampleID: CD-26 - 220516

QA/QC Sample ID: - NA.

Purge Method: Disp. bailer, Ded. Grundfos, ~~Ded. Bladder~~, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #2

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~400~~ 189 AS To ~~410~~ 194 AS

Press. Tank Vol: (if applicable)

Well Depth:	194				
− Depth to Water:	181.98	Gallons per linear foot:	Calc. Purge vol./casing vol.:	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip
= Water Column Depth:	12.02'	X 0.26	= 3.12=4GAL	12GAL	185'

Purge Rate: 0.83GPM Purge Begin Time: 1300

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1306	5GAL	7.13	831	12.9		CLEAR
1312	10GAL	7.17	834	12.7		CLEAR
1318	15GAL	7.18	837	12.7		CLEAR
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.89	(must meet criteria within 3 consecutive measurements)

Sample Time: 1320 QAQC Sample Time: -NA-

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

~~Dupe~~ MT SAMPLED USING THE PORTABLE BENNETT #2 PUMP. WELL LOCATED SOUTH OF OLD COMPOST FACILITY AND NORTH OF WAHOO ROAD IN WOODS

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING "D"

Date: 5/16/22 (CMON) Address/Phone: CD-4L Field Personnel: M. TERRIS

StationID: CD-04E1 ON LANDFILL (MIDDLE) Weather: MOSTLY CLOUDY 60s

SampleID: CD-04E1-220512

QA/QC Sample ID: - NA -

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennett PDB, Hydrasleeve #2

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: ~~100~~ 205 AS To ~~108~~ 215 AS

Press. Tank Vol: (if applicable)

Well Depth: 215

Depth to Water: 202.09

Water Column Depth: 12.97 x Gallons per linear foot: 0.17 = Calc. Purge vol./casing vol.: 2.19 = 3GAL

Estimated Total Purge Vol. (gal): 9GAL

Approx. Depth of Non-Ded. Equip: 205'

Purge Rate: 0.91 GPM

Purge Begin Time: 1130

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1134	3GAL	7.10	947	13.9		SLI CLOUDY
1138	6GAL	7.12	939	14.2		CLEAR
1143	9 GAL	7.12	938	14.3		CLEAR
Stabilization Criteria	√OK	+/- 0.1 unit	+/- 5%		17.1	(must meet criteria within 3 consecutive measurements)

Sample Time: 1145

QAQC Sample Time: - NA -

METERS

pH	Conductivity	Turbidity
pH Testr 100 ~~47990~~	TDS Testr 11+	Hach 2100P
S/N 47990	S/N 24B	S/N 940700005619
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

MT SAMPLED WELL USING PORTABLE BENNETT #2

COLBERT L[illegible]DFILL SUPPLEMENTAL GROUNDW[illegible]ATER SAMPLING "C"

(MON)

Date: 5/16/22 Address/Phone: CD-4U Field Personnel: M. TERRIS

StationID: CD-04C1 MIDDLE OF LANDFILL Weather: P.CLOUDY LOW 60S

SampleID: CD-04C1-220516 Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: EQ-04-220516 Dedicated Pump?: NO #2

PURGE INFORMATION

Screens from: ~~210~~ 147 AS To ~~225~~ 157 AS

Press. Tank Vol: (if applicable)

Well Depth: 157

Depth to Water: 149.02

Water Column Depth: 7.98 x Gallons per linear foot: 0.17 = Calc. Purge vol./casing vol.: 1.35-2

Estimated Total Purge Vol. (gal): 6 GAL

Approx. Depth of Non-Ded. Equip: 155'

Purge Rate:

Purge Begin Time: 0930

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0934	2 GAL	7.78	602	12.9		CLOUDY
0938	4 GAL	7.71	599	12.9		CLOUDY
0943	6 GAL	7.71	598	12.8		CLEAR
Stabilization Criteria	√OK	+/- 0.1 unit	+/- 5%		7.29	(must meet criteria within 3 consecutive measurements)

Sample Time: 0945 QAQC Sample Time: 1000

METERS

pH	Conductivity	Turbidity
pH Testr 100 S/N 472990	TDS Testr 11+ S/N 243	Hach 2100P S/N 940700005619
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

* PLACING PUMP SLOW ONCE IT HITS WATER PUMP OR IT WILL GET MUD *

Comments: EQUIPMENT BLANK TAKEN HERE

EB #2 MT SAMPLED WELL USING PORTABLE BENNETT #2 ... LAST EQUIPMENT BLANK WAS RUN HERE.

EQUIPMENT BLANK RAN THRU DECON STATION AND AT THE END RAN 15 GAL CLEAN DI TO SAMPLE WITH. PH: 8.21 COND. 0.0 TEMP. 15.4° TURB. 0.02

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

Date: 5/17/22 Address/Phone: Field Personnel: M. TERRIS

StationID: CD-33 WELL LOCATED NEXT S-1 Weather: P CLOUDY MID-50

SampleID: CD-33-220517

QA/QC Sample ID: -NA-

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennett, PDB, Hydrasleeve #2

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 92 To 106

Press. Tank Vol: (if applicable)

Well Depth:	107
− Depth to Water:	87.91
= Water Column Depth:	19.09

x Gallons per linear foot: 0.26 = Calc. Purge vol./casing vol.: 4.96=5GAL

Estimated Total Purge Vol. (gal): 15GAL

Approx. Depth of Non-Ded. Equip: 95

Purge Rate: 1.25GPM

Purge Begin Time: 0915

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0919	5GAL	7.55	524	11.9		CLEAR
0924	10GAL	7.53	528	10.9		CLEAR
0929	15GAL	~~5~~ 7.53	528	10.8		CLEAR
Stabilization Criteria	VOL	+/- 0.1 unit	+/- 5%		0.12	(must meet criteria within 3 consecutive measurements)

Sample Time: 0930

QAQC Sample Time: -NA-

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 11+	Hach 2100P
S/N 472990	S/N 243	S/N 940700005619
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
*	3-40ml Glass w/HCl- VOC's (524.3)	
*	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Added to list on 5/11/2022, don't know much about the well.

* MT SAMPLED WELL USING BENNETT PUMP #2

By EI

COLBERT LANDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

Date: 5-17-22 Address/Phone: Field Personnel: GF, AS

StationID: CD-21C3 Weather: mstly cldy, windy, 48°

SampleID: CD-21C3 - 220517

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

QA/QC Sample ID: NA Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 283 To 292

Press. Tank Vol: (if applicable) NA

Well Depth:	302				
− Depth to Water:	187.47'				
= Water Column Depth:	114.53	x Gallons per linear foot: 0.26	= Calc. Purge vol./casing vol.: 29.8 use 30	Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip 196'

Purge Rate 1.9 Purge Begin Time 0859 16 min/vol

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
0915	30	7.39	834	13.1		Slight tan color
0931	60	7.34	842	13.1		Clear
0947	90	7.35	850	13.2		Clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.18	(must meet criteria within 3 consecutive measurements)

Sample Time: 0949 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr EC Testr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619~~ 23474
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis:(Check parameters to be analyzed)		Bottle Batch #
✓	3-40ml Glass w/HCl- VOC's (524.3)	
✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Added to list on 5/11/2022, don't know much about the well.

This well maxes out @ ≈ 2 gpm

COLBERT [illegible]IDFILL SUPPLEMENTAL GROUNDW[illegible]TER SAMPLING

Date: 5/17/22 Address/Phone: Was CD-20E1 Field Personnel: M. TERRIS

StationID: CD-20D1 WELL LOCATED BY E-2 Weather: CLOUDY MID-50'S

SampleID: CD-20D1-220517

QA/QC Sample ID: -NA-

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40, Port. Grundfos, Port. Bennet, PDB, Hydrasleeve #2

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 153 To 165

Press. Tank Vol: (if applicable)

Well Depth: 163

Depth to Water: 157.61

Water Column Depth: 5.39' x 0.26 = 1.4=2GAL

Gallons per linear foot:

Calc. Purge vol./casing vol.:

Estimated Total Purge Vol. (gal): 6 GAL

Approx. Depth of Non-Ded. Equip: 160'

Purge Rate: 0.75 GPM

Purge Begin Time: 1047

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1050	2 GAL	7.06	1058	12.9		SLI CLOUDY
1053	4 GAL	7.09	1071	12.5		CLEAR
1056	6 GAL	7.08	1072	12.4		CLEAN
Stabilization Criteria	VOL	+/- 0.1 unit	+/- 5%		0.89	(must meet criteria within 3 consecutive measurements)

Sample Time: 1100

QAQC Sample Time: -NA

METERS

pH	Conductivity	Turbidity
pH Testr 100	TDS Testr 114	Hach 2100P
S/N 472990	S/N 248	S/N 940700005619/
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)		Bottle Batch #
X	3-40ml Glass w/HCl- VOC's (524.3)	
X	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Added to list on 5/11/2022. Well logs ID'd this well as CD-20E1. Priority 1 for sampling if time allows.

MT SAMPLED LOCATION USING PORT BENNETT #2 SLOW PURGE DOWN TO 75PSI COLUMN OF WATER IS ONLY 5.39'

By EZ

COLBERT IDFILL SUPPLEMENTAL GROUNDWATER SAMPLING

Date: 5-17-22 Address/Phone: Was CD-20E2 Field Personnel: GF

StationID: CD-20D2 WELL LOCATED BY E-2 Weather: mstly cldy, 60°

SampleID: CD-20D2 - 220517

QA/QC Sample ID: NA

Purge Method: Disp. bailer, Ded. Grundfos, Ded. Bladder, Ded. Bennett, Env. Tech ES 40 Port. Grundfos, Port. Bennet, PDB, Hydrasleeve

Dedicated Pump?: NO

PURGE INFORMATION

Screens from: 183 To 196

Press. Tank Vol: (if applicable)

Well Depth:	192			Estimated Total Purge Vol. (gal)	Approx. Depth of Non-Ded. Equip
− Depth to Water:	157.87	Gallons per linear foot:	Calc. Purge vol./casing vol.:		
= Water Column Depth:	34.13	x 0.26	= 9		185'

Purge Rate 1.8 Purge Begin Time 1110 5 min/vol

CASING INFO

Casing Size (in)	DIA.	VOL. (gal/ft)
2.5	1.25	0.08
	2.0	0.17
	2.5	0.26
	3	0.38
	4	0.66
	6	1.50

FIELD PARAMETERS

Time	Purge Vol/gal	pH	Cond. (umhos/cm)	Temp. (C)	Turb.	Comments
1115	9	7.05	1003	13.7		very lt gray cloudy color
1120	18	7.08	1012	13.6		clear
1125	27	7.07	1010	13.6		clear
Stabilization Criteria		+/- 0.1 unit	+/- 5%		0.56	(must meet criteria within 3 consecutive measurements)

Sample Time: 1127 QAQC Sample Time: NA

METERS

pH	Conductivity	Turbidity
pH Testr Extech	TDS Testr ECTestr 11+	Hach 2100P
S/N 476085	S/N 7810	S/N ~~940700005619/~~ 24957
Calib. to 4.0, 7.0 and 10.0	STD. to 700 umhos/cm	STD. to 4.8, 43.8, 420

Lab Analysis: (Check parameters to be analyzed)			Bottle Batch #
	✓	3-40ml Glass w/HCl- VOC's (524.3)	
	✓	2-60mL Amber glass w/ NaSO4 - 1,4-Dioxane (522)	

Comments:

Added to list on 5/11/2022. Well logs ID'd this well as CD-20E1. Priority 3 for sampling if time allows.

