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Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

Re: Fourth Quarter 2021 Groundwater Monitoring Data Report, Yakima Valley Dairies, SDWA-10-2013-0080

This quarterly groundwater monitoring report (report) has been prepared to supplement groundwater data collection initiated under the Administrative Order on Consent (AOC) Statement of Work.

The AOC requires 8 years of quarterly groundwater monitoring, which was completed in Second Quarter 2021. Under the AOC, this 8-year monitoring period is to be followed by data evaluation and a formal determination of next steps. This data evaluation process is now beginning.

Pending completion of the data evaluation process and definition of next steps under the AOC, the U.S. Environmental Protection Agency (EPA) and the Respondents to the AOC exchanged correspondence regarding the value of conducting continued nitrate monitoring. The monitoring data contained in this report were collected voluntarily consistent with a written proposal made by the Respondents in a letter to EPA dated October 4, 2021, and repeated in follow-up letters dated November 11, 2021, and December 10, 2021. In the December 10, 2021, letter, the Respondents informed EPA that they planned (during the following week of December 13, 2021) to voluntarily perform the groundwater monitoring event documented in this report. The Fourth Quarter 2021 groundwater monitoring event was then voluntarily conducted between December 14 to December 15, 2021.

EPA responded to the proposal from the Respondents for groundwater monitoring on January 25, 2022. In that letter EPA stated that the AOC did not require continued groundwater monitoring at this time but that it was in line with the goals of the AOC.

Groundwater monitoring was conducted using methods defined in the 2018 *Groundwater Monitoring Quality Assurance Project Plan* (QAPP; Anchor QEA 2018). Deviations from the QAPP as part of the Fourth Quarter 2021 monitoring event were as follows:

- Monitoring was performed on the subset of wells identified in the October 4, 2021, proposal from the Respondents to EPA. This excluded those wells that were dry and certain wells that

have been consistently below the nitrate MCL for at least the preceding eight monitoring events.

- Monitoring parameters were limited to those identified in the October 4, 2021, proposal from the Respondents to EPA and included groundwater elevation, groundwater field parameters, and nitrate concentrations.
- The analytical testing laboratory used during early 2021 (Cascade Analytical) was unavailable to perform the nitrate testing for the project. The lab previously used during AOC groundwater monitoring (ALS Environmental) was used instead for the monitoring event.

The locations of the monitoring wells are shown in Figure 1. The wells monitored in the current event are listed in Table 1.

Groundwater Monitoring Activities

Synoptic Depth to Static Water Level Measurement

Synoptic water level measurements were collected from all 26 wells in the monitoring network on December 14, 2021, using an electronic water level meter. The depths to water were measured to the nearest 0.01 foot from the indicated reference point on each well casing and recorded on the Water Level Survey Form presented in Appendix D of the 2018 QAPP. The depth-to-water measurements were collected from the 26 wells in as short a time period as possible (approximately 8 hours) to provide a "snapshot" of groundwater elevations and to reduce the effect of atmospheric pressure changes or precipitation effects on the water levels. Depth-to-water measurements were converted to groundwater elevations in the North American Vertical Datum of 1988 (NAVD88) by subtracting the measurements from the surveyed reference point elevation for each well. The depth-to-water measurements and calculated groundwater elevations for Fourth Quarter 2021 are shown in Table 2.

Continuous Groundwater Elevation Monitoring

Continuous long-term groundwater elevations are being monitored using non-vented Solinst Levelogger Junior Edge pressure transducers in six monitoring wells to evaluate seasonal fluctuations and trends in groundwater elevations. Two pressure transducers are installed in one of the shallow/deep monitoring well pairs to evaluate differences in hydraulic head and vertical gradients between the shallow and deep portions of the surficial aquifer. Wells with transducers include DC-03, the DC-05/DC-05D well pair, YVD-03, YVD-08, and YVD-11. Additionally, a Solinst Barologger Edge barometric pressure transducer is deployed at well YVD-08 to compensate water levels for atmospheric pressure.

Transducers recorded water levels in hourly increments from 12:00 p.m. on October 15, 2013, through December 7, 2020, at 8:00 a.m. Beginning December 7, 2020, at 8:45 a.m., the transducers began recording water levels in 15-minute increments to provide more accurate calibrations from

manual depth to water measurements. During data downloads, depths to water in wells were manually gauged using an electronic water level meter. Following the data download, water level data were compensated for atmospheric pressure and calibrated with concurrent field-verified groundwater elevation measurements. Groundwater hydrographs of the six wells with pressure transducers are provided in Appendix A.

Groundwater Elevation Seasonal Patterns

The hydrographs for many of the monitoring wells show a seasonal pattern of water level increases and decreases. For example, the water level in monitoring well YVD-02 historically increased about 12 feet from first quarter to second quarter before an adjacent irrigation ditch was converted to a closed pipe, after which the seasonal pattern became less pronounced.

Another example of seasonal water level fluctuation is observed in well YVD-17, which is located adjacent to the large, unlined Southside irrigation canal run by the Sunnyside Valley Irrigation District (Figure 1). According to the District fact sheet, irrigation usually runs from April 1 through October 20 with canal priming operations beginning in mid-March. The water elevation in YVD-17 varies seasonally by about 6 feet. The lowest water level of each year has consistently occurred in the first quarter (approximately April 1), and the highest water level of each year has consistently occurred in the third quarter (approximately October 1). This suggests that the travel time of water from the flowing irrigation canal to the relatively shallow drinking water aquifer at YVD-17 is likely in the range of days to weeks.

EPA has concluded that the seasonal fluctuations observed at monitoring wells indicate that percolation of water from the land surface to the aquifer in the vicinity of the Dairies can and does occur in a range of days to months. The time of travel depends on many factors including the soil type, existing amount of water in the soil, the duration and amount of water, evapotranspiration, and depth to the water table. The percolating water could originate from surface water such as a canal or pond, excess irrigation water from a field, an earthen lagoon, precipitation, or some other source. The groundwater elevation seasonal patterns for each monitoring well are shown in Figure 2 and the following table:

Monitoring Well ID	Clear Seasonal Pattern? (Y/N)	Well Depth from Ground Surface to Mid-Point of Screen (feet)	Highest Groundwater Elevation in 3Q (Fall) and Lowest in 1Q (Spring)	Highest Groundwater Elevation in 4Q (Winter) and Lowest in 2Q (Summer)	Highest Groundwater Elevation in 1Q (Spring) and Lowest in 3Q (Fall)
YVD-02	Y	25	X		
YVD-17	Y	38	X		
DC-04	Y	40	X		
DC-07	Y	49		X	

Monitoring Well ID	Clear Seasonal Pattern? (Y/N)	Well Depth from Ground Surface to Mid-Point of Screen (feet)	Highest Groundwater Elevation in 3Q (Fall) and Lowest in 1Q (Spring)	Highest Groundwater Elevation in 4Q (Winter) and Lowest in 2Q (Summer)	Highest Groundwater Elevation in 1Q (Spring) and Lowest in 3Q (Fall)
DC-03	Y	73	X		
DC-05	Y	74		X	
YVD-14R	Y	81		X	
YVD-10	Y	93			X
YVD-15	Y	95		X	
YVD-11	N	107			
DC-03D	Y	111	X		
YVD-09	N	112			
YVD-16	Y	112			X
DC-05D	Y	122		X	
YVD-13	Y	131		X	
DC-14	N	139			
YVD-12	Y	141			X
DC-01	N	150			
YVD-07	Y	158			X
YVD-06	Y	159			X
YVD-05	Y	172			X
YVD-08	Y	172			X
YVD-18	Y	175		X	
DC-09	Y	184			X
YVD-03	Y	190			X
YVD-04	Y	235			X

Sample Collection

Groundwater samples were collected using low-flow purging and sampling procedures described in the Standard Operating Procedure (SOP) entitled *Low-Flow Groundwater Purging and Sampling Procedures for Monitoring Wells* presented in Appendix E of the 2018 QAPP.

Purging and sampling of the monitoring wells was performed with dedicated 1-inch-diameter stainless-steel Solinst Model 407 bladder pumps with polytetrafluoroethylene (Teflon) bladders installed in each well.

A sample could not be collected at monitoring well YVD-02; the well was dry during the groundwater monitoring event.

Sample Handling and Custody

All samples were accompanied by a chain-of-custody record according to procedures described in the 2018 QAPP. When custody of samples was transferred, the individuals relinquishing and receiving the samples signed and dated the chain-of-custody record. The chain-of-custody record documents the custody transfer from the sampler, often through another agent (e.g., a shipping/transport company), to the laboratory sample custodian.

All samples collected for laboratory analyses were delivered to ALS Environmental, located at 1317 S. 13th Ave. in Kelso, Washington. Two sample delivery groups (SDGs) were submitted to the analytical laboratory; the delivery group and collection date are as follows:

Sample Delivery Group	Samples Collected	Date Received by Laboratory
K2114499	December 14, 2021	December 15, 2021
K2114550	December 15, 2021	December 16, 2021

Field Sampling Data Sheets were completed for each sample and indicate what type of samples were collected, sample identification, sample bottle types and volumes collected, field parameter measurements, and other pertinent information (including significant events and observations that occurred during sampling activities). Enough information was noted on field sampling forms to enable participants to reconstruct events that occurred and to refresh the memory of field personnel, if needed. Original copies of all field forms and chain-of-custody documents were retained by the Yakima Valley Dairies'[1] (Dairies') Field Lead in the project files. Dairy owner certifications are included in Appendix B. Copies of the field forms from Fourth Quarter 2021 are presented in Appendix C.

Analytical Program

Corrective Actions

No corrective actions were required for the Fourth Quarter 2021 sampling event.

Data Review, Verification, and Validation

All data underwent a Stage 2 validation, which included a data package completeness review. Data were validated in accordance with the EPA *National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2014). The Data Validation Report (DVR) is presented in Appendix D. Any deviation from the 2018 QAPP was either documented within this memorandum or in the DVR. Results met project data quality goals and criteria and are usable for all purposes. Refer to Table 3

[1] Collectively, the following are referred to as the Yakima Valley Dairies: 1) Cow Palace, LLC; 2) D&A Dairy, LLC (also known as D and A Dairy L.L.C.), George DeRuyter & Son Dairy, LLC, and George & Margaret, LLC; and 3) Liberty Dairy, LLC, and its associated dairy facility H&S Bosma Dairy.

embedded in the DVR for a list of the qualified results from the data validation process. Qualified results include the following:

- The matrix spike and matrix spike duplicate performed on sample YVD-121421-02 (YVD-16) recovered above the control limit. Associated batch sample results were qualified "J" to indicate a high bias.
- Samples were received by the laboratory and initially analyzed for nitrate within hold times. For 15 of the samples, a dilution and reanalysis was required. These re-analyses were performed less than 1 day beyond the designated holding time. Associated results were qualified "UJ" or "J" to indicate they may be biased.

Groundwater Monitoring Results

Site Hydrogeology

The groundwater flow direction at the site is generally to the southwest at an average hydraulic gradient of 0.013 foot per foot. Hydraulic gradients are greater in the topographically higher areas in the northern section of the site, with an average of 0.026. As groundwater flows to the southwest toward the center of the Yakima River valley, hydraulic gradients decrease to approximately 0.011 in the central portion of the site and then decrease further to 0.004 in the southern portion of the site. The estimated average linear groundwater flow velocities for the shallow surficial aquifer at the Dairies range from 0.7 to 24.8 feet per day across the site. These estimated values are based on estimated conductivity values based on observed soil types and have not been confirmed with site-specific aquifer testing (e.g., slug tests).

A groundwater elevation contour map for the surficial aquifer based on Fourth Quarter 2021 depth to groundwater measurements is shown in Figure 1. Groundwater elevation measurements for Fourth Quarter 2021 and monitoring well construction details are provided in Tables 2 and 3, respectively. Historical groundwater elevations are provided in Table 4. Estimated possible average linear flow velocity values for Fourth Quarter 2021 are provided in Table 5. Groundwater hydrographs for all 26 wells are provided in Appendix A.

Groundwater Sampling Results

Groundwater field parameters collected during well purging included dissolved oxygen, pH, oxidation-reduction potential, specific conductance, temperature, and turbidity. Field parameter measurements are presented in Table 6.

Groundwater from the 17 wells sampled was analyzed for nitrate (as nitrogen).

The nitrate results for Fourth Quarter 2021 are presented spatially on a map in Figure 3 and are shown in Table 7. Historical nitrate concentrations since 2013 are presented in Figure 4 and plotted

in Figures 5 through 9. A summary of historical groundwater analytical results is presented in Table 8. Analytical laboratory reports are provided in Appendix E.

The monitoring well network includes wells that are located upgradient and downgradient of the Dairies. There are four groundwater monitoring wells located upgradient of the Dairy facilities' footprint. All four wells are screened at the water table. Historically, the nitrate concentrations in the four upgradient wells have been consistently below the nitrate maximum contaminant level (MCL) of 10 milligrams per liter (mg/L). As noted previously, YVD-02 was dry during Fourth Quarter 2021, and a sample could not be collected. YVD-02 is screened in a shallow basalt layer just downgradient of a former irrigation canal that has now been replaced by an enclosed pipe. After the open ditch was replaced by the piped conveyance, groundwater elevations decreased in the well until the well went dry; a sample has not been collected from YVD-02 since Second Quarter 2020.

Nitrate concentrations in the 14 downgradient monitoring wells that are screened at the water table for Fourth Quarter 2021 are as follows:

Downgradient Wells	Nitrate (mg/L)
DC-03	184
DC-04	35.1
DC-05	43.5
DC-07	20.3
DC-14	51.4
YVD-08	60.8
YVD-09	55.3
YVD-10	75.8
YVD-11	46.1
YVD-12	13.4
YVD-13	34.0
YVD-14R	118
YVD-15	15.1
YVD-16	19.7

Nitrate concentrations exceeded the MCL in all 14 of the downgradient water table wells tested during this monitoring event.

In two cases the patterns of groundwater nitrate concentrations may be responding to changes in groundwater infiltration and elevation patterns as follows:

- Nitrate was detected above the MCL in well DC-07 at a concentration of 20.3 mg/L. Nitrate concentrations in this well were historically below the MCL between 2013 and Second Quarter

2020. Since Second Quarter 2020, the MCL has been exceeded four times out of six completed monitoring events. The change in groundwater quality at this well follows the termination of clean chiller water discharges to a ditch located upgradient of the well. That chiller water discharge was terminated in late 2018. During the past six monitoring events, the measured nitrate levels in well DC-07 have averaged 14.2 mg/L. This is very similar to the average nitrate concentration in the well located immediately east (well YVD-15, average nitrate concentration 19.9 mg/L) during the same time period.

- During the Fourth Quarter 2021 monitoring event, nitrate was detected above the MCL in well DC-14 at a concentration of 51.4 mg/L. Between 2013 and June 2016, the nitrate concentrations in this well were highly variable, ranging from a low of 5.8 mg/L to a high of 26 mg/L. After a permanent pump was installed in the well prior to the September 2016 monitoring event, the groundwater nitrate concentrations decreased to below the MCL, reaching a minimum concentration of 2.41 mg/L in June of 2017. Nitrate concentrations have increased steadily quarter over quarter between September 2017 and December 2021. During this same time period, groundwater elevations have decreased approximately 7 feet in well DC-14. Taken together, the groundwater quality and elevation data suggest that groundwater stratification and changes in groundwater elevation (relative to the fixed pump elevation) may be affecting measured groundwater nitrate concentrations in well DC-14.

EPA has not yet approved formal trend analyses procedures for use with the project. See Figures 5 through 9 for plots of observed nitrate concentrations over time in the AOC monitoring wells.

Three downgradient groundwater monitoring wells were constructed with well screens positioned at depths that were estimated by EPA to approximate the depth of a typical residential drinking water well in the area. Each of these deeper wells was paired at the same location with a water table well. The results for each well pair, with the water table well listed above its deeper counterpart, are as follows:

Well Placement	Shallow/Deep Well Pair	Nitrate (mg/L)	Shallow/Deep Well Pair	Nitrate (mg/L)	Shallow/Deep Well Pair	Nitrate (mg/L)
Shallow Well	YVD-13	34.0	DC-03	184	DC-05	43.5
Deep Well	YVD-18	26.6	DC-03D	35.1	DC-05D	12.7

The results from all the well pairs show stratified conditions, with higher nitrate concentrations at the top of the water table and lower concentrations at depth. The nitrate concentrations in the YVD-13/YVD-18 well pair were approximately equal from First Quarter 2017 through Second Quarter 2019. Since Third Quarter 2019, nitrate concentrations in water table well YVD-13 have been generally increasing relative to the deeper well YVD-18. Nitrate concentrations in water table well DC-05 have historically been greater than deeper well DC-05D. Nitrate concentrations in water table well DC-03 remain higher than those in the paired deeper well DC-03D.

References

Anchor QEA (Anchor QEA, LLC), 2018. *Groundwater Monitoring Quality Assurance Project Plan*. Yakima Valley Dairies/SDWA-10-2013-0080. Prepared for Yakima Valley Dairies. February 2018.

EPA (U.S. Environmental Protection Agency), 2014. *National Functional Guidelines for Superfund Organic Methods Data Review*. Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency, Washington, DC. EPA-540-R-014-002. August 2014.

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Table 1
Groundwater Monitoring Frequency

Well ID	Manual Groundwater Elevation Measurements (Quarterly)	Long-Term Groundwater Elevation Measurements (Every Quarter Hour)	Groundwater Sampling Frequency	
			Quarterly[1]	Annually (Second Quarter Event)
DC-01	X			X
DC-03	X	X	X	X
DC-03D	X		X	X
DC-04	X		X	X
DC-05	X	X	X	X
DC-05D	X	X	X	X
DC-07	X		X	X
DC-09	X			X
DC-14	X		X	X
YVD-02	X		X	X
YVD-03	X	X		X
YVD-04	X			X
YVD-05	X			X
YVD-06	X			X
YVD-07	X			X
YVD-08	X	X	X	X
YVD-09	X		X	X
YVD-10	X		X	X
YVD-11	X	X	X	X
YVD-12	X		X	X
YVD-13	X		X	X
YVD-14R	X		X	X
YVD-15	X		X	X
YVD-16	X		X	X
YVD-17	X			X
YVD-18	X		X	X

Notes:
1. There was no sampling event in Third Quarter 2021.

Table 2
Summary of Groundwater Elevations – Fourth Quarter 2021

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-01	12/14/2021	1199.17	150.85	1048.32
DC-03	12/14/2021	910.58	75.22	835.36
DC-03D	12/14/2021	911.33	75.88	835.45
DC-04	12/14/2021	877.22	37.91	839.31
DC-05	12/14/2021	911.95	74.08	837.87
DC-05D	12/14/2021	915.91	78.26	837.65
DC-07	12/14/2021	889.29	48.05	841.24
DC-09	12/14/2021	1048.60	163.15	885.45
DC-14	12/14/2021	1036.61	139.58	897.03
YVD-02	12/14/2021	1288.97	dry	---
YVD-03	12/14/2021	1120.68	195.94	924.74
YVD-04	12/14/2021	1118.66	225.63	893.03
YVD-05	12/14/2021	1051.78	174.20	877.58
YVD-06	12/14/2021	1053.51	111.58	941.93
YVD-07	12/14/2021	1073.03	163.66	909.37
YVD-08	12/14/2021	1014.38	174.37	840.01
YVD-09	12/14/2021	966.81	114.66	852.15
YVD-10	12/14/2021	958.00	95.35	862.65
YVD-11	12/14/2021	967.91	111.87	856.04
YVD-12	12/14/2021	961.91	140.81	821.10
YVD-13	12/14/2021	965.59	129.81	835.78
YVD-14R	12/14/2021	921.41	80.95	840.46
YVD-15	12/14/2021	940.61	96.53	844.08
YVD-16	12/14/2021	975.90	119.34	856.56
YVD-17	12/14/2021	866.73	37.37	829.36
YVD-18	12/14/2021	965.74	129.97	835.77

Notes:

BTOC: below top of casing

NAVD88: North American Vertical Datum of 1988

Table 3
Monitoring Well Construction Details

Well ID	Coordinates		Top of Casing Elevation (feet NAVD88)	Ground Surface Elevation (feet NAVD88)	Surface Completion	Well Depth (feet bgs)	Casing and Screen Material	Screen Slot Size (inches)	Screen Length (feet)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)	Elevation of Top of Screen (feet NAVD88)	Elevation of Base of Screen (feet NAVD88)	Depth to Top of Filter Pack (feet bgs)	Depth to Bottom of Filter Pack (feet bgs)
	Latitude	Longitude													
Monitoring Wells															
DC-01	46.418795	-120.138185	1199.17	1199.64	Flush	160.0	Schedule 40 PVC	0.020	20.0	140.0	160.0	1059.6	1039.6	136.0	160.0
DC-03	46.386289	-120.146145	910.58	911.04	Flush	85.0	Schedule 40 PVC	0.020	20.0	62.5	82.5	848.5	828.5	58.5	85.0
DC-03D	46.386220	-120.146054	911.33	908.83	Stick-up	116.1	Schedule 40 PVC	0.020	9.5	106.1	115.6	802.7	793.2	100.0	116.5
DC-04	46.382446	-120.131129	877.22	877.62	Flush	51.0	Schedule 40 PVC	0.020	20.0	29.5	49.5	848.1	828.1	24.5	51.0
DC-05	46.382358	-120.120237	911.95	912.35	Flush	86.0	Schedule 40 PVC	0.020	20.0	63.5	83.5	848.9	828.9	59.5	86.0
DC-05D	46.382517	-120.120210	915.91	913.55	Stick-up	126.8	Schedule 40 PVC	0.020	9.5	116.8	126.3	796.8	787.3	114.0	128.0
DC-07	46.389612	-120.141671	889.29	889.78	Flush	61.0	Schedule 40 PVC	0.020	20.0	38.5	58.5	851.3	831.3	34.5	61.0
DC-09	46.404230	-120.120858	1048.60	1048.97	Flush	196.0	Schedule 40 PVC	0.020	20.0	173.5	193.5	875.5	855.5	169.5	196.0
DC-14	46.404240	-120.139685	1036.61	1036.92	Flush	151.0	Schedule 40 PVC	0.020	20.0	128.5	148.5	908.4	888.4	124.5	151.0
YVD-02	46.422601	-120.113697	1288.97	1285.81	Stick-up	35.0	Schedule 40 PVC	0.020	19.5	15.0	34.5	1270.8	1251.3	13.0	36.0
YVD-03	46.414227	-120.139638	1120.68	1118.15	Stick-up	200.1	Schedule 40 PVC	0.020	19.5	180.1	199.6	938.1	918.6	176.0	202.0
YVD-04	46.408062	-120.156224	1118.66	1116.06	Stick-up	245.2	Schedule 40 PVC	0.020	19.5	225.2	244.7	890.9	871.4	220.0	248.0
YVD-05	46.404457	-120.142790	1051.78	1052.26	Flush	182.2	Schedule 40 PVC	0.020	19.5	162.2	181.7	890.1	870.6	156.0	208.0
YVD-06	46.407671	-120.137191	1053.51	1053.88	Flush	169.0	Schedule 40 PVC	0.020	19.5	149.0	168.5	904.9	885.4	144.0	170.0
YVD-07	46.404432	-120.125205	1073.03	1070.59	Stick-up	168.3	Schedule 40 PVC	0.020	19.5	148.3	167.8	922.3	902.8	145.0	169.0
YVD-08	46.396920	-120.152771	1014.38	1011.92	Stick-up	182.5	Schedule 40 PVC	0.020	19.5	162.5	182.0	849.4	829.9	155.0	188.0
YVD-09	46.396832	-120.144078	966.81	964.28	Stick-up	122.3	Schedule 40 PVC	0.020	19.5	102.3	121.8	862.0	842.5	9.5	128.0
YVD-10	46.396978	-120.136165	958.00	955.45	Stick-up	103.1	Schedule 40 PVC	0.020	19.5	83.1	102.6	872.4	852.9	76.0	103.5
YVD-11	46.393446	-120.123627	967.91	965.51	Stick-up	116.9	Schedule 40 PVC	0.020	19.5	96.9	116.4	868.6	849.1	94.0	117.3
YVD-12	46.389730	-120.166996	961.91	959.51	Stick-up	151.4	Schedule 40 PVC	0.020	19.5	131.4	150.9	828.1	808.6	127.0	154.0
YVD-13	46.389708	-120.151673	965.59	963.07	Stick-up	141.0	Schedule 40 PVC	0.020	19.5	121.0	140.5	842.1	822.6	117.0	148.0
YVD-14R	46.389532	-120.145124	920.19	918.80	Stick-up	93.0	Schedule 40 PVC	0.020	20.0	72.0	92.0	846.8	826.8	69.0	93.0
YVD-15	46.389802	-120.137153	940.61	938.08	Stick-up	105.1	Schedule 40 PVC	0.020	19.5	85.1	104.6	853.0	833.5	81.0	128.0
YVD-16	46.389586	-120.114783	975.90	972.99	Stick-up	122.1	Schedule 40 PVC	0.020	19.5	102.1	121.6	870.9	851.4	100.5	127.0
YVD-17	46.380761	-120.142067	866.73	864.28	Stick-up	47.7	Schedule 40 PVC	0.020	19.5	27.7	47.2	836.6	817.1	25.0	58.0
YVD-18	46.389758	-120.151671	965.74	963.42	Stick-up	179.9	Schedule 40 PVC	0.020	9.5	169.9	179.4	793.5	784.0	166.0	181.5
Decommissioned Wells															
YVD-14	46.389536	-120.145067	920.19	917.64	Stick-up	91.0	Schedule 40 PVC	0.020	19.5	71.0	90.5	846.6	827.1	66.0	98.0

Notes:
Latitude and longitude in decimal degrees based on World Geodetic Survey 1984.
bgs: below ground surface
NAVD88: North American Vertical Datum of 1988
PVC: polyvinyl chloride

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-01	9/16/2013	1199.17	150.45	1048.72
DC-01	12/9/2013	1199.17	150.66	1048.51
DC-01	3/16/2014	1199.17	150.43	1048.74
DC-01	6/1/2014	1199.17	150.50	1048.67
DC-01	9/21/2014	1199.17	150.32	1048.85
DC-01	12/14/2014	1199.17	150.20	1048.97
DC-01	3/5/2015	1199.17	150.35	1048.82
DC-01	6/15/2015	1199.17	150.41	1048.76
DC-01	9/21/2015	1199.17	150.50	1048.67
DC-01	12/13/2015	1199.17	150.46	1048.71
DC-01	3/8/2016	1199.17	150.53	1048.64
DC-01	6/19/2016	1199.17	150.70	1048.47
DC-01	9/25/2016	1199.17	150.70	1048.47
DC-01	12/11/2016	1199.17	150.65	1048.52
DC-01	3/5/2017	1199.17	150.55	1048.62
DC-01	6/4/2017	1199.17	150.68	1048.49
DC-01	9/27/2017	1199.17	150.81	1048.36
DC-01	12/3/2017	1199.17	150.74	1048.43
DC-01	3/18/2018	1199.17	150.74	1048.43
DC-01	6/3/2018	1199.17	150.74	1048.43
DC-01	9/8/2018	1199.17	150.44	1048.73
DC-01	12/9/2018	1199.17	150.94	1048.23
DC-01	3/21/2019	1199.17	150.78	1048.39
DC-01	6/1/2019	1199.17	150.85	1048.32
DC-01	9/8/2019	1199.17	150.77	1048.40
DC-01	12/8/2019	1199.17	150.79	1048.38
DC-01	3/29/2020	1199.17	150.74	1048.43
DC-01	6/7/2020	1199.17	150.87	1048.30
DC-01	9/20/2020	1199.17	150.97	1048.20
DC-01	12/6/2020	1199.17	151.06	1048.11
DC-01	2/28/2021	1199.17	150.99	1048.18
DC-01	6/6/2021	1199.17	150.86	1048.31
DC-01	9/20/2021	1199.17	151.13	1048.04
DC-01	12/14/2021	1199.17	150.85	1048.32
DC-03	9/16/2013	910.58	72.43	838.15
DC-03	12/9/2013	910.58	72.55	838.03
DC-03	3/16/2014	910.58	73.62	836.96
DC-03	6/1/2014	910.58	73.25	837.33

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-03	9/21/2014	910.58	72.26	838.32
DC-03	12/14/2014	910.58	72.40	838.18
DC-03	3/5/2015	910.58	73.60	836.98
DC-03	6/15/2015	910.58	73.12	837.46
DC-03	9/21/2015	910.58	72.35	838.23
DC-03	12/13/2015	910.58	73.64	837.94
DC-03	3/8/2016	910.58	73.99	836.59
DC-03	6/19/2016	910.58	73.84	836.74
DC-03	9/25/2016	910.58	72.87	837.71
DC-03	12/11/2016	910.58	72.93	837.65
DC-03	3/5/2017	910.58	74.20	836.38
DC-03	6/4/2017	910.58	74.21	836.37
DC-03	9/27/2017	910.58	72.81	837.77
DC-03	12/3/2017	910.58	73.11	837.47
DC-03	3/18/2018	910.58	74.54	836.04
DC-03	6/3/2018	910.58	74.08	836.50
DC-03	9/8/2018	910.58	73.24	837.34
DC-03	12/9/2018	910.58	73.32	837.26
DC-03	3/21/2019	910.58	75.01	835.57
DC-03	6/1/2019	910.58	74.94	835.64
DC-03	9/8/2019	910.58	73.95	836.63
DC-03	12/8/2019	910.58	74.10	836.48
DC-03	3/29/2020	910.58	75.90	834.68
DC-03	6/7/2020	910.58	75.52	835.06
DC-03	9/20/2020	910.58	74.46	836.12
DC-03	12/6/2020	910.58	74.56	836.02
DC-03	2/28/2021	910.58	75.94	834.64
DC-03	6/6/2021	910.58	75.89	834.69
DC-03	9/20/2021	910.58	74.90	835.68
DC-03	12/14/2021	910.58	75.22	835.36
DC-03D	9/16/2013	911.33	73.03	838.30
DC-03D	12/9/2013	911.33	73.16	838.17
DC-03D	3/16/2014	911.33	74.35	836.98
DC-03D	6/1/2014	911.33	73.90	837.43
DC-03D	9/21/2014	911.33	72.87	838.46
DC-03D	12/14/2014	911.33	73.13	838.20
DC-03D	3/5/2015	911.33	74.28	837.05
DC-03D	6/15/2015	911.33	73.72	837.61

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-03D	9/21/2015	911.33	72.96	838.37
DC-03D	12/13/2015	911.33	73.31	838.02
DC-03D	3/8/2016	911.33	74.66	836.67
DC-03D	6/19/2016	911.33	74.47	836.86
DC-03D	9/25/2016	911.33	73.44	837.89
DC-03D	12/11/2016	911.33	73.73	837.60
DC-03D	3/5/2017	911.33	75.05	836.28
DC-03D	6/4/2017	911.33	74.88	836.45
DC-03D	9/27/2017	911.33	73.42	837.91
DC-03D	12/3/2017	911.33	73.80	837.53
DC-03D	3/18/2018	911.33	75.30	836.03
DC-03D	6/3/2018	911.33	74.82	836.51
DC-03D	9/8/2018	911.33	73.78	837.55
DC-03D	12/9/2018	911.33	74.01	837.32
DC-03D	3/21/2019	911.33	75.75	835.58
DC-03D	6/1/2019	911.33	75.65	835.68
DC-03D	9/8/2019	911.33	74.55	836.78
DC-03D	12/8/2019	911.33	74.79	836.54
DC-03D	3/29/2020	911.33	76.49	834.84
DC-03D	6/7/2020	911.33	76.19	835.14
DC-03D	9/20/2020	911.33	75.06	836.27
DC-03D	12/6/2020	911.33	75.24	836.09
DC-03D	2/28/2021	911.33	76.66	834.67
DC-03D	6/6/2021	911.33	76.57	834.76
DC-03D	9/20/2021	911.33	75.53	835.80
DC-03D	12/14/2021	911.33	75.88	835.45
DC-04	9/16/2013	877.22	31.75	845.47
DC-04	12/9/2013	877.22	32.61	844.61
DC-04	3/16/2014	877.22	34.55	842.67
DC-04	6/1/2014	877.22	34.65	842.57
DC-04	9/21/2014	877.22	31.99	845.23
DC-04	12/14/2014	877.22	32.98	844.24
DC-04	3/5/2015	877.22	34.31	842.91
DC-04	6/15/2015	877.22	34.70	842.52
DC-04	9/21/2015	877.22	33.61	843.61
DC-04	12/13/2015	877.22	34.38	842.84
DC-04	3/8/2016	877.22	35.60	841.62
DC-04	6/19/2016	877.22	34.74	842.48

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-04	9/25/2016	877.22	33.81	843.41
DC-04	12/11/2016	877.22	34.33	842.89
DC-04	3/5/2017	877.22	35.45	841.77
DC-04	6/4/2017	877.22	35.63	841.59
DC-04	9/27/2017	877.22	34.42	842.80
DC-04	12/3/2017	877.22	35.17	842.05
DC-04	3/18/2018	877.22	36.89	840.33
DC-04	6/3/2018	877.22	37.17	840.05
DC-04	9/8/2018	877.22	36.45	840.77
DC-04	12/9/2018	877.22	36.17	841.05
DC-04	3/21/2019	877.22	37.73	839.49
DC-04	6/1/2019	877.22	38.20	839.02
DC-04	9/8/2019	877.22	36.96	840.26
DC-04	12/8/2019	877.22	36.83	840.39
DC-04	3/29/2020	877.22	38.37	838.85
DC-04	6/7/2020	877.22	38.58	838.64
DC-04	9/20/2020	877.22	37.23	839.99
DC-04	12/6/2020	877.22	36.76	840.46
DC-04	2/28/2021	877.22	38.35	838.87
DC-04	6/6/2021	877.22	39.12	838.10
DC-04	9/20/2021	877.22	38.19	839.03
DC-04	12/14/2021	877.22	37.91	839.31
DC-05	9/16/2013	911.95	67.78	844.17
DC-05	12/9/2013	911.95	68.28	843.67
DC-05	3/16/2014	911.95	69.25	842.70
DC-05	6/1/2014	911.95	70.15	841.80
DC-05	9/21/2014	911.95	69.43	842.52
DC-05	12/14/2014	911.95	68.80	843.15
DC-05	3/5/2015	911.95	69.33	842.62
DC-05	6/15/2015	911.95	70.28	841.67
DC-05	9/21/2015	911.95	69.94	842.01
DC-05	12/13/2015	911.95	69.59	842.36
DC-05	3/8/2016	911.95	70.58	841.37
DC-05	6/19/2016	911.95	71.43	840.52
DC-05	9/25/2016	911.95	71.08	840.87
DC-05	12/11/2016	911.95	70.24	841.71
DC-05	3/5/2017	911.95	70.98	840.97
DC-05	6/4/2017	911.95	71.81	840.14