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220505-1001
Shipping CO: UPS
No. Coolers: 1

DATE : 5/5/2022
PAGE 1 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
0273C-4-220503	5/3/2022	1000	X		1001	3	
1473C-5-220503	5/3/2022	1120	X		1001	3	
1573C-10-220503	5/3/2022	1230	X		1001	3	
1073L-4-220503	5/3/2022	1350	X		1001	3	
1573Q-1-220503	5/3/2022	1415	X		1001	3	
1073M-3-220503	5/3/2022	1500	X		1001	3	
1573B-4-220503	5/3/2022	1630	X		1001	3	
0273P-3-220503	5/3/2022	1013	X		1001	3	
0273C-3-220503	5/3/2022	1053	X		1001	3	
0273C-2-220503	5/3/2022	1249	X		1001	3	
0273E-3-220503	5/3/2022	1409	X		1001	3	
0373P-1S-220503	5/3/2022	1516	X		1001	3	
1073Q-2-220503	5/3/2022	1623	X		1001	3	
1073C-1S-220504	5/4/2022	906	X		1001	3	
CD-05C2-220504	5/4/2022	1410	X		1001	3	

RELINQUISHED BY:
Signature: Mike Terris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/5/2022
Time: 1400

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220505-1001
Shipping CO: Anatek Courier
No. Coolers: 1

DATE : 5/5/2022
PAGE 2 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-35A1-220504	5/4/2022	1309	X		21	2	
CD-07E1-220504	5/4/2022	1502	X		21	2	
Colbert Trips #3	5/4/2022	—	X		21	2	Trip Blanks

RELINQUISHED BY:
Signature: Mike S Terris
Print: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/5/2022
Time: 0900

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220505-21
Shipping CO: Anatek Courier
No. Coolers: 1

DATE : 5/5/2022
PAGE 1 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
0273C-4-220503	5/3/2022	1000			21	2	
1473C-5-220503	5/3/2022	1120			21	2	
1573C-10-220503	5/3/2022	1230			21	2	
1073L-4-220503	5/3/2022	1350			21	2	
1573Q-1-220503	5/3/2022	1415			21	2	
1073M-3-220503	5/3/2022	1500			21	2	
1573B-4-220503	5/3/2022	1630			21	2	
0273P-3-220503	5/3/2022	1013			21	2	
0273C-3-220503	5/3/2022	1053			21	2	
0273C-2-220503	5/3/2022	1249			21	2	
0273E-3-220503	5/3/2022	1409			21	2	
0373P-1S-220503	5/3/2022	1516			21	2	
1073Q-2-220503	5/3/2022	1623			21	2	
1073C-1S-220504	5/4/2022	906			21	2	
CD-05C2-220504	5/4/2022	1410			21	2	

RELINQUISHED BY:
Signature: Mike Terris
Print: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/5/2022
Time: 0900

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220505-1001
Shipping CO: UPS
No. Coolers: 1

DATE : 5/5/2022
PAGE 2 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-35A1-220504	5/4/2022	1309		X	1001	~~2~~ 2 MT	
CD-07E1-220504	5/4/2022	1502		X	1001	~~2~~ 2	
Colbert Trips #3	5/4/2022	—		X	1001	2	Trip Blanks

RELINQUISHED BY:
Signature: Mike Sterris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/5/2022
Time: 1400

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220505-1001
Shipping CO: UPS
No. Coolers: 1

DATE : 5/5/2022
PAGE 2 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-35A1-220504	5/4/2022	1309		X	1001	3	
CD-07E1-220504	5/4/2022	1502		X	1001	3	
Colbert Trips #3	5/4/2022	—		X	1001	2	Trip Blanks

Give to MT

RELINQUISHED BY:
Signature: Mike Terris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/5/2022
Time: 1400

S
Pr
AN
Time: 0931

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220505-21
Shipping CO: Anatek Courier
No. Coolers: 1

DATE : 5/5/2022
PAGE 1 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
0273C-4-220503	5/3/2022	1000		X	21	2	
1473C-5-220503	5/3/2022	1120		X	21	2	
1573C-10-220503	5/3/2022	1230		X	21	2	
1073L-4-220503	5/3/2022	1350		X	21	2	
1573Q-1-220503	5/3/2022	1415		X	21	2	
1073M-3-220503	5/3/2022	1500		X	21	2	
1573B-4-220503	5/3/2022	1630		X	21	2	
0273P-3-220503	5/3/2022	1013		X	21	2	
0273C-3-220503	5/3/2022	1053		X	21	2	
0273C-2-220503	5/3/2022	1249		X	21	2	
0273E-3-220503	5/3/2022	1409		X	21	2	
0373P-1S-220503	5/3/2022	1516		X	21	2	
1073Q-2-220503	5/3/2022	1623		X	21	2	
1073C-1S-220504	5/4/2022	906		X	21	2	
CD-05C2-220504	5/4/2022	1410		X	21	2	

RELINQUISHED BY:
Signature: Mike Sterris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/5/2022
Time: 0900

RECEIVED BY:
Signature:
Print Name: Brock Geyer
ANATEK LAB
Date: 5-5-22
Time: 0931

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220511-21
Shipping CO: Anatek Courier
No. Coolers: 1

DATE : 5/11/2022
PAGE 1 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-22D1-220509	5/9/2022	1148			21	6	MS/MSD
CD-03C1-220509	5/9/2022	1210			21	2	
CD-02RA1-220510	5/10/2022	905			21	2	
CD-40C2-220510	5/10/2022	1100			21	2	
CD-53-220510	5/10/2022	1030			21	2	
CD-24C2-220510	5/10/2022	1320			21	2	
CD-21C1-220510	5/10/2022	1515			21	6	MS/MSD
1473N-1-220510	5/10/2022	955			21	2	
0273D-2-220510	5/10/2022	1351			21	2	
CD-23B1-220510	5/10/2022	1552			21	2	
CD-32B1-220511	5/11/2022	905			21	2	
CD-47-220511	5/11/2022	1145			21	2	
CD-02RC2-220511	5/11/2022	1415			21	2	
EQ-02-220511	5/11/2022	1100			21	2	
1573H-4-220511	5/11/2022	859			21	2	

RELINQUISHED BY:
Signature: Mike S Terris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/11/2022
Time: 1700

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220511-21
Shipping CO: Anatek Courier
No. Coolers: 1

DATE : 5/11/2022
PAGE 2 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
EQ-01-220511	5/11/2022	1014			21	2	
0273D-3-220511	5/11/2022	1341			21	2	
Colbert TB 4	5/11/2022	—			21	2	Trip Blanks

RELINQUISHED BY:
Signature: Mike S Terris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/11/2022
Time: 1700

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: K2735219231
Shipping CO: UPS
No. Coolers: 1

DATE : 5/12/2022
PAGE 1 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-22D1-220509	5/9/2022	1148			13	9	MS/MSD
CD-03C1-220509	5/9/2022	1210			13	3	
CD-02RA1-220510	5/10/2022	905			13	3	
CD-40C2-220510	5/10/2022	1100			13	3	
CD-53-220510	5/10/2022	1030			13	3	
CD-24C2-220510	5/10/2022	1320			13	3	
CD-21C1-220510	5/10/2022	1515			13	9	MS/MSD
1473N-1-220510	5/10/2022	955			13	3	
0273D-2-220510	5/10/2022	1351			13	3	
CD-23B1-220510	5/10/2022	1552			13	3	
CD-32B1-220511	5/11/2022	905			13	3	
CD-47-220511	5/11/2022	1145			13	3	
CD-02RC2-220511	5/11/2022	1415			13	3	
EQ-02-220511	5/11/2022	1100			13	3	
1573H-4-220511	5/11/2022	859			13	3	

RELINQUISHED BY:
Signature: Mike S Terris
Print: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/12/2022
Time: 1530

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: K2735219231
Shipping CO: UPS
No. Coolers: 1

DATE : 5/12/2022
PAGE 2 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
EQ-01-220511	5/11/2022	1014	X		13	3	
0273D-3-220511	5/11/2022	1341	X		13	3	
CD-08E1-220512	5/12/2022	941	X		13	3	
CS-14C1-220512	5/12/2022	830	X		13	3	
CD-46-220412	5/12/2022	1045	X		13	3	
EQ-03-220512	5/12/2022	1000	X		13	3	
CD-23C2-220512	5/12/2022	1305	X		13	3	
CD-06A1-220512	5/12/2022	1243	X		13	3	
CD-06C2-220512	5/12/2022	1121	X		13	3	
0273N-7-220512	5/12/2022	1454	X		13	3	
CD-54-220512	5/12/2022	1109	X		13	3	
Colbert TB #4	5/12/2022	—	X		13	2	Trip Blanks

RELINQUISHED BY:
Signature: Mike S Terris
Print: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/12/2022
Time: 1530

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: K2735219240
Shipping CO: UPS
No. Coolers: 1

DATE : 5/18/2022
PAGE 1 OF 1

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
0273L-2-220516	5/16/2022	1234	X		21	3	
CD-01C1-220516	5/16/2022	1439	X		21	3	
CD-55-220516	5/16/2022	1417	X		21	3	
CD-25-220516	5/16/2022	1505	X		21	3	
CD-26-220516	5/16/2022	1320	X		21	3	
CD-04E1-220516	5/16/2022	1145	X		21	3	
CD-04C1-220516	5/16/2022	945	X		21	3	
EQ-04-220516	5/16/2022	1000	X		21	3	
CD-33-220517	5/17/2022	930	X		21	3	
CD-21C3-220517	5/17/2022	949	X		21	3	
CD-20D1-220517	5/17/2022	1100	X		21	3	
CD-20D2-220517	5/17/2022	1127	X		21	3	
Colbert Trips #5	5/17/2022	—	X		21	2	Trip Blanks

RELINQUISHED BY:
Signature: Mike S Terris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/18/2022
Time: 1000

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220517-04
Shipping CO: Anatek Courier
No. Coolers: 1

DATE : 5/18/2022
PAGE 1 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CS-14C1-220512	5/12/2022	830		X	4	2	
CD-46-220512	5/12/2022	1045		X	4	2	
EQ-03-220512	5/12/2022	1000		X	4	2	
CD-23C2-220512	5/12/2022	1305		X	4	2	
CD-08E1-220512	5/12/2022	941		X	4	2	
CD-06C2-220512	5/12/2022	1121		X	4	2	
CD-54-220512	5/12/2022	1109		X	4	2	
CD-06A1-220512	5/12/2022	1243		X	4	2	
0273N-7-220512	5/12/2022	1454		X	4	2	
0273L-2-220516	5/16/2022	1234		X	4	2	
CD-01C1-220516	5/16/2022	1439		X	4	2	
CD-55-220516	5/16/2022	1417		X	4	2	
CD-25-220516	5/16/2022	1505		X	4	2	
CD-26-220516	5/16/2022	1320		X	4	2	
CD-04E1-220516	5/16/2022	1145		X	4	2	

RELINQUISHED BY:
Signature: Mike S Terris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/18/2022
Time: 1000

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

CHAIN OF CUSTODY COLBERT LANDFILL
2022

LABORATORY:
SVL Analytical / Anatek Moscow
1282 Alturas DR
Moscow ID 83843
(208)883-2839
Attention: Sample Receiving

Colbert Landfill
Spokane County Environmental Services
22515 N. Elk-Chattaroy RD.
Colbert , WA 99005
(509) 238-6607 FAX:(509)238-6812

Tracking #: Colbert 220517-04
Shipping CO: Anatek Courier
No. Coolers: 1

DATE : 5/18/2022
PAGE 2 OF 2

PARAMETERS:			VOLATILES	1,4 Dioxane (DW)	SAMPLERS: Mike Terris, Gordie Fisette		
CONTAINERS:			3-40 ml	2-60 ml			
PRESERVATION:			HCl to pH<2	Sodium Sulfate pH<2			
HOLDING TIME:			14 days	28 Days			
METHOD:			524.3	522	COOLER NUMBER	TOTAL NO. OF BOTTLES	COMMENTS:
Sample ID:	Date:	Time:					
CD-04C1-220516	5/16/2022	945		X	4	2	
EQ-04-220516	5/16/2022	1000		X	4	2	
CD-33-220517	5/17/2022	930		X	4	2	
CD-21C3-220517	5/17/2022	949		X	4	2	
CD-20D1-220517	5/17/2022	1100		X	4	2	
CD-20D2-220517	5/17/2022	1127		X	4	2	
Colbert TB #5	5/17/2022	—		X	4	2	Trip Blanks

RELINQUISHED BY:
Signature: Mike S Terris
Pint: Mike S Terris
SPOKANE COUNTY UTILITIES LANDFILL CLOSURE
Date: 5/18/2022
Time: 1000

RECEIVED BY:
Signature:
Print Name:
ANATEK LAB
Date:
Time:

COMMENTS: Please email a copy of the sample condition report to Mike and Austin ASAP; mterris@spokanecounty.org & astewart@spokanecounty.org

COLCOC.XLS

COLBERT SUPPLEMENTAL SAMPLING "5/2022"

5/2/2022 (MON) TECH: M. TERRIS / A. STEWART
WEATHER: P. CLOUDY 40S/50's

* MT ON SITE FOR PREP WORK UPCOMING SUPPLEMENTAL SAMPLING EVENT. ALL PAPER COMPLETE, DECON STATION SET UP LAB TABLE CLEANED AND STOCKED

5/3/2022 (TUES) TECHS MT / GF
WEATHER: P. CLOUDY 60S PM

THE FOLLOWING LOCATIONS WERE SAMPLED TODAY:

WELL	SAMPLE ID	TIME	TECH	CAT	COMM
0273C-4	0273C-4-220503	1000	MT	A	COLRES
1473C-5	1473C-5-220503	1120	MT	A	COLRES
1573C-10	1573C-10-220503	1230	MT	A	COLRES
1073L-4	1073L-4-220503	1350	MT	A	COLRES
1573Q-1	1573Q-1-220503	1415	MT	A	COLRES
1073M-3	1073M-3-220503	1500	MT	A	COLRES
1573B-3	1573B-4-220503	1630	MT	B	COLRES
0273P-3	0273P-3-220503	1013	GF	B	COLRES
0273C-3	0273C-3-220503	1053	GF	A	COLRES
0273C-2	0273C-2-220503	1249	GF	A	COLRES
0273E-3	0273E-3-220503	1409	GF	B	COLRES
0373P-S1	0373P-S1-220503	1516	GF	A	SPRING
1073Q-2	1073Q-2-220503	1623	GF	B	COLRES

* ALL VOCS & 1,4 DIOXANE HELD OVERNIGHT IN COLBERT REFER FOR SHIPPING ON 5/5/2022

5/4/2022 (WED) TECH: MT/GF
WEATHER: P. CLOUDY 60S/70S WARM

THE FOLLOWING WELL LOCATIONS WERE SAMPLE TODAY:

WELL	SAMPLE ID	TIME	TECH	CAT	COMM
1073C-15	1073C-15-220504	0906	GF	A	SPRING
CD-05C2	CD-05C2-220504	1410	MT	A	*' PRE CLEAN
CD-35A1	CD-35A1-220504	1309	GF	A	*' PRE CLEAN
CD-07E1	CD-07E1-220504	1502	GF	A	
TRIPS	TB-03-220504				

*' MT/GF PRE-CLEANED BENNETT PUMP #1 & #2 BEFORE THESE LOCATIONS RUNNING EACH PUMP BEFORE SAMPLE BEGAN DECONING

ALL VOCS & 1,4 DIOXANE SAMPLES WERE HELD OVERNIGHT IN COLBENT REFER TO BE ~~SAMI~~ SHIP ON 5/5/2022 AM

5/5/2022 (THURS) TECH: MT/GF
WEATHER: CLOUDY LOTS OF RAIN 40S

* NO SAMPLING TODAY → SHIP COOLERS

- ALL VOC'S (8243) WERE PLACED INTO COOLER #1001 ALONG W/ 8 DOUBLE BAGGED REG. WET ICE PACK TO TRY TO KEEP SAMPLES AT/BELOW 4°C FOR SHIPING GF HAND DEL. COOLER #1001 TO UPS FOR OVERNIGHT TO ANATEK LAB ON 5/6/2022 (MT ALSO SHIP 2 TEST VIALS FOR DI TANKS TO SEE IF CLEAN FOR EQ BLANKS)

- ALL 1,4 DIOXANE SAMPLES WERE PLACED INTO COOLER #21 ALONG W/ 8 DOUBLE BAGGED WET ICE PACK TO KEEP SAMPLES AT/BELOW 4°C GF HAND DEL. COOLER 21 TO ANATEK LAB HOLD IN SPOKANE FOR THEIR COURIER TO DEL IN MOSCOW ID IN PM.

5/9/2022 (MON) TECHS: MT/GF/RV/AS
WEATHER: CLOUDY 50S RAIN PM

THE FOLLOWING WELL LOCATIONS WERE SAMPLED TODAY:

WELL	SAMPLE ID	TIME	TECH	CAT	COMM
CD-22D1	CD-22D1-220509	1148	GF/AS	A	MS/MSD
CD-03C1	CD-03C1-220509	1210	MT	A	

* RAN PM ALL PUMP DECON READY TO SAMPLE ON 5/10/22 AM RV/AS SET UP ON DECON STATION!

ALL SAMPLES HELD OVER NIGHT TO BE SHIPPED IN A BATCH LATER THIS WEEK.

5/10/2022 (TUES) TECHS (STAFF) MT/GF/RV/AS
WEATHER: P. CLOUDY LOW 40S AM MID-50S/60S PM

THE FOLLOWING LOCATIONS WERE SAMPLED TODAY:

WELL ID	SAMPLE ID	TIME	TECH	CAT	COMM:
CD-02RA1	CD-02RA1-220510	0905	MT	B	REPLACE PUMP
CD-40C2	CD-40C2-220510	1100	MT	B	BENN #1 (DUPE)
"DUPE	CD-53-220510	1030	MT	B	DUPE ID
CD-24C2	CD-24C2-220510	1320	MT	B	
CD-21C1	CD-21C1-220510	1515	MT	B	MS/MSD
1473N-1	1473N-1-220510	0955	GF	A	
0273D-2	0273D-2-220510	1351	GF/AS	B	
CD-23B1	CD-23B1-220510	1552	GF/AS	B	

* ALL SAMPLES HELD IN REFER (SAMPLING) & COLBERT TO BE SHIP ON 5/11/2022

ALL PUMPS WERE DECON ~~BEFORE~~ ~~AFTER~~ SAMPLING. FOR THE DAY READY FOR SAMPLING 5/11/22 AM

5/11/2022 (WED) STAFF (TECHS) GF/MT/RV/AS
WEATHER.. CLEAR COOL AM 40S P.C. 60S PM

THE FOLLOWING LOCATIONS WERE SAMPLED TODAY.

LOCATION	SAMPLE ID	TIME	TEAM	CAT	COMM
CD-32B1	CD-32B1-220511	0905	MT	A	
CD-47	CD-47-220511	1145	MT	B	EQ-2 EQUIP BLANK 2
EQ-02	EQ-02-220511	1100	MT/AS	B	
CD-02RC2	CD-02RC2-220511	1415	MT	C	
1573H-4	1573H-4-220511	0859	GF	B	EQ-1 EQUIP BLANK 1
EQ-01	EQ-01-220511	1014	GF	B	
0273D-3	0273D-3-220511	1314	GF/AS	A	GRUNDFOS HOSE LEAK FIXED

COLBERT TB#4 (1,4 DIOXANE)

SINCE ANATEK COURIER ONLY PICKS UP ON THURSDAY AM MT/GF PACKED ALL 1,4 DIOXANE SAMPLES TAKEN ON 5/9, 5/10 & 5/11 AND PACKED THEM INTO COOLER #21 ALONG W/SEVERAL ICE PACKS TO KEEP SAMPLES AT/BELOW 4°c AS HAND DEL COOLER #21 TO ANATEK LAB HERE IN SPOKANE THIS PM TO BE DEL TO ANATEK MOSCOW ON 5/12/22 AM.

ALL VOCS TAKEN ON 5/9, 5/10 & 5/11 WILL BE SHIP TOMORROW ON 5/12 PM. VIA UPS.

5/12/2022 (THURS) STAFF (MT/GF/AS/RV
WEATHER: P.C 40S AM P.C 60S PM

THE FOLLOWING LOCATIONS WERE SAMPLED TODAY:

LOCATION	SAMPLE ID	TIME	TEAM	CAT	COMM
CS-12A1	NO SAMPLE → NO WATER				
CS-14C1	CS-14C1-220512	0830	MT	B	BAILER
CD-46	CD-46-220512	1045	MT	C	EQ-3
EQ-03	EQ-03-220512	1000	MT	C	EQBLANK3
CD-23C2	CD-23C2-220512	1305	MT	D	
CD-08E1	CD-08E1-220512	0941	AS/GF	C	
CD-06C2	CD-06C2-220512	1121	GF/AS	C	DUPEHOLE
"DUPE	CD-54-220512	1109	GF/AS	C	DUPEID
CD-06A1	CD-06A1-220512	1243	GF	C	
0273N-7	0273N-7-220512	1454	GF	D	

COLBERT TB#4 (VOCS)

MT/GF PACKED ABOVE SAMPLES TAKEN TODAY ALONG WITH VOCS TAKEN ON 5/9, 5/10 & 5/11 THAT WERE IN OUR SAMPLE REFER HELD WHILE SAMPLING WERE PLACED INTO COOLER #13 ALONG W/ SEVERAL REG. WET ICE PACKS TO KEEP COOLER #13 AT/BELOW 4°C WHILE BEING SHIP TO ANATEK LAB IN MOSCOW ID V.A UPS PRIORTY OVERNIGHT

* ALL 1,4 DIOXANE SAMPLES TAKEN TODAY WILL BE HELD IN REFER (SAMPLING) & COLBERT TO BE SHIP AS A BATCH NEXT WEEK (1,4 DIOXANE HAVE A 30 DAY HOLDING TIME)

DATE: 5/16/2022 (MON) STAFF: MT/GF/AS/RV
WEATHER: MOSTLY CLOUDY 50's AM P.C 60's PM

THE FOLLOWING LOCATIONS WERE SAMPLED TODAY:

LOCATION	SAMPLE ID	TIME	TEAM	CAT	COMM
0273L-2	0273L-2-220516	1234	GF/AS	C	LONG PURGE ONLY ONE WELL
CD-01C1	CD-01C1-220516	1439	GF/AS	D	DUPE HERE
" DUPE	CD-55-220516	1417	GF/AS	D	DUPE ID
CD-25	CD 25-220516	1505	MT	2	NEW WELL PROG.
CD-26	CD-26 220516	1320	MT	D	
CD-04E1	CD-04E1-220516	1145	MT	D	
CD-04C1	CD-04C1-220516	0945	MT	C	EQ-4
EQ-04	EQ-04-220516	1000	MT		

* ALL VOCS & 1,4 DIOXANE WERE HELD OVER NIGHT IN REFER (SAMPLING) AND WILL SHIP IN A BATCH ON 5/17/22 (TUES)

DATE: 5/17/2022 (TUES) STAFF: MT/GF/AS/RV
WEATHER: P.CLOUDY 50S AM P.C 60S PM

THE FOLLOWING LOCATIONS WERE SAMPLED TODAY:

LOCATION	SAMPLE ID	TIME	TEAM	CAT	COMM
CD-33	CD-33-220517	0930	MT	2	WELL ADD TO PROGRAM
CD-21C3	CD-21C3-220517	0949	GF/AS	2	"
CD-20D1	CD-20D1-220517	1100	MT	2	"
CD-20D2	CD-20D-220517	1127	GF	2	"

TRIP-BLANKS TB #5 (BOTH VOCS & 1,4 DIOXANE)

* ALL VOCS TAKEN ON 5/16 & 5/17 WERE PLACED INTO COOLER #21 ALONG W/ SEVERAL REG. WET ICE PACKS TO TRY TO KEEP AT/BELOW 4°C WHILE BEING SHIP TO ANATEK LAB IN MOSCOW ID VIA UPS PRIORITY OVERNIGHT 5/18/22 AM

5/18/2022 (WED) TECH: M. TERRIS

* MT PACKED ALL VOCS INTO COOLER #21 TAKEN ON 5/16 & 5/17/22 W/SEVERAL REG. WET ICE PACKS TO TRY TO KEEP SAMPLES AT/BELOW 4°C WHILE BEING SHIP TO ANATEK LAB IN MOSCOW ID VIA UPS PRIORITY OVERNIGHT TO ARRIVE 5/19 AM. MT HAND DEL. PM

* MT PACKED ALL 1,4 DIOXANE TAKEN ON 5/12, 5/16 & 5/17 INTO COOLER #4 ALONG W/SEVERAL REG. WET ICE PACK TO KEEP SAMPLES AT/BELOW 4°C WHILE BEING SHIP FROM ANATEK LAB IN SPOKANE TO ANATEK LAB IN MOSCOW ID VIA ANATEK COURIER. MT HAND DEL COOLER #4 TO ANATEK IN SPOKANE THIS PM.

- COLBERT SUPPLEMENTAL SAMPLING COMPLETE

5/18/2022 MT

Master S ple Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-21C1	NO		235	2.5	lower	Supplemental				X	X			B	MS/MSD
CD-23B1	NO		88	2.5	upper	Supplemental				X	X			B	
CD-24C2	NO		252	2.5	lower	Supplemental				X	X			B	
CD-40C2	NO		145	2.5	lower	Supplemental				X	X			B	
CD-47	NO		296	2.5	lower	Supplemental				X	X			B	
CS-12A1	NO				upper	Supplemental				X	X			B	IF WA
CS-14C1	NO		87		upper	Supplemental				X	X			B	Bailer
0273D-2	NO	TOBIAS	220	6	lower	Supplemental	4510 E LoDolce Rd	238-4227	X	X	X			B	
0273L-2	NO	HAYES	560	6	lower	Supplemental	E 4714 Singletree	238-1106	X	X	X			C	
0273L-3	?	?	285		lower	Supplemental	23014 N Wagon			X	X	(NO SAMPLE WW) TEXT			
0373J-3	YES	GOULDING	217	6	lower	Supplemental	22915 N Elk-Chattaroy	238-6694	X	X	X			C	CALL FIRST
CD-02RC2	NO		274	2	lower	Supplemental				X	X			C	
CD-04C1	NO		157	2	upper	Supplemental				X	X			C	EB #2
CD-06A1	NO		100	2	upper	Supplemental				X	X			C	
CD-06C2	NO		208	2	lower	Supplemental				X	X			C	CD-51Dupe
CD-46	NO		257	2.5	lower	Supplemental				X	X			C	EB #3
0273N-7	NO	GOODWIN	140	6	lower	Supplemental	4517 Big Meadows	238-6917	X	X	X			D	
CD-01C1	NO		229	6	lower	Supplemental				X	X			D	
CD-04E1	NO		215	2	lower	Supplemental				X	X			D	
CD-23C2	NO		189	2.5	lower	Supplemental				X	X			D	
CD-26	NO		194	2.5	lower	Supplemental				X	X			D	Dupe
EF24-02	NO					Annual				X	X				
IN20-11	NO					Annual				X	X				
1473M-1	YES	Richard	105	6	upper	Annual	19826 N Yale Rd		X	X	X				
1573A-1	YES	Johnson	105	6	upper	Annual	20315 N Yale Rd		X	X	X				
1073D-1	YES	Neren	76	6	upper	Annual	22115 N Meadowview		X	X	X				

Master S[illegible]le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-03A1	YES		98	2	upper	Annual				X	X	X	X		
CD-60A1	YES		96.2	2	upper	Annual				X	X	X	X		CD-52 Dupe
CD-61A1	YES		75.9	2	upper	Annual				X	X	X	X		MS/MSD
CS-04A1	YES	CS-4	89.51	2	upper	Annual				X	X	X	X		
CD-31A1	YES		108	2.5	upper	Annual				X	X				
CD-34A1	YES		110	2.5	upper	Annual				X	X				
CD-36A1	YES		102	2.5	upper	Annual				X	X				
CD-37A1	YES		104	2.5	upper	Annual				X	X				
CD-38A1	YES		111	2.5	upper	Annual				X	X				
CD-40C1	YES		44	2.5	lower	Annual				X	X				CD-53 Dupe
CD-41C1	YES		233	2.5	lower	Annual				X	X				
CD-41C2	YES		291	2.5	lower	Annual				X	X				
CD-41C3	YES		403	2.5	lower	Annual				X	X				
CD-42C1	YES		227	2.5	lower	Annual				X	X				
CD-42C2	YES		312	2.5	lower	Annual				X	X				
CD-42C3	YES		402	2.5	lower	Annual				X	X				
CD-43C1	YES		230	2.5	lower	Annual				X	X				
CD-43C2	YES		299	2.5	lower	Annual				X	X				
CD-43C3	YES		401	2.5	lower	Annual				X	X				
CD-44C1	YES		200	2.5	lower	Annual				X	X				
CD-44C2	YES		247	2.5	lower	Annual				X	X				
CD-44C3	YES		295	2.5	lower	Annual				X	X				MS/MSD
CD-45C1	YES		200	2.5	lower	Annual				X	X				
CD-45C2	YES		247	2.5	lower	Annual				X	X				
CD-45C3	YES		339	2.5	lower	Annual				X	X				
CD-48C1	YES		243	2.5	lower	Annual				X	X				

Master S ple Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-48C2	YES		302	2.5	lower	Annual				X	X				
CD-48C3	YES		386	2.5	lower	Annual				X	X				
CD-49	YES		241.5	2.5	lower	Annual				X	X				
CP-S3	YES		99	6	upper	Annual				X	X				
CP-E1	YES		257	8	lower	Annual				X	X				CD-54 Dupe
CP-E2	YES		188	6	lower	Annual				X	X				
CP-E3	YES		254	8	lower	Annual				X	X				
CP-S1	YES		103	6	upper	Annual				X	X				MS/MSD
CP-S4	YES		104	6	upper	Annual				X	X				
CP-S5	YES		101	6	upper	Annual				X	X				
CP-S6	YES		106	6	upper	Annual				X	X				
CP-W1	YES		301	8	lower	Annual				X	X				
CP-W2	YES		278	8	lower	Annual				X	X				
CP-W3	YES		275	8	lower	Annual				X	X				

Master S[illegible]ple Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
0273C-2	YES	Vannatter	165	6	lower	Supplemental	23019 N Elk-Chattaroy		X	X	X			A	COLRES
0273C-3	YES	Warden	110	6	upper	Supplemental	23711 N Wagon Rd	688-9080	X	X	X			A	COLRES
0273C-4	YES	McQuestin	131	6	upper	Supplemental	4812 E Lo Dolce Rd	238-6080	X	X	X			A	COLRES
1073L-4	YES	Thomas	250	6	lower	Supplemental	3625 E Norwood	216-3911	X	X	X			A	COLRES
1073M-3	YES	Betholf	60	6	upper	Supplemental	21305 N Little Spokane	466-3511	X	X	X			A	COLRES
1473C-5	YES	Overmyer	290	6	lower	Supplemental	4710 E Woolard Rd	238-4896	X	X	X			A	COLI
1573C-10	YES	Lake	220	6	lower	Supplemental	20406 N Market	998-1965	X	X	X			A	COLRES
1573C-17	YES	Resident	260	6	lower	Supplemental	20518 N Thor Rd		X	X	X			A	COLRES
1573Q-1	YES	Saunder	97	6	upper	Supplemental	19317 N Newport Hwy	238-6953	X	X	X			A	COLRES
0273D-3	NO	Purdy	244	6	lower	Supplemental	4610 E Lo Dolce Rd	953-1268	X	X	X			A	Dog-Mazy
0373P-1S	NO	KING	SPRING		upper	Supplemental	22515 N Glen	995-7995		X	X			A	
1073C-1S	NO	Alderson	SPRING		upper	Supplemental	22009 N Meadowview	468-2065	X	X	X			A	
1473N-1	NO	Gewock	104	6	upper	Supplemental	N 19426 Yale	238-4903		X	X			A	
CD-03C1	NO		205	2	lower	Supplemental				X	X			A	
CD-05C2	NO		334	2	lower	Supplemental				X	X			A	
CD-07E1	NO		171	2	upper	Supplemental				X	X			A	
CD-22D1	NO	Ackerman	152	2.5	lower	Supplemental	4414 E Big Meadows		X	X	X			A	
CD-32B1	NO		109	2.5	upper	Supplemental				X	X			A	
CD-35A1	NO		104	2.5	upper	Supplemental				X	X			A	
0273E-3	YES	Costello	263	6	lower	Supplemental	23410 N E-Chattaroy	238-6048	X	X	X			B	
0273P-3	YES	Griffen	145	6	lower	Supplemental	BIG MEADOWS	238-6534	X	X	X			B	
1073Q-2	YES	Pfennig	110	6	upper	Supplemental	3701 Norwood	238-4839	X	X	X			B	CALL FIRST
1573B-4	YES	Vigil		6	upper	Supplemental	20319 N. Newport HWY	981-3608		X	X			B	
1573H-4	NO	Moore LS	111	8	upper	Supplemental	4109 E Woolard	466-7800	X	X	X			B	EB #1
CD-02RA1	NO		100	2	upper	Supplemental				X	X			B	
CD-08E1	NO		205	2	lower	Supplemental				X	X			B	

Master S ple Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-21C1	NO		235	2.5	lower	Supplemental				X	X			B	MS/MSD
CD-23B1	NO		88	2.5	upper	Supplemental				X	X			B	
CD-24C2	NO		252	2.5	lower	Supplemental				X	X			B	
CD-40C2	NO		145	2.5	lower	Supplemental				X	X			B	
CD-47	NO		296	2.5	lower	Supplemental				X	X			B	
CS-12A1	NO				upper	Supplemental				X	X			B	IF WA
CS-14C1	NO		87		upper	Supplemental				X	X			B	Bailer
0273D-2	NO	TOBIAS	220	6	lower	Supplemental	4510 E LoDolce Rd	238-4227	X	X	X			B	
0273L-2	NO	HAYES	560	6	lower	Supplemental	E 4714 Singletree	238-1106	X	X	X			C	
0273L-3	?	?	285		lower	Supplemental	23014 N Wagon			X	X			C	
0373J-3	YES	GOULDING	217	6	lower	Supplemental	22915 N Elk-Chattaroy	238-6694	X	X	X			C	CALL FIRST
CD-02RC2	NO		274	2	lower	Supplemental				X	X			C	
CD-04C1	NO		157	2	upper	Supplemental				X	X			C	EB #2
CD-06A1	NO		100	2	upper	Supplemental				X	X			C	
CD-06C2	NO		208	2	lower	Supplemental				X	X			C	CD-51Dupe
CD-46	NO		257	2.5	lower	Supplemental				X	X			C	EB #3
0273N-7	NO	GOODWIN	140	6	lower	Supplemental	4517 Big Meadows	238-6917	X	X	X			D	
CD-01C1	NO		229	6	lower	Supplemental				X	X			D	
CD-04E1	NO		215	2	lower	Supplemental				X	X			D	
CD-23C2	NO		189	2.5	lower	Supplemental				X	X			D	
CD-26	NO		194	2.5	lower	Supplemental				X	X			D	Dupe
EF24-02	NO					Annual				X	X				
IN20-11	NO					Annual				X	X				
1473M-1	YES	Richard	105	6	upper	Annual	19826 N Yale Rd		X	X	X				
1573A-1	YES	Johnson	105	6	upper	Annual	20315 N Yale Rd		X	X	X				
1073D-1	YES	Neren	76	6	upper	Annual	22115 N Meadowview		X	X	X				

Master S le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-03A1	YES		98	2	upper	Annual				X	X	X	X		
CD-60A1	YES		96.2	2	upper	Annual				X	X	X	X		CD-52 Dupe
CD-61A1	YES		75.9	2	upper	Annual				X	X	X	X		MS/MSD
CS-04A1	YES	CS-4	89.51	2	upper	Annual				X	X	X	X		
CD-31A1	YES		108	2.5	upper	Annual				X	X				
CD-34A1	YES		110	2.5	upper	Annual				X	X				
CD-36A1	YES		102	2.5	upper	Annual				X	X				
CD-37A1	YES		104	2.5	upper	Annual				X	X				
CD-38A1	YES		111	2.5	upper	Annual				X	X				
CD-40C1	YES		44	2.5	lower	Annual				X	X				CD-53 Dupe
CD-41C1	YES		233	2.5	lower	Annual				X	X				
CD-41C2	YES		291	2.5	lower	Annual				X	X				
CD-41C3	YES		403	2.5	lower	Annual				X	X				
CD-42C1	YES		227	2.5	lower	Annual				X	X				
CD-42C2	YES		312	2.5	lower	Annual				X	X				
CD-42C3	YES		402	2.5	lower	Annual				X	X				
CD-43C1	YES		230	2.5	lower	Annual				X	X				
CD-43C2	YES		299	2.5	lower	Annual				X	X				
CD-43C3	YES		401	2.5	lower	Annual				X	X				
CD-44C1	YES		200	2.5	lower	Annual				X	X				
CD-44C2	YES		247	2.5	lower	Annual				X	X				
CD-44C3	YES		295	2.5	lower	Annual				X	X				MS/MSD
CD-45C1	YES		200	2.5	lower	Annual				X	X				
CD-45C2	YES		247	2.5	lower	Annual				X	X				
CD-45C3	YES		339	2.5	lower	Annual				X	X				
CD-48C1	YES		243	2.5	lower	Annual				X	X				

Master Sample Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-48C2	YES		302	2.5	lower	Annual				X	X				
CD-48C3	YES		386	2.5	lower	Annual				X	X				
CD-49	YES		241.5	2.5	lower	Annual				X	X				
CP-S3	YES		99	6	upper	Annual				X	X				
CP-E1	YES		257	8	lower	Annual				X	X				CD-54 Dupe
CP-E2	YES		188	6	lower	Annual				X	X				
CP-E3	YES		254	8	lower	Annual				X	X				
CP-S1	YES		103	6	upper	Annual				X	X				MS/MSD
CP-S4	YES		104	6	upper	Annual				X	X				
CP-S5	YES		101	6	upper	Annual				X	X				
CP-S6	YES		106	6	upper	Annual				X	X				
CP-W1	YES		301	8	lower	Annual				X	X				
CP-W2	YES		278	8	lower	Annual				X	X				
CP-W3	YES		275	8	lower	Annual				X	X				

Master S[illegible]le Matrix
April 2022 - May 2022

SAMPLING COMPLETED
5/17/2022 @ 12 P.M

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
0273C-2	YES	Jones/Shmidt	165	6	lower	Supplemental	23019 N Elk-Chattaroy		X	X	X			A	COLRES
0273C-3	YES	Warden	110	6	upper	Supplemental	23711 N Wagon Rd	688-9080	X	X	X			A	COLRES
0273C-4	YES	McQuesten	131	6	upper	Supplemental	4812 E Lo Dolce Rd	238-6080	X	X	X			A	COLRES
1073L-4	YES	Thomas	250	6	lower	Supplemental	3625 E Norwood	216-3911	X	X	X			A	COLRES
1073M-3	YES	Lane	60	6	upper	Supplemental	21305 N Little Spokane	466-3511	X	X	X			A	COLRES
1473C-5	YES	Overmyer	290	6	lower	Supplemental	4710 E Woolard Rd	238-4896	X	X	X			A	COL[illegible]
1573C-10	YES	Lake	220	6	lower	Supplemental	20406 N Market	998-1965	X	X	X			A	COLRES
1573C-17	YES	Resident	260	6	lower	Supplemental	20518 N Thor Rd		X	X	X			A	COLRES
1573Q-1	YES	SAUNDER	97	6	upper	Supplemental	19317 N Newport Hwy	238-6953	X	X	X			A	COLRES
0273D-3	NO	PURDY	244	6	lower	Supplemental	4610 E Lo Dolce Rd	953-1268	X	X	X			A	Dog-Mazy
0373P-1S	NO	KING SPRINGS			upper	Supplemental	22515 N Glen	995-7995		X	X			A	
1073C-1S	NO	Alderson SPR			upper	Supplemental	22009 N Meadowview	468-2065	X	X	X			A	
1473N-1	NO	GEWOCK	104	6	upper	Supplemental	N 19426 Yale	238-4903		X	X			A	
CD-03C1	NO	CD-3L	205	2	lower	Supplemental				X	X			A	
CD-05C2	NO	CD-5	334	2	lower	Supplemental				X	X			A	
CD-07E1	NO	CD-7L	171	2	upper	Supplemental				X	X			A	
CD-22D1	NO	Ackerman	152	2.5	lower	Supplemental	4414 E Big Meadows		X	X	X			A	MS/MS[illegible]
CD-32B1	NO		109	2.5	upper	Supplemental				X	X			A	
CD-35A1	NO		104	2.5	upper	Supplemental				X	X			A	
0273E-3	YES	COSTELLO	263	6	lower	Supplemental	23410 N E-Chattaroy	238-6048	X	X	X			B	CALL FIRST
0273P-3	YES	Griffith	145	6	lower	Supplemental	BIG MEADOWS	238-6534	X	X	X			B	
1073Q-2	YES	PFENNIG	110	6	upper	Supplemental	3701 Norwood	238-4839	X	X	X			B	CALL FIRST
1573B-4	YES	MOFFAT		6	upper	Supplemental	20319 N. Newport HWY	981-3608		X	X			B	
1573H-4	NO	MOORE LNDSCP	111	8	upper	Supplemental	4109 E Woolard	466-7800	X	X	X			B	EB #1
CD-02RA1	NO	CD-2A1 Repla	100	2	upper	Supplemental				X	X			B	
CD-08E1	NO	CD-8M	205	2	lower	Supplemental				X	X			B	