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-05	9/27/2017	911.95	71.14	840.81
DC-05	12/3/2017	911.95	70.50	841.45
DC-05	3/18/2018	911.95	71.06	840.89
DC-05	6/3/2018	911.95	71.33	840.62
DC-05	9/8/2018	911.95	71.39	840.56
DC-05	12/9/2018	911.95	70.82	841.13
DC-05	3/21/2019	911.95	71.46	840.49
DC-05	6/1/2019	911.95	71.95	840.00
DC-05	9/8/2019	911.95	72.09	839.86
DC-05	12/8/2019	911.95	71.47	840.48
DC-05	3/29/2020	911.95	72.43	839.52
DC-05	6/7/2020	911.95	73.11	838.84
DC-05	9/20/2020	911.95	73.38	838.57
DC-05	12/6/2020	911.95	73.03	838.92
DC-05	2/28/2021	911.95	73.97	837.98
DC-05	6/6/2021	911.95	74.88	837.07
DC-05	9/20/2021	911.95	74.92	837.03
DC-05	12/14/2021	911.95	74.08	837.87
DC-05D	9/16/2013	915.91	71.92	843.99
DC-05D	12/9/2013	915.91	72.04	843.87
DC-05D	3/16/2014	915.91	73.83	842.08
DC-05D	6/1/2014	915.91	74.80	841.11
DC-05D	9/21/2014	915.91	73.78	842.13
DC-05D	12/14/2014	915.91	73.02	842.89
DC-05D	3/5/2015	915.91	73.66	842.25
DC-05D	6/15/2015	915.91	74.71	841.20
DC-05D	9/21/2015	915.91	74.38	841.53
DC-05D	12/13/2015	915.91	73.88	842.03
DC-05D	3/8/2016	915.91	74.70	841.21
DC-05D	6/19/2016	915.91	75.71	840.20
DC-05D	9/25/2016	915.91	75.40	840.51
DC-05D	12/11/2016	915.91	74.65	841.26
DC-05D	3/5/2017	915.91	74.96	840.95
DC-05D	6/4/2017	915.91	75.94	839.97
DC-05D	9/27/2017	915.91	75.47	840.44
DC-05D	12/3/2017	915.91	74.64	841.27
DC-05D	3/18/2018	915.91	75.43	840.48
DC-05D	6/3/2018	915.91	75.46	840.45

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-05D	9/8/2018	915.91	75.54	840.37
DC-05D	12/9/2018	915.91	75.00	840.91
DC-05D	3/21/2019	915.91	75.30	840.61
DC-05D	6/1/2019	915.91	76.26	839.65
DC-05D	9/8/2019	915.91	76.17	839.74
DC-05D	12/8/2019	915.91	75.37	840.54
DC-05D	3/29/2020	915.91	76.38	839.53
DC-05D	6/7/2020	915.91	77.36	838.55
DC-05D	9/20/2020	915.91	77.85	838.06
DC-05D	12/6/2020	915.91	77.21	838.70
DC-05D	2/28/2021	915.91	78.68	837.23
DC-05D	6/6/2021	915.91	79.28	836.63
DC-05D	9/20/2021	915.91	79.44	836.47
DC-05D	12/14/2021	915.91	78.26	837.65
DC-07	9/16/2013	889.29	44.76	844.53
DC-07	12/9/2013	889.29	44.15	845.14
DC-07	3/16/2014	889.29	44.76	844.53
DC-07	6/1/2014	889.29	35.12	---
DC-07	9/21/2014	889.29	44.59	844.70
DC-07	12/14/2014	889.29	44.13	845.16
DC-07	3/5/2015	889.29	44.90	844.39
DC-07	6/15/2015	889.29	45.30	843.99
DC-07	9/21/2015	889.29	45.08	844.21
DC-07	12/13/2015	889.29	44.65	844.64
DC-07	3/8/2016	889.29	45.50	843.79
DC-07	6/19/2016	889.29	46.16	843.13
DC-07	9/25/2016	889.29	45.69	843.60
DC-07	12/11/2016	889.29	45.61	843.68
DC-07	3/5/2017	889.29	46.27	843.02
DC-07	6/4/2017	889.29	46.54	842.75
DC-07	9/27/2017	889.29	46.11	843.18
DC-07	12/3/2017	889.29	45.73	843.56
DC-07	3/18/2018	889.29	46.45	842.84
DC-07	6/3/2018	889.29	46.76	842.53
DC-07	9/8/2018	889.29	46.32	842.97
DC-07	12/9/2018	889.29	46.09	843.20
DC-07	3/21/2019	889.29	46.94	842.35
DC-07	6/1/2019	889.29	47.36	841.93

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-07	9/8/2019	889.29	46.79	842.50
DC-07	12/8/2019	889.29	46.68	842.61
DC-07	3/29/2020	889.29	47.65	841.64
DC-07	6/7/2020	889.29	48.04	841.25
DC-07	7/13/2020	889.29	48.06	841.23
DC-07	9/20/2020	889.29	47.80	841.49
DC-07	12/6/2020	889.29	47.51	841.78
DC-07	2/28/2021	889.29	48.12	841.17
DC-07	6/6/2021	889.29	48.69	840.60
DC-07	9/20/2021	889.29	48.17	841.12
DC-07	12/14/2021	889.29	48.05	841.24
DC-09	9/16/2013	1048.60	147.16	901.44
DC-09	12/9/2013	1048.60	143.1	905.50
DC-09	3/16/2014	1048.60	139.81	908.79
DC-09	6/1/2014	1048.60	142.53	906.07
DC-09	9/21/2014	1048.60	143.67	904.93
DC-09	12/14/2014	1048.60	139.42	909.18
DC-09	3/5/2015	1048.60	137.83	910.77
DC-09	6/15/2015	1048.60	146.33	902.27
DC-09	9/21/2015	1048.60	151.28	897.32
DC-09	12/13/2015	1048.60	147.46	901.14
DC-09	3/8/2016	1048.60	146.70	901.90
DC-09	6/19/2016	1048.60	151.03	897.57
DC-09	9/25/2016	1048.60	151.98	896.62
DC-09	12/11/2016	1048.60	148.71	899.89
DC-09	3/5/2017	1048.60	146.24	902.36
DC-09	6/4/2017	1048.60	148.62	899.98
DC-09	9/27/2017	1048.60	151.56	897.04
DC-09	12/3/2017	1048.60	149.27	899.33
DC-09	3/18/2018	1048.60	146.19	902.41
DC-09	6/3/2018	1048.60	149.27	899.33
DC-09	9/8/2018	1048.60	151.66	896.94
DC-09	12/9/2018	1048.60	149.99	898.61
DC-09	3/21/2019	1048.60	148.87	899.73
DC-09	6/1/2019	1048.60	151.32	897.28
DC-09	9/8/2019	1048.60	155.69	892.91
DC-09	12/8/2019	1048.60	155.23	893.37
DC-09	3/29/2020	1048.60	156.53	892.07

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-09	6/7/2020	1048.60	157.91	890.69
DC-09	9/20/2020	1048.60	161.02	887.58
DC-09	12/6/2020	1048.60	160.56	888.04
DC-09	2/28/2021	1048.60	159.29	889.31
DC-09	6/6/2021	1048.60	161.68	886.92
DC-09	9/20/2021	1048.60	164.74	883.86
DC-09	12/14/2021	1048.60	163.15	885.45
DC-14	9/16/2013	1036.61	131.08	905.53
DC-14	12/9/2013	1036.61	131.10	905.51
DC-14	3/16/2014	1036.61	130.32	906.29
DC-14	6/1/2014	1036.61	130.02	906.59
DC-14	9/21/2014	1036.61	130.25	906.36
DC-14	12/14/2014	1036.61	137.91	---
DC-14	3/5/2015	1036.61	129.51	907.10
DC-14	6/15/2015	1036.61	129.37	907.24
DC-14	9/21/2015	1036.61	130.28	906.33
DC-14	12/13/2015	1036.61	130.71	905.90
DC-14	3/8/2016	1036.61	131.26	905.35
DC-14	6/19/2016	1036.61	131.89	904.72
DC-14	9/25/2016	1036.61	132.76	903.85
DC-14	12/11/2016	1036.61	133.45	903.16
DC-14	3/5/2017	1036.61	133.81	902.80
DC-14	6/4/2017	1036.61	133.81	902.80
DC-14	9/27/2017	1036.61	134.16	902.45
DC-14	12/3/2017	1036.61	134.48	902.13
DC-14	3/18/2018	1036.61	133.83	902.78
DC-14	6/3/2018	1036.61	133.35	903.26
DC-14	9/8/2018	1036.61	133.67	902.94
DC-14	12/9/2018	1036.61	133.67	902.94
DC-14	3/21/2019	1036.61	133.24	903.37
DC-14	6/1/2019	1036.61	132.98	903.63
DC-14	9/8/2019	1036.61	133.72	902.89
DC-14	12/8/2019	1036.61	134.60	902.01
DC-14	3/29/2020	1036.61	135.10	901.51
DC-14	6/7/2020	1036.61	135.56	901.05
DC-14	9/20/2020	1036.61	136.54	900.07
DC-14	12/6/2020	1036.61	137.45	899.16
DC-14	2/28/2021	1036.61	138.02	898.59

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
DC-14	6/6/2021	1036.61	138.28	898.33
DC-14	9/20/2021	1036.61	139.06	897.55
DC-14	12/14/2021	1036.61	139.58	897.03
YVD-02	9/16/2013	1288.97	24.21	1264.76
YVD-02	12/9/2013	1288.97	32.85	1256.12
YVD-02	3/16/2014	1288.97	34.45	1254.52
YVD-02	6/1/2014	1288.97	22.10	1266.87
YVD-02	9/21/2014	1288.97	26.14	1262.83
YVD-02	12/14/2014	1288.97	33.01	1255.96
YVD-02	3/5/2015	1288.97	34.42	1254.55
YVD-02	6/15/2015	1288.97	19.69	1269.28
YVD-02	9/21/2015	1288.97	25.36	1263.61
YVD-02	12/13/2015	1288.97	33.25	1255.72
YVD-02	3/8/2016	1288.97	33.93	1255.04
YVD-02	6/19/2016	1288.97	27.49	1261.48
YVD-02	9/25/2016	1288.97	27.72	1261.25
YVD-02	12/11/2016	1288.97	32.52	1256.45
YVD-02	3/5/2017	1288.97	27.34	1261.63
YVD-02	6/4/2017	1288.97	26.97	1262.00
YVD-02	9/27/2017	1288.97	28.08	1260.89
YVD-02	12/3/2017	1288.97	33.83	1255.14
YVD-02	3/18/2018	1288.97	34.07	1254.90
YVD-02	6/3/2018	1288.97	33.78	1255.19
YVD-02	9/8/2018	1288.97	29.19	1259.78
YVD-02	12/9/2018	1288.97	33.17	1255.80
YVD-02	3/21/2019	1288.97	34.44	1254.53
YVD-02	6/1/2019	1288.97	30.68	1258.29
YVD-02	9/8/2019	1288.97	32.34	1256.63
YVD-02	12/8/2019	1288.97	33.92	1255.05
YVD-02	3/29/2020	1288.97	35.49	1253.48
YVD-02	6/7/2020	1288.97	37.44	1251.53
YVD-02	7/13/2020	1288.97	37.68	1251.29
YVD-02	9/19/2020	1288.97	37.94	1251.03
YVD-02	12/6/2020	1288.97	dry	---
YVD-02	2/28/2021	1288.97	37.93	1251.04
YVD-02	6/6/2021	1288.97	dry	---
YVD-02	9/20/2021	1288.97	dry	---
YVD-02	12/14/2021	1288.97	dry	---

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-03	9/16/2013	1120.68	189.88	930.80
YVD-03	12/9/2013	1120.68	190.42	930.26
YVD-03	3/16/2014	1120.68	189.10	931.58
YVD-03	6/1/2014	1120.68	188.97	931.71
YVD-03	9/21/2014	1120.68	189.04	931.64
YVD-03	12/14/2014	1120.68	188.73	931.95
YVD-03	3/5/2015	1120.68	187.92	932.76
YVD-03	6/15/2015	1120.68	188.70	931.98
YVD-03	9/21/2015	1120.68	189.63	931.05
YVD-03	12/13/2015	1120.68	189.85	930.83
YVD-03	3/8/2016	1120.68	190.64	930.04
YVD-03	6/19/2016	1120.68	191.31	929.37
YVD-03	9/25/2016	1120.68	191.61	929.07
YVD-03	12/11/2016	1120.68	191.25	929.43
YVD-03	3/5/2017	1120.68	190.85	929.83
YVD-03	6/4/2017	1120.68	191.20	929.48
YVD-03	9/27/2017	1120.68	191.77	928.91
YVD-03	12/3/2017	1120.68	191.61	929.07
YVD-03	3/18/2018	1120.68	191.55	929.13
YVD-03	6/3/2018	1120.68	191.40	929.28
YVD-03	9/8/2018	1120.68	191.96	928.72
YVD-03	12/9/2018	1120.68	192.59	928.09
YVD-03	3/21/2019	1120.68	191.86	928.82
YVD-03	6/1/2019	1120.68	191.85	928.83
YVD-03	9/8/2019	1120.68	192.53	928.15
YVD-03	12/8/2019	1120.68	193.62	927.06
YVD-03	3/29/2020	1120.68	193.93	926.75
YVD-03	6/7/2020	1120.68	194.17	926.51
YVD-03	9/20/2020	1120.68	195.07	925.61
YVD-03	11/19/2020	1120.68	195.78	924.90
YVD-03	12/6/2020	1120.68	195.75	924.93
YVD-03	2/28/2021	1120.68	195.80	924.88
YVD-03	6/6/2021	1120.68	195.50	925.18
YVD-03	9/20/2021	1120.68	196.18	924.50
YVD-03	12/14/2021	1120.68	195.94	924.74
YVD-04	9/16/2013	1118.66	220.55	898.11
YVD-04	12/9/2013	1118.66	223.50	895.16
YVD-04	3/16/2014	1118.66	222.20	896.46

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-04	6/1/2014	1118.66	221.04	897.62
YVD-04	9/21/2014	1118.66	220.67	897.99
YVD-04	12/14/2014	1118.66	221.30	897.36
YVD-04	3/5/2015	1118.66	220.72	897.94
YVD-04	6/15/2015	1118.66	221.61	897.05
YVD-04	9/21/2015	1118.66	221.99	896.67
YVD-04	12/13/2015	1118.66	221.71	896.95
YVD-04	3/8/2016	1118.66	220.74	897.92
YVD-04	6/19/2016	1118.66	221.50	897.16
YVD-04	9/25/2016	1118.66	221.05	897.61
YVD-04	12/11/2016	1118.66	221.07	897.59
YVD-04	3/5/2017	1118.66	220.89	897.77
YVD-04	6/4/2017	1118.66	221.83	896.83
YVD-04	9/27/2017	1118.66	222.49	896.17
YVD-04	12/3/2017	1118.66	222.38	896.28
YVD-04	3/18/2018	1118.66	222.37	896.29
YVD-04	6/3/2018	1118.66	222.04	896.62
YVD-04	9/8/2018	1118.66	222.29	896.37
YVD-04	12/9/2018	1118.66	222.36	896.30
YVD-04	3/21/2019	1118.66	221.67	896.99
YVD-04	6/1/2019	1118.66	221.71	896.95
YVD-04	9/8/2019	1118.66	222.06	896.60
YVD-04	12/8/2019	1118.66	222.31	896.35
YVD-04	3/29/2020	1118.66	222.47	896.19
YVD-04	6/7/2020	1118.66	222.76	895.90
YVD-04	9/20/2020	1118.66	223.52	895.14
YVD-04	12/6/2020	1118.66	224.24	894.42
YVD-04	2/28/2021	1118.66	224.39	894.27
YVD-04	6/6/2021	1118.66	224.48	894.18
YVD-04	9/20/2021	1118.66	225.71	892.95
YVD-04	12/14/2021	1118.66	225.63	893.03
YVD-05	9/16/2013	1051.78	167.50	884.28
YVD-05	12/9/2013	1051.78	166.35	885.43
YVD-05	3/16/2014	1051.78	165.40	886.38
YVD-05	6/1/2014	1051.78	165.58	886.20
YVD-05	9/21/2014	1051.78	166.01	885.77
YVD-05	12/14/2014	1051.78	165.35	886.43
YVD-05	3/5/2015	1051.78	164.86	886.92

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-05	6/15/2015	1051.78	166.04	885.74
YVD-05	9/21/2015	1051.78	168.04	883.74
YVD-05	12/13/2015	1051.78	167.75	884.03
YVD-05	3/8/2016	1051.78	167.71	884.07
YVD-05	6/19/2016	1051.78	168.45	883.33
YVD-05	9/25/2016	1051.78	168.97	882.81
YVD-05	12/11/2016	1051.78	168.51	883.27
YVD-05	3/5/2017	1051.78	167.98	883.80
YVD-05	6/4/2017	1051.78	168.07	883.71
YVD-05	9/27/2017	1051.78	169.83	881.95
YVD-05	12/3/2017	1051.78	169.67	882.11
YVD-05	3/18/2018	1051.78	169.38	882.40
YVD-05	6/3/2018	1051.78	169.45	882.33
YVD-05	9/8/2018	1051.78	169.85	881.93
YVD-05	12/9/2018	1051.78	169.44	882.34
YVD-05	3/21/2019	1051.78	168.86	882.92
YVD-05	6/1/2019	1051.78	169.06	882.72
YVD-05	9/8/2019	1051.78	170.22	881.56
YVD-05	12/8/2019	1051.78	170.62	881.16
YVD-05	3/29/2020	1051.78	171.06	880.72
YVD-05	6/7/2020	1051.78	171.58	880.20
YVD-05	9/20/2020	1051.78	172.53	879.25
YVD-05	12/6/2020	1051.78	172.95	878.83
YVD-05	2/28/2021	1051.78	173.05	878.73
YVD-05	6/6/2021	1051.78	173.39	878.39
YVD-05	9/20/2021	1051.78	NM[2]	---
YVD-05	12/14/2021	1051.78	174.20	877.58
YVD-06	9/16/2013	1053.51	110.65	942.86
YVD-06	12/9/2013	1053.51	108.21	945.30
YVD-06	3/16/2014	1053.51	105.98	947.53
YVD-06	6/1/2014	1053.51	106.49	947.02
YVD-06	9/21/2014	1053.51	108.02	945.49
YVD-06	12/14/2014	1053.51	106.32	947.19
YVD-06	3/5/2015	1053.51	104.68	948.83
YVD-06	6/15/2015	1053.51	106.37	947.14
YVD-06	9/21/2015	1053.51	109.01	944.50
YVD-06	12/13/2015	1053.51	108.72	944.79
YVD-06	3/8/2016	1053.51	108.90	944.61

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-06	6/19/2016	1053.51	111.03	942.48
YVD-06	9/25/2016	1053.51	112.05	941.46
YVD-06	12/15/2016	1053.51	109.70	943.81
YVD-06	3/5/2017	1053.51	107.89	945.62
YVD-06	6/4/2017	1053.51	109.14	944.37
YVD-06	9/27/2017	1053.51	110.99	942.52
YVD-06	12/3/2017	1053.51	109.30	944.21
YVD-06	3/18/2018	1053.51	106.37	947.14
YVD-06	6/3/2018	1053.51	108.02	945.49
YVD-06	9/8/2018	1053.51	109.87	943.64
YVD-06	12/9/2018	1053.51	107.99	945.52
YVD-06	3/21/2019	1053.51	106.86	946.65
YVD-06	6/1/2019	1053.51	108.32	945.19
YVD-06	9/8/2019	1053.51	110.95	942.56
YVD-06	12/8/2019	1053.51	111.11	942.40
YVD-06	3/29/2020	1053.51	110.92	942.59
YVD-06	6/7/2020	1053.51	112.14	941.37
YVD-06	9/20/2020	1053.51	113.89	939.62
YVD-06	12/6/2020	1053.51	113.00	940.51
YVD-06	2/28/2021	1053.51	111.71	941.80
YVD-06	6/6/2021	1053.51	112.36	941.15
YVD-06	9/20/2021	1053.51	113.89	939.62
YVD-06	12/14/2021	1053.51	111.58	941.93
YVD-07	9/16/2013	1073.03	157.99	915.04
YVD-07	12/9/2013	1073.03	157.26	915.77
YVD-07	3/16/2014	1073.03	153.95	919.08
YVD-07	6/1/2014	1073.03	153.87	919.16
YVD-07	9/21/2014	1073.03	155.93	917.10
YVD-07	12/14/2014	1073.03	155.40	917.63
YVD-07	3/5/2015	1073.03	153.42	919.61
YVD-07	6/15/2015	1073.03	154.30	918.73
YVD-07	9/21/2015	1073.03	157.09	915.94
YVD-07	12/13/2015	1073.03	158.05	914.98
YVD-07	3/8/2016	1073.03	157.96	915.07
YVD-07	6/19/2016	1073.03	158.75	914.28
YVD-07	9/25/2016	1073.03	160.29	912.74
YVD-07	12/11/2016	1073.03	160.00	913.03
YVD-07	3/5/2017	1073.03	157.59	915.44

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-07	6/4/2017	1073.03	157.56	915.47
YVD-07	9/27/2017	1073.03	159.81	913.22
YVD-07	12/3/2017	1073.03	159.30	913.73
YVD-07	3/18/2018	1073.03	156.76	916.27
YVD-07	6/3/2018	1073.03	156.44	916.59
YVD-07	9/8/2018	1073.03	158.22	914.81
YVD-07	12/9/2018	1073.03	158.27	914.76
YVD-07	3/21/2019	1073.03	156.58	916.45
YVD-07	6/1/2019	1073.03	157.05	915.98
YVD-07	9/8/2019	1073.03	159.06	913.97
YVD-07	12/8/2019	1073.03	160.48	912.55
YVD-07	3/29/2020	1073.03	159.62	913.41
YVD-07	6/7/2020	1073.03	160.42	912.61
YVD-07	9/20/2020	1073.03	162.61	910.42
YVD-07	12/6/2020	1073.03	164.10	908.93
YVD-07	2/28/2021	1073.03	162.27	910.76
YVD-07	6/6/2021	1073.03	161.15	911.88
YVD-07	9/20/2021	1073.03	163.83	909.20
YVD-07	12/14/2021	1073.03	163.66	909.37
YVD-08	9/16/2013	1014.38	170.83	843.55
YVD-08	12/9/2013	1014.38	171.08	843.30
YVD-08	3/16/2014	1014.38	170.66	843.72
YVD-08	6/1/2014	1014.38	170.50	843.88
YVD-08	9/21/2014	1014.38	170.50	843.88
YVD-08	12/14/2014	1014.38	170.22	844.16
YVD-08	3/5/2015	1014.38	169.83	844.55
YVD-08	6/15/2015	1014.38	170.13	844.25
YVD-08	9/21/2015	1014.38	170.67	843.71
YVD-08	12/13/2015	1014.38	170.63	843.75
YVD-08	3/8/2016	1014.38	171.00	843.38
YVD-08	6/19/2016	1014.38	171.51	842.87
YVD-08	9/25/2016	1014.38	171.75	842.63
YVD-08	12/11/2016	1014.38	171.52	842.86
YVD-08	3/5/2017	1014.38	171.16	843.22
YVD-08	6/4/2017	1014.38	171.87	842.51
YVD-08	9/27/2017	1014.38	172.30	842.08
YVD-08	12/3/2017	1014.38	171.95	842.43
YVD-08	3/18/2018	1014.38	172.17	842.21

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-08	6/3/2018	1014.38	172.10	842.28
YVD-08	9/8/2018	1014.38	172.36	842.02
YVD-08	12/9/2018	1014.38	172.39	841.99
YVD-08	3/21/2019	1014.38	172.03	842.35
YVD-08	6/1/2019	1014.38	172.39	841.99
YVD-08	9/8/2019	1014.38	172.56	841.82
YVD-08	12/8/2019	1014.38	172.73	841.65
YVD-08	3/29/2020	1014.38	172.66	841.72
YVD-08	6/7/2020	1014.38	172.87	841.51
YVD-08	9/20/2020	1014.38	173.33	841.05
YVD-08	12/6/2020	1014.38	173.75	840.63
YVD-08	2/28/2021	1014.38	173.87	840.51
YVD-08	6/6/2021	1014.38	173.75	840.63
YVD-08	9/20/2021	1014.38	174.58	839.80
YVD-08	12/14/2021	1014.38	174.37	840.01
YVD-09	9/16/2013	966.81	111.14	855.67
YVD-09	12/9/2013	966.81	109.93	856.88
YVD-09	3/16/2014	966.81	109.65	857.16
YVD-09	6/1/2014	966.81	109.95	856.86
YVD-09	9/21/2014	966.81	110.08	856.73
YVD-09	12/14/2014	966.81	109.90	856.91
YVD-09	3/5/2015	966.81	109.95	856.86
YVD-09	6/15/2015	966.81	110.35	856.46
YVD-09	9/21/2015	966.81	110.83	855.98
YVD-09	12/13/2015	966.81	110.89	855.92
YVD-09	3/8/2016	966.81	111.16	855.65
YVD-09	6/19/2016	966.81	111.41	855.40
YVD-09	9/25/2016	966.81	111.68	855.13
YVD-09	12/11/2016	966.81	111.84	854.97
YVD-09	3/5/2017	966.81	111.92	854.89
YVD-09	6/4/2017	966.81	112.29	854.52
YVD-09	9/27/2017	966.81	112.50	854.31
YVD-09	12/3/2017	966.81	112.59	854.22
YVD-09	3/18/2018	966.81	112.56	854.25
YVD-09	6/3/2018	966.81	112.28	854.53
YVD-09	9/8/2018	966.81	112.19	854.62
YVD-09	12/9/2018	966.81	111.77	855.04
YVD-09	3/21/2019	966.81	111.78	855.03

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-09	6/1/2019	966.81	112.03	854.78
YVD-09	9/8/2019	966.81	112.37	854.44
YVD-09	12/8/2019	966.81	112.55	854.26
YVD-09	3/29/2020	966.81	112.60	854.21
YVD-09	6/7/2020	966.81	112.92	853.89
YVD-09	9/20/2020	966.81	113.29	853.52
YVD-09	12/6/2020	966.81	113.55	853.26
YVD-09	2/28/2021	966.81	113.63	853.18
YVD-09	6/6/2021	966.81	113.80	853.01
YVD-09	9/20/2021	966.81	114.41	852.40
YVD-09	12/14/2021	966.81	114.66	852.15
YVD-10	9/16/2013	958.00	90.04	867.96
YVD-10	12/9/2013	958.00	89.20	868.80
YVD-10	3/16/2014	958.00	89.39	868.61
YVD-10	6/1/2014	958.00	90.35	867.65
YVD-10	9/21/2014	958.00	90.41	867.59
YVD-10	12/14/2014	958.00	88.76	869.24
YVD-10	3/5/2015	958.00	89.90	868.10
YVD-10	6/15/2015	958.00	91.10	866.90
YVD-10	9/21/2015	958.00	91.85	866.15
YVD-10	12/13/2015	958.00	91.52	866.48
YVD-10	3/8/2016	958.00	91.91	866.09
YVD-10	6/19/2016	958.00	92.92	865.08
YVD-10	9/25/2016	958.00	92.99	865.01
YVD-10	12/11/2016	958.00	93.02	864.98
YVD-10	3/5/2017	958.00	93.24	864.76
YVD-10	6/4/2017	958.00	93.70	864.30
YVD-10	9/27/2017	958.00	93.39	864.61
YVD-10	12/3/2017	958.00	92.86	865.14
YVD-10	3/18/2018	958.00	92.49	865.51
YVD-10	6/3/2018	958.00	92.81	865.19
YVD-10	9/8/2018	958.00	93.35	864.65
YVD-10	12/9/2018	958.00	92.50	865.50
YVD-10	3/21/2019	958.00	92.36	865.64
YVD-10	6/1/2019	958.00	93.03	864.97
YVD-10	9/8/2019	958.00	93.67	864.33
YVD-10	12/8/2019	958.00	93.44	864.56
YVD-10	3/29/2020	958.00	94.06	863.94

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-10	6/7/2020	958.00	94.38	863.62
YVD-10	9/20/2020	958.00	94.92	863.08
YVD-10	12/6/2020	958.00	94.39	863.61
YVD-10	2/28/2021	958.00	94.67	863.33
YVD-10	6/6/2021	958.00	95.54	862.46
YVD-10	9/20/2021	958.00	95.88	862.12
YVD-10	12/14/2021	958.00	95.35	862.65
YVD-11	9/16/2013	967.91	106.03	861.88
YVD-11	12/9/2013	967.91	105.77	862.14
YVD-11	3/16/2014	967.91	105.72	862.19
YVD-11	6/1/2014	967.91	106.07	861.84
YVD-11	9/21/2014	967.91	106.04	861.87
YVD-11	12/14/2014	967.91	106.08	861.83
YVD-11	3/5/2015	967.91	106.18	861.73
YVD-11	6/15/2015	967.91	106.67	861.24
YVD-11	9/21/2015	967.91	106.52	861.39
YVD-11	12/13/2015	967.91	106.88	861.03
YVD-11	3/8/2016	967.91	107.58	860.33
YVD-11	6/19/2016	967.91	108.52	859.39
YVD-11	9/25/2016	967.91	108.95	858.96
YVD-11	12/11/2016	967.91	108.90	859.01
YVD-11	3/5/2017	967.91	109.08	858.83
YVD-11	6/4/2017	967.91	109.31	858.60
YVD-11	9/27/2017	967.91	108.75	859.16
YVD-11	12/3/2017	967.91	107.73	860.18
YVD-11	3/18/2018	967.91	108.10	859.81
YVD-11	6/3/2018	967.91	108.63	859.28
YVD-11	9/8/2018	967.91	108.97	858.94
YVD-11	12/9/2018	967.91	108.16	859.75
YVD-11	3/21/2019	967.91	108.58	859.33
YVD-11	6/1/2019	967.91	109.00	858.91
YVD-11	9/8/2019	967.91	109.58	858.33
YVD-11	12/8/2019	967.91	109.63	858.28
YVD-11	3/29/2020	967.91	110.09	857.82
YVD-11	6/7/2020	967.91	110.52	857.39
YVD-11	9/20/2020	967.91	111.12	856.79
YVD-11	12/6/2020	967.91	111.12	856.79
YVD-11	2/28/2021	967.91	111.24	856.67

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-11	6/6/2021	967.91	111.79	856.12
YVD-11	9/20/2021	967.91	111.94	855.97
YVD-11	12/14/2021	967.91	111.87	856.04
YVD-12	9/16/2013	961.91	138.50	823.41
YVD-12	12/9/2013	961.91	138.34	823.57
YVD-12	3/16/2014	961.91	137.55	824.36
YVD-12	6/1/2014	961.91	137.61	824.30
YVD-12	9/21/2014	961.91	137.45	824.46
YVD-12	12/14/2014	961.91	137.25	824.66
YVD-12	3/5/2015	961.91	136.52	825.39
YVD-12	6/15/2015	961.91	137.85	824.06
YVD-12	9/21/2015	961.91	138.95	822.96
YVD-12	12/13/2015	961.91	138.11	823.80
YVD-12	3/8/2016	961.91	138.26	823.65
YVD-12	6/19/2016	961.91	139.23	822.68
YVD-12	9/25/2016	961.91	139.13	822.78
YVD-12	12/11/2016	961.91	138.56	823.35
YVD-12	3/5/2017	961.91	138.02	823.89
YVD-12	6/4/2017	961.91	138.90	823.01
YVD-12	9/27/2017	961.91	139.05	822.86
YVD-12	12/3/2017	961.91	138.48	823.43
YVD-12	3/18/2018	961.91	138.46	823.45
YVD-12	6/3/2018	961.91	138.75	823.16
YVD-12	9/8/2018	961.91	139.15	822.76
YVD-12	12/9/2018	961.91	139.14	822.77
YVD-12	3/21/2019	961.91	138.69	823.22
YVD-12	6/1/2019	961.91	139.27	822.64
YVD-12	9/8/2019	961.91	139.67	822.24
YVD-12	12/8/2019	961.91	139.51	822.40
YVD-12	3/29/2020	961.91	139.82	822.09
YVD-12	6/7/2020	961.91	140.11	821.80
YVD-12	9/20/2020	961.91	140.51	821.40
YVD-12	12/6/2020	961.91	140.48	821.43
YVD-12	2/28/2021	961.91	140.39	821.52
YVD-12	6/6/2021	961.91	140.70	821.21
YVD-12	9/20/2021	961.91	141.51	820.40
YVD-12	12/14/2021	961.91	140.81	821.10

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-13	9/16/2013	965.59	127.43	838.16
YVD-13	12/9/2013	965.59	127.25	838.34
YVD-13	3/16/2014	965.59	127.58	838.01
YVD-13	6/1/2014	965.59	127.59	838.00
YVD-13	9/21/2014	965.59	127.29	838.30
YVD-13	12/14/2014	965.59	127.20	838.39
YVD-13	3/5/2015	965.59	127.35	838.24
YVD-13	6/15/2015	965.59	127.60	837.99
YVD-13	9/21/2015	965.59	127.36	838.23
YVD-13	12/13/2015	965.59	127.13	838.46
YVD-13	3/8/2016	965.59	127.87	837.72
YVD-13	6/19/2016	965.59	128.17	837.42
YVD-13	9/25/2016	965.59	127.88	837.71
YVD-13	12/11/2016	965.59	127.57	838.02
YVD-13	3/5/2017	965.59	127.92	837.67
YVD-13	6/4/2017	965.59	128.49	837.10
YVD-13	9/27/2017	965.59	128.05	837.54
YVD-13	12/3/2017	965.59	127.88	837.71
YVD-13	3/18/2018	965.59	128.47	837.12
YVD-13	6/3/2018	965.59	128.44	837.15
YVD-13	9/8/2018	965.59	128.28	837.31
YVD-13	12/9/2018	965.59	127.87	837.72
YVD-13	3/21/2019	965.59	128.46	837.13
YVD-13	6/1/2019	965.59	128.88	836.71
YVD-13	9/8/2019	965.59	128.62	836.97
YVD-13	12/8/2019	965.59	128.51	837.08
YVD-13	3/29/2020	965.59	129.09	836.50
YVD-13	6/7/2020	965.59	129.53	836.06
YVD-13	9/20/2020	965.59	129.32	836.27
YVD-13	12/6/2020	965.59	129.18	836.41
YVD-13	2/28/2021	965.59	129.66	835.93
YVD-13	6/6/2021	965.59	129.99	835.60
YVD-13	9/20/2021	965.59	130.05	835.54
YVD-13	12/14/2021	965.59	129.81	835.78
YVD-14	9/16/2013	920.19	77.30	842.89
YVD-14	12/9/2013	920.19	76.97	843.22
YVD-14	3/16/2014	920.19	77.45	842.74
YVD-14	6/1/2014	920.19	77.61	842.58

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-14	9/21/2014	920.19	77.28	842.91
YVD-14	12/14/2014	920.19	76.90	843.29
YVD-14	3/5/2015	920.19	77.51	842.68
YVD-14	6/17/2015	NM	NM	---
YVD-14	9/21/2015	NM	NM	---
YVD-14R	12/13/2015	921.41	77.76	843.65
YVD-14R	3/8/2016	921.41	78.53	842.88
YVD-14R	6/19/2016	921.41	79.03	842.38
YVD-14R	9/25/2016	921.41	78.68	842.73
YVD-14R	12/11/2016	921.41	78.57	842.84
YVD-14R	3/5/2017	921.41	79.14	842.27
YVD-14R	42890	921.41	79.53	841.88
YVD-14R	9/27/2017	921.41	78.93	842.48
YVD-14R	12/3/2017	921.41	78.72	842.69
YVD-14R	3/18/2018	921.41	79.40	842.01
YVD-14R	6/3/2018	921.41	79.35	842.06
YVD-14R	9/8/2018	921.41	79.26	842.15
YVD-14R	12/9/2018	921.41	78.93	842.48
YVD-14R	3/21/2019	921.41	79.75	841.66
YVD-14R	6/1/2019	921.41	80.14	841.27
YVD-14R	9/8/2019	921.41	79.74	841.67
YVD-14R	12/8/2019	921.41	79.60	841.81
YVD-14R	3/29/2020	921.41	80.46	840.95
YVD-14R	6/7/2020	921.41	80.83	840.58
YVD-14R	9/20/2020	921.41	80.55	840.86
YVD-14R	12/6/2020	921.41	80.38	841.03
YVD-14R	2/28/2021	921.41	80.92	840.49
YVD-14R	6/6/2021	921.41	81.41	840.00
YVD-14R	9/20/2021	921.41	81.13	840.28
YVD-14R	12/14/2021	921.41	80.95	840.46
YVD-15	9/16/2013	940.61	90.34	850.27
YVD-15	12/9/2013	940.61	90.49	850.12
YVD-15	3/16/2014	940.61	91.62	848.99
YVD-15	6/1/2014	940.61	92.57	848.04
YVD-15	9/21/2014	940.61	88.84	851.77
YVD-15	12/14/2014	940.61	90.56	850.05
YVD-15	3/5/2015	940.61	92.03	848.58
YVD-15	6/15/2015	940.61	93.22	847.39

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-15	9/21/2015	940.61	93.43	847.18
YVD-15	12/13/2015	940.61	93.21	847.40
YVD-15	3/8/2016	940.61	93.83	846.78
YVD-15	6/19/2016	940.61	94.70	845.91
YVD-15	9/25/2016	940.61	94.70	845.91
YVD-15	12/11/2016	940.61	94.44	846.17
YVD-15	3/5/2017	940.61	94.96	845.65
YVD-15	6/4/2017	940.61	95.52	845.09
YVD-15	9/27/2017	940.61	95.16	845.45
YVD-15	12/3/2017	940.61	94.74	845.87
YVD-15	3/18/2018	940.61	94.96	845.65
YVD-15	6/3/2018	940.61	95.32	845.29
YVD-15	9/8/2018	940.61	95.32	845.29
YVD-15	12/9/2018	940.61	94.79	845.82
YVD-15	3/21/2019	940.61	95.36	845.25
YVD-15	6/1/2019	940.61	95.83	844.78
YVD-15	9/8/2019	940.61	95.92	844.69
YVD-15	12/8/2019	940.61	95.55	845.06
YVD-15	3/29/2020	940.61	96.14	844.47
YVD-15	6/7/2020	940.61	96.58	844.03
YVD-15	9/20/2020	940.61	96.50	844.11
YVD-15	12/6/2020	940.61	95.96	844.65
YVD-15	2/28/2021	940.61	96.25	844.36
YVD-15	6/6/2021	940.61	96.97	843.64
YVD-15	9/20/2021	940.61	97.05	843.56
YVD-15	12/14/2021	940.61	96.53	844.08
YVD-16	9/16/2013	975.90	112.95	862.95
YVD-16	12/9/2013	975.90	112.84	863.06
YVD-16	3/16/2014	975.90	112.50	863.40
YVD-16	6/1/2014	975.90	112.62	863.28
YVD-16	9/21/2014	975.90	113.02	862.88
YVD-16	12/14/2014	975.90	112.86	863.04
YVD-16	3/5/2015	975.90	112.42	863.48
YVD-16	6/15/2015	975.90	112.85	863.05
YVD-16	9/21/2015	975.90	113.95	861.95
YVD-16	12/13/2015	975.90	114.04	861.86
YVD-16	3/8/2016	975.90	114.51	861.39
YVD-16	6/19/2016	975.90	115.18	860.72

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-16	9/25/2016	975.90	115.67	860.23
YVD-16	12/11/2016	975.90	115.17	860.73
YVD-16	3/5/2017	975.90	114.90	861.00
YVD-16	6/4/2017	975.90	115.51	860.39
YVD-16	9/27/2017	975.90	115.32	860.58
YVD-16	12/3/2017	975.90	114.86	861.04
YVD-16	3/18/2018	975.90	114.49	861.41
YVD-16	6/3/2018	975.90	114.62	861.28
YVD-16	9/8/2018	975.90	115.77	860.13
YVD-16	12/9/2018	975.90	115.57	860.33
YVD-16	3/21/2019	975.90	115.14	860.76
YVD-16	6/1/2019	975.90	115.72	860.18
YVD-16	9/8/2019	975.90	116.43	859.47
YVD-16	12/8/2019	975.90	116.71	859.19
YVD-16	3/29/2020	975.90	116.83	859.07
YVD-16	6/7/2020	975.90	117.34	858.56
YVD-16	9/20/2020	975.90	118.44	857.46
YVD-16	12/6/2020	975.90	118.68	857.22
YVD-16	2/28/2021	975.90	118.70	857.20
YVD-16	6/6/2021	975.90	118.88	857.02
YVD-16	9/20/2021	975.90	119.54	856.36
YVD-16	12/14/2021	975.90	119.34	856.56
YVD-17	9/16/2013	866.73	32.07	834.66
YVD-17	12/9/2013	866.73	34.81	831.92
YVD-17	3/16/2014	866.73	37.97	828.76
YVD-17	6/1/2014	866.73	35.50	831.23
YVD-17	9/21/2014	866.73	31.86	834.87
YVD-17	12/14/2014	866.73	34.74	831.99
YVD-17	3/5/2015	866.73	37.79	828.94
YVD-17	6/15/2015	866.73	34.57	832.16
YVD-17	9/21/2015	866.73	31.92	834.81
YVD-17	12/13/2015	866.73	35.16	831.57
YVD-17	3/8/2016	866.73	37.47	829.26
YVD-17	6/19/2016	866.73	35.37	831.36
YVD-17	9/25/2016	866.73	32.31	834.42
YVD-17	12/11/2016	866.73	35.20	831.53
YVD-17	3/5/2017	866.73	37.88	828.85
YVD-17	6/4/2017	866.73	36.13	830.60

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-17	9/27/2017	866.73	31.22	835.51
YVD-17	12/3/2017	866.73	34.65	832.08
YVD-17	3/18/2018	866.73	38.54	828.19
YVD-17	6/3/2018	866.73	36.20	830.53
YVD-17	9/8/2018	866.73	32.64	834.09
YVD-17	12/9/2018	866.73	35.42	831.31
YVD-17	3/21/2019	866.73	39.08	827.65
YVD-17	6/1/2019	866.73	37.30	829.43
YVD-17	9/9/2019	866.73	32.69	834.04
YVD-17	12/8/2019	866.73	35.95	830.78
YVD-17	3/29/2020	866.73	39.61	827.12
YVD-17	6/7/2020	866.73	36.93	829.80
YVD-17	9/20/2020	866.73	33.68	833.05
YVD-17	12/6/2020	866.73	36.31	830.42
YVD-17	2/28/2021	866.73	39.80	826.93
YVD-17	6/6/2021	866.73	37.82	828.91
YVD-17	9/20/2021	866.73	34.26	832.47
YVD-17	12/14/2021	866.73	37.37	829.36
YVD-18	9/16/2013	965.74	127.49	838.25
YVD-18	12/9/2013	965.74	127.45	838.29
YVD-18	3/16/2014	965.74	127.75	837.99
YVD-18	6/1/2014	965.74	127.69	838.05
YVD-18	9/21/2014	965.74	127.33	838.41
YVD-18	12/14/2014	965.74	127.33	838.41
YVD-18	3/5/2015	965.74	127.46	838.28
YVD-18	6/15/2015	965.74	127.71	838.03
YVD-18	9/21/2015	965.74	127.42	838.32
YVD-18	12/13/2015	965.74	127.24	838.50
YVD-18	3/8/2016	965.74	128.05	837.69
YVD-18	6/19/2016	965.74	128.29	837.45
YVD-18	9/25/2016	965.74	127.92	837.82
YVD-18	12/11/2016	965.74	127.66	838.08
YVD-18	3/5/2017	965.74	128.01	837.73
YVD-18	6/4/2017	965.74	128.54	837.20
YVD-18	9/27/2017	965.74	128.14	837.60
YVD-18	12/3/2017	965.74	127.95	837.79
YVD-18	3/18/2018	965.74	128.72	837.02
YVD-18	6/3/2018	965.74	128.48	837.26

Table 4
Historical Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-18	9/8/2018	965.74	128.35	837.39
YVD-18	12/9/2018	965.74	128.00	837.74
YVD-18	3/21/2019	965.74	128.62	837.12
YVD-18	6/1/2019	965.74	129.04	836.70
YVD-18	9/8/2019	965.74	128.71	837.03
YVD-18	12/8/2019	965.74	128.63	837.11
YVD-18	3/29/2020	965.74	129.29	836.45
YVD-18	6/7/2020	965.74	129.67	836.07
YVD-18	9/20/2020	965.74	129.41	836.33
YVD-18	12/6/2020	965.74	129.32	836.42
YVD-18	2/28/2021	965.74	129.90	835.84
YVD-18	6/6/2021	965.74	130.11	835.63
YVD-18	9/20/2021	965.74	130.20	835.54
YVD-18	12/14/2021	965.74	129.97	835.77

Notes:
1. Erroneous or anomalous measurement; not included in dataset.
2. Well not accessible; partly paved over.
BTOC: below top of casing
NAVD88: North American Vertical Datum of 1988
NM: Not measured due to well damage.

Table 5
Estimated Possible Average Linear Groundwater Flow Velocities – Fourth Quarter 2021

Material	Hydraulic Conductivity[1,2] [K] (feet per day)	Effective Porosity[3] [n_e]	K/n_e	Estimated Possible Average Linear Groundwater Flow Velocities [V_X] (feet per day)			
				Second Quarter 2021 Hydraulic Gradients			
				Site Average I[4]	Upslope I	Central I	Southern I
				0.013	***0.026***	***0.011***	***0.004***
Fine sand	53	0.33	161	2.0	4.2	1.7	0.7
Medium sand to fine gravel	131	0.32	409	5.2	10.6	4.4	1.8
Medium sand to coarse gravel	164	0.30	547	6.9	14.2	5.9	2.4
Fine gravel	267	0.28	954	12.0	24.8	10.4	4.1

Notes:

1. Hydraulic conductivities obtained from U.S. Environmental Protection Agency Method 9100, Saturated Hydraulic Conductivity, Saturated Leachate Conductivity, and Intrinsic Permeability, Chapter 6 – Properties; Publication SW-846: *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*; 1986.
2. Hydraulic conductivities presented are for well-sorted (poorly graded) material.
3. Effective porosity obtained from *Data Collection Handbook to Support Modeling Impacts of Radioactive Material in Soil*; Environmental Assessment and Information Sciences Division, Argonne National Laboratory; Argonne, Illinois; April 1993.
4. Hydraulic gradient [I] in feet per foot.

Table 6
Field Parameter Measurements – Fourth Quarter 2021

Well ID	Measurement Date	Bladder Pump Type (portable or dedicated)	Purge Time (minutes)	Volume Purged (liters)	Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductance (µS/cm)	pH (Standard Units)	Oxidation/Reduction Potential (mV)	Turbidity (NTU)
DC-03	12/14/2021	Dedicated	15	4.0	12.9	8.72	2365	7.11	---[1]	2.43
DC-03D	12/14/2021	Dedicated	15	3.9	13.5	1.30	1268	7.05	---[1]	1.59
DC-04	12/15/2021	Dedicated	15	5.4	13.4	8.38	1279	7.04	---[1]	1.09
DC-05	12/15/2021	Dedicated	12	2.8	12.2	7.55	1148	7.22	---[1]	2.16
DC-05D	12/14/2021	Dedicated	12	2.8	12.9	7.77	692	7.73	---[1]	3.35
DC-07	12/15/2021	Dedicated	12	4.0	14.0	0.18	1139	6.73	---[1]	4.61
DC-14	12/15/2021	Dedicated	15	2.8	14.0	1.55	1679	6.70	---[1]	0.94
YVD-02	NS	Dedicated	---	---	---	---	---	---	---[1]	---
YVD-08	12/15/2021	Dedicated	33	7.0	13.9	6.19	1541	7.33	117.7	15.6
YVD-09	12/14/2021	Dedicated	15	3.0	14.4	6.39	1360	7.33	---[1]	1.27
YVD-10	12/14/2021	Dedicated	12	3.3	12.6	7.22	2150	6.94	---[1]	2.52
YVD-11	12/14/2021	Dedicated	15	1.5	11.4	6.92	1327	7.14	---[1]	4.95
YVD-12	12/15/2021	Dedicated	15	3.0	14.0	7.07	1087	7.52	102.6	1.27
YVD-13	12/15/2021	Dedicated	15	4.0	13.2	7.29	1229	7.50	106.6	1.72
YVD-14R	12/14/2021	Dedicated	12	4.0	13.9	0.95	2257	6.83	---[1]	1.16
YVD-15	12/14/2021	Dedicated	12	2.3	12.5	7.18	951	7.34	---[1]	1.4
YVD-16	12/14/2021	Dedicated	12	2.5	12.4	8.81	881	7.52	---[1]	71.3
YVD-18	12/15/2021	Dedicated	18	3.6	13.1	8.22	1019	7.28	106.6	1.21

Notes:

1: ORP probe defective; no readings

---: no value or not applicable

°C: degrees Celsius

µS/cm: microsiemens per centimeter

mg/L: milligrams per liter

mV: millivolt

NS: not sampled

NTU: nephelometric turbidity unit

Table 7
Groundwater Analytical Results – Fourth Quarter 2021

				Analyte	Nitrate (as N)		
				Analytical Method	EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code
DC-03	YVD-121421-11	12/14/2021	N	K2114499	**184**	J	HTQ, MS
DC-03D	YVD-121421-10	12/14/2021	N	K2114499	**35.1**	--	--
DC-04	YVD-121521-21	12/15/2021	N	K2114550	**32.7**	J	HTQ, MS
DC-05	YVD-121521-15	12/15/2021	N	K2114550	**43.5**	J	HTQ, MS
DC-05D	YVD-121421-04	12/14/2021	N	K2114499	**12.7**	J	HTQ, MS
DC-07	YVD-121521-17	12/15/2021	N	K2114550	**20.3**	J	HTQ, MS
DC-14	YVD-121521-19	12/15/2021	N	K2114550	**51.4**	J	HTQ, MS
YVD-02	NS[1]	--	--	--	--	--	--
YVD-08	YVD-121521-20	12/15/2021	N	K2114550	**60.8**	J	HTQ, MS
YVD-09	YVD-121421-09	12/14/2021	N	K2114499	**55.3**	J	HTQ, MS
YVD-10	YVD-121421-06	12/14/2021	N	K2114499	**75.8**	--	--
YVD-11	YVD-121421-05	12/14/2021	N	K2114499	**46.1**	--	--
YVD-12	YVD-121521-18	12/15/2021	N	K2114550	**13.4**	J	HTQ, MS
YVD-13	YVD-121521-16	12/15/2021	N	K2114550	**34.0**	J	HTQ, MS
YVD-14R	YVD-121421-08	12/14/2021	N	K2114499	**118**	J	HTQ, MS
YVD-15	YVD-121421-07	12/14/2021	N	K2114499	**15.1**	--	--
YVD-16	YVD-121421-02	12/14/2021	N	K2114499	**19.7**	J	HTQ, MS
YVD-16	YVD-121421-03	12/14/2021	FD	K2114499	**20.1**	--	--
YVD-18	YVD-121521-12	12/15/2021	N	K2114550	**26.6**	J	HTQ, MS
YVD-18	YVD-121521-14	12/15/2021	FD	K2114550	**26.7**	J	HTQ, MS

Notes:
1. Well YVD-02 was dry. No sample could be collected.
Bold: detected result
--: not applicable
(as N): reported as nitrogen
EPA: U.S. Environmental Protection Agency
FD: field duplicate
HTQ: A dilution and reanalysis of this sample were conducted. The reanalysis was conducted outside of the designated holding time.
J: The compound was positively identified; however, the associated numerical value is an estimated concentration.
mg/L: milligrams per liter
MS: The matrix spike/matrix spike duplicate percent recoveries were outside target limits.
N: normal sample
NS: not sampled