Master S[illegible]le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-21C1	NO		235	2.5	lower	Supplemental				X	X			B	MS/MSD
CD-23B1	NO		88	2.5	upper	Supplemental				X	X			B	
CD-24C2	NO		252	2.5	lower	Supplemental				X	X			B	
CD-40C2	NO		145	2.5	lower	Supplemental				X	X			B	CD-53 Dupe
CD-47	NO		296	2.5	lower	Supplemental				X	X			B	
CS-12A1	NO				upper	Supplemental				X	X	(NO SAMPLE NO WATER)		B	No sa
CS-14C1	NO	CS-14U	87		upper	Supplemental				X	X			B	Bailer
0273D-2	NO	Tobias	220	6	lower	Supplemental	4510 E LoDolce Rd	238-4227	X	X	X			B	CALL FIRST
CD-21C3	NO		302	2.5	lower	Supplemental	BY E-1			X	X			?	ADDED
CD-25	NO		198	2.5		Supplemental	BY E-2			X	X			?	ADDED
CD-33	NO		107	2.5	upper	Supplemental	BY S-1			X	X			?	ADDED
CD-20D1	NO		163	2.5		Supplemental	BY E-2			X	X			?	ADDED
CD-20D2	NO		192	2.5		Supplemental	BY E-2			X	X			?	ADDED
0273L-2	NO	HAYES	560	6	lower	Supplemental	E 4714 Singletree	238-1106	X	X	X			C	
0273L-3	?	Whitworth Water	285		lower	Supplemental	23014 N Wagon			X	X	(NO SAMPLE)		C	NO WW
0373J-3	YES	Goulding	217	6	lower	Supplemental	22915 N Elk-Chattaroy	238-6694	X	X	X	Called 6/22		C	CALL FIRST
CD-02RC2	NO	CD-2C2 Repla	274	2	lower	Supplemental				X	X			C	
CD-04C1	NO	CD-4U	157	2	upper	Supplemental				X	X			C	EB #2
CD-06A1	NO	CD-6U	100	2	upper	Supplemental				X	X			C	
CD-06C2	NO	CD-6L	208	2	lower	Supplemental				X	X			C	CD-54 Dupe
CD-46	NO		257	2.5	lower	Supplemental				X	X			C	EB #3
0273N-7	NO	GOODWIN	140	6	lower	Supplemental	4517 Big Meadows	238-6917	X	X	X			D	CALL FIRST
CD-01C1	NO	CD-1	229	6	lower	Supplemental				X	X			D	CD-55 Dupe
CD-04E1	NO	CD-4L	215	2	lower	Supplemental				X	X			D	
CD-23C2	NO		189	2.5	lower	Supplemental				X	X			D	
CD-26	NO		194	2.5	lower	Supplemental				X	X			D	

Master S[illegible]le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
EF24-02	NO					Annual				X	X				
IN20-11	NO					Annual				X	X				
1473M-1	YES	Richard	105	6	upper	Annual	19826 N Yale Rd		X	X	X				
1573A-1	YES	Johnson	105	6	upper	Annual	20315 N Yale Rd		X	X	X				
1073D-1	YES	Nerren	76	6	upper	Annual	22115 N Meadowview		X	X	X				
CD-03A1	YES	CD-3M	98	2	upper	Annual				X	X	X	X		CD-51[illegible]
CD-60A1	YES		96.2	2	upper	Annual				X	X	X	X		
CD-61A1	YES		75.9	2	upper	Annual				X	X	X	X		MS/MSD
CS-04A1	YES	CS-4	89.51	2	upper	Annual				X	X	X	X		
CD-31A1	YES		108	2.5	upper	Annual				X	X				
CD-34A1	YES		110	2.5	upper	Annual				X	X				
CD-36A1	YES		102	2.5	upper	Annual				X	X				
CD-37A1	YES		104	2.5	upper	Annual				X	X				
CD-38A1	YES		111	2.5	upper	Annual				X	X				
CD-40C1	YES		44	2.5	lower	Annual				X	X				CD-50 Dupe
CD-41C1	YES		233	2.5	lower	Annual				X	X				
CD-41C2	YES		291	2.5	lower	Annual				X	X				
CD-41C3	YES		403	2.5	lower	Annual				X	X				
CD-42C1	YES		227	2.5	lower	Annual				X	X				
CD-42C2	YES		312	2.5	lower	Annual				X	X				
CD-42C3	YES		402	2.5	lower	Annual				X	X				
CD-43C1	YES		230	2.5	lower	Annual				X	X				
CD-43C2	YES		299	2.5	lower	Annual				X	X				
CD-43C3	YES		401	2.5	lower	Annual				X	X				
CD-44C1	YES		200	2.5	lower	Annual				X	X				
CD-44C2	YES		247	2.5	lower	Annual				X	X				

Master S[illegible]le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-44C3	YES		295	2.5	lower	Annual				X	X				
CD-45C1	YES		200	2.5	lower	Annual				X	X				
CD-45C2	YES		247	2.5	lower	Annual				X	X				
CD-45C3	YES		339	2.5	lower	Annual				X	X				
CD-48C1	YES		243	2.5	lower	Annual				X	X				
CD-48C2	YES		302	2.5	lower	Annual				X	X				
CD-48C3	YES		386	2.5	lower	Annual				X	X				
CD-49	YES		241.5	2.5	lower	Annual				X	X				
CP-S3	YES		99	6	upper	Annual				X	X				
CP-E1	YES		257	8	lower	Annual				X	X				
CP-E2	YES		188	6	lower	Annual				X	X				
CP-E3	YES		254	8	lower	Annual				X	X				
CP-S1	YES		103	6	upper	Annual				X	X				MS/MSD
CP-S4	YES		104	6	upper	Annual				X	X				
CP-S5	YES		101	6	upper	Annual				X	X				
CP-S6	YES		106	6	upper	Annual				X	X				
CP-W1	YES		301	8	lower	Annual				X	X				
CP-W2	YES		278	8	lower	Annual				X	X				
CP-W3	YES		275	8	lower	Annual				X	X				CD-52 Dupe

Master S[illegible]ple Matrix
April 2022 - May 2022

1645
END OF DAY 5/10/22

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
0273C-2	YES	Jones/Shmidt	165	6	lower	Supplemental	23019 N Elk-Chattaroy		X	X	X			A	COLRES
0273C-3	YES	Warden	110	6	upper	Supplemental	23711 N Wagon Rd	688-9080	X	X	X			A	COLRES
0273C-4	YES	McQuesten	131	6	upper	Supplemental	4812 E Lo Dolce Rd	238-6080	X	X	X			A	COLRES
1073L-4	YES	Thomas	250	6	lower	Supplemental	3625 E Norwood	216-3911	X	X	X			A	COLRES
1073M-3	YES	Lane	60	6	upper	Supplemental	21305 N Little Spokane	466-3511	X	X	X			A	COLRES
1473C-5	YES	Overmyer	290	6	lower	Supplemental	4710 E Woolard Rd	238-4896	X	X	X			A	COL[illegible]
1573C-10	YES	Lake	220	6	lower	Supplemental	20406 N Market	998-1965	X	X	X			A	COLRES
1573C-17	YES	Resident	260	6	lower	Supplemental	20518 N Thor Rd		X	X	X			A	COLRES
1573Q-1	YES	SAUNDER	97	6	upper	Supplemental	19317 N Newport Hwy	238-6953	X	X	X			A	COLRES
0273D-3	NO	PURDY	244	6	lower	Supplemental	4610 E Lo Dolce Rd	953-1268	X	X	X			A	Dog-Mazy
0373P-1S	NO	KING SPRINGS			upper	Supplemental	22515 N Glen	995-7995		X	X			A	
1073C-1S	NO	Alderson SPR			upper	Supplemental	22009 N Meadowview	468-2065	X	X	X			A	
1473N-1	NO	GEWOCK	104	6	upper	Supplemental	N 19426 Yale	238-4903		X	X			A	
CD-03C1	NO	CD-3L	205	2	lower	Supplemental				X	X			A	
CD-05C2	NO	CD-5	334	2	lower	Supplemental				X	X			A	
CD-07E1	NO	CD-7L	171	2	upper	Supplemental				X	X			A	
CD-22D1	NO	Ackerman	152	2.5	lower	Supplemental	4414 E Big Meadows		X	X	X			A	MS/MSD
CD-32B1	NO		109	2.5	upper	Supplemental				X	X			A	
CD-35A1	NO		104	2.5	upper	Supplemental				X	X			A	
0273E-3	YES	COSTELLO	263	6	lower	Supplemental	23410 N E-Chattaroy	238-6048	X	X	X			B	CALL FIRST
0273P-3	YES	Griffith	145	6	lower	Supplemental	BIG MEADOWS	238-6534	X	X	X			B	
1073Q-2	YES	PFENNIG	110	6	upper	Supplemental	3701 Norwood	238-4839	X	X	X			B	CALL FIRST
1573B-4	YES	MOFFAT		6	upper	Supplemental	20319 N. Newport HWY	981-3608		X	X			B	
1573H-4	NO	MOORE LNDSCP	111	8	upper	Supplemental	4109 E Woolard	466-7800	X	X	X			B	EB #1
CD-02RA1	NO	CD-2A1 Repla	100	2	upper	Supplemental				X	X			B	
CD-08E1	NO	CD-8M	205	2	lower	Supplemental				X	X			B	

Master S ple Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-21C1	NO		235	2.5	lower	Supplemental				X	X			B	MS/MSD
CD-23B1	NO		88	2.5	upper	Supplemental				X	X			B	
CD-24C2	NO		252	2.5	lower	Supplemental				X	X			B	
CD-40C2	NO		145	2.5	lower	Supplemental				X	X			B	CD-53 Dupe
CD-47	NO		296	2.5	lower	Supplemental				X	X			B	
CS-12A1	NO				upper	Supplemental				X	X			B	No sa
CS-14C1	NO	CS-14U	87		upper	Supplemental				X	X			B	Bailer
0273D-2	NO	Tobias	220	6	lower	Supplemental	4510 E LoDolce Rd	238-4227	X	X	X			B	CALL FIRST
CD-21C3	NO		302	2.5	lower	Supplemental	BY E-1			X	X			?	ADDED
CD-25	NO		198	2.5		Supplemental	BY E-2			X	X			?	ADDED
CD-33	NO		107	2.5	upper	Supplemental	BY S-1			X	X			?	ADDED
CD-20D1	NO		163	2.5		Supplemental	BY E-2			X	X			?	ADDED
CD-20D2	NO		192	2.5		Supplemental	BY E-2			X	X			?	ADDED
0273L-2	NO	HAYES	560	6	lower	Supplemental	E 4714 Singletree	238-1106	X	X	X			C	
0273L-3	?	Whitworth Water	285		lower	Supplemental	23014 N Wagon			X	X			C	NO WW
0373J-3	YES	Goulding	217	6	lower	Supplemental	22915 N Elk-Chattaroy	238-6694	X	X	X			C	CALL FIRST
CD-02RC2	NO	CD-2C2 Repla	274	2	lower	Supplemental				X	X			C	
CD-04C1	NO	CD-4U	157	2	upper	Supplemental				X	X			C	EB #2
CD-06A1	NO	CD-6U	100	2	upper	Supplemental				X	X			C	
CD-06C2	NO	CD-6L	208	2	lower	Supplemental				X	X			C	CD-54 Dupe
CD-46	NO		257	2.5	lower	Supplemental				X	X			C	EB #3
0273N-7	NO	GOODWIN	140	6	lower	Supplemental	4517 Big Meadows	238-6917	X	X	X			D	CALL FIRST
CD-01C1	NO	CD-1	229	6	lower	Supplemental				X	X			D	CD-55 Dupe
CD-04E1	NO	CD-4L	215	2	lower	Supplemental				X	X			D	
CD-23C2	NO		189	2.5	lower	Supplemental				X	X			D	
CD-26	NO		194	2.5	lower	Supplemental				X	X			D	