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-01	DC-01-130104	01/04/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**9.8**	-	-
DC-01	DC-01-130924	09/24/2013	N	SWI0178	**110**	-	-	**110**	-	-	-	-	-	0.1	U	-	**88.9**	-	-	**44**	-	-	0.5	U	-	**32.5**	-	-	**11.1**	-	-
DC-01	DC-01-131211	12/11/2013	N	SWL0063	**159**	-	-	**160**	-	-	-	-	-	-	R	MSD	**91.4**	-	-	**47.8**	-	-	5	U	-	**32.6**	-	-	**11.5**	-	-
DC-01	DC-01-140318	03/18/2014	N	SXC0095	**159**	-	-	**160**	-	-	-	-	-	**0.101**	-	-	**90.5**	-	-	**48.2**	-	-	5	U	-	**31.4**	-	-	**11.2**	-	-
DC-01	DC-01-140602	06/02/2014	N	SXF0017	**164**	-	-	**165**	-	-	-	-	-	0.1	U	-	**88.6**	-	-	**41.4**	-	-	2	U	-	**31.9**	-	-	**9.76**	-	-
DC-01	DC-01-140923	09/23/2014	N	SXI0158	**154**	-	-	**155**	-	-	-	-	-	-	R	MSD	**89.4**	-	-	**41.8**	-	-	5	U	-	**31.2**	-	-	**9**	-	-
DC-01	DC-01-141216	12/16/2014	N	SXL0121	**140**	-	-	**140**	-	-	-	-	-	0.1	U	-	**92.8**	-	-	**85.7**	-	-	5	U	-	**34.0**	-	-	**18.9**	-	-
DC-01	DC-01-150316	03/16/2015	N	5904471	**150**	-	-	**150**	-	-	-	-	-	0.1	U	-	**91.0**	-	-	**44**	-	-	5	U	-	**32.0**	-	-	**11**	-	-
DC-01	DC-01-150616	06/16/2015	N	59010751	**150**	-	-	**150**	-	-	-	-	-	0.1	U	-	**91.0**	J+	MSD	**42**	-	-	5	U	-	**33.0**	J+	MSD	**9.5**	-	-
DC-01	DC-01-150923	09/23/2015	N	59020281	**150**	-	-	**150**	-	-	-	-	-	**0.13**	-	-	**83.0**	-	-	**37**	-	-	5	U	-	**32.0**	-	-	**8.6**	-	-
DC-01	YVD-D1-150923	09/23/2015	FD	59020281	**160**	-	-	**160**	-	-	-	-	-	0.1	U	-	**85.0**	-	-	**43**	-	-	0.5	U	-	**33.0**	-	-	**10**	-	-
DC-01	DC-01-151214	12/14/2015	N	59025431	**170**	J	FDP	**170**	J	FDP	-	-	-	-	R	MSD	**97.0**	-	-	**38**	-	-	5	U	-	**34.0**	-	-	**8.8**	-	-
DC-01	DC-01-160308	03/08/2016	N	59029711	**150**	-	-	**150**	-	-	-	-	-	-	R	FBK, FDP	**83.0**	-	-	**40**	-	-	5	U	-	**30.0**	-	-	**8.6**	-	-
DC-01	DC-01-160620	6/20/2016	N	59037101	**150**	-	-	**150**	-	-	-	-	-	0.1	U	-	**83.0**	-	-	**40**	-	-	5	U	-	**31.0**	-	-	**9.2**	-	-
DC-01	DC-01-160928	9/28/2016	N	K1611629	**147**	-	-	**147**	-	-	-	-	-	0.050	U	MBK	**80.6**	-	-	**34.0**	-	-	**0.25**	-	-	**28.5**	-	-	**9.15**	-	-
DC-01	DC-01-161212	12/12/2016	N	K1615045	**144**	-	-	**144**	-	-	-	-	-	0.050	U	-	**81.1**	-	-	**31.9**	-	-	**0.39**	-	-	**27.9**	-	-	**8.89**	J	HTQ
DC-01	YVD-030817-18	3/8/2017	N	K1702324	**148**	-	-	**148**	-	-	-	-	-	1	U	-	**80.8**	-	-	**32.6**	-	-	**0.39**	-	-	**27**	-	-	**9.0**	-	-
DC-01	YVD-060417-03	6/4/2017	N	K1705702	**147**	-	-	**147**	-	-	-	-	-	0.050	U	-	**83.4**	-	-	**32.9**	-	-	**0.40**	-	-	**26.2**	-	-	**8.2**	-	-
DC-01	YVD-060417-05	6/4/2017	FD	K1705702	**147**	-	-	**147**	-	-	-	-	-	0.050	U	-	**83.0**	-	-	**33.2**	-	-	**0.38**	-	-	**25.7**	-	-	**8.2**	-	-
DC-01	YVD-092517-13	9/25/2017	N	K1710333	**148**	-	-	**148**	-	-	-	-	-	0.050	U	-	**78.9**	-	-	**33.2**	-	-	**0.37**	-	-	**26.1**	-	-	**8.41**	-	-
DC-01	YVD-120617-31	12/6/2017	N	K1713157	**146**	-	-	**146**	-	-	-	-	-	0.050	U	-	**83.7**	-	-	**33.2**	-	-	**0.37**	-	-	**28.1**	-	-	**8.81**	-	-
DC-01	YVD-060418-19	6/4/2018	N	874662	**141**	-	-	**141**	-	-	0.070	U	FBK	-	-	-	**80.5**	-	-	**34.6**	-	-	**0.36**	-	-	**28.75**	-	-	**8.60**	-	-
DC-01	YVD-060219-03	6/2/2019	N	991939	**142**	-	-	**142**	-	-	0.070	U	-	-	-	-	**76.5**	-	-	46.3	U	FBK	0.99	U	FBK	**26.15**	-	-	**8.60**	-	-
DC-01	YVD-060820-07	6/8/2020	N	009144	**143**	--	--	**143**	--	--	0.070	U	--	-	-	-	**76.0**	--	--	**33.1**	--	--	**0.30**	--	--	**26.30**	--	--	**7.60**	--	--
DC-01	YVD-060721-10	6/7/2021	N	124105	**140**	--	--	**140**	--	--	0.070	U	--	-	-	-	**72.5**	--	--	**32.4**	--	--	**0.32**	--	--	**25.15**	--	--	**8.00**	--	--
DC-03	DC-03-130102	01/02/2013	N	EPA01	-	-	-	-	-	-	-	-	-	0.1	U	-	-	-	-	-	-	-	-	-	-	-	-	-	**190**	-	-
DC-03	DC-03-130918	09/18/2013	N	SWI0138	**435**	-	-	**435**	-	-	-	-	-	0.1	U	-	**284**	-	-	**176**	-	-	5	U	-	**73.7**	-	-	**166**	-	-
DC-03	DC-03-131212	12/12/2013	N	SWL0078	**474**	-	-	**475**	-	-	-	-	-	0.02	U	-	**280**	-	-	**172**	-	-	5	U	-	**75.0**	-	-	**174**	-	-
DC-03	YVD-D3-131212	12/12/2013	FD	SWL0078	**459**	-	-	**460**	-	-	-	-	-	0.02	U	-	**292**	-	-	**142**	-	-	5	U	-	**77.3**	-	-	**182**	-	-
DC-03	DC-03-140319	03/19/2014	N	SXC0107	**459**	-	-	**460**	-	-	-	-	-	0.1	U	-	**261**	-	-	**159**	J	FDP	5	U	-	**66.8**	-	-	**195**	-	-
DC-03	YVD-D3-140319	03/19/2014	FD	SXC0107	**469**	-	-	**470**	-	-	-	-	-	0.1	U	-	**261**	-	-	**128**	J	FDP	5	U	-	**66.7**	-	-	**164**	-	-
DC-03	DC-03-140604	06/04/2014	N	SXF0025	**425**	-	-	**425**	-	-	-	-	-	0.1	U	-	**259**	-	-	**201**	-	-	10	U	-	**67.7**	-	-	**234**	-	-
DC-03	DC-03-140924	09/24/2014	N	SXI0173	**409**	-	-	**410**	-	-	-	-	-	0.1	U	-	**291**	-	-	**147**	-	-	5	U	-	**77.1**	-	-	**170**	-	-
DC-03	DC-03-141217	12/17/2014	N	SXL0144	**429**	-	-	**430**	-	-	-	-	-	**0.18**	J+	FBK, MBK	**274**	-	-	**157**	-	-	10	U	-	**74.9**	-	-	**193**	-	-
DC-03	YVD-D4-141217	12/17/2014	FD	SXL0144	**423**	-	-	**425**	-	-	-	-	-	0.1	U	-	**271**	-	-	**182**	-	-	5	U	-	**72.6**	-	-	**156**	-	-
DC-03	DC-03-150318	03/18/2015	N	5904651	**420**	-	-	**420**	-	-	-	-	-	0.1	U	-	**260**	-	-	**160**	-	-	5	U	-	**73.0**	-	-	**180**	-	-
DC-03	YVD-D4-150318	03/18/2015	FD	5904651	**410**	-	-	**410**	-	-	-	-	-	**0.12**	-	-	**270**	-	-	**150**	-	-	2.5	U	-	**74.0**	-	-	**180**	-	-
DC-03	DC-03-150617	06/17/2015	N	59011021	**460**	-	-	**460**	-	-	-	-	-	0.1	U	-	**290**	-	-	**170**	-	-	5	U	-	**78.0**	J	RPD	**180**	J-	MSD, FDP
DC-03	YVD-D4-150617	06/17/2015	FD	59011021	**450**	-	-	**450**	-	-	-	-	-	0.1	U	-	**290**	-	-	**180**	-	-	5	U	-	**77.0**	J	RPD	**10**	J-	MSD, FDP
DC-03	DC-03-150925	09/25/2015	N	59020431	**390**	-	-	**390**	-	-	-	-	-	**0.1**	-	-	**270**	-	-	**140**	-	-	10	U	-	**73.0**	-	-	**180**	-	-
DC-03	YVD-D4-150925	09/25/2015	FD	59020431	**460**	-	-	**460**	-	-	-	-	-	**0.2**	-	-	**260**	-	-	**140**	-	-	0.5	U	-	**69.0**	-	-	**180**	-	-
DC-03	DC-03-151216	12/16/2015	N	59025501	**400**	-	-	**400**	-	-	-	-	-	**0.18**	J-	MSD	**260**	-	-	**170**	-	-	5	U	-	**75.0**	-	-	**200**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-03	YVD-D4-151216	12/16/2015	FD	59025501	**380**	-	-	**380**	-	-	-	-	-	-	R	MSD	**250**	-	-	**160**	-	-	2.5	U	-	**75.0**	-	-	**170**	-	-
DC-03	DC-03-160310	03/10/2016	N	59029941	**460**	-	-	**460**	-	-	-	-	-	0.1	U	-	**270**	-	-	**150**	-	-	5	U	-	**72.0**	-	-	**180**	-	-
DC-03	YVD-D4-160310	03/10/2016	FD	59029941	**480**	-	-	**480**	-	-	-	-	-	0.1	U	-	**270**	-	-	**160**	-	-	5	U	-	**72.0**	-	-	**190**	-	-
DC-03	DC-03-160623	6/23/2016	N	59037371	**420**	-	-	**420**	-	-	-	-	-	**0.12**	J-	MSD	**270**	-	-	**150**	-	-	5	U	-	**73.0**	-	-	**180**	-	-
DC-03	YVD-D4-160623	6/23/2016	FD	59037371	**410**	-	-	**410**	-	-	-	-	-	**0.11**	J-	MSD	**250**	-	-	**160**	-	-	2.5	U	-	**71.0**	-	-	**170**	-	-
DC-03	DC-03-160927	9/27/2016	N	K1611565	**425**	-	-	**425**	-	-	-	-	-	0.050	U	MBK	**265**	-	-	**136**	-	-	**0.20**	J	-	**72.4**	-	-	**163**	-	-
DC-03	DC-03-D2-160927	9/27/2016	FD	K1611565	**427**	-	-	**427**	-	-	-	-	-	0.050	U	MBK	**262**	-	-	**137**	-	-	**0.19**	J	-	**71.9**	-	-	**163**	-	-
DC-03	DC-03-161212	12/12/2016	N	K1615029	**371**	-	-	**371**	-	-	-	-	-	0.050	U	-	**254**	-	-	**131**	-	-	**0.24**	-	-	**65.7**	-	-	**168**	J	HTQ
DC-03	YVD-030817-13	3/8/2017	N	K1702324	**381**	-	-	**381**	-	-	-	-	-	1	U	-	**267**	-	-	**150**	-	-	**0.22**	-	-	**66.0**	-	-	**179**	-	-
DC-03	YVD-060517-02	6/5/2017	N	K1705702	**358**	-	-	**358**	-	-	-	-	-	0.050	U	-	**271**	-	-	**152**	-	-	**0.24**	-	-	**61.6**	-	-	**181**	-	-
DC-03	YVD-060517-04	6/5/2017	FD	K1705702	**360**	-	-	**360**	-	-	-	-	-	0.050	U	-	**269**	-	-	**152**	-	-	**0.28**	-	-	**70.6**	-	-	**182**	-	-
DC-03	YVD-092617-22	9/26/2017	N	K1710333	**329**	-	-	**329**	-	-	-	-	-	0.050	U	-	**279**	-	-	**154**	-	-	**0.24**	-	-	**68.9**	-	-	**192**	-	-
DC-03	YVD-120417-10	12/4/2017	N	K1713026	**333**	-	-	**333**	-	-	-	-	-	0.050	U	-	**274**	-	-	**161**	-	-	**0.24**	-	-	**69.4**	-	-	**207**	-	-
DC-03	YVD-031818-04	3/18/2018	N	870610	**374**	-	-	**374**	-	-	0.070	U	-	-	-	-	**280**	-	-	**156**	-	-	**0.19**	-	-	**67.00**	-	-	**192**	-	-
DC-03	YVD-060418-22	6/4/2018	N	874860	**358**	-	-	**358**	-	-	**1.22**	-	-	-	-	-	**266**	-	-	**152**	-	-	**0.19**	-	-	**67.00**	-	-	**184**	-	-
DC-03	YVD-090918-17	9/9/2018	N	880601	**460**	-	-	**460**	-	-	0.070	U	-	-	-	-	**267**	-	-	**133**	-	-	**0.20**	-	-	**65.50**	-	-	**157**	-	-
DC-03	YVD-121018-03	12/10/2018	N	884857	**415**	-	-	**415**	-	-	0.070	U	-	-	-	-	**263**	-	-	**142**	-	-	0.20	U	FBK	**65.50**	J	MSD	**180**	-	-
DC-03	YVD-031819-19	3/18/2019	N	988273	**435**	-	-	**435**	-	-	0.070	U	-	-	-	-	**276**	-	-	**150**	-	-	**0.19**	-	-	**66.00**	-	-	**186**	-	-
DC-03	YVD-060419-32	6/4/2019	N	992242	**406**	-	-	**406**	-	-	**0.27**	-	-	-	-	-	**282**	-	-	**155**	-	-	**0.27**	-	-	**70.00**	-	-	**178**	-	-
DC-03	YVD-091019-23	9/10/2019	N	998438	**463**	-	-	**463**	-	-	0.070	U	-	-	-	-	**285**	-	-	**132**	-	-	**0.15**	-	-	**74.00**	-	-	**180**	-	-
DC-03	YVD-121019-22	12/10/2019	N	902321	**433**	-	-	**433**	-	-	0.070	U	-	-	-	-	**261**	-	-	**121**	-	-	**0.17**	-	-	**65.50**	-	-	**175**	-	-
DC-03	YVD-033120-22	3/31/2020	N	006260	**418**	-	-	**418**	-	-	0.070	U	-	-	-	-	**284**	-	-	**136**	-	-	**0.17**	--	--	**71.00**	-	-	**166**	-	-
DC-03	YVD-060920-26	6/9/2020	N	009269	**426**	--	--	**426**	--	--	0.070	U	--				**298**	--	--	**163**	--	--	**0.14**	--	--	**75.00**	--	--	**205**	--	--
DC-03	YVD-092120-21	9/21/2020	N	013896	**429**	--	--	**429**	--	--	0.070	U	--	-	-	-	**284**	--	--	**140**	--	--	**0.24**	--	--	**73.50**	--	--	**177**	--	--
DC-03	YVD-120720-05	12/7/2020	N	017035	**430**	--	--	**430**	--	--	0.070	U	--	-	-	-	**260**	--	--	**122**	--	--	**0.15**	--	--	**64.50**	--	--	**144**	--	--
DC-03	YVD-120720-07	12/7/2020	FD	017035	**431**	--	--	**431**	--	--	0.070	U	--	-	-	-	**256**	--	--	**122**	--	--	**0.15**	--	--	**64.50**	--	--	**153**	--	--
DC-03	YVD-030221-23	3/2/2021	N	120034	**393**	--	--	**393**	--	--	0.070	U	--	-	-	-	**286**	--	--	**141**	--	--	**0.17**	--	--	**69.00**	--	--	**186**	--	--
DC-03	YVD-060821-27	6/8/2021	N	124212	**406**	--	--	**406**	--	--	0.070	U	--	-	-	-	**280**	--	--	**150**	--	--	0.10	U	--	**69.50**	--	--	**185**	--	--
DC-03	YVD-121421-11	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**184**	J	HTQ, MS
DC-03D	DC-03D-130918	09/18/2013	N	SWI0138	**509**	-	-	**510**	-	-	-	-	-	0.1	U	-	**198**	-	-	**56**	-	-	5	U	-	**44.0**	-	-	**46.4**	-	-
DC-03D	DC-03D-131212	12/12/2013	N	SWL0073	**559**	-	-	**560**	-	-	-	-	-	0.02	UJ	MSD	**194**	-	-	**67.9**	-	-	5	U	-	**43.3**	-	-	**38.9**	-	-
DC-03D	DC-03D-140319	03/19/2014	N	SXC0107	**564**	-	-	**565**	-	-	-	-	-	**0.127**	-	-	**200**	-	-	**65.9**	-	-	5	U	-	**43.9**	-	-	**42.5**	-	-
DC-03D	DC-03D-140603	06/03/2014	N	SXF0017	**542**	-	-	**543**	-	-	-	-	-	0.1	U	-	**179**	-	-	**65.5**	-	-	2	U	-	**40.9**	-	-	**42**	-	-
DC-03D	DC-03D-140923	09/23/2014	N	SXI0173	**514**	-	-	**515**	-	-	-	-	-	0.1	U	-	**216**	-	-	**59.5**	-	-	2.5	U	-	**46.6**	-	-	**38**	-	-
DC-03D	DC-03D-141217	12/17/2014	N	SXL0121	**514**	-	-	**515**	-	-	-	-	-	0.1	U	-	**203**	-	-	**62.8**	-	-	2.5	U	-	**46.8**	-	-	**38.6**	-	-
DC-03D	DC-03D-150317	03/17/2015	N	5904651	**530**	-	-	**530**	-	-	-	-	-	0.1	U	-	**210**	-	-	**63**	-	-	2.5	U	-	**48.0**	-	-	**37**	-	-
DC-03D	DC-03D-150617	06/17/2015	N	59011021	**530**	-	-	**530**	-	-	-	-	-	0.1	U	-	**210**	-	-	**71**	-	-	2.5	U	-	**48.0**	J	RPD	**42**	J-	MSD
DC-03D	DC-03D-150925	09/25/2015	N	59020431	**610**	-	-	**610**	-	-	-	-	-	0.1	U	-	**200**	-	-	**58**	-	-	10	U	-	**47.0**	-	-	**33**	-	-
DC-03D	DC-03D-151216	12/16/2015	N	59025501	**590**	-	-	**590**	-	-	-	-	-	-	R	MSD	**210**	-	-	**70**	-	-	2.5	U	-	**50.0**	-	-	**36**	-	-
DC-03D	DC-03D-160310	03/10/2016	N	59029941	**580**	-	-	**580**	-	-	-	-	-	0.1	U	-	**200**	-	-	**65**	-	-	2.5	U	-	**47.0**	-	-	**37**	-	-
DC-03D	DC-03D-160623	6/23/2016	N	59037371	**530**	-	-	**530**	-	-	-	-	-	**0.11**	J-	MSD	**200**	-	-	**65**	-	-	5	U	-	**47.0**	-	-	**36**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-03D	DC-03D-160927	9/27/2016	N	K1611565	**546**	-	-	**546**	-	-	-	-	-	0.050	U	MBK	**188**	-	-	**58.7**	-	-	**0.10**	J	-	**47.1**	-	-	**32.8**	-	-
DC-03D	DC-03D-161212	12/12/2016	N	K1615029	**544**	-	-	**544**	-	-	-	-	-	0.050	U	-	**200**	-	-	**57.8**	-	-	**0.12**	J	-	**44.8**	-	-	**33.8**	J	HTQ
DC-03D	YVD-030817-14	3/8/2017	N	K1702324	**537**	-	-	**537**	-	-	-	-	-	1	U	-	**196**	-	-	**59.5**	-	-	**0.16**	J	-	**43.4**	-	-	**32.9**	-	-
DC-03D	YVD-030817-16	3/8/2017	FD	K1702324	**555**	-	-	**555**	-	-	-	-	-	1	U	-	**194**	-	-	**59.1**	-	-	**0.17**	J	-	**42.7**	-	-	**32.8**	-	-
DC-03D	YVD-060517-09	6/5/2017	N	K1705702	**533**	-	-	**533**	-	-	-	-	-	0.050	U	-	**203**	-	-	**58.7**	-	-	**0.13**	J	-	**41.3**	-	-	**31.9**	-	-
DC-03D	YVD-092617-24	9/26/2017	N	K1710333	**537**	-	-	**537**	-	-	-	-	-	0.050	U	-	**194**	-	-	**60.1**	-	-	**0.12**	J	-	**44.2**	-	-	**33.2**	-	-
DC-03D	YVD-120417-08	12/4/2017	N	K1713026	**525**	-	-	**525**	-	-	-	-	-	0.050	U	-	**195**	-	-	**57.9**	-	-	**0.17**	J	-	**41.5**	-	-	**33.6**	-	-
DC-03D	YVD-031818-02	3/18/2018	N	870610	**529**	-	-	**529**	-	-	0.070	U	-	-	-	-	**199**	-	-	**66.1**	-	-	0.10	U	-	**42.65**	-	-	**32.6**	-	-
DC-03D	YVD-060418-24	6/4/2018	N	874860	**533**	-	-	**533**	-	-	0.070	U	-	-	-	-	**187**	-	-	**64.7**	-	-	**0.10**	-	-	**42.85**	-	-	**31.0**	-	-
DC-03D	YVD-090918-15	9/9/2018	N	880601	**541**	-	-	**541**	-	-	0.070	U	-	-	-	-	**200**	-	-	**69.5**	-	-	**0.10**	-	-	**42.90**	-	-	**32.9**	-	-
DC-03D	YVD-121018-05	12/10/2018	N	884857	**543**	-	-	**543**	-	-	0.070	U	-	-	-	-	**191**	-	-	**62.1**	-	-	0.10	U	FBK	**42.50**	J	MSD	**34.8**	-	-
DC-03D	YVD-031819-17	3/18/2019	N	988273	**536**	-	-	**536**	-	-	0.070	U	-	-	-	-	**192**	-	-	**61.4**	-	-	**0.13**	-	-	**41.55**	-	-	**35.4**	-	-
DC-03D	YVD-060419-30	6/4/2019	N	992242	**499**	-	-	**499**	-	-	0.070	U	-	-	-	-	**186**	-	-	**59.6**	-	-	0.10	U	-	**40.35**	-	-	**36.6**	-	-
DC-03D	YVD-060419-31	6/4/2019	FD	992242	**494**	-	-	**494**	-	-	0.070	U	-	-	-	-	**182**	-	-	**60.6**	-	-	0.10	U	-	**40.70**	-	-	**37.2**	-	-
DC-03D	YVD-091019-21	9/10/2019	N	998438	**506**	-	-	**506**	-	-	0.070	U	-	-	-	-	**186**	-	-	**58.4**	-	-	0.10	U	-	**40.95**	-	-	**36.4**	-	-
DC-03D	YVD-091019-22	9/10/2019	FD	998438	**514**	-	-	**514**	-	-	0.070	U	-	-	-	-	**186**	-	-	**58.3**	-	-	0.10	U	-	**41.15**	-	-	**36.5**	-	-
DC-03D	YVD-121019-20	12/10/2019	N	902321	**502**	-	-	**502**	-	-	0.070	U	-	-	-	-	**182**	-	-	**65.0**	-	-	0.10	U	-	**39.85**	-	-	**36.2**	-	-
DC-03D	YVD-033120-20	3/31/2020	N	006260	**456**	-	-	**456**	-	-	0.070	U	-	-	-	-	**175**	-	-	**58.5**	-	-	0.10	U	--	**38.40**	-	-	**39.0**	-	-
DC-03D	YVD-061020-34	6/10/2020	N	009361	**458**	--	--	**458**	--	--	0.070	U	--	-	-	-	**168**	--	--	**60.8**	--	--	0.10	U	--	**36.20**	J	MS	**37.0**	--	--
DC-03D	YVD-092120-19	9/21/2020	N	013896	**460**	--	--	**460**	--	--	0.070	U	--	-	-	-	**176**	--	--	**68.9**	--	--	0.10	U	--	**38.30**	--	--	**38.5**	--	--
DC-03D	YVD-120720-09	12/7/2020	N	017035	**452**	--	--	**452**	--	--	0.070	U	--	-	-	-	**174**	--	--	**66.3**	--	--	**0.15**	--	--	**38.60**	--	--	**35.8**	--	--
DC-03D	YVD-030221-21	3/2/2021	N	120034	**481**	--	--	**481**	--	--	0.070	U	--	-	-	-	**181**	--	--	**69.6**	--	--	0.10	U	--	**39.15**	--	--	**39.8**	--	--
DC-03D	YVD-030221-21	3/2/2021	N	120034	**481**	--	--	**481**	--	--	0.070	U	--	-	-	-	**181**	--	--	**69.6**	--	--	0.10	U	--	**39.15**	--	--	**39.8**	--	--
DC-03D	YVD-060821-29	6/8/2021	N	124212	**456**	--	--	**456**	--	--	0.070	U	--	-	-	-	**175**	--	--	**66.8**	--	--	0.10	U	--	**39.00**	--	--	**41.4**	--	--
DC-03D	YVD-060821-31	6/8/2021	FD	124212	**455**	--	--	**455**	--	--	0.070	U	--	-	-	-	**174**	--	--	**66.7**	--	--	0.10	U	--	**38.35**	--	--	**39.9**	--	--
DC-03D	YVD-121421-10	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**35.1**	--	--
DC-04	DC-04-130103	01/03/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**26.0**	-	-
DC-04	DC-04-130920	09/20/2013	N	SWI0142	**305**	-	-	**305**	-	-	-	-	-	0.1	U	-	**141**	-	-	**39.4**	-	-	5	U	-	**25.5**	-	-	-	-	-
DC-04	DC-04-130924	09/24/2013	N	SWI0175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**31.7**	-	-
DC-04	DC-04-131212	12/12/2013	N	SWL0073	**315**	-	-	**315**	-	-	-	-	-	0.02	UJ	MSD	**148**	-	-	**41.1**	-	-	5	U	-	**28.4**	-	-	**36.7**	-	-
DC-04	DC-04-140318	03/18/2014	N	SXC0107	**325**	-	-	**325**	-	-	-	-	-	0.1	U	-	**153**	-	-	**42**	-	-	5	U	-	**28.0**	-	-	**37.3**	-	-
DC-04	DC-04-140603	06/03/2014	N	SXF0017	**310**	-	-	**310**	-	-	-	-	-	0.1	U	-	**134**	-	-	**36.2**	-	-	2	U	-	**28.9**	-	-	**36.4**	-	-
DC-04	DC-04-140923	09/23/2014	N	SXI0173	**317**	-	-	**320**	-	-	-	-	-	0.1	U	-	**174**	-	-	**39.7**	-	-	2.5	U	-	**34.2**	-	-	**37.8**	-	-
DC-04	DC-04-141217	12/17/2014	N	SXL0121	**329**	-	-	**330**	-	-	-	-	-	0.1	U	-	**182**	-	-	**42.7**	-	-	2.5	U	-	**35.7**	-	-	**40.8**	-	-
DC-04	DC-04-150317	03/17/2015	N	5904651	**340**	-	-	**340**	-	-	-	-	-	0.1	U	-	**180**	-	-	**41**	-	-	2.5	U	-	**34.0**	-	-	**39**	-	-
DC-04	DC-04-150617	06/17/2015	N	59010961	**330**	-	-	**330**	-	-	-	-	-	0.1	U	-	**180**	-	-	**46**	-	-	5	U	-	**34.0**	-	-	**42**	-	-
DC-04	DC-04-150924	09/24/2015	N	59020391	**400**	-	-	**400**	-	-	-	-	-	0.1	UJ	MSD	**160**	-	-	**48**	-	-	2.5	U	-	**36.0**	-	-	**48**	J+	MSD
DC-04	YVD-D3-150924	09/24/2015	FD	59020391	**380**	-	-	**380**	-	-	-	-	-	0.1	UJ	MSD	**170**	-	-	**53**	-	-	2.5	U	-	**37.0**	-	-	**53**	J+	MSD
DC-04	DC-04-151215	12/15/2015	N	59025431	**400**	J	FDP	**400**	J	FDP	-	-	-	-	R	MSD	**180**	-	-	**46**	-	-	2.5	U	-	**36.0**	-	-	**48**	-	-
DC-04	DC-04-160309	03/09/2016	N	59029711	**390**	-	-	**390**	-	-	-	-	-	0.1	UJ	FDP	**190**	-	-	**53**	-	-	2.5	U	-	**36.0**	-	-	**53**	-	-
DC-04	DC-04-160621	6/21/2016	N	59037271	**360**	-	-	**360**	-	-	-	-	-	0.1	UJ	MSD	**200**	-	-	**50**	-	-	2.5	U	-	**40.0**	-	-	**50**	-	-
DC-04	DC-04-160926	9/26/2016	N	K1611506	**374**	-	-	**374**	-	-	-	-	-	0.050	U	MBK	**194**	-	-	**43.4**	-	-	**0.12**	J	-	**40.6**	-	-	**44.1**	-	-
DC-04	DC-04-161216	12/12/2016	N	K1615174	**384**	-	-	**384**	-	-	-	-	-	0.050	U	-	**214**	-	-	**44.7**	-	-	**0.15**	J	-	**39.7**	-	-	**45.2**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-04	YVD-031017-31	3/10/2017	N	K1702448	**375**	-	-	**375**	-	-	-	-	-	0.050	U	-	**219**	-	-	**43.1**	-	-	**0.16**	J	-	**36.3**	-	-	**46.0**	-	-
DC-04	YVD-031017-33	3/10/2017	FD	K1702448	**383**	-	-	**383**	-	-	-	-	-	0.050	U	-	**219**	-	-	**43.2**	-	-	**0.16**	J	-	**36.3**	-	-	**45.7**	-	-
DC-04	YVD-060617-26	6/6/2017	N	K1705833	**390**	-	-	**390**	-	-	-	-	-	0.050	U	-	**202**	-	-	**38.6**	-	-	**0.13**	J	-	**37.0**	-	-	**38.4**	-	-
DC-04	YVD-092517-06	9/25/2017	N	K1710274	**391**	-	-	**391**	-	-	-	-	-	0.050	U	-	**192**	-	-	**35.2**	-	-	**0.14**	J	-	**37.0**	-	-	**33.7**	-	-
DC-04	YVD-120517-24	12/5/2017	N	K1713091	**388**	-	-	**388**	-	-	-	-	-	0.050	U	-	**188**	-	-	**34.3**	-	-	**0.12**	J	-	**32.7**	-	-	**33.8**	J	HTQ
DC-04	YVD-031818-07	3/18/2018	N	870610	**377**	-	-	**377**	-	-	0.070	U	-	-	-	-	**182**	-	-	**34.5**	-	-	0.10	U	-	**32.10**	-	-	**32.9**	-	-
DC-04	YVD-060418-18	6/4/2018	N	874662	**380**	-	-	**380**	-	-	0.070	U	FBK	-	-	-	**182**	-	-	**35.4**	-	-	**0.10**	-	-	**33.55**	-	-	**33.0**	-	-
DC-04	YVD-090918-18	9/9/2018	N	880601	**371**	-	-	**371**	-	-	0.070	U	-	-	-	-	**176**	-	-	**32.4**	-	-	**0.12**	-	-	**30.40**	-	-	**30.4**	-	-
DC-04	YVD-121118-18	12/11/2018	N	884939	**376**	-	-	**376**	-	-	0.070	U	-	-	-	-	**166**	-	-	**30.4**	-	-	**0.11**	-	-	**29.40**	-	-	**29.4**	-	-
DC-04	YVD-032019-21	3/20/2019	N	988477	**393**	-	-	**393**	-	-	0.070	U	-	-	-	-	**172**	-	-	**26.2**	-	-	**0.10**	-	-	**30.45**	-	-	**29.6**	-	-
DC-04	YVD-060219-14	6/2/2019	N	991939	**390**	-	-	**390**	-	-	**0.09**	-	-	-	-	-	**173**	-	-	22.9	U	FBK	0.10	U	-	**30.55**	-	-	**29.1**	-	-
DC-04	YVD-090919-09	9/9/2019	N	998357	**387**	-	-	**387**	-	-	0.070	U	-	-	-	-	**169**	-	-	**33.1**	-	-	0.10	U	-	**30.35**	-	-	**31.4**	-	-
DC-04	YVD-120919-07	12/9/2019	N	902276	**382**	-	-	**382**	-	-	0.070	U	-	-	-	-	**167**	-	-	**33.4**	-	-	0.10	U	-	**30.35**	-	-	**31.3**	-	-
DC-04	YVD-033120-18	3/31/2020	N	006260	**390**	-	-	**390**	-	-	0.070	U	-	-	-	-	**171**	-	-	**34.1**	-	-	**0.10**	--	--	**30.50**	-	-	**29.8**	-	-
DC-04	YVD-060820-08	6/8/2020	N	009144	**395**	--	--	**395**	--	--	0.070	U	--	-	-	-	**173**	--	--	**34.5**	--	--	**0.10**	--	--	**31.00**	--	--	**30.9**	--	--
DC-04	YVD-092020-07	9/20/2020	N	013864	**403**	--	--	**403**	--	--	0.070	U	--	-	-	-	**184**	--	--	**39.4**	--	--	0.10	U	--	**33.35**	--	--	**34.1**	--	--
DC-04	YVD-120820-23	12/8/2020	N	017137	**422**	--	--	**422**	--	--	0.070	U	--	-	-	-	**193**	--	--	**41.3**	--	--	0.10	U	--	**34.65**	--	--	**34.4**	--	--
DC-04	YVD-030221-20	3/2/2021	N	120034	**443**	--	--	**443**	--	--	0.070	U	--	-	-	-	**208**	--	--	**46.2**	--	--	**0.15**	--	--	**36.15**	--	--	**35.0**	--	--
DC-04	YVD-030221-22	3/2/2021	FD	120034	**440**	--	--	**440**	--	--	0.070	U	--	-	-	-	**200**	--	--	**45.7**	--	--	**0.15**	--	--	**35.70**	--	--	**34.3**	--	--
DC-04	YVD-030221-20	3/2/2021	N	120034	**443**	--	--	**443**	--	--	0.070	U	--	-	-	-	**208**	--	--	**46.2**	--	--	**0.15**	--	--	**36.15**	--	--	**35.0**	--	--
DC-04	YVD-030221-22	3/2/2021	FD	120034	**440**	--	--	**440**	--	--	0.070	U	--	-	-	-	**200**	--	--	**45.7**	--	--	**0.15**	--	--	**35.70**	--	--	**34.3**	--	--
DC-04	YVD-060621-06	6/6/2021	N	124053	**438**	--	--	**438**	--	--	0.070	U	--	-	-	-	**195**	--	--	**39.6**	--	--	0.10	U	--	**34.75**	--	--	**30.9**	--	--
DC-04	YVD-121521-21	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**32.7**	J	HTQ, MS
DC-05	DC-05-130104	01/04/2013	N	EPA01	-		-	-		-	-	-	-	-		-	-		-	-		-	-		-	-		-	**32**		-
DC-05	DC-05-130920	09/20/2013	N	SWI0142	**414**		-	**415**		-	-	-	-	**0.255**		-	**129**		-	**36.7**		-	5	U	-	**48.5**		-	-		-
DC-05	DC-05-130924	09/24/2013	N	SWI0175	-		-	-		-	-	-	-	-		-	-		-	-		-	-		-	-		-	**33.6**		-
DC-05	DC-05-131212	12/12/2013	N	SWL0073	**424**	-	-	**425**	-	-	-	-	-	0.02	UJ	MSD	**130**	-	-	**35.9**	-	-	5	U	-	**50.2**	-	-	**42.6**	-	-
DC-05	DC-05-140318	03/18/2014	N	SXC0107	**404**	-	-	**405**	-	-	-	-	-	**0.131**	-	-	**133**	-	-	**33**	-	-	5	U	-	**49.7**	-	-	**33.1**	-	-
DC-05	DC-05-140603	06/03/2014	N	SXF0017	**412**	-	-	**413**	-	-	-	-	-	0.1	U	-	**118**	-	-	**31.6**	-	-	2	U	-	**46.7**	-	-	**32.6**	-	-
DC-05	DC-05-140923	09/23/2014	N	SXI0173	**408**	-	-	**410**	-	-	-	-	-	0.1	U	-	**140**	-	-	**35**	-	-	2.5	U	-	**53.5**	-	-	**35.8**	-	-
DC-05	DC-05-141217	12/17/2014	N	SXL0121	**414**	-	-	**415**	-	-	-	-	-	0.1	U	-	**147**	-	-	**34.4**	-	-	2.5	U	-	**58.9**	-	-	**33.4**	-	-
DC-05	DC-05-150317	03/17/2015	N	5904541	**430**	-	-	**430**	-	-	-	-	-	0.1	U	-	**150**	-	-	**36**	-	-	**2**	-	-	**58.0**	-	-	**38**	J-	MSD
DC-05	DC-05-150616	06/16/2015	N	59010961	**410**	-	-	**410**	-	-	-	-	-	0.1	U	-	**140**	-	-	**35**	-	-	2	U	-	**57.0**	-	-	**37**	-	-
DC-05	YVD-D2-150616	06/16/2015	FD	59010961	**410**	-	-	**410**	-	-	-	-	-	0.1	U	-	**140**	-	-	**35**	-	-	5	U	-	**56.0**	-	-	**41**	-	-
DC-05	DC-05-150923	09/23/2015	N	59020391	**440**	-	-	**440**	-	-	-	-	-	0.1	UJ	MSD	**130**	-	-	**33**	-	-	2	U	-	**57.0**	-	-	**38**	J+	MSD
DC-05	DC-05-151215	12/15/2015	N	59025431	**440**	J	FDP	**440**	J	FDP	-	-	-	-	R	MSD	**140**	-	-	**29**	-	-	2	U	-	**55.0**	-	-	**38**	-	-
DC-05	DC-05-160309	03/09/2016	N	59029711	**410**	-	-	**410**	-	-	-	-	-	0.1	UJ	FDP	**140**	-	-	**35**	-	-	2	U	-	**54.0**	-	-	**43**	-	-
DC-05	DC-05-160621	6/21/2016	N	59037151	**390**	-	-	**390**	-	-	-	-	-	0.1	UJ	-	**130**	-	-	**34**	-	-	2	U	-	**54.0**	-	-	**36**	-	-
DC-05	DC-05-160926	9/26/2016	N	K1611506	**346**	-	-	**346**	-	-	-	-	-	0.050	U	-	**119**	-	-	**26.5**	-	-	**0.15**	J	-	**49.7**	-	-	**32.1**	-	-
DC-05	DC-05-D1-160926	9/26/2016	FD	K1611506	**364**	-	-	**364**	-	-	-	-	-	0.050	U	MBK	**124**	-	-	**26.6**	-	-	**0.16**	J	-	**52.5**	-	-	**32.2**	-	-
DC-05	DC-05-161216	12/16/2016	N	K1615174	**348**	-	-	**348**	-	-	-	-	-	0.050	U	-	**129**	-	-	**28.6**	-	-	**0.19**	J	-	**45.4**	-	-	**33.7**	-	-
DC-05	YVD-D5-161216	12/16/2016	FD	K1615174	**340**	-	-	**340**	-	-	-	-	-	0.050	U	-	**128**	-	-	**28.9**	-	-	**0.19**	J	-	**48.0**	-	-	**33.3**	-	-
DC-05	YVD-030717-09	3/7/2017	N	K1702324	**367**	-	-	**367**	-	-	-	-	-	1	U	-	**117**	-	-	**28.5**	-	-	**0.20**	J	-	**43.5**	-	-	**32.9**	J	HTQ
DC-05	YVD-060717-30	6/7/2017	N	K1705833	**364**	-	-	**364**	-	-	-	-	-	0.050	U	-	**122**	-	-	**26.8**	-	-	**0.16**	J	-	**47.1**	-	-	**30.8**	-	-
DC-05	YVD-060717-32	6/7/2017	FD	K1705833	**364**	-	-	**364**	-	-	-	-	-	0.050	U	-	**122**	-	-	**26.3**	-	-	**0.16**	J	-	**45.8**	-	-	**30.7**	-	-
DC-05	YVD-092517-04	9/25/2017	N	K1710274	**368**	-	-	**368**	-	-	-	-	-	0.050	U	-	**126**	-	-	**28.1**	-	-	**0.19**	J	-	**49.7**	-	-	**30.7**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-05	YVD-120517-16	12/5/2017	N	K1713091	**364**	-	-	**364**	-	-	-	-	-	0.050	U	-	**119**	-	-	**31.9**	-	-	**0.18**	J	-	**42.5**	-	-	**34.5**	J	HTQ
DC-05	YVD-120517-18	12/5/2017	FD	K1713091	**366**	-	-	**366**	-	-	-	-	-	0.050	U	-	**120**	-	-	**31.3**	-	-	**0.19**	J	-	**43.1**	-	-	**33.9**	J	HTQ
DC-05	YVD-031818-03	3/18/2018	N	870610	**364**	-	-	**364**	-	-	**0.10**	-	-	-	-	-	**116**	-	-	**33.0**	-	-	0.14	U	-	**42.35**	-	-	**33.6**	-	-
DC-05	YVD-031818-05	3/18/2018	FD	870610	**356**	-	-	**356**	-	-	0.070	U	-	-	-	-	**116**	-	-	**33.1**	-	-	**0.14**	-	-	**42.85**	-	-	**33.8**	-	-
DC-05	YVD-060318-02	6/3/2018	FD	874568	**368**	-	-	**368**	-	-	0.070	U	-	-	-	-	**118**	-	-	**32.2**	-	-	**0.15**	-	-	**43.50**	-	-	**34.4**	-	-
DC-05	YVD-090918-03	9/9/2018	N	880601	**378**	-	-	**378**	-	-	0.070	U	-	-	-	-	**122**	-	-	**31.4**	-	-	**0.18**	-	-	**42.55**	-	-	**31.5**	-	-
DC-05	YVD-121118-16	12/11/2018	N	884939	**390**	-	-	**390**	-	-	0.070	U	-	-	-	-	**120**	-	-	**33.7**	-	-	**0.16**	-	-	**43.40**	-	-	**33.2**	-	-
DC-05	YVD-031719-02	3/17/2019	N	988239	**396**	-	-	**396**	-	-	0.070	U	-	-	-	-	**126**	-	-	**29.9**	-	-	0.12	U	FBK	**44.25**	-	-	**30.4**	-	-
DC-05	YVD-060219-08	6/2/2019	N	991939	**400**	-	-	**400**	-	-	0.070	U	-	-	-	-	**122**	-	-	26.2	U	FBK	0.12	U	FBK	**44.15**	-	-	**28.8**	-	-
DC-05	YVD-090919-14	9/9/2019	N	998357	**389**	-	-	**389**	-	-	0.070	U	-	-	-	-	**120**	-	-	**25.4**	-	-	**0.14**	-	-	**42.30**	-	-	**26.7**	-	-
DC-05	YVD-120919-03	12/9/2019	N	902276	**400**	-	-	**400**	-	-	0.070	U	-	-	-	-	**120**	-	-	**28.1**	-	-	**0.14**	-	-	**43.00**	-	-	**29.3**	-	-
DC-05	YVD-033020-12	3/30/2020	N	006241	**402**	-	-	**402**	-	-	0.070	U	-	-	-	-	**120**	-	-	**26.0**	-	-	**0.14**	--	--	**43.45**	-	-	**25.6**	-	-
DC-05	YVD-060820-06	6/8/2020	N	009144	**404**	--	--	**404**	--	--	0.070	U	--	-	-	-	**116**	--	--	**24.4**	--	--	**0.16**	--	--	**41.75**	--	--	**24.0**	--	--
DC-05	YVD-092020-03	9/20/2020	N	013864	**387**	--	--	**387**	--	--	0.070	U	--	-	-	-	**126**	--	--	**26.8**	--	--	**0.12**	--	--	**45.05**	--	--	**27.8**	--	--
DC-05	YVD-120720-06	12/7/2020	N	017035	**372**	--	--	**372**	--	--	0.070	U	--	-	-	-	**130**	--	--	**24.0**	--	--	**0.12**	--	--	**47.55**	--	--	**29.6**	--	--
DC-05	YVD-030221-16	3/2/2021	N	120034	**388**	--	--	**388**	--	--	0.070	U	--	-	-	-	**139**	--	--	**30.5**	--	--	**0.12**	--	--	**49.25**	--	--	**32.3**	--	--
DC-05	YVD-060721-14	6/7/2021	N	124105	**360**	--	--	**360**	--	--	0.070	U	--	-	-	-	**129**	--	--	**34.9**	--	--	**0.17**	--	--	**46.45**	--	--	**38.5**	--	--
DC-05	YVD-121521-15	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**43.5**	J	HTQ, MS
DC-05D	DC-05D-130920	09/20/2013	N	SWI0142	**214**	-	-	**215**	-	-	-	-	-	0.1	U	-	**86.7**	-	-	**43.6**	-	-	5	U	-	**30.3**	-	-	-	-	-
DC-05D	DC-05D-130924	09/24/2013	N	SWI0178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**14.6**	-	-
DC-05D	DC-05D-131211	12/11/2013	N	SWL0073	**209**	-	-	**210**	-	-	-	-	-	0.02	UJ	MSD	**81.8**	-	-	**32.3**	-	-	5	U	-	**28.8**	-	-	**16**	-	-
DC-05D	DC-05D-140318	03/18/2014	N	SXC0095	**209**	-	-	**210**	-	-	-	-	-	**0.182**	-	-	**86.2**	-	-	**33.4**	-	-	5	U	-	**29.4**	-	-	**12.8**	-	-
DC-05D	DC-05D-140602	06/02/2014	N	SXF0017	**214**	-	-	**215**	-	-	-	-	-	**0.163**	-	-	**67.4**	-	-	**30.6**	-	-	2	U	-	**24.6**	-	-	**3.36**	-	-
DC-05D	DC-05D-140922	09/22/2014	N	SXI0148	**203**	-	-	**205**	-	-	-	-	-	0.1	U	-	**83.3**	-	-	**30.9**	-	-	2	U	-	**30.2**	-	-	**11.7**	-	-
DC-05D	DC-05D-141216	12/16/2014	N	SXL0121	**199**	-	-	**200**	-	-	-	-	-	0.1	U	-	**78.9**	-	-	**35.9**	-	-	5	U	-	**29.5**	-	-	**7.9**	-	-
DC-05D	DC-05D-150317	03/17/2015	N	5904541	**210**	-	-	**210**	-	-	-	-	-	0.1	U	-	**78.0**	-	-	**31**	-	-	2	U	-	**29.0**	-	-	**7.7**	J-	MSD
DC-05D	DC-05D-150616	06/16/2015	N	59010961	**210**	-	-	**210**	-	-	-	-	-	0.1	U	-	**79.0**	-	-	**34**	-	-	2	U	-	**30.0**	-	-	**8.6**	-	-
DC-05D	DC-05D-150923	09/23/2015	N	59020391	**200**	-	-	**200**	-	-	-	-	-	0.1	UJ	MSD	**74.0**	-	-	**31**	-	-	2	U	-	**31.0**	-	-	**8.9**	J+	MSD
DC-05D	YVD-D2-150923	09/23/2015	FD	59020391	**220**	-	-	**220**	-	-	-	-	-	**0.16**	J	MSD	**73.0**	-	-	**33**	-	-	0.5	U	-	**30.0**	-	-	**10**	J+	MSD
DC-05D	DC-05D-151215	12/15/2015	N	59025431	**230**	J	FDP	**230**	J	FDP	-	-	-	-	R	MSD	**78.0**	-	-	**30**	-	-	2	U	-	**29.0**	-	-	**9.9**	-	-
DC-05D	DC-05D-160309	03/09/2016	N	59029711	**220**	-	-	**220**	-	-	-	-	-	0.1	UJ	FDP	**81.0**	-	-	**33**	-	-	2	U	-	**30.0**	-	-	**13**	-	-
DC-05D	DC-05D-160621	6/21/2016	N	59037271	**210**	-	-	**210**	-	-	-	-	-	**0.13**	J-	MSD	**78.0**	-	-	**32**	-	-	2	U	-	**30.0**	-	-	**12**	-	-
DC-05D	DC-05D-160926	9/26/2016	N	K1611506	**209**	-	-	**209**	-	-	-	-	-	0.050	U	-	**81.4**	-	-	**25.6**	-	-	**0.26**	-	-	**28.4**	-	-	**11.2**	-	-
DC-05D	DC-05D-161214	12/14/2016	N	K1615126	**202**	-	-	**202**	-	-	-	-	-	0.050	U	-	**78.1**	-	-	**25.7**	-	-	**0.28**	-	-	**27.5**	-	-	**11.2**	-	-
DC-05D	YVD-030717-12	3/7/2017	N	K1702324	**206**	-	-	**206**	-	-	-	-	-	1	U	-	**76.4**	-	-	**26.3**	-	-	**0.32**	-	-	**26.5**	-	-	**11.6**	J	HTQ
DC-05D	YVD-060717-34	6/7/2017	N	K1705833	**201**	-	-	**201**	-	-	-	-	-	0.050	U	-	**79.1**	-	-	**23.9**	-	-	**0.29**	-	-	**27.3**	-	-	**10.8**	-	-
DC-05D	YVD-092517-02	9/25/2017	N	K1710274	**207**	-	-	**207**	-	-	-	-	-	0.050	U	-	**79.2**	-	-	**25.2**	-	-	**0.28**	-	-	**28.9**	-	-	**11.1**	-	-
DC-05D	YVD-092517-03	9/25/2017	FD	K1710274	**207**	-	-	**207**	-	-	-	-	-	0.050	U	-	**80.6**	-	-	**24.9**	-	-	**0.27**	-	-	**29.1**	-	-	**11**	-	-
DC-05D	YVD-120517-20	12/5/2017	N	K1713091	**202**	-	-	**202**	-	-	-	-	-	0.050	U	-	**81.2**	-	-	**26.6**	-	-	**0.28**	-	-	**27.1**	-	-	**11.9**	J	HTQ
DC-05D	YVD-031818-08	3/18/2018	N	870610	**198**	-	-	**198**	-	-	0.07	U	-	-	-	-	**82.0**	-	-	**27.4**	-	-	**0.25**	-	-	**27.50**	-	-	**12.6**	-	-
DC-05D	YVD-060318-03	6/3/2018	N	874568	**203**	-	-	**203**	-	-	0.08	U	FBK	-	-	-	**78.5**	-	-	**27.4**	-	-	**0.35**	-	-	**27.95**	-	-	**12.5**	-	-
DC-05D	YVD-060318-05	6/3/2018	FD	874568	**202**	-	-	**202**	-	-	0.070	U	-	-	-	-	**78.5**	-	-	**27.4**	-	-	**0.26**	-	-	**28.00**	-	-	**13.4**	-	-
DC-05D	YVD-090918-02	9/9/2018	N	880601	**204**	-	-	**204**	-	-	0.070	U	-	-	-	-	**79.5**	-	-	**26.8**	-	-	**0.25**	-	-	**26.75**	-	-	**12.2**	-	-
DC-05D	YVD-121118-14	12/11/2018	N	884939	**204**	-	-	**204**	-	-	0.070	U	-	-	-	-	**78.5**	-	-	**25.7**	-	-	**0.24**	-	-	**26.50**	-	-	**12.4**	-	-
DC-05D	YVD-031719-04	3/17/2019	N	988239	**204**	-	-	**204**	-	-	0.070	U	-	-	-	-	**79.0**	-	-	**26.6**	-	-	0.22	U	FBK	**26.85**	-	-	**12.8**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-05D	YVD-031719-06	3/17/2019	FD	988239	**206**	-	-	**206**	-	-	0.070	U	-	-	-	-	**81.5**	-	-	**26.4**	-	-	0.22	U	FBK	**27.05**	-	-	**12.6**	-	-
DC-05D	YVD-060219-10	6/2/2019	N	991939	**206**	-	-	**206**	-	-	0.070	U	-	-	-	-	**78.0**	-	-	26.0	U	FBK	0.25	U	FBK	**26.70**	-	-	**13.8**	-	-
DC-05D	YVD-090919-12	9/9/2019	N	998357	**205**	-	-	**205**	-	-	0.070	U	-	-	-	-	**78.5**	-	-	**26.5**	-	-	**0.30**	-	-	**26.15**	-	-	**12.5**	-	-
DC-05D	YVD-120919-05	12/9/2019	N	902276	**201**	-	-	**201**	-	-	0.070	U	-	-	-	-	**76.5**	-	-	**26.3**	-	-	**0.28**	-	-	**26.20**	-	-	**12.9**	-	-
DC-05D	YVD-033020-14	3/30/2020	N	006241	**202**	-	-	**202**	-	-	0.070	U	-	-	-	-	**75.5**	-	-	**27.3**	-	-	**0.25**	--	--	**26.30**	-	-	**12.8**	-	-
DC-05D	YVD-060820-02	6/8/2020	N	009144	**202**	--	--	**202**	--	--	0.070	U	--	-	-	-	**76.5**	--	--	**26.9**	--	--	**0.20**	--	--	**26.55**	--	--	**14.4**	--	--
DC-05D	YVD-060820-04	6/8/2020	FD	009144	**202**	--	--	**202**	--	--	0.070	U	--	-	-	-	**76.0**	--	--	**26.9**	--	--	**0.20**	--	--	**26.55**	--	--	**12.0**	--	--
DC-05D	YVD-092020-04	9/20/2020	N	013864/20I0421	**202**	--	--	**202**	--	--	0.070	U	--	-	-	-	**78.0**	--	--	**27.2**	--	--	**0.21**	--	--	**26.95**	--	--	**12.0**	--	--
DC-05D	YVD-092020-05	9/20/2020	FD	013864/20I0421	**202**	--	--	**202**	--	--	0.070	U	--	-	-	-	**78.5**	--	--	**27.2**	--	--	**0.22**	--	--	**26.75**	--	--	**12.0**	--	--
DC-05D	YVD-120720-02	12/7/2020	N	017035	**200**	--	--	**200**	--	--	0.070	U	--	-	-	-	**77.5**	--	--	**23.5**	--	--	**0.20**	--	--	**27.05**	--	--	**12.9**	--	--
DC-05D	YVD-120720-04	12/7/2020	FD	017035	**198**	--	--	**198**	--	--	0.070	U	--	-	-	-	**76.5**	--	--	**21.0**	--	--	**0.18**	--	--	**26.90**	--	--	**12.9**	--	--
DC-05D	YVD-030221-18	3/2/2021	N	120034	**206**	--	--	**206**	--	--	0.070	U	--	-	-	-	**80.5**	--	--	**27.9**	--	--	**0.23**	--	--	**27.10**	--	--	**12.8**	--	--
DC-05D	YVD-060721-13	6/7/2021	N	124105	**212**	--	--	**212**	--	--	0.070	U	--	-	-	-	**78.0**	--	--	**27.2**	--	--	**0.22**	--	--	**26.85**	--	--	**13.0**	--	--
DC-05D	YVD-121421-04	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**12.7**	J	HTQ, MS
DC-07	DC-07-130103	01/03/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**2.8**	-	-
DC-07	DC-07-130918	09/18/2013	N	SWI0123	**315**	-	-	**315**	-	-	-	-	-	0.1	U	-	**122**	-	-	**30.5**	-	-	5	U	-	**18.4**	-	-	**4.3**	-	-
DC-07	YVD-D1-130918	09/18/2013	FD	SWI0123	**295**	-	-	**295**	-	-	-	-	-	0.1	U	-	**122**	-	-	**32.8**	-	-	5	U	-	**18.5**	-	-	**4.3**	-	-
DC-07	DC-07-131210	12/10/2013	N	SWL0055	**260**	-	-	**260**	-	-	-	-	-	0.02	UJ	MSD	**27.5**	-	-	**31**	-	-	5	U	-	**11.5**	-	-	**4.7**	-	-
DC-07	DC-07-140316	03/16/2014	N	SXC0081	**260**	-	-	**260**	-	-	-	-	-	**0.116**	-	-	**88.4**	-	-	**26.5**	-	-	2	U	-	**15.4**	-	-	**4.72**	-	-
DC-07	DC-07-140602	06/02/2014	N	SXF0008	**245**	-	-	**245**	-	-	-	-	-	0.1	U	-	**93.7**	-	-	**28.2**	-	-	2	U	-	**16.5**	-	-	0.8	U	-
DC-07	DC-07-140922	09/22/2014	N	SXI0148	**215**	-	-	**215**	-	-	-	-	-	0.1	U	-	**87.1**	-	-	**29.8**	-	-	2	U	-	**16.1**	-	-	**4.88**	-	-
DC-07	DC-07-141216	12/16/2014	N	SXL0108	**210**	-	-	**210**	-	-	-	-	-	0.1	U	-	**83.6**	-	-	**24.2**	-	-	2	U	-	**15.1**	-	-	**2.8**	-	-
DC-07	YVD-D2-141216	12/16/2014	FD	SXL0108	**210**	-	-	**210**	-	-	-	-	-	0.1	U	-	**84.2**	-	-	**25.6**	-	-	0.5	U	-	**15.1**	-	-	**2.92**	-	-
DC-07	DC-07-150317	03/17/2015	N	5904541	**240**	-	-	**240**	-	-	-	-	-	0.1	U	-	**94.0**	-	-	**29**	-	-	2	U	-	**17.0**	-	-	**4.6**	J-	MSD
DC-07	DC-07-150617	06/17/2015	N	59011021	**230**	-	-	**230**	-	-	-	-	-	0.1	U	-	**97.0**	-	-	**32**	-	-	2	U	-	**17.0**	J	RPD	**4**	J-	MSD
DC-07	DC-07-150924	09/24/2015	N	59020391	**240**	-	-	**240**	-	-	-	-	-	0.1	UJ	MSD	**76.0**	-	-	**30**	-	-	2	U	-	**15.0**	-	-	**2.7**	J+	MSD
DC-07	DC-07-151215	12/15/2015	N	59025501	**240**	-	-	**240**	-	-	-	-	-	-	R	MSD	**87.0**	-	-	**29**	-	-	2	U	-	**16.0**	-	-	**2.5**	-	-
DC-07	DC-07-160309	03/09/2016	N	59029941	**280**	-	-	**280**	-	-	-	-	-	0.1	U	-	**91.0**	-	-	**31**	-	-	2	U	-	**17.0**	-	-	**2.2**	-	-
DC-07	DC-07-160621	6/21/2016	N	59037271	**250**	-	-	**250**	-	-	-	-	-	**0.1**	J-	MSD	**96.0**	-	-	**33**	-	-	2	U	-	**18.0**	-	-	**4.8**	-	-
DC-07	DC-07-160926	9/26/2016	N	K1611565	**204**	-	-	**204**	-	-	-	-	-	0.050	U	-	**82.3**	-	-	**24.4**	-	-	0.2	U	-	**15.0**	-	-	**2.74**	-	-
DC-07	DC-07-161214	12/14/2016	N	K1615083	**218**	-	-	**218**	-	-	-	-	-	0.050	U	-	**77.0**	-	-	**19.2**	-	-	0.2	U	-	**13.1**	-	-	**1.44**	-	-
DC-07	YVD-030917-25	3/9/2017	N	K1702448	**255**	-	-	**255**	-	-	-	-	-	0.050	U	-	**87.9**	-	-	**21.4**	-	-	0.2	U	-	**14.4**	-	-	**2.58**	-	-
DC-07	YVD-060617-18	6/6/2017	N	K1705754	**232**	-	-	**232**	-	-	-	-	-	0.050	U	-	**82.8**	-	-	**24.5**	-	-	**0.11**	J	-	**14.3**	-	-	**2.42**	-	-
DC-07	YVD-092517-12	9/25/2017	N	K1710333	**235**	-	-	**235**	-	-	-	-	-	0.050	U	-	**86.1**	-	-	**25.4**	-	-	**0.09**	J	-	**13.9**	-	-	**2.34**	-	-
DC-07	YVD-120417-14	12/4/2017	N	K1713026	**221**	-	-	**221**	-	-	-	-	-	0.050	U	-	**80.9**	-	-	**25.7**	-	-	**0.18**	J	-	**13.3**	-	-	**2.92**	-	-
DC-07	YVD-060318-17	6/3/2018	N	874568	**202**	-	-	**202**	-	-	0.070	U	-	-	-	-	**90.5**	-	-	**28.5**	-	-	0.10	U	-	**15.85**	-	-	**6.90**	-	-
DC-07	YVD-060319-20	6/3/2019	N	992053	**349**	-	-	**349**	-	-	0.070	U	-	-	-	-	**120**	-	-	**20.4**	-	-	0.10	U	-	**20.20**	-	-	**2.95**	-	-
DC-07	YVD-060920-18	6/9/2020	N	009269	**468**	--	--	**468**	--	--	0.070	U	--	-	-	-	**174**	--	--	**48.8**	--	--	0.10	U	--	**26.95**	--	--	**10.1**	--	--
DC-07	YVD-092120-22	9/21/2020	N	013896	**500**	--	--	**500**	--	--	0.070	U	--	-	-	-	**194**	--	--	**62.3**	--	--	0.10	U	--	**28.95**	--	--	**26.5**	--	--
DC-07	YVD-120820-22	12/8/2020	N	017137	**507**	--	--	**507**	--	--	0.070	U	--	-	-	-	**172**	--	--	**40.6**	--	--	**0.11**	--	--	**25.95**	--	--	**13.4**	--	--
DC-07	YVD-030121-10	3/1/2021	N	119931	**500**	--	--	**500**	--	--	0.070	U	--	-	-	-	**169**	--	--	**35.1**	--	--	0.10	U	--	**26.60**	--	--	**5.80**	--	--
DC-07	YVD-060721-16	6/7/2021	N	124105	**490**	--	--	**490**	--	--	0.070	U	--	-	-	-	**152**	--	--	**23.1**	--	--	0.10	U	--	**23.55**	--	--	**8.80**	--	--
DC-07	YVD-060721-17	6/7/2021	FD	124105	**490**	--	--	**490**	--	--	0.070	U	--	-	-	-	**150**	--	--	**23.2**	--	--	0.10	U	--	**23.40**	--	--	**9.90**	--	--
DC-07	YVD-121521-17	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**20.3**	J	HTQ, MS