Master S[illegible]ple Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
EF24-02	NO					Annual				X	X				
IN20-11	NO					Annual				X	X				
1473M-1	YES	Richard	105	6	upper	Annual	19826 N Yale Rd		X	X	X				
1573A-1	YES	Johnson	105	6	upper	Annual	20315 N Yale Rd		X	X	X				
1073D-1	YES	Nerren	76	6	upper	Annual	22115 N Meadowview		X	X	X				
CD-03A1	YES	CD-3M	98	2	upper	Annual				X	X	X	X		CD-51[illegible]e
CD-60A1	YES		96.2	2	upper	Annual				X	X	X	X		
CD-61A1	YES		75.9	2	upper	Annual				X	X	X	X		MS/MSD
CS-04A1	YES	CS-4	89.51	2	upper	Annual				X	X	X	X		
CD-31A1	YES		108	2.5	upper	Annual				X	X				
CD-34A1	YES		110	2.5	upper	Annual				X	X				
CD-36A1	YES		102	2.5	upper	Annual				X	X				
CD-37A1	YES		104	2.5	upper	Annual				X	X				
CD-38A1	YES		111	2.5	upper	Annual				X	X				
CD-40C1	YES		44	2.5	lower	Annual				X	X				CD-50 Dupe
CD-41C1	YES		233	2.5	lower	Annual				X	X				
CD-41C2	YES		291	2.5	lower	Annual				X	X				
CD-41C3	YES		403	2.5	lower	Annual				X	X				
CD-42C1	YES		227	2.5	lower	Annual				X	X				
CD-42C2	YES		312	2.5	lower	Annual				X	X				
CD-42C3	YES		402	2.5	lower	Annual				X	X				
CD-43C1	YES		230	2.5	lower	Annual				X	X				
CD-43C2	YES		299	2.5	lower	Annual				X	X				
CD-43C3	YES		401	2.5	lower	Annual				X	X				
CD-44C1	YES		200	2.5	lower	Annual				X	X				
CD-44C2	YES		247	2.5	lower	Annual				X	X				

Master S[illegible]le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-44C3	YES		295	2.5	lower	Annual				X	X				
CD-45C1	YES		200	2.5	lower	Annual				X	X				
CD-45C2	YES		247	2.5	lower	Annual				X	X				
CD-45C3	YES		339	2.5	lower	Annual				X	X				
CD-48C1	YES		243	2.5	lower	Annual				X	X				
CD-48C2	YES		302	2.5	lower	Annual				X	X				
CD-48C3	YES		386	2.5	lower	Annual				X	X				
CD-49	YES		241.5	2.5	lower	Annual				X	X				
CP-S3	YES		99	6	upper	Annual				X	X				
CP-E1	YES		257	8	lower	Annual				X	X				
CP-E2	YES		188	6	lower	Annual				X	X				
CP-E3	YES		254	8	lower	Annual				X	X				
CP-S1	YES		103	6	upper	Annual				X	X				MS/MSD
CP-S4	YES		104	6	upper	Annual				X	X				
CP-S5	YES		101	6	upper	Annual				X	X				
CP-S6	YES		106	6	upper	Annual				X	X				
CP-W1	YES		301	8	lower	Annual				X	X				
CP-W2	YES		278	8	lower	Annual				X	X				
CP-W3	YES		275	8	lower	Annual				X	X				CD-52 Dupe

Master S[illegible]le Matrix
April 2022 - May 2022

MADE 5/16

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
0273C-2	YES	Jones/Shmidt	165	6	lower	Supplemental	23019 N Elk-Chattaroy		X	X	X			A	COLRES
0273C-3	YES	Warden	110	6	upper	Supplemental	23711 N Wagon Rd	688-9080	X	X	X			A	COLRES
0273C-4	YES	McQuesten	131	6	upper	Supplemental	4812 E Lo Dolce Rd	238-6080	X	X	X			A	COLRES
1073L-4	YES	Thomas	250	6	lower	Supplemental	3625 E Norwood	216-3911	X	X	X			A	COLRES
1073M-3	YES	Lane	60	6	upper	Supplemental	21305 N Little Spokane	466-3511	X	X	X			A	COLRES
1473C-5	YES	Overmyer	290	6	lower	Supplemental	4710 E Woolard Rd	238-4896	X	X	X			A	COL[illegible]
1573C-10	YES	Lake	220	6	lower	Supplemental	20406 N Market	998-1965	X	X	X			A	COLRES
1573C-17	YES	Resident	260	6	lower	Supplemental	20518 N Thor Rd		X	X	X			A	COLRES
1573Q-1	YES	SAUNDER	97	6	upper	Supplemental	19317 N Newport Hwy	238-6953	X	X	X			A	COLRES
0273D-3	NO	PURDY	244	6	lower	Supplemental	4610 E Lo Dolce Rd	953-1268	X	X	X			A	Dog-Mazy
0373P-1S	NO	KING SPRINGS			upper	Supplemental	22515 N Glen	995-7995		X	X			A	
1073C-1S	NO	Alderson SPR			upper	Supplemental	22009 N Meadowview	468-2065	X	X	X			A	
1473N-1	NO	GEWOCK	104	6	upper	Supplemental	N 19426 Yale	238-4903		X	X			A	
CD-03C1	NO	CD-3L	205	2	lower	Supplemental				X	X			A	
CD-05C2	NO	CD-5	334	2	lower	Supplemental				X	X			A	
CD-07E1	NO	CD-7L	171	2	upper	Supplemental				X	X			A	
CD-22D1	NO	Ackerman	152	2.5	lower	Supplemental	4414 E Big Meadows		X	X	X			A	MS/MS[illegible]
CD-32B1	NO		109	2.5	upper	Supplemental				X	X			A	
CD-35A1	NO		104	2.5	upper	Supplemental				X	X			A	
0273E-3	YES	COSTELLO	263	6	lower	Supplemental	23410 N E-Chattaroy	238-6048	X	X	X			B	CALL FIRST
0273P-3	YES	Griffith	145	6	lower	Supplemental	BIG MEADOWS	238-6534	X	X	X			B	
1073Q-2	YES	PFENNIG	110	6	upper	Supplemental	3701 Norwood	238-4839	X	X	X			B	CALL FIRST
1573B-4	YES	MOFFAT		6	upper	Supplemental	20319 N. Newport HWY	981-3608		X	X			B	
1573H-4	NO	MOORE LNDSCP	111	8	upper	Supplemental	4109 E Woolard	466-7800	X	X	X			B	EB #1
CD-02RA1	NO	CD-2A1 Repla	100	2	upper	Supplemental				X	X			B	
CD-08E1	NO	CD-8M	205	2	lower	Supplemental				X	X			B	

Master S le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-21C1	NO		235	2.5	lower	Supplemental				X	X			B	MS/MSD
CD-23B1	NO		88	2.5	upper	Supplemental				X	X			B	
CD-24C2	NO		252	2.5	lower	Supplemental				X	X			B	
CD-40C2	NO		145	2.5	lower	Supplemental				X	X			B	CD-53 Dupe
CD-47	NO		296	2.5	lower	Supplemental				X	X			B	
CS-12A1	NO				upper	Supplemental				X	X			B	No sa
CS-14C1	NO	CS-14U	87		upper	Supplemental				X	X			B	Bailer
0273D-2	NO	Tobias	220	6	lower	Supplemental	4510 E LoDolce Rd	238-4227	X	X	X			B	CALL FIRST
CD-21C3	NO		302	2.5	lower	Supplemental	BY E-1			X	X			?	ADDED
CD-25	NO		198	2.5		Supplemental	BY E-2			X	X			?	ADDED
CD-33	NO		107	2.5	upper	Supplemental	BY S-1			X	X			?	ADDED
CD-20D1	NO		163	2.5		Supplemental	BY E-2			X	X			?	ADDED
CD-20D2	NO		192	2.5		Supplemental	BY E-2			X	X			?	ADDED
0273L-2	NO	HAYES	560	6	lower	Supplemental	E 4714 Singletree	238-1106	X	X	X			C	
0273L-3	?	Whitworth Water	285		lower	Supplemental	23014 N Wagon			X	X			C	NO WW
0373J-3	YES	Goulding	217	6	lower	Supplemental	22915 N Elk-Chattaroy	238-6694	X	X	X			C	CALL FIRST
CD-02RC2	NO	CD-2C2 Repla	274	2	lower	Supplemental				X	X			C	
CD-04C1	NO	CD-4U	157	2	upper	Supplemental				X	X			C	EB #2
CD-06A1	NO	CD-6U	100	2	upper	Supplemental				X	X			C	
CD-06C2	NO	CD-6L	208	2	lower	Supplemental				X	X			C	CD-54 Dupe
CD-46	NO		257	2.5	lower	Supplemental				X	X			C	EB #3
0273N-7	NO	GOODWIN	140	6	lower	Supplemental	4517 Big Meadows	238-6917	X	X	X			D	CALL FIRST
CD-01C1	NO	CD-1	229	6	lower	Supplemental				X	X			D	CD-55 Dupe
CD-04E1	NO	CD-4L	215	2	lower	Supplemental				X	X			D	
CD-23C2	NO		189	2.5	lower	Supplemental				X	X			D	
CD-26	NO		194	2.5	lower	Supplemental				X	X			D	

Master S[illegible]ple Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
EF24-02	NO					Annual				X	X				
IN20-11	NO					Annual				X	X				
1473M-1	YES	Richard	105	6	upper	Annual	19826 N Yale Rd		X	X	X				
1573A-1	YES	Johnson	105	6	upper	Annual	20315 N Yale Rd		X	X	X				
1073D-1	YES	Nerren	76	6	upper	Annual	22115 N Meadowview		X	X	X				
CD-03A1	YES	CD-3M	98	2	upper	Annual				X	X	X	X		CD-51
CD-60A1	YES		96.2	2	upper	Annual				X	X	X	X		
CD-61A1	YES		75.9	2	upper	Annual				X	X	X	X		MS/MSD
CS-04A1	YES	CS-4	89.51	2	upper	Annual				X	X	X	X		
CD-31A1	YES		108	2.5	upper	Annual				X	X				
CD-34A1	YES		110	2.5	upper	Annual				X	X				
CD-36A1	YES		102	2.5	upper	Annual				X	X				
CD-37A1	YES		104	2.5	upper	Annual				X	X				
CD-38A1	YES		111	2.5	upper	Annual				X	X				
CD-40C1	YES		44	2.5	lower	Annual				X	X				CD-50 Dupe
CD-41C1	YES		233	2.5	lower	Annual				X	X				
CD-41C2	YES		291	2.5	lower	Annual				X	X				
CD-41C3	YES		403	2.5	lower	Annual				X	X				
CD-42C1	YES		227	2.5	lower	Annual				X	X				
CD-42C2	YES		312	2.5	lower	Annual				X	X				
CD-42C3	YES		402	2.5	lower	Annual				X	X				
CD-43C1	YES		230	2.5	lower	Annual				X	X				
CD-43C2	YES		299	2.5	lower	Annual				X	X				
CD-43C3	YES		401	2.5	lower	Annual				X	X				
CD-44C1	YES		200	2.5	lower	Annual				X	X				
CD-44C2	YES		247	2.5	lower	Annual				X	X				

Master S[illegible]ple Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-44C3	YES		295	2.5	lower	Annual				X	X				
CD-45C1	YES		200	2.5	lower	Annual				X	X				
CD-45C2	YES		247	2.5	lower	Annual				X	X				
CD-45C3	YES		339	2.5	lower	Annual				X	X				
CD-48C1	YES		243	2.5	lower	Annual				X	X				
CD-48C2	YES		302	2.5	lower	Annual				X	X				
CD-48C3	YES		386	2.5	lower	Annual				X	X				
CD-49	YES		241.5	2.5	lower	Annual				X	X				
CP-S3	YES		99	6	upper	Annual				X	X				
CP-E1	YES		257	8	lower	Annual				X	X				
CP-E2	YES		188	6	lower	Annual				X	X				
CP-E3	YES		254	8	lower	Annual				X	X				
CP-S1	YES		103	6	upper	Annual				X	X				MS/MSD
CP-S4	YES		104	6	upper	Annual				X	X				
CP-S5	YES		101	6	upper	Annual				X	X				
CP-S6	YES		106	6	upper	Annual				X	X				
CP-W1	YES		301	8	lower	Annual				X	X				
CP-W2	YES		278	8	lower	Annual				X	X				
CP-W3	YES		275	8	lower	Annual				X	X				CD-52 Dupe