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-09	DC-09-130103	01/03/2013	N	EPA01	-	-	-	-	-	-	-	-	-	0.1	U	-	-	-	-	-	-	-	-	-	-	-	-	-	**6**	-	-
DC-09	DC-09-130923	09/23/2013	N	SWI0178	**44.7**	-	-	**45**	-	-	-	-	-	0.1	U	-	**34.0**	-	-	-	-	-	-	-	-	**8.4**	-	-	-	-	-
DC-09	DC-09-130926	09/26/2013	N	SWI0190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**16.2**	-	-	0.5	U	-	-	-	-	**6.02**	-	-
DC-09	DC-09-131211	12/11/2013	N	SWL0063	**129**	-	-	**130**	-	-	-	-	-	-	R	MSD	**34.8**	-	-	**17.4**	-	-	0.5	U	-	**7.9**	-	-	**6.78**	-	-
DC-09	DC-09-140317	03/17/2014	N	SXC0095	**144**	-	-	**145**	-	-	-	-	-	0.1	U	-	**35.4**	-	-	**15.6**	-	-	**0.82**	-	-	**8.4**	-	-	**5.85**	-	-
DC-09	DC-09-140602	06/02/2014	N	SXF0008	**129**	-	-	**130**	-	-	-	-	-	**0.106**	-	-	**33.9**	-	-	**15.9**	-	-	0.5	U	-	**8.3**	-	-	**6.18**	-	-
DC-09	YVD-D3-140602	06/02/2014	FD	SXF0008	**129**	-	-	**130**	-	-	-	-	-	0.1	U	-	**34.2**	-	-	**15.8**	-	-	0.5	U	-	**8.7**	-	-	**5.97**	-	-
DC-09	DC-09-140923	09/23/2014	N	SXI0158	**124**	-	-	**125**	-	-	-	-	-	-	R	MSD	**32.2**	-	-	**15.8**	-	-	0.5	U	-	**6.8**	-	-	**6.01**	-	-
DC-09	DC-09-141216	12/16/2014	N	SXL0108	**129**	-	-	**130**	-	-	-	-	-	0.1	U	-	**35.3**	-	-	**16.3**	-	-	0.5	U	-	**8.0**	-	-	**5.94**	-	-
DC-09	DC-09-150316	03/16/2015	N	5904541	**130**	-	-	**130**	-	-	-	-	-	**0.15**	-	-	**36.0**	-	-	**17**	-	-	**0.6**	-	-	**8.0**	-	-	**5.9**	J-	MSD
DC-09	DC-09-150616	06/16/2015	N	59010751	**130**	-	-	**130**	-	-	-	-	-	0.1	U	-	**34.0**	J+	MSD	**16**	-	-	0.5	U	-	**8.1**	J+	MSD	**5.8**	-	-
DC-09	DC-09-150923	09/23/2015	N	59020281	**140**	-	-	**140**	-	-	-	-	-	0.1	U	-	**33.0**	-	-	**16**	-	-	0.5	U	-	**8.1**	-	-	**5.8**	-	-
DC-09	DC-09-151214	12/14/2015	N	59025431	**150**	J	FDP	**150**	J	FDP	-	-	-	-	R	MSD	**34.0**	-	-	**16**	-	-	0.5	U	-	**8.2**	-	-	**5.9**	-	-
DC-09	DC-09-160308	03/08/2016	N	59029711	**130**	-	-	**130**	-	-	-	-	-	-	R	FBK, FDP	**35.0**	-	-	**16**	-	-	0.5	U	-	**8.8**	-	-	**5.7**	-	-
DC-09	YVD-D2-160308	03/08/2016	FD	59029711	**130**	-	-	**130**	-	-	-	-	-	0.1	UJ	FDP	**34.0**	-	-	**16**	-	-	0.5	U	-	**8.6**	-	-	**5.7**	-	-
DC-09	DC-09-160621	6/21/2016	N	59037151	**130**	-	-	**130**	-	-	-	-	-	0.1	UJ	-	**32.0**	-	-	**17**	-	-	**0.51**	-	-	**7.5**	-	-	**5.9**	-	-
DC-09	DC-09-160929	9/29/2016	N	K1611704	**129**	-	-	**129**	-	-	-	-	-	0.050	U	MBK	**30.6**	-	-	**14.8**	-	-	**0.38**	-	-	**6.25**	-	-	**5.53**	-	-
DC-09	DC-09-D4-160929	9/29/2016	FD	K1611704	**128**	-	-	**128**	-	-	-	-	-	0.050	U	MBK	**30.4**	-	-	**14.9**	-	-	**0.38**	-	-	**6.22**	-	-	**5.53**	-	-
DC-09	DC-09-161215	12/15/2016	N	K1615126	**127**	-	-	**127**	-	-	-	-	-	0.050	U	-	**33.0**	-	-	**15.0**	-	-	**0.41**	-	-	**6.65**	-	-	**5.62**	-	-
DC-09	YVD-D4-161215	12/15/2016	FD	K1615126	**127**	-	-	**127**	-	-	-	-	-	0.050	U	-	**32.8**	-	-	**15.0**	-	-	**0.42**	-	-	**6.62**	-	-	**5.61**	-	-
DC-09	YVD-031317-36	3/13/2017	N	K1702489	**124**	-	-	**124**	-	-	-	-	-	0.050	U	-	**33.8**	-	-	**14.6**	-	-	**0.44**	-	-	**6.75**	-	-	**5.54**	-	-
DC-09	YVD-060717-27	6/7/2017	N	K1705833	**126**	-	-	**126**	-	-	-	-	-	0.050	U	-	**33.3**	-	-	**14.7**	-	-	**0.40**	-	-	**6.88**	-	-	**5.55**	-	-
DC-09	YVD-092617-23	9/26/2017	N	K1710333	**132**	-	-	**132**	-	-	-	-	-	0.050	U	-	**32.9**	-	-	**14.7**	-	-	**0.40**	-	-	**6.71**	-	-	**5.47**	-	-
DC-09	YVD-120417-09	12/4/2017	N	K1713026	**129**	-	-	**129**	-	-	-	-	-	0.050	U	-	**33.0**	-	-	**15.1**	-	-	**0.43**	-	-	**6.50**	-	-	**5.80**	-	-
DC-09	YVD-060418-25	6/4/2018	N	874860	**127**	-	-	**127**	-	-	0.070	U	-	-	-	-	**33.4**	-	-	**14.1**	-	-	**0.39**	-	-	**7.30**	-	-	**5.29**	-	-
DC-09	YVD-060319-19	6/3/2019	N	992053	**128**	-	-	**128**	-	-	0.070	U	-	-	-	-	**34.5**	-	-	**13.1**	-	-	**0.39**	-	-	**7.25**	-	-	**5.23**	-	-
DC-09	YVD-060920-25	6/9/2020	N	009269	**128**	--	--	**128**	--	--	0.070	U	--	-	-	-	**34.0**	--	--	**14.4**	--	--	**0.35**	--	--	**7.150**	--	--	**5.60**	--	--
DC-09	YVD-060721-15	6/7/2021	N	124105	**129**	--	--	**129**	--	--	0.070	U	--	-	-	-	**34.4**	--	--	**14.8**	--	--	**0.38**	--	--	**7.350**	--	--	**6.20**	--	--
DC-14	DC-14-130103	01/03/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**26**	-	-
DC-14	DC-14-130917	09/17/2013	N	SWI0113	**454**	-	-	**455**	-	-	-	-	-	**0.115**	-	-	**121**	-	-	**80.2**	-	-	0.5	U	-	**32.3**	-	-	**12**	-	-
DC-14	DC-14-131211	12/11/2013	N	SWL0063	**434**	-	-	**435**	-	-	-	-	-	-	R	MSD	**91.2**	-	-	**64.4**	-	-	5	U	-	**23.9**	-	-	**5.8**	-	-
DC-14	DC-14-140318	03/18/2014	N	SXC0095	**494**	-	-	**495**	-	-	-	-	-	0.1	U	-	**107**	-	-	**71.8**	-	-	5	U	-	**28.4**	-	-	**10.6**	-	-
DC-14	DC-14-140602	06/02/2014	N	SXF0017	**425**	-	-	**425**	-	-	-	-	-	0.1	U	-	**95.9**	-	-	**56.1**	-	-	1	U	-	**26.3**	-	-	**6.46**	-	-
DC-14	DC-14-140923	09/23/2014	N	SXI0158	**424**	-	-	**425**	-	-	-	-	-	-	R	MSD	**106**	-	-	**63.7**	-	-	1	U	-	**27.6**	-	-	**8.9**	-	-
DC-14	DC-14-141216	12/16/2014	N	SXL0108	**429**	-	-	**430**	-	-	-	-	-	0.1	U	-	**110**	-	-	**74.4**	-	-	1	U	-	**31.5**	-	-	**10.4**	-	-
DC-14	DC-14-150316	03/16/2015	N	5904541	**490**	-	-	**490**	-	-	-	-	-	**0.16**	-	-	**140**	-	-	**80**	-	-	1	U	-	**38.0**	-	-	**18**	J-	MSD
DC-14	DC-14-150616	06/16/2015	N	59010961	**430**	-	-	**430**	-	-	-	-	-	0.1	U	-	**120**	-	-	**76**	-	-	1	U	-	**33.0**	-	-	**12**	-	-
DC-14	DC-14-150924	09/24/2015	N	59020391	**470**	-	-	**470**	-	-	-	-	-	0.1	UJ	MSD	**130**	-	-	**96**	-	-	1	U	-	**42.0**	-	-	**22**	J+	MSD
DC-14	DC-14-151214	12/14/2015	N	59025351	**550**	-	-	**550**	-	-	-	-	-	-	R	MSD	**150**	-	-	**90**	-	-	1	U	-	**43.0**	-	-	**21**	-	-
DC-14	YVD-D1-151214	12/14/2015	FD	59025351	**540**	-	-	**540**	-	-	-	-	-	-	R	MSD	**150**	-	-	**85**	-	-	0.5	U	-	**43.0**	-	-	**22**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-14	DC-14-160309	03/09/2016	N	59029711	**490**	-	-	**490**	-	-	-	-	-	0.1	UJ	FDP	**130**	-	-	**82**	-	-	1	U	-	**38.0**	-	-	**16**	-	-
DC-14	DC-14-160620	6/20/2016	N	59037151	**460**	-	-	**460**	-	-	-	-	-	0.1	U	-	**120**	-	-	**75**	-	-	1	U	-	**36.0**	-	-	**16**	-	-
DC-14	DC-14-160929	9/29/2016	N	K1611704	**394**	-	-	**394**	-	-	-	-	-	0.050	U	MBK	**97.2**	-	-	**56.4**	-	-	**0.30**	-	-	**28.9**	-	-	**7.19**	-	-
DC-14	DC-14-161216	12/16/2016	N	K1615174	**361**	-	-	**361**	-	-	-	-	-	0.050	U	-	**93.3**	-	-	**53.9**	-	-	**0.36**	-	-	**22.3**	-	-	**4.45**	-	-
DC-14	YVD-031317-38	3/14/2017	N	K1702542	**359**	-	-	**359**	-	-	-	-	-	0.050	U	-	**91.0**	-	-	**49.6**	-	-	**0.34**	-	-	**24.4**	-	-	**4.34**	-	-
DC-14	YVD-060617-19	6/6/2017	N	K1705754	**386**	-	-	**386**	-	-	-	-	-	0.050	U	-	**97.7**	-	-	**49.2**	-	-	**0.34**	-	-	**24.4**	-	-	**3.86**	-	-
DC-14	YVD-092517-11	9/25/2017	N	K1710274	**382**	-	-	**382**	-	-	-	-	-	0.050	U	-	**98.2**	-	-	**43.3**	-	-	**0.34**	-	-	**24.5**	-	-	**2.41**	-	-
DC-14	YVD-120617-27	12/6/2017	N	K1713157	**378**	-	-	**378**	-	-	-	-	-	0.050	U	MBK	**100**	-	-	**46.4**	-	-	**0.35**	-	-	**23.5**	-	-	**2.52**	-	-
DC-14	YVD-120617-29	12/6/2017	FD	K1713157	**372**	-	-	**372**	-	-	-	-	-	0.050	U	-	**97.7**	-	-	**46.0**	-	-	**0.34**	-	-	**22.8**	-	-	**2.52**	-	-
DC-14	YVD-031918-20	3/19/2018	N	870634	**372**	-	-	**372**	-	-	0.070	U	-	-	-	-	**95.0**	-	-	**47.9**	-	-	**0.31**	-	-	**22.55**	-	-	**2.86**	-	-
DC-14	YVD-060518-28	6/5/2018	N	874860	**370**	-	-	**370**	-	-	0.070	U	-	-	-	-	**92.0**	-	-	**56.5**	-	-	**0.31**	-	-	**23.45**	-	-	**4.00**	-	-
DC-14	YVD-060518-30	6/5/2018	FD	874860	-	R	PRS	-	R	PRS	0.070	U	-	-	-	-	**97.5**	-	-	-	R	PRS	-	R	PRS	**24.55**	-	-	-	R	PRS
DC-14	YVD-090918-08	9/9/2018	N	880601	**368**	-	-	**368**	-	-	0.070	U	-	-	-	-	**104**	-	-	**63.5**	-	-	**0.29**	-	-	**25.00**	-	-	**4.08**	-	-
DC-14	YVD-090918-10	9/9/2018	FD	880601	**363**	-	-	**363**	-	-	0.070	U	-	-	-	-	**105**	-	-	**70.8**	-	-	**0.29**	-	-	**25.05**	-	-	**4.00**	-	-
DC-14	YVD-121018-07	12/10/2018	N	884857	**376**	-	-	**376**	-	-	0.070	U	-	-	-	-	**105**	-	-	**72.8**	-	-	0.28	U	FBK	**25.70**	J	MSD	**4.60**	-	-
DC-14	YVD-031719-09	3/17/2019	N	988239	**395**	-	-	**395**	-	-	0.070	U	-	-	-	-	**118**	-	-	**83.8**	-	-	0.25	U	FBK	**27.80**	-	-	**5.00**	-	-
DC-14	YVD-060319-17	6/3/2019	N	992053	**395**	-	-	**395**	-	-	0.070	U	-	-	-	-	**122**	-	-	**79.7**	-	-	**0.22**	-	-	**29.65**	-	-	**5.35**	-	-
DC-14	YVD-091019-18	9/10/2019	N	998438	**427**	-	-	**427**	-	-	0.070	U	-	-	-	-	**132**	-	-	**89.5**	-	-	**0.24**	-	-	**32.25**	-	-	**7.70**	-	-
DC-14	YVD-120919-14	12/9/2019	N	902276	**438**	-	-	**438**	-	-	0.070	U	-	-	-	-	**134**	-	-	**95.2**			**0.32**			**32.85**	-	-	**8.00**	-	-
DC-14	YVD-033120-19	3/31/2020	N	006260	**451**	-	-	**451**	-	-	0.070	U	-	-	-	-	**134**	-	-	**87.6**	-	-	**0.24**	--	--	**32.50**	-	-	**9.50**	-	-
DC-14	YVD-033120-21	3/31/2020	FD	006260	**448**	-	-	**448**	-	-	0.070	U	-	-	-	-	**136**	-	-	**87.7**	-	-	**0.26**	--	--	**33.05**	-	-	**9.60**	-	-
DC-14	YVD-061020-32	6/10/2020	N	009361	**437**	--	--	**437**	--	--	0.070	U	--	-	-	-	**138**	--	--	**84.9**	--	--	**0.23**	--	--	**33.70**	J	MS	**11.5**	--	--
DC-14	YVD-061020-33	6/10/2020	FD	009361	**461**	--	--	**461**	--	--	0.070	U	--	-	-	-	**139**	--	--	**87.3**	--	--	**0.22**	--	--	**33.25**	J	MS	**12.0**	--	--
DC-14	YVD-092120-23	9/21/2020	N	013896	**472**	--	--	**472**	--	--	0.070	U	--	-	-	-	**150**	--	--	**90.5**	--	--	**0.21**	--	--	**36.10**	--	--	**17.3**	--	--
DC-14	YVD-120820-21	12/8/2020	N	017137	**496**	--	--	**496**	--	--	0.070	U	--	-	-	-	**174**	--	--	**89.4**	--	--	**0.18**	--	--	**41.50**	--	--	**23.6**	--	--
DC-14	YVD-030121-09	3/1/2021	N	119931	**517**	--	--	**517**	--	--	0.070	U	--	-	-	-	**186**	--	--	**90.9**	--	--	**0.24**	--	--	**44.30**	--	--	**31.2**	--	--
DC-14	YVD-060821-33	6/8/2021	N	124212	**563**	--	--	**563**	--	--	0.070	U	--	-	-	-	**196**	--	--	**93.4**	--	--	**0.14**	--	--	**47.05**	--	--	**40.2**	--	--
DC-14	YVD-121521-19	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**51.4**	J	HTQ, MS
YVD-02	YVD-02-130924	09/24/2013	N	SWI0178	**54.9**	-	-	**55**	-	-	-	-	-	**0.146**	-	-	**20.4**	-	-	**3.85**	-	-	0.5	U	-	**5.9**	-	-	**0.41**	-	-
YVD-02	YVD-02-140316	03/16/2014	N	SXC0081	**199**	-	-	**200**	-	-	-	-	-	0.1	U	-	**90.8**	-	-	**3.93**	-	-	**1.02**	-	-	**71.7**	-	-	0.2	U	-
YVD-02	YVD-02-140602	06/02/2014	N	SXF0008	**82.2**	-	-	**82.5**	-	-	-	-	-	0.1	U	-	**62.7**	-	-	**2.75**	-	-	0.5	U	-	**48.7**	-	-	0.2	U	-
YVD-02	YVD-02-140921	09/21/2014	N	SXI0148	**89.4**	-	-	**90**	-	-	-	-	-	0.1	U	-	**29.6**	-	-	**2.64**	-	-	0.5	U	-	**13.7**	J	FDP	0.2	U	-
YVD-02	YVD-D1-140921	09/21/2014	FD	SXI0148	**89.4**	-	-	**90**	-	-	-	-	-	0.1	U	-	**35.8**	-	-	**2.2**	-	-	0.5	U	-	**18.2**	J	FDP	0.2	U	-
YVD-02	YVD-02-141215	12/15/2014	N	SXL0103	**94.7**	-	-	**95**	-	-	-	-	-	0.1	U	-	**35.7**	-	-	**2.9**	J+	MSD	0.5	U	-	**17.4**	-	-	**0.22**	J	DUP
YVD-02	YVD-02-150615	06/15/2015	N	59010751	**75**	J+	FBK	**75**	J+	FBK	-	-	-	**0.11**	-	-	**32.0**	J+	MSD	**2.6**	-	-	0.5	U	-	**16.0**	J+	MSD	**0.23**	-	-
YVD-02	YVD-02-150923	09/23/2015	N	59020281	**95**	-	-	**95**	-	-	-	-	-	0.1	U	-	**28.0**	-	-	**2.5**	-	-	0.5	U	-	**17.0**	-	-	0.2	U	-
YVD-02	YVD-02-151214	12/14/2015	N	59025351	**100**	-	-	**100**	-	-	-	-	-	-	R	MSD	**38.0**	-	-	**2.6**	-	-	0.5	U	-	**23.0**	-	-	0.2	U	-
YVD-02	YVD-02-160308	03/08/2016	N	59029521	**110**	J	FDP	**110**	J	FDP	-	-	-	0.1	UJ	RPD	**32.0**	-	-	**3**	-	-	**0.57**	-	-	**20.0**	-	-	0.2	U	-
YVD-02	YVD-02-160620	6/20/2016	N	59037101	**75**	-	-	**75**	-	-	-	-	-	0.1	U	-	**25.0**	-	-	**2.9**	-	-	0.5	U	-	**10.0**	-	-	**0.31**	-	-
YVD-02	YVD-02-160928	9/28/2016	N	K1611629	**72**	-	-	**72**	-	-	-	-	-	0.050	U	MBK	**17.2**	-	-	**2.79**	J	DUP	**0.16**	J	-	**4.6**	-	-	**0.13**	-	-
YVD-02	YVD-030817-15	3/8/2017	N	K1702324	**103**	-	-	**103**	-	-	-	-	-	1	U	-	**30.2**	-	-	**3.85**	-	-	**0.21**	-	-	**7.2**	-	-	**5.40**	-	-
YVD-02	YVD-060617-14	6/6/2017	N	K1705754	**81**	-	-	**81**	-	-	-	-	-	0.050	U	-	**20.9**	-	-	**3.03**	-	-	**0.16**	J	-	**4.85**	-	-	**0.20**	-	-
YVD-02	YVD-060617-16	6/6/2017	FD	K1705754	**67**	-	-	**67**	-	-	-	-	-	0.050	U	-	**20.2**	-	-	**2.95**	-	-	**0.15**	J	-	**4.74**	-	-	**0.20**	-	-
YVD-02	YVD-092617-20	9/26/2017	N	K1710333	**75**	-	-	**75**	-	-	-	-	-	0.050	U	-	**17.7**	-	-	**2.63**	-	-	**0.15**	J	-	**4.64**	-	-	**0.17**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-02	YVD-120417-02	12/4/2017	N	K1713026	**89**	-	-	**89**	-	-	-	-	-	0.050	U	-	**20.0**	-	-	**2.37**	-	-	**0.29**	-	-	**7.43**	-	-	**0.22**	-	-
YVD-02	YVD-120417-04	12/4/2017	FD	K1713026	**93**	-	-	**93**	-	-	-	-	-	0.050	U	-	**19.6**	-	-	**2.20**	-	-	**0.31**	-	-	**7.74**	-	-	**0.20**	-	-
YVD-02	YVD-061218-32	6/12/2018	N	875438	-	R	NR	-	R	NR	-	R	NR	-	-	-	-	R	NR	-	R	NR	-	R	NR	-	R	NR	-	R	NR
YVD-02	YVD-060419-28	6/4/2019	N	992242	**191**	-	-	**191**	-	-	0.07	U	-	-	-	-	**54.0**	-	-	**12.5**	-	-	**0.18**	-	-	**19.55**	-	-	**33.9**	J	HTQ
YVD-02	YVD-070219-33	7/2/2019	N	994356	**204**	-	-	**204**	-	-	0.07	U	-	-	-	-	**87.0**	-	-	**13.0**	-	-	**0.19**	-	-	**32.35**	-	-	**36.1**	-	-
YVD-02	YVD-091019-19	9/10/2019	N	998438	**200**	-	-	**200**	-	-	0.07	U	-	-	-	-	**97.0**	-	-	**11.3**	-	-	**0.13**	-	-	**26.95**	-	-	**43.6**	-	-
YVD-02	YVD-121019-23	12/10/2019	N	902321	**226**	-	-	**226**	-	-	0.07	U	-				**85.0**	-	-	**11.6**	-	-	**0.33**	-	-	**31.60**	-	-	**38.9**	-	-
YVD-02	YVD-040120-23	4/1/2020	N	006311	**237**	-	-	**237**	-	-	0.07	U	-	-	-	-	**59.5**	-	-	**11.7**	-	-	**0.55**	--	--	**25.40**	-	-	**20.6**	-	-
YVD-02	YVD-061120-35	6/11/2020	N	009430	NS	--	--	NS	--	--	NS	--	--	-	-	-	NS	--	--	NS	--	--	NS	--	--	NS	--	--	**15.5**	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--	NS	--	--	-	-	-	NS	--	--	NS	--	--	NS		--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--	NS	--	--	-	-	-	NS	--	--	NS	--	--	NS		--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--	NS	--	--				NS	--	--	NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--	NS	--	--				NS	--	--	NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--	NS	--	--				NS	--	--	NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-03	YVD-03-130916	09/16/2013	N	SWI0113	**209**	-	-	**210**	-	-	-	-	-	0.1	U	-	**57.5**	-	-	**14**	-	-	**0.74**	-	-	**24.3**	-	-	**4.75**	-	-
YVD-03	YVD-03-131210	12/10/2013	N	SWL0063	**214**	-	-	**215**	-	-	-	-	-	-	R	MSD	**48.7**	-	-	**14.3**	-	-	1	U	-	**20.4**	-	-	**5.96**	-	-
YVD-03	YVD-03-140317	03/17/2014	N	SXC0081	**219**	-	-	**220**	-	-	-	-	-	**0.249**	-	-	**51.2**	-	-	**13.3**	-	-	**1.03**	-	-	**18.2**	-	-	**4.75**	-	-
YVD-03	YVD-03-140602	06/02/2014	N	SXF0008	**206**	-	-	**208**	-	-	-	-	-	0.1	U	-	**46.4**	-	-	**10.7**	-	-	0.5	U	-	**16.8**	-	-	**3.86**	-	-
YVD-03	YVD-03-140923	09/23/2014	N	SXI0158	**199**	-	-	**200**	-	-	-	-	-	-	R	MSD	**52.2**	-	-	**11.8**	-	-	**0.62**	-	-	**19.5**	-	-	**3.97**	-	-
YVD-03	YVD-D3-140923	09/23/2014	FD	SXI0158	**199**	-	-	**200**	-	-	-	-	-	-	R	MSD	**45.4**	-	-	**12.1**	-	-	**0.65**	-	-	**16.2**	-	-	**4.04**	-	-
YVD-03	YVD-03-141215	12/15/2014	N	SXL0108	**199**	-	-	**200**	-	-	-	-	-	0.1	U	-	**51.7**	-	-	**12.9**	-	-	**0.54**	-	-	**19.3**	-	-	**4.27**	-	-
YVD-03	YVD-03-150316	03/16/2015	N	5904541	**210**	-	-	**210**	-	-	-	-	-	0.1	U	-	**46.0**	-	-	**13**	-	-	**0.84**	-	-	**17.0**	-	-	**4.1**	J-	MSD
YVD-03	YVD-03-150616	06/16/2015	N	59010751	**200**	-	-	**200**	-	-	-	-	-	**0.12**	-	-	**50.0**	J+	MSD	**12**	-	-	**0.68**	-	-	**20.0**	J+	MSD	**4**	-	-
YVD-03	YVD-03-150922	09/22/2015	N	59020141	**220**	-	-	**220**	-	-	-	-	-	0.1	U	-	**43.0**	-	-	**14**	-	-	**0.66**	-	-	**19.0**	-	-	**4.9**	-	-
YVD-03	YVD-03-151214	12/14/2015	N	59025351	**230**	-	-	**230**	-	-	-	-	-	-	R	MSD	**49.0**	-	-	**14**	-	-	**0.74**	-	-	**22.0**	-	-	**4.9**	-	-
YVD-03	YVD-03-160307	03/07/2016	N	59029521	**150**	J	FDP	**150**	J	FDP	-	-	-	0.1	UJ	RPD	**43.0**	-	-	**13**	-	-	**0.72**	-	-	**20.0**	-	-	**4.6**	-	-
YVD-03	YVD-03-160620	6/20/2016	N	59037151	**190**	-	-	**190**	-	-	-	-	-	0.1	U	-	**46.0**	-	-	**14**	-	-	**0.76**	-	-	**21.0**	-	-	**4.6**	-	-
YVD-03	YVD-03-160929	9/29/2016	N	K1611758	**196**	-	-	**196**	-	-	-	-	-	0.050	U	MBK	**43.2**	-	-	**11.7**	-	-	**0.61**	-	-	**18.3**	-	-	**4.39**	-	-
YVD-03	YVD-03-161213	12/13/2016	N	K1615045	**189**	-	-	**189**	-	-	-	-	-	0.050	U	-	**40.0**	-	-	**11.6**	-	-	**0.69**	-	-	**17.4**	-	-	**4.47**	-	-
YVD-03	YVD-030617-02	3/6/2017	N	K1702228	**190**	-	-	**190**	-	-	-	-	-	0.050	U	-	**41.6**	-	-	**11.4**	-	-	**0.60**	-	-	**17.3**	-	-	**4.42**	-	-
YVD-03	YVD-030617-03	3/6/2017	FD	K1702228	**192**	-	-	**192**	-	-	-	-	-	0.050	U	-	**41.5**	-	-	**11.6**	-	-	**0.65**	-	-	**17.3**	-	-	**4.48**	-	-
YVD-03	YVD-060517-13	6/5/2017	N	K1705702	**189**	-	-	**189**	-	-	-	-	-	0.050	U	-	**41.9**	-	-	**11.9**	-	-	**0.66**	-	-	**18.1**	-	-	**4.61**	-	-
YVD-03	YVD-092517-05	9/25/2017	N	K1710274	**193**	-	-	**193**	-	-	-	-	-	0.050	U	-	**41.6**	-	-	**11.6**	-	-	**0.66**	-	-	**18.7**	-	-	**4.45**	-	-
YVD-03	YVD-120517-19	12/5/2017	N	K1713091	**181**	-	-	**181**	-	-	-	-	-	0.050	U	-	**41.9**	-	-	**11.1**	-	-	**0.64**	-	-	**17.4**	-	-	**4.52**	-	-
YVD-03	YVD-060518-27	6/5/2018	N	874860	**188**	-	-	**188**	-	-	0.070	U	-	-	-	-	**39.0**	-	-	**11.3**	-	-	**0.62**	-	-	**17.4**	-	-	**4.70**	-	-
YVD-03	YVD-060219-07	6/2/2019	N	991939	**185**	-	-	**185**	-	-	0.070	U	-	-	-	-	**40.3**	-	-	8.19	U	FBK	0.44	U	FBK	**17.2**	-	-	**3.16**	-	-
YVD-03	YVD-060820-09	6/8/2020	N	009144	**184**	--	--	**184**	--	--	0.070	U	--	-	-	-	**40.5**	--	--	**11.6**	--	--	**0.56**	--	--	**17.55**	--	--	**5.20**	--	--
YVD-03	YVD-060821-24	6/8/2021	N	124212	**182**	--	--	**182**	--	--	0.070	U	--	-	-	-	**42.2**	--	--	**8.09**	--	--	**0.37**	--	--	**17.75**	--	--	**3.23**	--	--
YVD-04	YVD-04-130916	09/16/2013	N	SWI0113	**184**	-	-	**185**	-	-	-	-	-	0.1	U	-	**37.4**	-	-	**14.9**	-	-	0.5	U	-	**11.2**	-	-	**4.45**	-	-
YVD-04	YVD-04-131210	12/10/2013	N	SWL0063	**203**	-	-	**205**	-	-	-	-	-	-	R	MSD	**38.2**	-	-	**15**	-	-	1	U	-	**11.7**	-	-	**4.64**	-	-
YVD-04	YVD-04-140317	03/17/2014	N	SXC0081	**209**	-	-	**210**	-	-	-	-	-	0.1	U	-	**37.7**	-	-	**15.1**	-	-	**0.63**	-	-	**11.6**	-	-	**4.03**	-	-
YVD-04	YVD-04-140602	06/02/2014	N	SXF0008	**191**	-	-	**193**	-	-	-	-	-	**0.113**	-	-	**36.8**	-	-	**14.3**	-	-	1	U	-	**11.5**	-	-	**3.78**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-04	YVD-04-140923	09/23/2014	N	SXI0158	**188**	-	-	**190**	-	-	-	-	-	-	R	MSD	**37.8**	-	-	**15.3**	-	-	0.5	U	-	**11.5**	-	-	**3.87**	-	-
YVD-04	YVD-04-141215	12/15/2014	N	SXL0108	**188**	-	-	**190**	-	-	-	-	-	0.1	U	-	**38.8**	-	-	**15.2**	-	-	0.5	U	-	**12.4**	-	-	**3.81**	-	-
YVD-04	YVD-04-150315	03/15/2015	N	5904471	**190**	-	-	**190**	-	-	-	-	-	0.1	U	-	**38.0**	-	-	**16**	-	-	0.5	U	-	**12.0**	-	-	**4.3**	-	-
YVD-04	YVD-04-150615	06/15/2015	N	59010751	**190**	-	-	**190**	-	-	-	-	-	0.1	U	-	**38.0**	J+	MSD	**15**	-	-	0.5	U	-	**8.5**	J+	MSD	**4**	-	-
YVD-04	YVD-04-150922	09/22/2015	N	59020141	**200**	-	-	**200**	-	-	-	-	-	**0.13**	-	-	**36.0**	-	-	**15**	-	-	0.5	U	-	**11.0**	-	-	**3.9**	-	-
YVD-04	YVD-04-151213	12/13/2015	N	59025351	**200**	-	-	**200**	-	-	-	-	-	-	R	MSD	**39.0**	-	-	**15**	-	-	0.5	U	-	**12.0**	-	-	**4.1**	-	-
YVD-04	YVD-04-160307	03/07/2016	N	59029521	**250**	J	FDP	**250**	J	FDP	-	-	-	0.1	UJ	RPD	**36.0**	-	-	**14**	-	-	0.5	U	-	**12.0**	-	-	**3.7**	-	-
YVD-04	YVD-04-160620	6/20/2016	N	59037101	**190**	-	-	**190**	-	-	-	-	-	0.1	U	-	**36.0**	-	-	**15**	-	-	0.5	U	-	**12.0**	-	-	**4**	-	-
YVD-04	YVD-D1-160620	6/20/2016	FD	59037101	**180**	-	-	**180**	-	-	-	-	-	0.1	U	-	**35.0**	-	-	**15**	-	-	0.5	U	-	**12.0**	-	-	**4**	-	-
YVD-04	YVD-04-160928	9/28/2016	N	K1611629	**187**	-	-	**187**	-	-	-	-	-	0.050	U	-	**34.7**	-	-	**13.2**	-	-	**0.21**	-	-	**10.7**	-	-	**3.67**	-	-
YVD-04	YVD-04-D3-160928	9/28/2016	FD	K1611629	**185**	-	-	**185**	-	-	-	-	-	0.050	U	MBK	**34.7**	-	-	**13.2**	-	-	**0.20**	-	-	**10.9**	-	-	**3.68**	-	-
YVD-04	YVD-04-161213	12/13/2016	N	K1615045	**181**	-	-	**181**	-	-	-	-	-	0.050	U	-	**35.2**	-	-	**13.2**	-	-	**0.23**	-	-	**10.9**	-	-	**3.74**	-	-
YVD-04	YVD-031017-28	3/10/2017	N	K1702448	**167**	-	-	**167**	-	-	-	-	-	0.050	U	-	**37.8**	-	-	**13.2**	-	-	**0.21**	-	-	**10.9**	-	-	**3.70**	-	-
YVD-04	YVD-060517-11	6/5/2017	N	K1705702	**182**	-	-	**182**	-	-	-	-	-	0.050	U	-	**36.5**	-	-	**13.0**	-	-	**0.22**	-	-	**9.85**	-	-	**3.53**	-	-
YVD-04	YVD-092517-07	9/25/2017	N	K1710274	**188**	-	-	**188**	-	-	-	-	-	0.050	U	-	**37.2**	-	-	**12.9**	-	-	**0.21**	-	-	**11.7**	-	-	**3.57**	-	-
YVD-04	YVD-120417-13	12/4/2017	N	K1713091	**185**	-	-	**185**	-	-	-	-	-	0.050	U	-	**36.5**	-	-	**13.2**	-	-	**0.24**	-	-	**10.9**	-	-	**3.79**	-	-
YVD-04	YVD-060418-21	6/4/2018	N	874662	**179**	-	-	**179**	-	-	0.08	U	FBK	-	-	-	**37.0**	-	-	**12.3**	-	-	**0.19**	-	-	**11.65**	-	-	**4.10**	-	-
YVD-04	YVD-060219-05	6/2/2019	N	991939	**181**	-	-	**181**	-	-	0.070	U	-	-	-	-	**36.2**	-	-	22.9	U	FBK	0.79	U	FBK	**11.10**	-	-	**3.85**	-	-
YVD-04	YVD-060820-05	6/8/2020	N	009144	**182**	--	--	**182**	--	--	0.070	U	--	-	-	-	**34.9**	--	--	**12.7**	--	--	**0.16**	--	--	**10.90**	--	--	**4.10**	--	--
YVD-04	YVD-060821-22	6/8/2021	N	124212	**182**	--	--	**182**	--	--	0.070	U	--	-	-	-	**35.4**	--	--	**12.5**	--	--	**0.16**	--	--	**10.65**	--	--	**3.73**	--	--
YVD-05	YVD-05-130917	09/17/2013	N	SWI0113	**184**	-	-	**185**	-	-	-	-	-	**0.112**	-	-	**66.0**	-	-	**10.2**	-	-	0.5	U	-	**31.0**	-	-	**4.9**	-	-
YVD-05	YVD-05-131211	12/11/2013	N	SWL0063	**174**	-	-	**175**	-	-	-	-	-	-	R	MSD	**41.5**	-	-	**10**	-	-	1	U	-	**17.0**	-	-	**4.36**	-	-
YVD-05	YVD-05-140317	03/17/2014	N	SXC0081	**174**	-	-	**175**	-	-	-	-	-	0.1	U	-	**33.7**	-	-	**8.4**	-	-	**1.3**	-	-	**13.5**	-	-	**3.3**	-	-
YVD-05	YVD-05-140601	06/01/2014	N	SXF0008	**164**	-	-	**165**	-	-	-	-	-	0.1	U	-	**30.8**	-	-	**8.4**	-	-	1	U	-	**13.2**	-	-	**3**	-	-
YVD-05	YVD-05-140922	09/22/2014	N	SXI0148	**159**	-	-	**160**	-	-	-	-	-	0.1	U	-	**31.6**	-	-	**7.6**	-	-	1	U	-	**13.7**	-	-	**2.82**	-	-
YVD-05	YVD-05-141215	12/15/2014	N	SXL0103	**154**	-	-	**155**	-	-	-	-	-	0.1	U	-	**36.9**	-	-	**4.56**	J+	MSD, FDP	1	U	-	**17.0**	-	-	**1.5**	J	FDP, DUP
YVD-05	YVD-D1-141215	12/15/2014	FD	SXL0103	**153**	-	-	**155**	-	-	-	-	-	0.1	U	-	**34.2**	-	-	**7.8**	J+	MSD, FDP	0.5	U	-	**15.0**	-	-	**2.65**	J	FDP, DUP
YVD-05	YVD-05-150316	03/16/2015	N	5904471	**160**	-	-	**160**	-	-	-	-	-	0.1	U	-	**33.0**	-	-	**8**	-	-	1	U	-	**15.0**	-	-	**2.8**	-	-
YVD-05	YVD-05-150616	06/16/2015	N	59010751	**170**	-	-	**170**	-	-	-	-	-	0.1	U	-	**35.0**	J+	MSD	**8.9**	-	-	1	U	-	**16.0**	J+	MSD	**3.1**	-	-
YVD-05	YVD-05-150922	09/22/2015	N	59020281	**160**	-	-	**160**	-	-	-	-	-	0.1	U	-	**42.0**	-	-	**8.8**	-	-	1	U	-	**20.0**	-	-	**3**	-	-
YVD-05	YVD-05-151214	12/14/2015	N	59025351	**180**	-	-	**180**	-	-	-	-	-	-	R	MSD	**37.0**	-	-	**7.9**	-	-	1	U	-	**17.0**	-	-	**2.8**	-	-
YVD-05	YVD-05-160307	03/07/2016	N	59029521	**160**	J	FDP	**160**	J	FDP	-	-	-	0.1	UJ	RPD	**32.0**	-	-	**8.3**	-	-	1	U	-	**15.0**	-	-	**2.7**	-	-
YVD-05	YVD-D1-160307	03/07/2016	FD	59029521	**170**	J	FDP	**170**	J	FDP	-	-	-	0.1	UJ	RPD	**32.0**	-	-	**8.7**	-	-	**0.59**	-	-	**15.0**	-	-	**2.9**	-	-
YVD-05	YVD-05-160620	6/20/2016	N	59037151	**170**	-	-	**170**	-	-	-	-	-	0.1	U	-	**31.0**	-	-	**9.1**	-	-	1	U	-	**14.0**	-	-	**3**	-	-
YVD-05	YVD-05-160928	9/28/2016	N	K1611698	**171**	-	-	**171**	-	-	-	-	-	0.050	U	MBK	**32.1**	-	-	**8.37**	-	-	**0.44**	-	-	**13.8**	-	-	**3.12**	-	-
YVD-05	YVD-05-161215	12/15/2016	N	K1615174	**163**	-	-	**163**	-	-	-	-	-	0.050	U	-	**33.3**	-	-	**8.30**	-	-	**0.48**	-	-	**13.1**	-	-	**3.15**	-	-
YVD-05	YVD-031317-32	3/13/2017	N	K1702489	**166**	-	-	**166**	-	-	-	-	-	0.050	U	-	**31.4**	-	-	**7.89**	-	-	**0.49**	-	-	**14.1**	-	-	**2.88**	-	-
YVD-05	YVD-031317-34	3/13/2017	FD	K1702489	**168**	-	-	**168**	-	-	-	-	-	0.050	U	-	**31.4**	-	-	**7.92**	-	-	**0.48**	-	-	**14.0**	-	-	**2.91**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-05	YVD-060617-23	6/6/2017	N	K1705754	**168**	-	-	**168**	-	-	-	-	-	0.050	U	-	**31.6**	-	-	**8.12**	-	-	**0.47**	-	-	**13.9**	-	-	**2.90**	-	-
YVD-05	YVD-092517-09	9/25/2017	N	K1710274	**173**	-	-	**173**	-	-	-	-	-	0.050	U	-	**35.3**	-	-	**8.01**	-	-	**0.47**	-	-	**14.6**	-	-	**2.82**	-	-
YVD-05	YVD-120517-15	12/5/2017	N	K1713091	**171**	-	-	**171**	-	-	-	-	-	0.050	U	MBK	**31.3**	-	-	**7.92**	-	-	**0.51**	-	-	**13.5**	-	-	**2.81**	-	-
YVD-05	YVD-060518-29	6/5/2018	N	874860	**170**	-	-	**170**	-	-	0.070	U	-	-	-	-	**31.6**	-	-	**8.29**	-	-	**0.44**	-	-	**14.15**	-	-	**2.79**	-	-
YVD-05	YVD-060219-09	6/2/2019	N	991939	**176**	-	-	**176**	-	-	0.070	U	-	-	-	-	**33.2**	-	-	6.43	U	FBK	0.31	U	FBK	**14.35**	-	-	**2.18**	-	-
YVD-05	YVD-060920-15	6/9/2020	N	009269	**182**	--	--	**182**	--	--	0.070	U	--	-	-	-	**35.4**	--	--	**9.24**	--	--	**0.39**	--	--	**15.40**	--	--	**3.88**	--	--
YVD-05	YVD-060821-26	6/8/2021	N	124212	**198**	--	--	**198**	--	--	0.070	U	--	-	-	-	**39.6**	--	--	**11.0**	--	--	**0.68**	--	--	**17.30**	--	--	**4.50**	--	--
YVD-06	YVD-06-130917	09/17/2013	N	SWI0113	**149**	-	-	**150**	-	-	-	-	-	0.1	U	-	**46.0**	-	-	**3.13**	-	-	0.5	U	-	**12.8**	-	-	**0.51**	-	-
YVD-06	YVD-06-131209	12/09/2013	N	SWL0055	**154**	-	-	**155**	-	-	-	-	-	0.02	UJ	MSD	**31.2**	J	FDP	**2.73**	-	-	0.5	U	-	**5.3**	J	FDP	**0.49**	J	FDP
YVD-06	YVD-D1-131209	12/09/2013	FD	SWL0055	**159**	-	-	**160**	-	-	-	-	-	0.02	UJ	MSD	**38.9**	J	FDP	8	U	-	5	U	-	**6.6**	J	FDP	**6.4**	J	FDP
YVD-06	YVD-06-140316	03/16/2014	N	SXC0081	**174**	-	-	**175**	-	-	-	-	-	0.1	U	-	**40.1**	-	-	**3.47**	-	-	**0.58**	-	-	**7.6**	-	-	**0.61**	-	-
YVD-06	YVD-D1-140316	03/16/2014	FD	SXC0081	**159**	-	-	**160**	-	-	-	-	-	0.1	U	-	**40.5**	-	-	**3.16**	-	-	**0.55**	-	-	**7.8**	-	-	**0.62**	-	-
YVD-06	YVD-06-140601	06/01/2014	N	SXF0008	**156**	-	-	**158**	-	-	-	-	-	**0.172**	-	-	**37.8**	-	-	**2.88**	J	DUP	0.5	U	-	**6.5**	-	-	**0.51**	-	-
YVD-06	YVD-D1-140601	06/01/2014	FD	SXF0008	**153**	-	-	**155**	-	-	-	-	-	0.1	U	-	**38.3**	-	-	**2.95**	-	-	0.5	U	-	**6.6**	-	-	**0.56**	-	-
YVD-06	YVD-06-140921	09/21/2014	N	SXI0148	**149**	-	-	**150**	-	-	-	-	-	**0.139**	-	-	**41.3**	-	-	**2.45**	-	-	0.5	U	-	**8.5**	-	-	**0.44**	-	-
YVD-06	YVD-06-141215	12/15/2014	N	SXL0103	**149**	-	-	**150**	-	-	-	-	-	0.1	U	-	**40.3**	-	-	**2.5**	J+	MSD	0.5	U	-	**7.8**	-	-	**0.45**	J	DUP
YVD-06	YVD-06-150316	03/16/2015	N	5904471	**150**	-	-	**150**	-	-	-	-	-	0.1	U	-	**38.0**	-	-	**2.8**	-	-	0.5	U	-	**6.8**	-	-	**0.99**	-	-
YVD-06	YVD-06-150616	06/16/2015	N	59010751	**150**	-	-	**150**	-	-	-	-	-	0.1	U	-	**40.0**	J+	MSD	**2.7**	-	-	0.5	U	-	**7.0**	J+	MSD	**0.53**	-	-
YVD-06	YVD-06-150922	09/22/2015	N	59020141	**170**	-	-	**170**	-	-	-	-	-	**0.11**	-	-	**41.0**	-	-	**2.8**	-	-	0.5	U	-	**9.8**	-	-	**0.51**	-	-
YVD-06	YVD-06-151214	12/14/2015	N	59025351	**170**	-	-	**170**	-	-	-	-	-	-	R	MSD	**42.0**	-	-	**2.4**	-	-	0.5	U	-	**7.3**	-	-	**0.51**	-	-
YVD-06	YVD-06-160307	03/07/2016	N	59029521	**160**	J	FDP	**160**	J	FDP	-	-	-	0.1	UJ	RPD	**38.0**	-	-	**2.8**	-	-	0.5	U	-	**7.2**	-	-	**0.51**	-	-
YVD-06	YVD-06-160620	6/20/2016	N	59037151	**150**	-	-	**150**	-	-	-	-	-	0.1	U	-	**37.0**	-	-	**3.1**	-	-	0.5	U	-	**6.6**	-	-	**0.53**	-	-
YVD-06	YVD-06-160929	9/29/2016	N	K1611704	**145**	-	-	**145**	-	-	-	-	-	0.050	U	MBK	**35.7**	-	-	**2.64**	-	-	**0.20**	-	-	**6.1**	-	-	**0.55**	-	-
YVD-06	YVD-06-161215	12/15/2016	N	K1615126	**136**	-	-	**136**	-	-	-	-	-	0.050	U	-	**33.5**	-	-	**3.14**	-	-	**0.23**	-	-	**5.7**	-	-	**0.70**	-	-
YVD-06	YVD-030617-04	3/6/2017	N	K1702228	**142**	-	-	**142**	-	-	-	-	-	**0.021**	J	-	**35.2**	-	-	**2.83**	-	-	**0.29**	-	-	**5.8**	-	-	**0.61**	-	-
YVD-06	YVD-060617-21	6/6/2017	N	K1705754	**144**	-	-	**144**	-	-	-	-	-	0.050	U	-	**36.9**	-	-	**2.54**	-	-	**0.19**	J	-	**6.07**	-	-	**0.51**	-	-
YVD-06	YVD-092617-17	9/26/2017	N	K1710333	**140**	-	-	**140**	-	-	-	-	-	0.050	U	-	**35.0**	-	-	**2.94**	-	-	**0.23**	-	-	**5.82**	-	-	**0.62**	-	-
YVD-06	YVD-092617-18	9/26/2017	FD	K1710333	**140**	-	-	**140**	-	-	-	-	-	0.050	U	-	**34.6**	-	-	**2.95**	-	-	**0.22**	-	-	**5.77**	-	-	**0.62**	-	-
YVD-06	YVD-120517-17	12/5/2017	N	K1713091	**137**	-	-	**137**	-	-	-	-	-	0.050	U	MBK	**34.7**	-	-	**3.23**	-	-	**0.25**	-	-	**5.81**	-	-	**0.73**	-	-
YVD-06	YVD-060318-15	6/3/2018	N	874568	**138**	-	-	**138**	-	-	0.09	U	FBK	-	-	-	**37.5**	-	-	**2.69**	-	-	**0.18**	-	-	**6.45**	-	-	**0.56**	-	-
YVD-06	YVD-060219-11	6/2/2019	N	991939	**134**	-	-	**134**	-	-	0.070	U	-	-	-	-	**35.6**	-	-	2.50	U	FBK	0.15	U	FBK	**6.05**	-	-	**0.51**	-	-
YVD-06	YVD-060920-17	6/9/2020	N	009269	**132**	--	--	**132**	--	--	0.070	U	--	-	-	-	**34.2**	--	--	**3.20**	--	--	**0.17**	--	--	**5.900**	--	--	**0.70**	--	--
YVD-06	YVD-060721-19	6/7/2021	N	124105	**160**	--	--	**160**	--	--	0.070	U	--	-	-	-	**34.0**	--	--	**4.95**	--	--	**0.25**	--	--	**5.900**	--	--	**0.67**	--	--
YVD-07	YVD-07-130923	09/23/2013	N	SWI0178	**79.4**	-	-	**80**	-	-	-	-	-	0.1	U	-	**27.7**	-	-	-	-	-	-	-	-	**16.2**	-	-	-	-	-
YVD-07	YVD-07-130926	09/26/2013	N	SWI0190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**7.53**	-	-	0.5	U	-	-	-	-	**4.4**	-	-
YVD-07	YVD-07-131210	12/10/2013	N	SWL0055	**135**	-	-	**135**	-	-	-	-	-	0.02	UJ	MSD	**99.2**	-	-	**8.46**	-	-	**0.55**	-	-	**16.0**	-	-	**5.3**	-	-
YVD-07	YVD-07-140316	03/16/2014	N	SXC0081	**134**	-	-	**135**	-	-	-	-	-	**0.116**	-	-	**33.4**	-	-	**11.6**	-	-	**0.83**	-	-	**14.1**	-	-	**3.9**	-	-
YVD-07	YVD-07-140604	06/04/2014	N	SXF0025	**137**	-	-	**138**	-	-	-	-	-	0.1	U	-	**38.4**	-	-	**9.74**	-	-	1	U	-	**18.3**	-	-	**3.36**	-	-
YVD-07	YVD-07-140922	09/22/2014	N	SXI0158	**134**	-	-	**135**	-	-	-	-	-	-	R	MSD	**31.4**	-	-	**10.3**	-	-	1	U	-	**12.7**	-	-	**5.52**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-07	YVD-07-141216	12/16/2014	N	SXL0108	**133**	-	-	**135**	-	-	-	-	-	0.1	U	-	**29.9**	-	-	**8.76**	-	-	1	U	-	**12.2**	-	-	**2.92**	-	-
YVD-07	YVD-07-150316	03/16/2015	N	5904541	**140**	-	-	**140**	-	-	-	-	-	0.1	U	-	**37.0**	-	-	**15**	-	-	1	U	-	**15.0**	-	-	**4**	J-	MSD
YVD-07	YVD-D2-150316	03/16/2015	FD	5904541	**140**	-	-	**140**	-	-	-	-	-	0.1	U	-	**35.0**	-	-	**16**	-	-	**0.65**	-	-	**14.0**	-	-	**4.2**	J-	MSD
YVD-07	YVD-07-150616	06/16/2015	N	59010751	**150**	-	-	**150**	-	-	-	-	-	0.1	U	-	**34.0**	J+	MSD	**13**	-	-	0.5	U	-	**14.0**	J+	MSD	**3.3**	-	-
YVD-07	YVD-D1-150616	06/16/2015	FD	59010751	**140**	-	-	**140**	-	-	-	-	-	0.1	U	-	**35.0**	J+	MSD	**14**	-	-	0.5	U	-	**14.0**	J+	MSD	**3.5**	-	-
YVD-07	YVD-07-150923	09/23/2015	N	59020281	**160**	-	-	**160**	-	-	-	-	-	**0.22**	-	-	**33.0**	-	-	**9.9**	-	-	1	U	-	**14.0**	-	-	**4.7**	-	-
YVD-07	YVD-07-151214	12/14/2015	N	59025431	**140**	J	FDP	**140**	J	FDP	-	-	-	-	R	MSD	**30.0**	-	-	**6.7**	-	-	1	U	-	**13.0**	-	-	**2.4**	-	-
YVD-07	YVD-07-160308	03/08/2016	N	59029711	**140**	-	-	**140**	-	-	-	-	-	**1.1**	J+	FBK, FDP	**25.0**	-	-	**6.7**	-	-	1	U	-	**11.0**	-	-	**1.8**	-	-
YVD-07	YVD-07-160621	6/21/2016	N	59037151	**100**	-	-	**100**	-	-	-	-	-	0.1	U	-	**19.0**	-	-	**6.2**	-	-	1	U	-	**9.0**	-	-	**1.2**	-	-
YVD-07	YVD-07-160929	9/29/2016	N	K1611704	**113**	-	-	**113**	-	-	-	-	-	0.050	U	MBK	**17.8**	-	-	**5.3**	-	-	**0.40**	-	-	**7.14**	-	-	**1.37**	-	-
YVD-07	YVD-07-161213	12/13/2016	N	K1615083	**120**	-	-	**120**	-	-	-	-	-	0.050	U	-	**25.9**	-	-	**6.38**	-	-	**0.40**	-	-	**10.2**	-	-	**2.15**	-	-
YVD-07	YVD-030717-07	3/7/2017	N	K1702324	**107**	-	-	**107**	-	-	-	-	-	1	U	-	**17.6**	-	-	**5.34**	-	-	**0.43**	-	-	**6.47**	-	-	**1.74**	J	HTQ
YVD-07	YVD-060517-15	6/5/2017	N	K1705754	**105**	-	-	**105**	-	-	-	-	-	0.050	U	-	**19.4**	-	-	**6.07**	-	-	**0.39**	-	-	**7.31**	-	-	**2.07**	-	-
YVD-07	YVD-092617-21	9/26/2017	N	K1710333	**116**	-	-	**116**	-	-	-	-	-	0.050	U	-	**25.4**	-	-	**7.45**	-	-	**0.35**	-	-	**9.27**	-	-	**3.47**	-	-
YVD-07	YVD-120417-11	12/4/2017	N	K1713026	**130**	-	-	**130**	-	-	-	-	-	0.050	U	-	**29.5**	-	-	**8.32**	-	-	**0.37**	-	-	**11.1**	-	-	**4.40**	-	-
YVD-07	YVD-060418-23	6/4/2018	N	874662	**126**	-	-	**126**	-	-	0.47	U	FBK	-	-	-	**34.0**	-	-	**10.5**	-	-	**0.30**	-	-	**13.35**	-	-	**3.34**	-	-
YVD-07	YVD-060319-16	6/3/2019	N	992053	**127**	-	-	**127**	-	-	0.070	U	-	-	-	-	**31.0**	-	-	**5.83**	-	-	**0.17**	-	-	**11.75**	-	-	**1.86**	-	-
YVD-07	YVD-060920-27	6/9/2020	N	009269	**145**	--	--	**145**	--	--	0.070	U	--	-	-	-	**33.8**	--	--	**8.90**	--	--	**0.29**	--	--	**13.70**	--	--	**4.86**	--	--
YVD-07	YVD-060821-34	6/8/2021	N	124212	**142**	--	--	**142**	--	--	0.070	U	--	-	-	-	**33.1**	--	--	**7.68**	--	--	**0.22**	--	--	**13.45**	--	--	**3.34**	--	--
YVD-08	YVD-08-130919	09/19/2013	N	SWI0138	**354**	-	-	**355**	-	-	-	-	-	0.1	U	-	**126**	-	-	**145**	-	-	5	U	-	**43.8**	-	-	**8**	-	-
YVD-08	YVD-08-131211	12/11/2013	N	SWL0063	**259**	-	-	**260**	-	-	-	-	-	-	R	MSD	**134**	-	-	**123**	-	-	5	U	-	**53.8**	-	-	**22.5**	-	-
YVD-08	YVD-08-140317	03/17/2014	N	SXC0095	**294**	-	-	**295**	-	-	-	-	-	**0.146**	-	-	**122**	-	-	**128**	-	-	5	U	-	**42.0**	-	-	**14.3**	-	-
YVD-08	YVD-08-140602	06/02/2014	N	SXF0017	**279**	-	-	**280**	-	-	-	-	-	0.1	U	-	**138**	-	-	**118**	-	-	2	U	-	**64.6**	-	-	**14.7**	-	-
YVD-08	YVD-08-140923	09/23/2014	N	SXI0173	**249**	-	-	**250**	-	-	-	-	-	0.1	U	-	**103**	-	-	**122**	-	-	2.5	U	-	**36.3**	-	-	**8.1**	-	-
YVD-08	YVD-08-141216	12/16/2014	N	SXL0108	**264**	-	-	**265**	-	-	-	-	-	0.1	U	-	**111**	-	-	**126**	-	-	2.5	U	-	**41.4**	-	-	**14**	-	-
YVD-08	YVD-08-150317	03/17/2015	N	5904541	**230**	-	-	**230**	-	-	-	-	-	0.1	U	-	**110**	-	-	**120**	-	-	2.5	U	-	**40.0**	-	-	**13**	J-	MSD
YVD-08	YVD-D3-150317	03/17/2015	FD	5904541	**240**	-	-	**240**	-	-	-	-	-	0.1	U	-	**100**	-	-	**130**	-	-	0.5	U	-	**39.0**	-	-	**14**	J-	MSD
YVD-08	YVD-08-150617	06/17/2015	N	59010961	**280**	J	FDP	**280**	J	FDP	-	-	-	**0.14**	-	-	**110**	-	-	**120**	-	-	2.5	U	-	**40.0**	-	-	**19**	-	-
YVD-08	YVD-D3-150617	06/17/2015	FD	59010961	**220**	J	FDP	**220**	J	FDP	-	-	-	0.1	U	-	**110**	-	-	**140**	-	-	5	U	-	**39.0**	-	-	**19**	-	-
YVD-08	YVD-08-150924	09/24/2015	N	59020391	**260**	-	-	**260**	-	-	-	-	-	0.1	UJ	MSD	**110**	-	-	**120**	-	-	2.5	U	-	**44.0**	-	-	**20**	J+	MSD
YVD-08	YVD-08-151215	12/15/2015	N	59025501	**260**	-	-	**260**	-	-	-	-	-	-	R	MSD	**120**	-	-	**120**	-	-	2.5	U	-	**44.0**	-	-	**26**	-	-
YVD-08	YVD-D3-151215	12/15/2015	FD	59025501	**250**	-	-	**250**	-	-	-	-	-	**0.15**	J-	MSD	**120**	-	-	**110**	-	-	5	U	-	**46.0**	-	-	**26**	-	-
YVD-08	YVD-08-160310	03/10/2016	N	59029941	**240**	-	-	**240**	-	-	-	-	-	0.1	U	-	**120**	-	-	**120**	-	-	2.5	U	-	**44.0**	-	-	**32**	-	-
YVD-08	YVD-08-160622	6/22/2016	N	59037271	**230**	-	-	**230**	-	-	-	-	-	0.1	UJ	MSD	**120**	-	-	**110**	-	-	2.5	U	-	**46.0**	-	-	**34**	-	-
YVD-08	YVD-D3-160622	6/22/2016	FD	59037271	**230**	-	-	**230**	-	-	-	-	-	0.1	UJ	FBK, MSD	**120**	-	-	**120**	-	-	0.5	U	-	**46.0**	-	-	**34**	-	-
YVD-08	YVD-08-160927	9/27/2016	N	K1611565	**239**	-	-	**239**	-	-	-	-	-	0.050	U	MBK	**120**	-	-	**96.0**	-	-	**0.18**	J	-	**47.0**	-	-	**30.6**	-	-
YVD-08	YVD-08-161213	12/13/2016	N	K1615045	**222**	-	-	**222**	-	-	-	-	-	0.050	U	-	**122**	-	-	**89.3**	-	-	**0.23**	-	-	**41.9**	-	-	**34.5**	J	HTQ
YVD-08	YVD-030917-24	3/9/2017	N	K1702448	**263**	-	-	**263**	-	-	-	-	-	0.050	U	-	**136**	-	-	**95.2**	-	-	**0.20**	J	-	**44.4**	-	-	**37.3**	J	HTQ
YVD-08	YVD-060717-29	6/7/2017	N	K1705833	**236**	-	-	**236**	-	-	-	-	-	0.050	U	-	**139**	-	-	**94.3**	-	-	**0.17**	J	-	**48.3**	-	-	**44.0**	-	-
YVD-08	YVD-092617-19	9/26/2017	N	K1710333	**271**	-	-	**271**	-	-	-	-	-	0.050	U	-	**137**	-	-	**98.0**	-	-	**0.19**	J	-	**44.3**	-	-	**38.6**	J	HTQ

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-08	YVD-120517-23	12/5/2017	N	K1713157	**233**	-	-	**233**	-	-	-	-	-	0.050	U	-	**147**	-	-	**98.8**	-	-	**0.20**	J	-	**48.1**	-	-	**49.3**	-	-
YVD-08	YVD-031918-15	3/19/2018	N	870634	**250**	-	-	**250**	-	-	0.070	U	-	-	-	-	**134**	-	-	**103**	-	-	**0.15**	-	-	**45.95**	-	-	**46.3**	-	-
YVD-08	YVD-060518-31	6/5/2018	N	874860	**238**	-	-	**238**	-	-	0.070	U	-	-	-	-	**136**	-	-	**99.0**	-	-	**0.16**	-	-	**47.45**	-	-	**53.0**	-	-
YVD-08	YVD-090918-04	9/9/2018	N	880601	**237**	-	-	**237**	-	-	0.070	U	-	-	-	-	**146**	-	-	**103**	-	-	**0.18**	-	-	**49.15**	-	-	**54.4**	-	-
YVD-08	YVD-121118-19	12/11/2018	N	884939	**227**	-	-	**227**	-	-	0.070	U	-	-	-	-	**138**	-	-	**117**	-	-	**0.16**	-	-	**45.85**	-	-	**59.4**	-	-
YVD-08	YVD-031719-03	3/17/2019	N	988239	**234**	-	-	**234**	-	-	0.070	U	-	-	-	-	**138**	-	-	**119**	-	-	0.22	U	FBK	**46.30**	-	-	**54.8**	-	-
YVD-08	YVD-060319-21	6/3/2019	N	992053	**240**	-	-	**240**	-	-	0.070	U	-	-	-	-	**138**	-	-	**100**	-	-	**0.10**	-	-	**46.10**	-	-	**50.0**	-	-
YVD-08	YVD-090919-02	9/9/2019	N	998357	**226**	-	-	**226**	-	-	0.070	U	-	-	-	-	**139**	-	-	**89.8**	-	-	**0.15**	-	-	**45.70**	-	-	**62.0**	-	-
YVD-08	YVD-120919-02	12/9/2019	N	902276	**227**	-	-	**227**	-	-	0.070	U	-	-	-	-	**132**	-	-	**95.6**	-	-	**0.16**	-	-	**44.60**	-	-	**61.8**	-	-
YVD-08	YVD-120919-04	12/9/2019	FD	902276	**226**	-	-	**226**	-	-	0.070	U	-	-	-	-	**130**	-	-	**94.3**	-	-	**0.15**	-	-	**44.50**	-	-	**61.6**	-	-
YVD-08	YVD-033120-17	3/31/2020	N	006260	**213**	-	-	**213**	-	-	0.070	U	-	-	-	-	**132**	-	-	**96.5**	-	-	**0.18**	--	--	**45.65**	-	-	**68.0**	-	-
YVD-08	YVD-060920-23	6/9/2020	N	009269	**217**	--	--	**217**	--	--	0.070	U	--	-	-	-	**132**	--	--	**96.1**	--	--	**0.19**	--	--	**44.75**	--	--	**66.6**	--	--
YVD-08	YVD-092120-11	9/21/2020	N	013896	**216**	--	--	**216**	--	--	0.070	U	--	-	-	-	**134**	--	--	**96.2**	--	--	**0.16**	--	--	**45.80**	--	--	**66.0**	--	--
YVD-08	YVD-120720-11	12/7/2020	N	017035	**215**	--	--	**215**	--	--	0.070	U	--	-	-	-	**132**	--	--	**107**	--	--	**0.20**	--	--	**45.85**	--	--	**62.2**	--	--
YVD-08	YVD-030121-07	3/1/2021	N	119931	**217**	--	--	**217**	--	--	0.070	U	--	-	-	-	**135**	--	--	**92.9**	--	--	**0.20**	--	--	**45.80**	--	--	**68.8**	--	--
YVD-08	YVD-060821-28	6/8/2021	N	124212	**218**	--	--	**218**	--	--	0.070	U	--	-	-	-	**130**	--	--	**94.2**	--	--	**0.17**	--	--	**44.90**	--	--	**62.0**	--	--
YVD-08	YVD-121521-20	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**60.8**	J	HTQ, MS
YVD-09	YVD-09-130919	09/19/2013	N	SWI0138	**369**	-	-	**370**	-	-	-	-	-	0.1	U	-	**107**	-	-	**96.3**	-	-	5	U	-	**39.3**	-	-	**74.7**	-	-
YVD-09	YVD-09-131212	12/12/2013	N	SWL0078	**384**	-	-	**385**	-	-	-	-	-	0.02	U	-	**109**	-	-	**87.2**	-	-	5	U	-	**42.0**	-	-	**64.4**	-	-
YVD-09	YVD-09-140319	03/19/2014	N	SXC0107	**388**	-	-	**390**	-	-	-	-	-	0.1	U	-	**109**	-	-	**104**	-	-	**5.5**		-	**40.8**	-	-	**62.4**	-	-
YVD-09	YVD-09-140603	06/03/2014	N	SXF0025	**367**	-	-	**368**	-	-	-	-	-	0.1	U	-	**113**	-	-	**89.8**	-	-	5	U	-	**44.5**	-	-	**57.1**	-	-
YVD-09	YVD-09-140924	09/24/2014	N	SXI0173	**359**	-	-	**360**	-	-	-	-	-	0.1	U	-	**118**	-	-	**68.2**	-	-	5	U	-	**41.7**	-	-	**48**	-	-
YVD-09	YVD-09-141217	12/17/2014	N	SXL0121	**359**	-	-	**360**	-	-	-	-	-	0.1	U	-	**130**	-	-	**85**	-	-	5	U	-	**56.3**	-	-	**53.9**	-	-
YVD-09	YVD-09-150318	03/18/2015	N	5904651	**350**	-	-	**350**	-	-	-	-	-	**0.14**	-	-	**110**	-	-	**74**	-	-	5	U	-	**46.0**	-	-	**47**	-	-
YVD-09	YVD-09-150617	06/17/2015	N	59010961	**350**	-	-	**350**	-	-	-	-	-	**0.14**	-	-	**110**	-	-	**89**	-	-	5	U	-	**43.0**	-	-	**54**	-	-
YVD-09	YVD-09-150923	09/23/2015	N	59020391	**330**	-	-	**330**	-	-	-	-	-	**0.21**	J	MSD	**110**	-	-	**78**	-	-	0.5	U	-	**46.0**	-	-	**56**	J+	MSD
YVD-09	YVD-09-151215	12/15/2015	N	59025501	**340**	-	-	**340**	-	-	-	-	-	-	R	MSD	**110**	-	-	**77**	-	-	5	U	-	**42.0**	-	-	**52**	-	-
YVD-09	YVD-09-160310	03/10/2016	N	59029941	**360**	-	-	**360**	-	-	-	-	-	**0.12**	-	-	**110**	-	-	**72**	-	-	5	U	-	**42.0**	-	-	**48**	-	-
YVD-09	YVD-09-160622	6/22/2016	N	59037271	**350**	-	-	**350**	-	-	-	-	-	0.1	UJ	MSD	**100**	-	-	**76**	-	-	5	U	-	**42.0**	-	-	**49**	-	-
YVD-09	YVD-09-160929	9/29/2016	N	K1611704	**347**	-	-	**347**	-	-	-	-	-	0.050	U	MBK	**103**	-	-	**66.7**	-	-	**0.34**	-	-	**41.2**	-	-	**43.2**	-	-
YVD-09	YVD-09-161213	12/13/2016	N	K1615045	**340**	-	-	**340**	-	-	-	-	-	0.050	U	-	**107**	-	-	**59.8**	-	-	**0.40**	-	-	**38.1**	-	-	**42.8**	J	HTQ
YVD-09	YVD-D2-161213	12/13/2016	FD	K1615045	**340**	-	-	**340**	-	-	-	-	-	0.050	U	-	**108**	-	-	**61.4**	-	-	**0.40**	-	-	**37.1**	-	-	**43.3**	J	HTQ
YVD-09	YVD-031317-35	3/13/2017	N	K1702489	**329**	-	-	**329**	-	-	-	-	-	0.050	U	-	**108**	-	-	**63.9**	-	-	**0.37**	-	-	**39.2**	-	-	**44.3**	-	-
YVD-09	YVD-060517-08	6/5/2017	N	K1705702	**341**	-	-	**341**	-	-	-	-	-	0.050	U	-	**110**	-	-	**62.6**	-	-	**0.39**	-	-	**39.4**	-	-	**44.6**	-	-
YVD-09	YVD-092617-29	9/26/2017	N	K1710381	**351**	-	-	**351**	-	-	-	-	-	0.050	U	-	**109**	-	-	**61.0**	-	-	**0.38**	-	-	**37.2**	-	-	**44.1**	J	HTQ
YVD-09	YVD-092617-30	9/26/2017	FD	K1710381	**415**	-	-	**415**	-	-	-	-	-	0.050	U	-	**109**	-	-	**61.1**	-	-	**0.38**	-	-	**37.4**	-	-	**44.1**	J	HTQ
YVD-09	YVD-120517-21	12/5/2017	N	K1713091	**351**	-	-	**351**	-	-	-	-	-	0.050	U	-	**108**	-	-	**63.0**	-	-	**0.38**	-	-	**35.9**	-	-	**46.9**	-	-
YVD-09	YVD-031918-18	3/19/2018	N	870634	**350**	-	-	**350**	-	-	0.070	U	-	-	-	-	**108**	-	-	**69.2**	-	-	**0.34**	-	-	**35.90**	-	-	**48.5**	-	-
YVD-09	YVD-060318-13	6/3/2018	N	874568	**348**	-	-	**348**	-	-	0.070	U	-	-	-	-	**107**	-	-	**63.4**	-	-	**0.36**	-	-	**37.75**	-	-	**50.6**	-	-
YVD-09	YVD-090918-06	9/9/2018	N	880601	**354**	-	-	**354**	-	-	0.070	U	-	-	-	-	**108**	-	-	**71.0**	-	-	**0.35**	-	-	**35.90**	-	-	**51.4**	-	-
YVD-09	YVD-121118-15	12/11/2018	N	884939	**358**	-	-	**358**	-	-	0.070	U	-	-	-	-	**102**	-	-	**65.6**	-	-	**0.34**	-	-	**34.25**	-	-	**52.8**	-	-
YVD-09	YVD-121118-17	12/11/2018	FD	884939	**357**	-	-	**357**	-	-	0.070	U	-	-	-	-	**103**	-	-	**68.0**	-	-	**0.33**	-	-	**34.55**	-	-	**54.6**	-	-
YVD-09	YVD-031719-05	3/17/2019	N	988239	**356**	-	-	**356**	-	-	0.070	U	-	-	-	-	**104**	-	-	**67.4**	-	-	0.31	U	FBK	**35.75**	-	-	**56.0**	-	-
YVD-09	YVD-060319-15	6/3/2019	N	992053	**353**	-	-	**353**	-	-	0.070	U	-	-	-	-	**104**	-	-	**43.4**	-	-	**0.36**	-	-	**35.65**	-	-	**53.3**	-	-
YVD-09	YVD-090919-04	9/9/2019	N	998357	**363**	-	-	**363**	-	-	0.070	U	-	-	-	-	**110**	-	-	**64.7**	-	-	**0.33**	-	-	**36.45**	-	-	**58.2**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-09	YVD-120919-06	12/9/2019	N	902276	**356**	-	-	**356**	-	-	0.070	U	-	-	-	-	**106**	-	-	**69.1**	-	-	**0.37**	-	-	**35.75**	-	-	**57.0**	-	-
YVD-09	YVD-033020-05	3/30/2020	N	006241	**350**	-	-	**350**	-	-	0.070	U	-	-	-	-	**102**	-	-	**71.4**	-	-	**0.37**	--	--	**35.15**	-	-	**55.2**	-	-
YVD-09	YVD-060920-24	6/9/2020	N	009269	**350**	--	--	**350**	--	--	0.070	U	--	-	-	-	**102**	--	--	**68.8**	--	--	**0.31**	--	--	**35.35**	--	--	**55.2**	--	--
YVD-09	YVD-092120-16	9/21/2020	N	013896	**347**	--	--	**347**	--	--	0.070	U	--	-	-	-	**101**	--	--	**72.5**	--	--	0.10	U	--	**35.05**	--	--	**56.2**	--	--
YVD-09	YVD-120720-13	12/7/2020	N	017035	**345**	--	--	**345**	--	--	0.070	U	--	-	-	-	**101**	--	--	**69.4**	--	--	**0.26**	--	--	**35.65**	--	--	**54.0**	--	--
YVD-09	YVD-030121-05	3/1/2021	N	119931	**347**	--	--	**347**	--	--	0.070	U	--	-	-	-	**104**	--	--	**68.8**	--	--	**0.35**	--	--	**36.30**	--	--	**57.4**	--	--
YVD-09	YVD-060721-18	6/7/2021	N	124105	**352**	--	--	**352**	--	--	0.070	U	--	-	-	-	**102**	--	--	**75.9**	--	--	**0.32**	--	--	**35.50**	--	--	**54.4**	--	--
YVD-09	YVD-121421-09	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**55.3**	J	HTQ, MS
YVD-10	YVD-10-130917	09/17/2013	N	SWI0123	**464**	-	-	**465**	-	-	-	-	-	0.1	U	-	**216**	-	-	**95.4**	-	-	5	U	-	**51.8**	-	-	**95**		-
YVD-10	YVD-10-131212	12/12/2013	N	SWL0078	**459**	-	-	**460**	-	-	-	-	-	0.02	U	-	**202**	-	-	**91.4**	-	-	5	U	-	**55.6**	-	-	**86.9**	-	-
YVD-10	YVD-10-140319	03/19/2014	N	SXC0107	**489**	-	-	**490**	-	-	-	-	-	**0.109**	-	-	**218**	-	-	**86.8**	-	-	5	U	-	**54.0**	-	-	**77.6**	-	-
YVD-10	YVD-10-140603	06/03/2014	N	SXF0025	**487**	-	-	**488**	-	-	-	-	-	**0.105**	-	-	**232**	-	-	**94.3**	-	-	5	U	-	**58.6**	-	-	**86.1**	-	-
YVD-10	YVD-10-140924	09/24/2014	N	SXI0173	**523**	-	-	**525**	-	-	-	-	-	0.1	U	-	**276**	-	-	**115**	-	-	5	U	-	**65.8**	-	-	**97.2**	-	-
YVD-10	YVD-10-141217	12/17/2014	N	SXL0144	**503**	-	-	**505**	-	-	-	-	-	0.5	U	-	**248**	-	-	**97.9**	-	-	5	U	-	**60.4**	-	-	**78.7**	-	-
YVD-10	YVD-10-150318	03/18/2015	N	5904651	**590**	-	-	**590**	-	-	-	-	-	0.1	U	-	**400**	-	-	**180**	-	-	5	U	-	**92.0**	-	-	**120**	-	-
YVD-10	YVD-10-150617	06/17/2015	N	59010961	**600**	-	-	**600**	-	-	-	-	-	**0.12**	-	-	**390**	-	-	**39**	-	-	5	U	-	**95.0**	-	-	**20**	-	-
YVD-10	YVD-10-150923	09/23/2015	N	59020391	**620**	-	-	**620**	-	-	-	-	-	**0.72**	J	MSD	**330**	-	-	**160**	-	-	5	U	-	**89.0**	-	-	**120**	J+	MSD
YVD-10	YVD-10-151214	12/14/2015	N	59025351	**600**	-	-	**600**	-	-	-	-	-	-	R	MSD	**350**	-	-	**150**	-	-	5	U	-	**84.0**	-	-	**120**	-	-
YVD-10	YVD-10-160309	03/09/2016	N	59029711	**520**	-	-	**520**	-	-	-	-	-	0.1	UJ	FDP	**310**	-	-	**140**	-	-	5	U	-	**73.0**	-	-	**98**	-	-
YVD-10	YVD-10-160621	6/21/2016	N	59037271	**510**	-	-	**510**	-	-	-	-	-	**0.11**	J-	MSD	**270**	-	-	**120**	-	-	5	U	-	**73.0**	-	-	**96**	-	-
YVD-10	YVD-10-160929	9/29/2016	N	K1611698	**513**	-	-	**513**	-	-	-	-	-	0.050	U	MBK	**286**	-	-	**105**	-	-	0.2	U	MBK	**63.1**	-	-	**84**	-	-
YVD-10	YVD-10-161212	12/12/2016	N	K1615029	**524**	-	-	**524**	-	-	-	-	-	0.050	U	-	**303**	-	-	**141**	-	-	**0.10**	J	-	**66.9**	-	-	**109**	J	HTQ
YVD-10	YVD-030917-27	3/9/2017	N	K1702448	**637**	-	-	**637**	-	-	-	-	-	0.050	U	-	**569**	-	-	**173**	-	-	**0.09**	J	-	**128**	-	-	**123**	J	HTQ
YVD-10	YVD-060617-22	6/6/2017	N	K1705754	**525**	-	-	**525**	-	-	-	-	-	0.050	U	-	**349**	-	-	**125**	-	-	**0.14**	J	-	**76.7**	-	-	**99.4**	-	-
YVD-10	YVD-092617-31	9/26/2017	N	K1710381	**523**	-	-	**523**	-	-	-	-	-	0.050	U	-	**316**	-	-	**113**	-	-	**0.09**	J	-	**66.7**	-	-	**93.9**	J	HTQ
YVD-10	YVD-120517-30	12/5/2017	N	K1713091	**540**	-	-	**540**	-	-	-	-	-	0.050	U	-	**327**	-	-	**128**	-	-	**0.11**	J	-	**67.3**	-	-	**109**	J	HTQ
YVD-10	YVD-031818-06	3/18/2018	N	870610	**527**	-	-	**527**	-	-	0.070	U	-	-	-	-	**296**	-	-	**121**	-	-	0.10	U	-	**61.00**	-	-	**91.4**	-	-
YVD-10	YVD-060318-06	6/3/2018	N	874568	**543**	-	-	**543**	-	-	0.08	U	FBK	-	-	-	**298**	-	-	**122**	-	-	0.10	U	-	**65.00**	-	-	**92.0**	-	-
YVD-10	YVD-090918-13	9/9/2018	N	880601	**557**	-	-	**557**	-	-	0.070	U	-	-	-	-	**308**	-	-	**128**	-	-	**0.10**	-	-	**63.50**	-	-	**90.0**	-	-
YVD-10	YVD-121018-08	12/10/2018	N	884857	**544**	-	-	**544**	-	-	0.070	U	-	-	-	-	**274**	-	-	**124**	-	-	0.10	U	FBK	**58.00**	J	MSD	**87.0**	-	-
YVD-10	YVD-031819-16	3/18/2019	N	988273	**527**	-	-	**527**	-	-	0.070	U	-	-	-	-	**276**	-	-	**141**	-	-	**0.10**	-	-	**58.00**	-	-	**81.6**	-	-
YVD-10	YVD-060319-18	6/3/2019	N	992053	**568**	-	-	**568**	-	-	0.070	U	-	-	-	-	**297**	-	-	**135**	-	-	0.10	U	-	**63.00**	-	-	**74.4**	-	-
YVD-10	YVD-091019-20	9/10/2019	N	998438	**584**	-	-	**584**	-	-	0.070	U	-	-	-	-	**256**	-	-	**92.0**	-	-	0.10	U	-	**54.50**	-	-	**69.0**	-	-
YVD-10	YVD-121019-21	12/10/2019	N	902321	**576**	-	-	**576**	-	-	0.070	U	-	-	-	-	**286**	-	-	**114**	-	-	0.10	U	-	**59.50**	-	-	**84.4**	-	-
YVD-10	YVD-033020-08	3/30/2020	N	006241	**568**	-	-	**568**	-	-	0.070	U	-	-	-	-	**264**	-	-	**104**	-	-	0.10	U	--	**57.00**	-	-	**73.2**	-	-
YVD-10	YVD-060920-12	6/9/2020	N	009269	**586**	--	--	**586**	--	--	0.070	U	--	-	-	-	**293**	--	--	**128**	--	--	0.10	U	--	**62.00**	--	--	**82.6**	--	--
YVD-10	YVD-092020-08	9/20/2020	N	013864	**596**	--	--	**596**	--	--	0.070	U	--	-	-	-	**306**	--	--	**110**	--	--	0.10	U	--	**63.50**	--	--	**76.0**	--	--
YVD-10	YVD-120720-12	12/7/2020	N	017035	**612**	--	--	**612**	--	--	0.070	U	--	-	-	-	**331**	--	--	**161**	--	--	0.10	U	--	**71.00**	--	--	**76.0**	--	--
YVD-10	YVD-030121-12	3/1/2021	N	119931	**770**	--	--	**770**	--	--	0.070	U	--	-	-	-	**482**	--	--	**90.0**	--	--	0.10	U	--	**97.00**	--	--	**44.4**	--	--
YVD-10	YVD-060621-07	6/6/2021	N	124053	**710**	--	--	**710**	--	--	0.070	U	--	-	-	-	**320**	--	--	**85.3**	--	--	**0.49**	--	--	**68.00**	--	--	**53.1**	--	--
YVD-10	YVD-121421-06	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**75.8**	--	--
YVD-11	YVD-11-130923	09/23/2013	N	SWI0178	**254**	J	FDP	**255**	J	FDP	-	-	-	0.1	U	-	**183**	-	-	-	-	-	-	-	-	**51.9**	-	-	-	-	-
YVD-11	YVD-D2-130923	09/23/2013	FD	SWI0178	**199**	J	FDP	**200**	J	FDP	-	-	-	0.1	U	-	**175**	-	-	-	-	-	-	-	-	**46.0**	-	-	-	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-11	YVD-11-130926	09/26/2013	N	SWI0190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**54.7**	-	-	5	U	-	-	-	-	**38.4**	-	-
YVD-11	YVD-D3-130926	09/26/2013	FD	SWI0190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**61.4**	-	-	5	U	-	-	-	-	**46.2**	-	-
YVD-11	YVD-11-131212	12/12/2013	N	SWL0073	**294**	-	-	**295**	-	-	-	-	-	0.02	UJ	MSD	**171**	-	-	**58.7**	-	-	5	U	-	**43.4**	-	-	**49.9**	-	-
YVD-11	YVD-11-140318	03/18/2014	N	SXC0107	**324**	-	-	**325**	-	-	-	-	-	0.1	U	-	**183**	-	-	**61.6**	-	-	5	U	-	**44.4**	-	-	**43.7**	-	-
YVD-11	YVD-11-140603	06/03/2014	N	SXF0017	**312**	-	-	**313**	-	-	-	-	-	0.1	U	-	**176**	-	-	**67.2**	-	-	5	U	-	**50.3**	-	-	**49.1**	-	-
YVD-11	YVD-11-140924	09/24/2014	N	SXI0173	**294**	-	-	**295**	-	-	-	-	-	0.1	U	-	**193**	-	-	**67.2**	-	-	2.5	U	-	**47.9**	-	-	**46.6**	-	-
YVD-11	YVD-11-141217	12/17/2014	N	SXL0121	**289**	-	-	**290**	-	-	-	-	-	0.1	U	-	**198**	-	-	**72.1**	-	-	5	U	-	**53.6**	-	-	**49.1**	-	-
YVD-11	YVD-11-150317	03/17/2015	N	5904651	**290**	-	-	**290**	-	-	-	-	-	0.1	U	-	**190**	-	-	**76**	-	-	5	U	-	**51.0**	-	-	**52**	-	-
YVD-11	YVD-11-150616	06/16/2015	N	59010961	**290**	-	-	**290**	-	-	-	-	-	0.1	U	-	**200**	-	-	**86**	-	-	5	U	-	**50.0**	-	-	**56**	-	-
YVD-11	YVD-11-150923	09/23/2015	N	59020281	**310**	-	-	**310**	-	-	-	-	-	**0.12**	-	-	**200**	-	-	**90**	-	-	5	U	-	**55.0**	-	-	**66**	-	-
YVD-11	YVD-11-151215	12/15/2015	N	59025431	**110**	J	FDP	**110**	J	FDP	-	-	-	-	R	MSD	**210**	-	-	**100**	-	-	5	U	-	**60.0**	-	-	**74**	-	-
YVD-11	YVD-D2-151215	12/15/2015	FD	59025431	**360**	J	FDP	**360**	J	FDP	-	-	-	-	R	MSD	**210**	-	-	**98**	-	-	0.5	U	-	**58.0**	-	-	**70**	-	-
YVD-11	YVD-11-160309	03/09/2016	N	59029711	**340**	-	-	**340**	-	-	-	-	-	**0.14**	J	FDP	**200**	-	-	**99**	-	-	5	U	-	**53.0**	-	-	**65**	-	-
YVD-11	YVD-11-160621	6/21/2016	N	59037151	**340**	-	-	**340**	-	-	-	-	-	0.1	U	-	**200**	-	-	**120**	-	-	5	U	-	**56.0**	-	-	**71**	-	-
YVD-11	YVD-11-160927	9/27/2016	N	K1611629	**375**	-	-	**375**	-	-	-	-	-	0.050	U	MBK	**204**	-	-	**82.0**	-	-	**0.18**	J	-	**52.6**	-	-	**48.9**	J	HTQ
YVD-11	YVD-11-161214	12/14/2016	N	K1615126	**352**	-	-	**352**	-	-	-	-	-	0.050	U	-	**209**	-	-	**82.5**	-	-	**0.19**	J	-	**57.8**	-	-	**55.5**	-	-
YVD-11	YVD-031317-37	3/13/2017	N	K1702489	**353**	-	-	**353**	-	-	-	-	-	0.050	U	-	**235**	-	-	**102**	-	-	**0.21**	-	-	**62.1**	-	-	**77.3**	-	-
YVD-11	YVD-060517-10	6/5/2017	N	K1705702	**341**	-	-	**341**	-	-	-	-	-	0.050	U	-	**271**	-	-	**129**	-	-	**0.18**	J	-	**69.1**	-	-	**97.1**	-	-
YVD-11	YVD-092617-26	9/26/2017	N	K1710381	**347**	-	-	**347**	-	-	-	-	-	0.050	U	-	**276**	-	-	**135**	-	-	**0.17**	J	-	**68.6**	-	-	**103**	J	HTQ
YVD-11	YVD-120417-06	12/4/2017	N	K1713026	**361**	-	-	**361**	-	-	-	-	-	0.050	U	-	**248**	-	-	**110**	-	-	**0.16**	J	-	**58.6**	-	-	**84.8**	-	-
YVD-11	YVD-031918-12	3/19/2018	N	870634	**386**	-	-	**386**	-	-	0.07	U	-	-	-	-	**223**	-	-	**91.4**	-	-	**0.11**	-	-	**51.50**	-	-	**61.8**	-	-
YVD-11	YVD-031918-14	3/19/2018	FD	870634	**387**	-	-	**387**	-	-	0.07	U	-	-	-	-	**222**	-	-	**89.1**	-	-	**0.12**	-	-	**50.50**	-	-	**61.2**	-	-
YVD-11	YVD-060418-14	6/4/2018	N	874662	**377**	-	-	**377**	-	-	0.34	U	FBK	-	-	-	**224**	-	-	**114**	-	-	**0.12**	-	-	**57.00**	-	-	**68.6**	-	-
YVD-11	YVD-060418-16	6/4/2018	FD	874662	**380**	-	-	**380**	-	-	0.08	U	FBK	-	-	-	**231**	-	-	**114**	-	-	**0.12**	-	-	**57.50**	-	-	**68.2**	-	-
YVD-11	YVD-090918-05	9/9/2018	N	880601	**395**	-	-	**395**	-	-	0.070	U	-	-	-	-	**223**	-	-	**102**	-	-	**0.20**	-	-	**53.00**	-	-	**62.8**	-	-
YVD-11	YVD-121018-10	12/10/2018	N	884857	**410**	-	-	**410**	-	-	0.070	U	-	-	-	-	**182**	-	-	**75.6**	-	-	0.14	U	FBK	**44.90**	J	MSD	**41.1**	-	-
YVD-11	YVD-031819-18	3/18/2019	N	988273	**440**	-	-	**440**	-	-	0.070	U	-	-	-	-	**158**	-	-	**38.6**	-	-	**0.12**	-	-	**38.85**	-	-	**20.2**	-	-
YVD-11	YVD-060219-02	6/2/2019	N	991939	**424**	-	-	**424**	-	-	0.070	U	-	-	-	-	**156**	-	-	49.2	U	FBK	0.59	U	FBK	**38.30**	-	-	**26.4**	-	-
YVD-11	YVD-060219-04	6/2/2019	FD	991939	**423**	-	-	**423**	-	-	0.070	U	-	-	-	-	**156**	-	-	49.8	U	FBK	0.60	U	FBK	**38.70**	-	-	**26.7**	-	-
YVD-11	YVD-090919-05	9/9/2019	N	998357	**423**	-	-	**423**	-	-	0.070	U	-	-	-	-	**164**	-	-	**52.2**	-	-	**0.12**	-	-	**39.95**	-	-	**32.8**	-	-
YVD-11	YVD-120919-13	12/9/2019	N	902276	**429**	-	-	**429**	-	-	0.070	U	-	-	-	-	**162**	-	-	**46.1**	-	-	**0.11**	-	-	**39.70**	-	-	**27.8**	-	-
YVD-11	YVD-033020-10	3/30/2020	N	006241	**426**	-	-	**426**	-	-	0.070	U	-	-	-	-	**150**	-	-	**39.6**	-	-	**0.13**	--	--	**36.55**	-	-	**23.8**	-	-
YVD-11	YVD-061020-31	6/10/2020	N	009361	**420**	--	--	**420**	--	--	0.070	U	--	-	-	-	**151**	--	--	**47.0**	--	--	**0.13**	--	--	**36.55**	J	MS	**24.9**	--	--
YVD-11	YVD-092120-20	9/21/2020	N	013896	**413**	--	--	**413**	--	--	0.070	U	--	-	-	-	**162**	--	--	**69.2**	--	--	**0.12**	--	--	**40.85**	--	--	**37.5**	--	--
YVD-11	YVD-120720-10	12/7/2020	N	017035	**412**	--	--	**412**	--	--	0.070	U	--	-	-	-	**179**	--	--	**78.2**	--	--	**0.24**	--	--	**44.40**	--	--	**48.0**	--	--
YVD-11	YVD-030121-06	3/1/2021	N	119931	**422**	--	--	**422**	--	--	0.070	U	--	-	-	-	**178**	--	--	**85.9**	--	--	**0.17**	--	--	**45.60**	--	--	**44.1**	--	--
YVD-11	YVD-060821-23	6/8/2021	N	124212	**414**	--	--	**414**	--	--	0.070	U	--	-	-	-	**170**	--	--	**85.4**	--	--	**0.11**	--	--	**41.90**	--	--	**41.7**	--	--
YVD-11	YVD-121421-05	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**46.1**	--	--
YVD-12	YVD-12-130919	09/19/2013	N	SWI0142	**204**	-	-	**205**	-	-	-	-	-	0.1	U	-	**98.6**	-	-	**98.2**	-	-	5	U	-	**37.5**	-	-	-	-	-