Master S le Matrix
April 2022 - May 2022

MADE 5/12

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
0273C-2	YES	Jones/Shmidt	165	6	lower	Supplemental	23019 N Elk-Chattaroy		X	X	X			A	COLRES
0273C-3	YES	Warden	110	6	upper	Supplemental	23711 N Wagon Rd	688-9080	X	X	X			A	COLRES
0273C-4	YES	McQuesten	131	6	upper	Supplemental	4812 E Lo Dolce Rd	238-6080	X	X	X			A	COLRES
1073L-4	YES	Thomas	250	6	lower	Supplemental	3625 E Norwood	216-3911	X	X	X			A	COLRES
1073M-3	YES	Lane	60	6	upper	Supplemental	21305 N Little Spokane	466-3511	X	X	X			A	COLRES
1473C-5	YES	Overmyer	290	6	lower	Supplemental	4710 E Woolard Rd	238-4896	X	X	X			A	COLF
1573C-10	YES	Lake	220	6	lower	Supplemental	20406 N Market	998-1965	X	X	X			A	COLRES
1573C-17	YES	Resident	260	6	lower	Supplemental	20518 N Thor Rd		X	X	X			A	COLRES
1573Q-1	YES	SAUNDER	97	6	upper	Supplemental	19317 N Newport Hwy	238-6953	X	X	X			A	COLRES
0273D-3	NO	PURDY	244	6	lower	Supplemental	4610 E Lo Dolce Rd	953-1268	X	X	X			A	Dog-Mazy
0373P-1S	NO	KING SPRINGS			upper	Supplemental	22515 N Glen	995-7995		X	X			A	
1073C-1S	NO	Alderson SPR			upper	Supplemental	22009 N Meadowview	468-2065	X	X	X			A	
1473N-1	NO	GEWOCK	104	6	upper	Supplemental	N 19426 Yale	238-4903		X	X			A	
CD-03C1	NO	CD-3L	205	2	lower	Supplemental				X	X			A	
CD-05C2	NO	CD-5	334	2	lower	Supplemental				X	X			A	
CD-07E1	NO	CD-7L	171	2	upper	Supplemental				X	X			A	
CD-22D1	NO	Ackerman	152	2.5	lower	Supplemental	4414 E Big Meadows		X	X	X			A	MS/MSD
CD-32B1	NO		109	2.5	upper	Supplemental				X	X			A	
CD-35A1	NO		104	2.5	upper	Supplemental				X	X			A	
0273E-3	YES	COSTELLO	263	6	lower	Supplemental	23410 N E-Chattaroy	238-6048	X	X	X			B	CALL FIRST
0273P-3	YES	Griffith	145	6	lower	Supplemental	BIG MEADOWS	238-6534	X	X	X			B	
1073Q-2	YES	PFENNIG	110	6	upper	Supplemental	3701 Norwood	238-4839	X	X	X			B	CALL FIRST
1573B-4	YES	MOFFAT		6	upper	Supplemental	20319 N. Newport HWY	981-3608		X	X			B	
1573H-4	NO	MOORE LNDSCF	111	8	upper	Supplemental	4109 E Woolard	466-7800	X	X	X			B	EB #1
CD-02RA1	NO	CD-2A1 Repla	100	2	upper	Supplemental				X	X			B	
CD-08E1	NO	CD-8M	205	2	lower	Supplemental				X	X			B	

Master S[illegible]le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-21C1	NO		235	2.5	lower	Supplemental				X	X			B	MS/MSD
CD-23B1	NO		88	2.5	upper	Supplemental				X	X			B	
CD-24C2	NO		252	2.5	lower	Supplemental				X	X			B	
CD-40C2	NO		145	2.5	lower	Supplemental				X	X			B	CD-53 Dupe
CD-47	NO		296	2.5	lower	Supplemental				X	X			B	
CS-12A1	NO				upper	Supplemental		NO SAMPLE		X			NO WATE		
CS-14C1	NO	CS-14U	87		upper	Supplemental				X	X			B	Bailer
0273D-2	NO	Tobias	220	6	lower	Supplemental	4510 E LoDolce Rd	238-4227	X	X	X			B	CALL FIRST
0273L-2	NO	HAYES	560	6	lower	Supplemental	E 4714 Singletree	238-1106	X	X	X			C	
0273L-3	?	?	285		lower	Supplemental	23014 N Wagon	NO SAMPLE		WW				C	No sample
0373J-3	YES	Goulding	217	6	lower	Supplemental	22915 N Elk-Chattaroy	238-6694	X	X	X			C	CALL FIRST
CD-02RC2	NO	CD-2C2 Repla	274	2	lower	Supplemental				X	X			C	
CD-04C1	NO	CD-4U	157	2	upper	Supplemental				X	X			C	EB #2
CD-06A1	NO	CD-6U	100	2	upper	Supplemental				X	X			C	
CD-06C2	NO	CD-6L	208	2	lower	Supplemental				X	X			C	CD-54 Dupe
CD-46	NO		257	2.5	lower	Supplemental				X	X			C	EB #3
0273N-7	NO	GOODWIN	140	6	lower	Supplemental	4517 Big Meadows	238-6917	X	X	X			D	CALL FIRST
CD-01C1	NO	CD-1	229	6	lower	Supplemental				X	X			D	CD-55 Dupe
CD-04E1	NO	CD-4L	215	2	lower	Supplemental				X	X			D	
CD-23C2	NO		189	2.5	lower	Supplemental				X	X			D	
CD-26	NO		194	2.5	lower	Supplemental				X	X			D	
EF24-02	NO					Annual				X	X				
IN20-11	NO					Annual				X	X				
1473M-1	YES	Richard	105	6	upper	Annual	19826 N Yale Rd		X	X	X				
1573A-1	YES	Johnson	105	6	upper	Annual	20315 N Yale Rd		X	X	X				
1073D-1	YES	Nerren	76	6	upper	Annual	22115 N Meadowview		X	X	X				

Master S le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-03A1	YES	CD-3M	98	2	upper	Annual				X	X	X	X		CD-51 Dupe
CD-60A1	YES		96.2	2	upper	Annual				X	X	X	X		
CD-61A1	YES		75.9	2	upper	Annual				X	X	X	X		MS/MSD
CS-04A1	YES	CS-4	89.51	2	upper	Annual				X	X	X	X		
CD-31A1	YES		108	2.5	upper	Annual				X	X				
CD-34A1	YES		110	2.5	upper	Annual				X	X				
CD-36A1	YES		102	2.5	upper	Annual				X	X				
CD-37A1	YES		104	2.5	upper	Annual				X	X				
CD-38A1	YES		111	2.5	upper	Annual				X	X				
CD-40C1	YES		44	2.5	lower	Annual				X	X				CD-50 Dupe
CD-41C1	YES		233	2.5	lower	Annual				X	X				
CD-41C2	YES		291	2.5	lower	Annual				X	X				
CD-41C3	YES		403	2.5	lower	Annual				X	X				
CD-42C1	YES		227	2.5	lower	Annual				X	X				
CD-42C2	YES		312	2.5	lower	Annual				X	X				
CD-42C3	YES		402	2.5	lower	Annual				X	X				
CD-43C1	YES		230	2.5	lower	Annual				X	X				
CD-43C2	YES		299	2.5	lower	Annual				X	X				
CD-43C3	YES		401	2.5	lower	Annual				X	X				
CD-44C1	YES		200	2.5	lower	Annual				X	X				
CD-44C2	YES		247	2.5	lower	Annual				X	X				
CD-44C3	YES		295	2.5	lower	Annual				X	X				
CD-45C1	YES		200	2.5	lower	Annual				X	X				
CD-45C2	YES		247	2.5	lower	Annual				X	X				
CD-45C3	YES		339	2.5	lower	Annual				X	X				
CD-48C1	YES		243	2.5	lower	Annual				X	X				

Master S[illegible]le Matrix
April 2022 - May 2022

Well ID	PUMP	Residential Name	Depth	Case	Aquifer	Sample Program S/A	Location	Contact Number	OK	VOC	1,4 DIOXANE	Annual CONV/ MET	TOC / NO3 / SO4	Portable Pump CatEgory	Comments
CD-48C2	YES		302	2.5	lower	Annual				X	X				
CD-48C3	YES		386	2.5	lower	Annual				X	X				
CD-49	YES		241.5	2.5	lower	Annual				X	X				
CP-S3	YES		99	6	upper	Annual				X	X				
CP-E1	YES		257	8	lower	Annual				X	X				
CP-E2	YES		188	6	lower	Annual				X	X				
CP-E3	YES		254	8	lower	Annual				X	X				
CP-S1	YES		103	6	upper	Annual				X	X				MS/MSD
CP-S4	YES		104	6	upper	Annual				X	X				
CP-S5	YES		101	6	upper	Annual				X	X				
CP-S6	YES		106	6	upper	Annual				X	X				
CP-W1	YES		301	8	lower	Annual				X	X				
CP-W2	YES		278	8	lower	Annual				X	X				
CP-W3	YES		275	8	lower	Annual				X	X				CD-52 Dupe

COLBERT PUMP CLEANING LOG
2022

DATE 2022	TIME	SAMPLE LOCATION	TECH'S	PUMP ID	WASH GAL	RINSE GAL	DI GAL	LAB DI GAL	COMMENTS	
5/4	1100	PRESAMPLE	MT/GF	BENNETT 1	10	10	10	—	PRE-SAMPLE CLEAN	MT
5/4	1200	PRESAMPLE	GF/MT	BENNETT 2	10	10	10	—	PRESAMPLE CLEAN	MT
5/4	1340	CD-35A1	GF	BENNETT 2	10	10	10	—		MT
5/4	1500	CD-05C2	MT	BENNETT 1	10	10	10	—	DAY END CLEAN	MT
5/4	1600	CD-07E1	GF	BENNETT 2	10	10	10	—	DAY END CLEAN	MT
5/9	0930	PRE-SAMPLE	RV AS/GF	GRUNDFOS	10	10	10	—	PRE-SAMPLE CLEAN	GF
5/9	1215	CD-22D1	AS/GF/RV	Grundfos	10	10	10	—	MS/MSD Taken Here	GF
5/9	1245	CD-03C1	RV/MT/AS	BENNETT 1	10	10	10	—	Day End clean: Raining	MT
5/10	1000	CD-02RA1	RV MT	BENNETT	10				NEW PUMP INSTALLED PUMP SEIZURE AFTER WASH	MT
5/10	1100	1473N-1	RV AS	GRUNDFOS	10	10	10			GF
5/10	1200	CD-02RA1	RV	BENN. #1	10	10	10		NEW PUMP → PRE CLEAN	MT
5/10	1230	CD-40C2	RV	BENNETT 2	10	10	10		DUPE TAKEN HERE	MT
5/10	1400	CD-24C2	RV	BENNETT 2	10	10	10			MT
5/10	1430	0273D-2	GF/RV	GRUNDFOS	10	10	10			DAY END GF
5/10	1600	CD-21C1	RV	BENN #1	10	10	10		MS/MSD TAKEN HERE	MT
5/10	1630	CD-23B1	GF/RV	GRUNDFOS	10	10	10		DAY END	GF
5/11	0900	1573H-4	RV AS	GRUNDFOS	10	10	10	10	EQ-BLANK EQ-01	GF
5/11	1040	CD-32B1	RV AS	BENNETT 1	10	10	10			GF
5/11	1215	CD-47	RV/AS	BENNETT 2	10	10	10	15	EQ BLANK EQ-02	MT
5/11	1500	CD-02RC2	RV	BENNETT 2	10	10	10			MT
5/11	1530	0273D-3	RV/AS	GRUNDFOS	10	10	10	—		GF
5/12	1130	CD 46	RV	BENNETT 2	10	10	10	15	EQ BLANK EQ-03	MT

COLBERT PUMP CLEANING LOG
2022

DATE	TIME	SAMPLE LOCATION	TECH'S	PUMP ID	WASH	RINSE	DI	LAB DI	COMMENTS
5/12	1200	CD-6	RV AS	GRUNDFOS	10	10	10		GF
5/12	1015	CD-8E1	AS	GRUNDFOS	10	10	10		GF
5/12	1315	CD-6	AS/RV	GRUNDFOS	10	10	10		GF
5/12	1340	CD-23C2	AS/RV	Bennett #2	10	10	10		MT
5/12	1510	0273N-7	AS/RV	GRUNDFOS	10	10	10		GF
5/16	1030	CD-04C1	AS/RV	BENNETT #2	10	10	10	15	EQ-04-220516 MT
5/16	1220	CD-04E1	AS/RV	BENNETT #2	10	10	10		"D" WELL MT
5/16	1300	0273L-2	AS/RV	GRUNDFOS	10	10	10		HAYES WELL GF
5/16	1400	CD-26	AS/RV	BENNETT #2	10	10	10		MT
5/16	1525	CD-1	RV/AS	GRUNDFOS	10	10	10		DUPE HERE GF
5/16	1600	CD-25	RV/AS	BENNETT #2	10	10	10		END OF DAY MT
5/17	1000	CD-33	RV/AS	BENNETT #2	10	10	10		MT
5/17	1030	CD-21C3	RV/AS	GRUNDFOS	10	10	10		Cond. Still @ 0.00 GF
5/17	1130	CD-20D1	RV/AS	BENNETT #2	15	15	15		COND STILL @ 0.00 MT
5/17	1215	CD-20D2	RV/AS	GRUNDFOS	15	15	15		GF
~~5/17~~									

Colbert Supplemental Residential Wells Permission and Data 2022:

Well ID	Residential Name	Permission	Pump	Well in use	WW water	Date	Comments
1173D-1	ACKERMAN-CD22	YES	NO	NO	YES	3/16	HOUSE IS ON WW
0273L-2	HAYES	YES	NO	NO	YES	3/16	HOUSE IS ON WW
0273C-2	JONES/SCHMIDT	YES	YES	YES	NO	3/16	NEW OWNER → WAS VANATTER
1073C-1S	ALDERSON	YES	NO	SPRING	YES	3/16	HOUSE IS ON WW → SPRING SAMPLE
0273N-7	RESIDENT (GOODWIN)					3/16	RETURN LETTER → HAND DEL
0273R-3	GRIFFITH	YES	YES	YES	YES	3/19	WW TO HOUSE ONLY
0273E-3	COSTELLO	YES	YES	YES	YES	3/19	WW TO HOUSE ONLY
0273D-3	PURDY	YES	NO	NO	YES	3/30	WW TO HOUSE ONLY
0273D-2	TOBIAS	YES	NO	NO	YES	4/4	VERBAL/PERMISSION
0373J-3	GOULDING	YES	YES	WATERING LAWN ONLY	YES	4/4	CALL FIRST TO MAKE WATER
1073Q-2	PFENNIG	YES	YES	YES	YES/HOUSE	4/4	CALL FIRST BY APPOINT.
0273C-3	WARDEN	YES	YES	YES	NO	4/4	WAS ON COLRES PROG
0273N-7	GOODWIN	YES	NO	NO	YES	4/4	
1573H-4	MOORELAND	YES	NO	NO	YES	4/12	VERBAL

Spokane County
Public Works

RESIDENTIAL NAME: Cory & Nancy Hayes

WELL ID: 0273L-2

4714 E. SINGETREE
COLBERT WA 99005

WELL DEPTH: _____

CONTACT # / Email: NHayes56@gmail.com

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☐	NO ☒
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☒
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☐	NO ☒
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☒	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☒
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

Thank you!

Spokane County
Public Works

RESIDENTIAL NAME: LARRY ACKERMAN

WELL ID: 1173D-1 4414 ~~N~~ E. BIG MEADOWS RD CHATTAROY, WA 99003

WELL DEPTH: _____

CONTACT # / Email: _____

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☒	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☒
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☐	NO ☒
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☒	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☒	NO ☐
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

CD-22D$ 152' 2.5" ~~LOWER DRIFT~~ CAT "D"

ON LIST TO SAMPLE CD-22D1

CAT. "A"

Spokane County
Public Works

RESIDENTIAL NAME: Ken & Laura Goulding

WELL ID: 0373J-3

WELL DEPTH: _____

CONTACT # / Email: KennethGoulding07@Gmail.com

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☑	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☑	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☑	NO ☐
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☑	NO ☐
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☐	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☑	NO ☐
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☑	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

well water is used to water Lawn.
Please contact myself or wife -
Cell # 509-869-2324
Cell # 509-869-2300

From: Stewart, Austin R.
Sent: Monday, April 4, 2022 9:51 AM
To: Terris, Mike
Subject: 0273D-2 Updated Information/Permission

Hi Mike,

Like I mentioned on the phone, Cindy Tobias (0273D-2) gave us verbal permission today to access their well for sampling. They just ask that we call them and schedule it for when they can be present for the sampling. The information I received from the master sample list/Cindy is listed below:

Well ID	PUMP	Last Name	First Name	Depth	Case	Aquifer	Sample Program S/A	Corrected Address
0273D-2	NO	Tobias	Cindy	220	6	lower	Supplemental	4510 E La Dolce Rd

Let me know if you need anything else. Thanks!

Austin

CALL BEFORE SAMPLING WE HAVE PERMISSION BY MRS. TOBIAS PER AUSTIN

CINDY (MRS. TOBIAS) CELL 509-953-4467

Spokane County
Public Works

RESIDENTIAL NAME: Scott & Lissa Warder

WELL ID: 0273C-3

23711 N Wagon Rd.

WELL DEPTH: 129 ft we think

CONTACT # / Email: Scott Warder 509-688-9082
3dstrong@gmail.com

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☐	NO ☒
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☒	NO ☐
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☒	NO ☐
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☒	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☒	NO ☐
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

Send report via mail. please

11D"
WELL

Spokane County
Public Works

RESIDENTIAL NAME: Donna & Jack Goodwin

WELL ID: 0273N-7

WELL DEPTH: Don't Know

CONTACT # / Email: 509-991-1001 goodwindr@aol.com

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☑	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☑	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☑
IS THERE AN OPERATIONAL PUMP IN WELL? Don't Know	YES ☐	NO ☐
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☑	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☑
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☑	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

Mailing address is P.O. Box 239 Colbert, WA 99005

Please notify us the day before you collect the sample

So we can have the gate open

Spokane County
Public Works

RESIDENTIAL NAME: Bob Purdy

WELL ID: 8273D-3

WELL DEPTH: _____

CONTACT # / Email: 509-953-1268

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☒	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☒
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☐	NO ☒
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☒	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☒
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below) Mail	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

If gates closed you are welcome to open it and come in but please close it behind you
Dog is very friendly Name is MAZY.
Bob Purdy 509 953-1268

From: Stewart, Austin R.
Sent: Wednesday, March 30, 2022 5:21 PM
To: Terris, Mike
Subject: COLRES Well Information

Hi Mike,

Here is the information that I could find on the well 0273D-3:

Well ID	PUMP	Last Name	First Name	Depth	Case	Aquifer	Sample Program S/A	Address 1
0273D-3	NO	Purdy	Bob	244	6	lower	Supplemental	4610 E La Dolce Rd

It turns out that this well is not even in the COLRES database, but the well/well details are in the clbf1 database (main Colbert database). I also could not find any sample results for the well in the database, but based on its location/that it is in the lower aquifer, I would treat it as a category A well, as the other wells near 0273D-3 (and similar depth) have shown non-detections for contamination.

The only other well that I sent a permission letter to that was not already on our Master List was 1173D-1, and it looks like we now have permission, so I hope we can hear from the other wells ☺

Let me know if you need anything else. Thanks!

Austin

Spokane County
Public Works

RESIDENTIAL NAME: ROBERT & BARBARA COSTELLO

WELL ID: 0273E-3

WELL DEPTH: ?

CONTACT # / Email: 509-999-3667 BOBS47@YAHOO.COM

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☒	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☒	NO ☐
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☒	NO ☐
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☐	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☒
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

WOULD YOU CONTACT ME BEFORE COMING TO TEST

I HAVE GOATS IN WELL AREA TKS

Spokane County
Public Works

RESIDENTIAL NAME: Daniel Griffith

WELL ID: 0273P-3

WELL DEPTH: not sure Between Like 60-80 ft I think

CONTACT # / Email: Danny Griffith82@GMail.com

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☒	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE? Wateing lawn garden	YES ☒	NO ☐
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☒	NO ☐
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK? N/	YES ☒	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☒
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

JUST to the House

COMMENTS OR SPECIAL INSTRUCTIONS:

Please do take as many as you want
I would just like to know if it is safe for
my Dogs play in and [redacted] Drink not all the time
Through out the summer when watering the lawns

Spokane County
Public Works

RESIDENTIAL NAME: STEVE ALDERSON

WELL ID: 1073C-1S (Spring)

WELL DEPTH: SPRING

CONTACT # / Email: _____

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☒	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☒
IS THERE AN OPERATIONAL PUMP IN WELL? NA	YES ☐	NO ☐
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK? NA	YES ☐	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☒
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

22009 N. MEADOWVIEW DR.
COLBERT WA. 99005

Spokane County
Public Works

0273 C-2
Jones / Schmidt
425 773-3022
3021
4712 E. LaDolce
Colbert WA 99005

TO: Residents included in the Colbert Landfill Domestic Well Sampling Program

FROM: Austin Stewart, Water Resources Specialist

RE: Upcoming Well Sampling Event

Every 5 years, Spokane County conducts an extensive groundwater monitoring event (known as the "Supplemental" sampling event) that includes additional Colbert Landfill area groundwater wells such as yours. This year, we will be performing the sampling event during the target dates of May 2nd, 2022 to May 20th, 2022 (business days only, sometime between 8:00 am – 4:00 pm).

Although the Spokane County Landfill Closure department already samples your well through our Residential Monitoring Program, we wanted to send you a notification letter to inform you of the target dates/times for our upcoming Supplemental sampling event.

After collection, the samples are sent to a certified laboratory, SVL Analytical, for analysis. The samples are analyzed using standard drinking water test EPA Method 524.3. Results are reviewed by Spokane County and then compiled, summarized, and sent to the individual resident or property owner usually by mail, but an electronic version can be sent (via email) if preferred. During this Supplemental sampling event, additional contaminants will be included in the laboratory analyses, providing you with additional information about your drinking water.

If you have any further questions regarding the sampling event, new information regarding your well, or other questions regarding the program, please do not hesitate to contact me at 406-370-3271 or send an email to astewart@spokanecounty.org.

Thank you,

Austin Stewart
Water Resources Specialist
Spokane County Environmental Services

Kendra Jones
Glenn Schmidt
425 773 3022
3021

Spokane County
Public Works

RESIDENTIAL NAME: Shirley Pfenning

WELL ID: 1073Q-2

WELL DEPTH: _____

CONTACT # / Email: 509-290-9123 / shirleypfenning62@hotmail.com

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☒	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE? (Lawn only	YES ☒	NO ☐
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☒	NO ☐
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☑	NO ☐ — There is a pump
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☒	NO ☐
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

I use the well water for watering the lawn only. We are on Whitworth Water for house. It is backflow is tested yearly. Need to call to schedule so I am home and can ~~allow~~ open gate to get in. Should be able to test water from faucet that is connected to the well water holding tank.

11D"
WELL

Spokane County
Public Works

RESIDENTIAL NAME: Donna & Jack Goodwin

WELL ID: 0273N-7

4517 BIG MEADOWS RD

WELL DEPTH: Don't Know

GRUNDFOS PUMP 2017

CONTACT # / Email: 509-991-1001 goodwindr@aol.com

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☑	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☑	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☑
IS THERE AN OPERATIONAL PUMP IN WELL? Don't Know	YES ☐	NO ☐
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☑	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☑
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☑	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

Mailing address is P.O. Box 239 Colbert, WA 99005

Please notify us the day before you collect the sample

So we can have the gate open

Spokane County
Public Works

RESIDENTIAL NAME: Bob Purdy

WELL ID: 0273D-3

WELL DEPTH: _____

CONTACT # / Email: 509-953-1268

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☒	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☒
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☐	NO ☒
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☒	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☒
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below) Mail	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

If gates closed you are welcome to open it
And come in but please close it behind you
Dog is very friendly Name is MAZY.
Bob Purdy 509 953-1268

From: Stewart, Austin R.
Sent: Wednesday, March 30, 2022 5:21 PM
To: Terris, Mike
Subject: COLRES Well Information

Hi Mike,

Here is the information that I could find on the well 0273D-3:

Well ID	PUMP	Last Name	First Name	Depth	Case	Aquifer	Sample Program S/A	Address 1
0273D-3	NO	Purdy	Bob	244	6	lower	Supplemental	4610 E La Dolce Rd

It turns out that this well is not even in the COLRES database, but the well/well details are in the clbf1 database (main Colbert database). I also could not find any sample results for the well in the database, but based on its location/that it is in the lower aquifer, I would treat it as a category A well, as the other wells near 0273D-3 (and similar depth) have shown non-detections for contamination.

The only other well that I sent a permission letter to that was not already on our Master List was 1173D-1, and it looks like we now have permission, so I hope we can hear from the other wells ☺

Let me know if you need anything else. Thanks!

Austin

Spokane County
Public Works

RESIDENTIAL NAME: Cory & Nancy Hayes

WELL ID: 0273L-2

4714 E. SINGETREE
COLBERT WA 99005

WELL DEPTH: _____

CONTACT # / Email: NHayes56@email.com

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☐	NO ☒
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☒
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☐	NO ☒
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☒	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☐	NO ☒
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

Thank you!

Spokane County
Public Works

RESIDENTIAL NAME: LARRY ACKERMAN

WELL ID: 1173D-1 4414 E. BIG MEADOWS RD CHATTAROY, WA 99003

WELL DEPTH: _____

CONTACT # / Email: _____

Sampling during the dates of May 2nd, 2022 to May 20th, 2022:

PERMISSION TO SAMPLE?	YES ☒	NO ☐
CURRENTLY CONNECTED TO WHITWORTH WATER?	YES ☒	NO ☐
CURRENTLY USING WELL FOR ANY PURPOSE?	YES ☐	NO ☒
IS THERE AN OPERATIONAL PUMP IN WELL?	YES ☐	NO ☒
IF NO PUMP IN WELL, IS WELL ACCESSIBLE BY TRUCK?	YES ☒	NO ☐
DOES OWNER NEED TO BE PRESENT FOR US TO SAMPLE?	YES ☒	NO ☐
WOULD YOU LIKE A WATER QUALITY REPORT? (if yes, please specify via mail or email below)	YES ☒	NO ☐

COMMENTS OR SPECIAL INSTRUCTIONS:

CD-22D3 152' 2.5" ~~LOWER DMT~~ ~~CAT "D"~~

ON LIST TO SAMPLE CD-22D1 CAT. "A"