YVD-12	YVD-12-130925	09/25/2013	N	SWI0175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**15**	-	-
YVD-12	YVD-12-131211	12/11/2013	N	SWL0073	**194**	-	-	**195**	-	-	-	-	-	0.02	UJ	MSD	**93.5**	-	-	**97**	-	-	5	U	-	**36.2**	-	-	**20.1**	-	-
YVD-12	YVD-12-140318	03/18/2014	N	SXC0095	**204**	-	-	**205**	-	-	-	-	-	**0.248**	-	-	**92.9**	-	-	**95.2**	-	-	5	U	-	**35.9**	-	-	**17**	-	-
YVD-12	YVD-12-140603	06/03/2014	N	SXF0017	**199**	-	-	**200**	-	-	-	-	-	0.1	U	-	**92.6**	-	-	**8.33**	-	-	0.5	U	-	**34.9**	-	-	**1.44**	-	-
YVD-12	YVD-12-140922	09/22/2014	N	SXI0148	**189**	-	-	**190**	-	-	-	-	-	0.1	U	-	**98.4**	-	-	**78.5**	-	-	5	U	-	**39.1**	-	-	**13.3**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-12	YVD-D2-140922	09/22/2014	FD	SXI0148	**194**	-	-	**195**	-	-	-	-	-	0.1	U	-	**99.3**	-	-	**82.4**	-	-	2	U	-	**39.0**	-	-	**15.5**	-	-
YVD-12	YVD-12-141216	12/16/2014	N	SXL0121	**194**	-	-	**195**	-	-	-	-	-	0.1	U	-	**99.3**	-	-	**84.1**	-	-	5	U	-	**39.6**	-	-	**15.1**	-	-
YVD-12	YVD-12-150317	03/17/2015	N	5904541	**190**	-	-	**190**	-	-	-	-	-	0.1	U	-	**93.0**	-	-	**75**	-	-	5	U	-	**37.0**	-	-	**14**	J-	MSD
YVD-12	YVD-12-150617	06/17/2015	N	59010961	**190**	-	-	**190**	-	-	-	-	-	0.1	U	-	**90.0**	-	-	**84**	-	-	5	U	-	**35.0**	-	-	**12**	-	-
YVD-12	YVD-12-150924	09/24/2015	N	59020391	**190**	-	-	**190**	-	-	-	-	-	0.1	UJ	MSD	**92.0**	-	-	**78**	-	-	5	U	-	**39.0**	-	-	**15**	J+	MSD
YVD-12	YVD-12-151216	12/16/2015	N	59025501	**210**	-	-	**210**	-	-	-	-	-	-	R	MSD	**95.0**	-	-	**76**	-	-	5	U	-	**37.0**	-	-	**14**	-	-
YVD-12	YVD-12-160309	03/09/2016	N	59029941	**210**	-	-	**210**	-	-	-	-	-	0.1	U	-	**95.0**	-	-	**73**	-	-	5	U	-	**35.0**	-	-	**13**	-	-
YVD-12	YVD-D3-160309	03/09/2016	FD	59029941	**200**	-	-	**200**	-	-	-	-	-	0.1	U	-	**95.0**	-	-	**79**	-	-	0.5	U	-	**36.0**	-	-	**15**	-	-
YVD-12	YVD-12-160622	6/22/2016	N	59037271	**190**	-	-	**190**	-	-	-	-	-	0.1	UJ	MSD	**89.0**	-	-	**90**	-	-	5	U	-	**36.0**	-	-	**14**	-	-
YVD-12	YVD-12-160929	9/29/2016	N	K1611704	**188**	-	-	**188**	-	-	-	-	-	0.050	U	MBK	**88.9**	-	-	**83.5**	-	-	**0.33**	-	-	**37.2**	-	-	**13.5**	-	-
YVD-12	YVD-12-161213	12/13/2016	N	K1615083	**183**	-	-	**183**	-	-	-	-	-	0.050	U	-	**93.4**	-	-	**81.7**	-	-	**0.33**	-	-	**33.6**	-	-	**12.2**	-	-
YVD-12	YVD-030917-20	3/9/2017	N	K1702404	**132**	-	-	**132**	-	-	-	-	-	0.050	U	-	**97.3**	-	-	**91.7**	-	-	**0.38**	-	-	**35.4**	-	-	**13.4**	-	-
YVD-12	YVD-060617-25	6/6/2017	N	K1705833	**183**	-	-	**183**	-	-	-	-	-	0.050	U	-	**98.4**	-	-	**94.1**	-	-	**0.32**	-	-	**35.8**	-	-	**13.6**	-	-
YVD-12	YVD-092517-15	9/25/2017	N	K1710333	**188**	-	-	**188**	-	-	-	-	-	0.050	U	-	**97.6**	-	-	**94.7**	-	-	**0.34**	-	-	**34.2**	-	-	**14.0**	-	-
YVD-12	YVD-120417-03	12/4/2017	N	K1713026	**186**	-	-	**186**	-	-	-	-	-	0.050	U	-	**89.7**	-	-	**85.4**	-	-	**0.41**	-	-	**32.9**	-	-	**13.4**	-	-
YVD-12	YVD-031918-13	3/19/2018	N	870610	**181**	-	-	**181**	-	-	0.070	U	-	-	-	-	**98.0**	-	-	**97.7**	-	-	**0.35**	-	-	**35.25**	-	-	**13.6**	-	-
YVD-12	YVD-060318-11	6/3/2018	N	874568	**178**	-	-	**178**	-	-	0.070	U	FBK	-	-	-	**103**	-	-	**100**	-	-	**0.34**	-	-	**38.35**	-	-	**15.1**	-	-
YVD-12	YVD-090918-16	9/9/2018	N	880601	**185**	-	-	**185**	-	-	0.070	U	-	-	-	-	**110**	-	-	**105**	-	-	**0.33**	-	-	**38.65**	-	-	**15.8**	-	-
YVD-12	YVD-121018-13	12/10/2018	N	884857	**184**	-	-	**184**	-	-	0.070	U	-	-	-	-	**106**	-	-	**98.9**	-	-	0.29	U	FBK	**37.65**	J	MSD	**15.5**	-	-
YVD-12	YVD-031719-07	3/17/2019	N	988239	**189**	-	-	**189**	-	-	0.070	U	-	-	-	-	**104**	-	-	**97.6**	-	-	0.31	U	FBK	**38.00**	-	-	**18.4**	-	-
YVD-12	YVD-060319-27	6/3/2019	N	992053	**185**	-	-	**185**	-	-	0.070	U	-	-	-	-	**104**	-	-	**96.7**	-	-	**0.24**	-	-	**38.05**	-	-	**18.9**	-	-
YVD-12	YVD-090919-16	9/9/2019	N	998357	**185**	-	-	**185**	-	-	0.070	U	-	-	-	-	**106**	-	-	**95.6**	-	-	**0.29**	-	-	**37.50**	-	-	**16.5**	-	-
YVD-12	YVD-120919-12	12/9/2019	N	902276	**190**	-	-	**190**	-	-	**0.30**	-	-	-	-	-	**104**	-	-	**97.8**	-	-	**0.32**	-	-	**38.80**	-	-	**19.6**	-	-
YVD-12	YVD-033020-11	3/30/2020	N	006241	**183**	-	-	**183**	-	-	0.070	U	-	-	-	-	**99.5**	-	-	**99.5**	-	-	**0.32**	--	--	**36.25**	-	-	**17.1**	-	-
YVD-12	YVD-060920-22	6/9/2020	N	009269	**186**	--	--	**186**	--	--	0.070	U	--	-	-	-	**110**	--	--	**101**	--	--	**0.29**	--	--	**38.70**	--	--	**19.5**	--	--
YVD-12	YVD-092120-18	9/21/2020	N	013896	**180**	--	--	**180**	--	--	0.070	U	--	-	-	-	**96.5**	--	--	**99.3**	--	--	**0.27**	--	--	**35.45**	--	--	**13.8**	--	--
YVD-12	YVD-120820-19	12/8/2020	N	017137	**184**	--	--	**184**	--	--	0.070	U	--	-	-	-	**101**	--	--	**114**	--	--	**0.28**	--	--	**36.85**	--	--	**15.2**	--	--
YVD-12	YVD-030221-19	3/2/2021	N	120034	**184**	--	--	**184**	--	--	0.070	U	--	-	-	-	**101**	--	--	**98.1**	--	--	**0.30**	--	--	**36.55**	--	--	**14.8**	--	--
YVD-12	YVD-060821-25	6/8/2021	N	124212	**180**	--	--	**180**	--	--	0.070	U	--	-	-	-	**102**	--	--	**100**	--	--	**0.25**	--	--	**36.95**	--	--	**14.4**	--	--
YVD-12	YVD-121521-18	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**13.4**	J	HTQ, MS
YVD-13	YVD-13-130919	09/19/2013	N	SWI0138	**134**	-	-	**135**	-	-	-	-	-	0.1	U	-	**102**	-	-	**90.3**	-	-	5	U	-	**29.9**	-	-	**27.6**	-	-
YVD-13	YVD-13-131211	12/11/2013	N	SWL0073	**139**	-	-	**140**	-	-	-	-	-	0.02	UJ	MSD	**101**	-	-	**77.8**	-	-	5	U	-	**29.4**	-	-	**21.7**	-	-
YVD-13	YVD-13-140318	03/18/2014	N	SXC0095	**134**	-	-	**135**	-	-	-	-	-	**0.288**		-	**102**	-	-	**80.3**	-	-	5	U	-	**29.3**	-	-	**24.2**	-	-
YVD-13	YVD-13-140603	06/03/2014	N	SXF0017	**129**	-	-	**130**	-	-	-	-	-	**0.103**		-	**94.8**	-	-	**39.7**	-	-	2	U	-	**27.7**	-	-	**12.4**	-	-
YVD-13	YVD-13-140923	09/23/2014	N	SXI0173	**124**	-	-	**125**	-	-	-	-	-	0.1	U	-	**104**	-	-	**81.7**	-	-	5	U	-	**29.0**	-	-	**26.7**	-	-
YVD-13	YVD-13-141217	12/17/2014	N	SXL0121	**124**	-	-	**125**	-	-	-	-	-	0.1	U	-	**114**	-	-	**86.5**	-	-	5	U	-	**33.1**	-	-	**27.3**	-	-
YVD-13	YVD-13-150317	03/17/2015	N	5904541	**130**	-	-	**130**	-	-	-	-	-	0.1	U	-	**100**	-	-	**72**	-	-	5	U	-	**30.0**	-	-	**24**	J-	MSD
YVD-13	YVD-13-150617	06/17/2015	N	59010961	**140**	-	-	**140**	-	-	-	-	-	0.1	U	-	**110**	-	-	**81**	-	-	5	U	-	**30.0**	-	-	**27**	-	-
YVD-13	YVD-13-150924	09/24/2015	N	59020391	**150**	-	-	**150**	-	-	-	-	-	0.1	UJ	MSD	**98.0**	-	-	**70**	-	-	5	U	-	**31.0**	-	-	**26**	J+	MSD
YVD-13	YVD-13-151216	12/16/2015	N	59025501	**140**	-	-	**140**	-	-	-	-	-	-	R	MSD	**100**	-	-	**69**	-	-	5	U	-	**30.0**	-	-	**26**	-	-
YVD-13	YVD-13-160309	03/09/2016	N	59029941	**140**	-	-	**140**	-	-	-	-	-	0.1	U	-	**100**	-	-	**85**	-	-	5	U	-	**29.0**	-	-	**32**	-	-
YVD-13	YVD-13-160622	6/22/2016	N	59037271	**130**	-	-	**130**	-	-	-	-	-	0.1	UJ	MSD	**100**	-	-	**76**	-	-	5	U	-	**30.0**	-	-	**28**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-13	YVD-13-160928	9/28/2016	N	K1611698	**133**	-	-	**133**	-	-	-	-	-	0.050	U	MBK	**101**	-	-	**60.0**	-	-	**0.30**	-	-	**28.1**	-	-	**23.5**	J	HTQ
YVD-13	YVD-13-161214	12/13/2016	N	K1615083	**132**	-	-	**132**	-	-	-	-	-	0.050	U	-	**100**	-	-	**57.3**	-	-	**0.33**	-	-	**27.5**	-	-	**23.1**	-	-
YVD-13	YVD-030717-08	3/7/2017	N	K1702324	**138**	-	-	**138**	-	-	-	-	-	1	U	-	**96.9**	-	-	**52.8**	-	-	**0.35**	-	-	**26.7**	-	-	**23.3**	J	HTQ
YVD-13	YVD-030717-10	3/7/2017	FD	K1702324	**139**	-	-	**139**	-	-	-	-	-	1	U	-	**97.3**	-	-	**53.6**	-	-	**0.37**	-	-	**27.1**	-	-	**23.7**	J	HTQ
YVD-13	YVD-060717-33	6/7/2017	N	K1705833	**134**	-	-	**134**	-	-	-	-	-	0.050	U	-	**99.0**	-	-	**54.6**	-	-	**0.30**	-	-	**27.9**	-	-	**22.7**	-	-
YVD-13	YVD-092617-25	9/26/2017	N	K1710333	**142**	-	-	**142**	-	-	-	-	-	0.050	U	-	**94.9**	-	-	**52.8**	-	-	**0.33**	-	-	**24.5**	-	-	**23.2**	-	-
YVD-13	YVD-120417-07	12/4/2017	N	K1713026	**141**	-	-	**141**	-	-	-	-	-	0.050	U	-	**93.4**	-	-	**53.9**	-	-	**0.36**	-	-	**24.5**	-	-	**24.3**	-	-
YVD-13	YVD-031918-19	3/19/2018	N	870634	**138**	-	-	**138**	-	-	0.070	U	-	-	-	-	**96.0**	-	-	**63.0**	-	-	**0.34**	-	-	**25.45**	-	-	**25.8**	-	-
YVD-13	YVD-060318-09	6/3/2018	N	874568	**137**	-	-	**137**	-	-	0.070	U	-	-	-	-	**91.0**	-	-	**63.3**	-	-	**0.35**	-	-	**25.90**	-	-	**25.2**	-	-
YVD-13	YVD-090918-14	9/9/2018	N	880601	**140**	-	-	**140**	-	-	0.070	U	-	-	-	-	**92.0**	-	-	**66.6**	-	-	**0.34**	-	-	**24.55**	-	-	**26.1**	-	-
YVD-13	YVD-121018-11	12/10/2018	N	884857	**142**	-	-	**142**	-	-	0.070	U	-	-	-	-	**87.5**	-	-	**70.8**	-	-	0.25	U	FBK	**24.20**	J	MSD	**28.6**	-	-
YVD-13	YVD-031819-15	3/18/2019	N	988273	**153**	-	-	**153**	-	-	0.070	U	-	-	-	-	**91.0**	-	-	**74.4**	-	-	**0.31**	-	-	**24.50**	-	-	**29.1**	-	-
YVD-13	YVD-060319-25	6/3/2019	N	992053	**142**	-	-	**142**	-	-	0.070	U	-	-	-	-	**90.0**	-	-	**40.9**	-	-	**0.23**	-	-	**24.35**	-	-	**28.0**	-	-
YVD-13	YVD-090919-10	9/9/2019	N	998357	**143**	-	-	**143**	-	-	0.070	U	-	-	-	-	**90.0**	-	-	**67.6**	-	-	**0.38**	-	-	**23.95**	-	-	**31.0**	-	-
YVD-13	YVD-120919-10	12/9/2019	N	902276	**138**	-	-	**138**	-	-	0.070	U	-	-	-	-	**88.0**	-	-	**73.4**	-	-	**0.37**	-	-	**24.10**	-	-	**30.9**	-	-
YVD-13	YVD-033020-09	3/30/2020	N	006241	**140**	-	-	**140**	-	-	0.070	U	-	-	-	-	**87.5**	-	-	**77.0**	-	-	**0.34**	--	--	**24.05**	-	-	**30.9**	-	-
YVD-13	YVD-060920-21	6/9/2020	N	009269	**139**	--	--	**139**	--	--	0.070	U	--	-	-	-	**89.5**	--	--	**71.1**	--	--	**0.29**	--	--	**24.55**	--	--	**28.5**	--	--
YVD-13	YVD-092120-13	9/21/2020	N	013896	**138**	--	--	**138**	--	--	0.070	U	--	-	-	-	**92.0**	--	--	**79.7**	--	--	**0.30**	--	--	**25.05**	--	--	**32.3**	--	--
YVD-13	YVD-120820-17	12/8/2020	N	017137	**137**	--	--	**137**	--	--	0.070	U	--	-	-	-	**90.5**	--	--	**64.8**	--	--	**0.33**	--	--	**25.05**	--	--	**27.1**	--	--
YVD-13	YVD-030221-15	3/2/2021	N	120034	**144**	--	--	**144**	--	--	0.070	U	--	-	-	-	**93.5**	--	--	**83.0**	--	--	**0.34**	--	--	**25.50**	--	--	**34.3**	--	--
YVD-13	YVD-060821-32	6/8/2021	N	124212	**142**	--	--	**142**	--	--	0.070	U	--	-	-	-	**92.5**	--	--	**82.8**	--	--	**0.31**	--	--	**25.45**	--	--	**34.0**	--	--
YVD-13	YVD-121521-16	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**34.0**	J	HTQ, MS
YVD-14	YVD-14-130918	09/18/2013	N	SWI0123	**605**	-	-	**605**	-	-	-	-	-	0.1	U	-	**260**	-	-	**118**	-	-	5	U	-	**65.4**	-	-	**112**	-	-
YVD-14	YVD-14-131212	12/12/2013	N	SWL0078	**544**	-	-	**545**	-	-	-	-	-	0.02	U	-	**249**	-	-	**104**	-	-	5	U	-	**65.6**	-	-	**105**	-	-
YVD-14	YVD-14-140319	03/19/2014	N	SXC0107	**634**	-	-	**635**	-	-	-	-	-	0.1	U	-	**248**	-	-	**108**	-	-	5	U	-	**64.5**	-	-	**101**	-	-
YVD-14	YVD-14-140604	06/04/2014	N	SXF0025	**569**	-	-	**570**	-	-	-	-	-	0.1	U	-	**240**	-	-	**109**	-	-	5	U	-	**63.2**	-	-	**102**	-	-
YVD-14	YVD-14-140924	09/24/2014	N	SXI0173	**554**	-	-	**555**	-	-	-	-	-	**0.107**	-	-	**268**	-	-	**110**	-	-	5	U	-	**72.0**	-	-	**96.7**	-	-
YVD-14	YVD-14-141217	12/17/2014	N	SXL0121	**539**	-	-	**540**	-	-	-	-	-	0.1	U	-	**252**	-	-	**110**	-	-	5	U	-	**70.9**	-	-	**96.1**	-	-
YVD-14	YVD-14-150318	03/18/2015	N	5904651	**530**	-	-	**530**	-	-	-	-	-	**0.11**	-	-	**260**	-	-	**110**	-	-	5	U	-	**70.0**	-	-	**91**	-	-
YVD-14R	YVD-14R-151216	12/16/2015	N	59025501	**550**	-	-	**550**	-	-	-	-	-	-	R	MSD	**250**	-	-	**110**	-	-	5	U	-	**69.0**	-	-	**98**	-	-
YVD-14R	YVD-14R-160309	03/09/2016	N	59029941	**600**	-	-	**600**	-	-	-	-	-	0.1	U	-	**250**	-	-	**110**	-	-	5	U	-	**67.0**	-	-	**100**	-	-
YVD-14R	YVD-14R-160622	6/22/2016	N	59037271	**490**	-	-	**490**	-	-	-	-	-	0.1	UJ	MSD	**230**	-	-	**110**	-	-	5	U	-	**67.0**	-	-	**110**	-	-
YVD-14R	YVD-14R-160928	9/28/2016	N	K1611698	**535**	-	-	**535**	-	-	-	-	-	0.050	U	MBK	**252**	-	-	**95.7**	-	-	**0.16**	J	-	**65.9**	-	-	**92.1**	J	HTQ
YVD-14R	YVD-14R-161212	12/12/2016	N	K1615029	**578**	-	-	**578**	-	-	-	-	-	0.050	U	-	**251**	-	-	**94.7**	-	-	**0.24**	-	-	**65.7**	-	-	**92.3**	J	HTQ
YVD-14R	YVD-D1-161212	12/12/2016	FD	K1615029	**571**	-	-	**571**	-	-	-	-	-	0.050	U	-	**255**	-	-	**93.3**	-	-	**0.19**	-	-	**66.5**	-	-	**92.3**	J	HTQ
YVD-14R	YVD-030917-19	3/9/2017	N	K1702404	**526**	-	-	**526**	-	-	-	-	-	0.050	U	-	**257**	-	-	**97.0**	-	-	**0.18**	J	-	**66.1**	-	-	**91.1**	-	-
YVD-14R	YVD-030917-21	3/9/2017	FD	K1702404	**514**	-	-	**514**	-	-	-	-	-	0.050	U	-	**251**	-	-	**95.0**	-	-	**0.19**	J	-	**65.2**	-	-	**92.2**	J	HTQ
YVD-14R	YVD-060517-06	6/5/2017	N	K1705702	**505**	-	-	**505**	-	-	-	-	-	0.050	U	-	**243**	-	-	**98.4**	-	-	**0.20**	-	-	**62.3**	-	-	**95.7**	-	-
YVD-14R	YVD-092517-14	9/25/2017	N	K1710333	**515**	-	-	**515**	-	-	-	-	-	0.050	U	-	**238**	-	-	**99.8**	-	-	**0.18**	J	-	**61.2**	-	-	**97.3**	-	-
YVD-14R	YVD-120417-12	12/4/2017	N	K1713026	**504**	-	-	**504**	-	-	-	-	-	0.050	U	-	**230**	-	-	**98.3**	-	-	**0.22**	-	-	**59.3**	-	-	**96.7**	-	-
YVD-14R	YVD-031818-11	3/18/2018	N	870610	**514**	-	-	**514**	-	-	**0.17**	-	-	-	-	-	**232**	-	-	**102**	-	-	**0.13**	-	-	**60.00**	-	-	**90.2**	-	-
YVD-14R	YVD-060318-04	6/3/2018	N	874568	**521**	-	-	**521**	-	-	0.19	U	FBK	-	-	-	**233**	-	-	**105**	-	-	**0.15**	-	-	**63.00**	-	-	**96.5**	-	-
YVD-14R	YVD-090918-09	9/9/2018	N	880601	**532**	-	-	**532**	-	-	0.070	U	-	-	-	-	**250**	-	-	**115**	-	-	**0.18**	-	-	**63.50**	-	-	**115**	-	-
YVD-14R	YVD-121018-02	12/10/2018	N	884857	**528**	-	-	**528**	-	-	0.070	U	-	-	-	-	**256**	-	-	**133**	-	-	0.15	U	FBK	**66.00**	J	MSD	**117**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-14R	YVD-121018-04	12/10/2018	FD	884857	**528**	-	-	**528**	-	-	0.070	U	-	-	-	-	**254**	-	-	**132**	-	-	0.15	U	FBK	**66.00**	J	MSD	**115**	-	-
YVD-14R	YVD-031819-12	3/18/2019	N	988273	**531**	-	-	**531**	-	-	0.070	U	-	-	-	-	**277**	-	-	**151**	-	-	**0.44**	J	DUP	**71.50**	-	-	**138**	-	-
YVD-14R	YVD-031819-14	3/18/2019	FD	988273	**532**	-	-	**532**	-	-	0.070	U	-	-	-	-	**275**	-	-	**148**	-	-	**0.13**	J	DUP	**70.50**	-	-	**135**	-	-
YVD-14R	YVD-060319-22	6/3/2019	N	992053	**542**	-	-	**542**	-	-	**0.12**	U	-	-	-	-	**284**	-	-	**149**	-	-	**0.22**	-	-	**73.50**	-	-	**136**	-	-
YVD-14R	YVD-060319-24	6/3/2019	FD	992053	**538**	-	-	**538**	-	-	0.070	U	-	-	-	-	**270**	-	-	**130**	-	-	0.10	U	-	**71.50**	-	-	**138**	-	-
YVD-14R	YVD-090919-13	9/9/2019	N	998357	**560**	-	-	**560**	-	-	0.070	U	-	-	-	-	**280**	-	-	**130**	-	-	**0.13**	-	-	**73.00**	-	-	**140**	-	-
YVD-14R	YVD-121019-15	12/10/2019	N	902321	**533**	-	-	**533**	-	-	0.070	U	-	-	-	-	**255**	-	-	**128**	-	-	**0.13**	-	-	**66.50**	-	-	**126**	-	-
YVD-14R	YVD-121019-17	12/10/2019	FD	902321	**543**	-	-	**543**	-	-	0.070	U	-	-	-	-	**256**	-	-	**128**	-	-	**0.13**	-	-	**66.50**	-	-	**125**	-	-
YVD-14R	YVD-033020-02	3/30/2020	N	006241	**555**	-	-	**555**	-	-	0.070	U	-	-	-	-	**262**	-	-	**134**	-	-	**0.13**	--	--	**68.00**	-	-	**126**	-	-
YVD-14R	YVD-033020-04	3/30/2020	FD	006241	**556**	-	-	**556**	-	-	0.070	U	-	-	-	-	**262**	-	-	**132**	-	-	**0.13**	--	--	**68.00**	-	-	**127**	-	-
YVD-14R	YVD-060920-20	6/9/2020	N	009269	**569**	--	--	**569**	--	--	0.070	U	--	-	-	-	**269**	--	--	**149**	--	--	**0.11**	--	--	**70.50**	--	--	**130**	--	--
YVD-14R	YVD-092120-14	9/21/2020	N	013896	**560**	--	--	**560**	--	--	0.070	U	--	-	-	-	**260**	--	--	**141**	--	--	**0.21**	--	--	**68.50**	--	--	**122**	--	--
YVD-14R	YVD-120820-20	12/8/2020	N	017137	**556**	--	--	**556**	--	--	0.070	U	--	-	-	-	**263**	--	--	**148**	--	--	**0.12**	--	--	**68.00**	--	--	**119**	--	--
YVD-14R	YVD-030121-08	3/1/2021	N	119931	**564**	--	--	**564**	--	--	0.070	U	--	-	-	-	**266**	--	--	**139**	--	--	**0.14**	--	--	**70.50**	--	--	**129**	--	--
YVD-14R	YVD-060621-09	6/6/2021	N	124053	**558**	--	--	**558**	--	--	0.070	U	--	-	-	-	**262**	--	--	**131**	--	--	**0.14**	--	--	**68.00**	--	--	**121**	--	--
YVD-14R	YVD-121421-08	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**118**	J	HTQ, MS
YVD-15	YVD-15-130917	09/17/2013	N	SWI0123	**514**	-	-	**515**	-	-	-	-	-	0.1	U	-	**125**	-	-	**62.8**	-	-	5	U	-	**51.6**	-	-	**72.5**	-	-
YVD-15	YVD-15-131212	12/12/2013	N	SWL0078	**494**	-	-	**495**	-	-	-	-	-	0.02	U	-	**131**	-	-	**120**	-	-	5	U	-	**59.4**	-	-	**71.2**	-	-
YVD-15	YVD-15-140319	03/19/2014	N	SXC0107	**534**	-	-	**535**	-	-	-	-	-	**0.112**	-	-	**124**	-	-	**54.9**	-	-	5	U	-	**57.9**	-	-	**47.4**	-	-
YVD-15	YVD-15-140603	06/03/2014	N	SXF0025	**509**	-	-	**510**	-	-	-	-	-	0.1	U	-	**138**	-	-	**82.5**	-	-	5	U	-	**64.7**	-	-	**88.1**	-	-
YVD-15	YVD-15-140924	09/24/2014	N	SXI0173	**541**	-	-	**545**	-	-	-	-	-	**0.246**	-	-	**132**	-	-	**58.7**	-	-	5	U	-	**56.9**	-	-	**54.8**	-	-
YVD-15	YVD-15-141217	12/17/2014	N	SXL0121	**518**	-	-	**520**	-	-	-	-	-	0.1	U	-	**175**	-	-	**57.6**	-	-	5	U	-	**81.6**	-	-	**66.9**	-	-
YVD-15	YVD-15-150317	03/17/2015	N	5904651	**550**	-	-	**550**	-	-	-	-	-	0.1	U	-	**280**	-	-	**65**	-	-	5	U	-	**130.0**	-	-	**67**	-	-
YVD-15	YVD-15-150617	06/17/2015	N	59011021	**550**	-	-	**550**	-	-	-	-	-	0.1	U	-	**140**	-	-	**42**	-	-	0.5	U	-	**66.0**	J	RPD	**39**	J-	MSD, HTQ
YVD-15	YVD-15-150925	09/25/2015	N	59020431	**480**	-	-	**480**	-	-	-	-	-	0.1	U	-	**98.0**	-	-	**22**	-	-	5	U	-	**46.0**	-	-	**14**	-	-
YVD-15	YVD-15-151215	12/15/2015	N	59025431	**540**	J	FDP	**540**	J	FDP	-	-	-	-	R	MSD	**120**	-	-	**37**	-	-	5	U	-	**59.0**	-	-	**38**	-	-
YVD-15	YVD-15-160309	03/09/2016	N	59029711	**520**	-	-	**520**	-	-	-	-	-	0.1	UJ	FDP	**120**	-	-	**32**	-	-	5	U	-	**60.0**	-	-	**36**	-	-
YVD-15	YVD-15-160621	6/21/2016	N	59037271	**430**	-	-	**430**	-	-	-	-	-	**0.13**	J-	MSD	**110**	-	-	**26**	-	-	5	U	-	**56.0**	-	-	**31**	-	-
YVD-15	YVD-15-160928	9/28/2016	N	K1611629	**401**	-	-	**401**	-	-	-	-	-	0.050	U	MBK	**112**	-	-	**22.5**	-	-	**0.29**	-	-	**50.9**	-	-	**26.6**	-	-
YVD-15	YVD-15-161215	12/15/2016	N	K1615126	**395**	-	-	**395**	-	-	-	-	-	0.050	U	-	**113**	-	-	**22.1**	-	-	**0.32**	-	-	**50.4**	-	-	**25.5**	-	-
YVD-15	YVD-030917-23	3/9/2017	N	K1702404	**395**	-	-	**395**	-	-	-	-	-	0.050	U	-	**119**	-	-	**23.0**	-	-	**0.34**	-	-	**52.9**	-	-	**25.0**	J	HTQ
YVD-15	YVD-060617-20	6/6/2017	N	K1705754	**399**	-	-	**399**	-	-	-	-	-	0.050	U	-	**126**	-	-	**21.8**	-	-	**0.32**	-	-	**54.6**	-	-	**23.0**	-	-
YVD-15	YVD-092517-10	9/25/2017	N	K1710333	**412**	-	-	**412**	-	-	-	-	-	0.050	U	-	**112**	-	-	**22.1**	-	-	**0.35**	-	-	**50.2**	-	-	**21.8**	-	-
YVD-15	YVD-120517-28	12/5/2017	N	K1713091	**414**	-	-	**414**	-	-	-	-	-	0.050	U	-	**112**	-	-	**21.8**	-	-	**0.34**	-	-	**48.0**	-	-	**22.7**	J	HTQ
YVD-15	YVD-031818-09	3/18/2018	N	870610	**397**	-	-	**397**	-	-	0.070	U	-	-	-	-	**104**	-	-	**21.7**	-	-	**0.32**	-	-	**46.60**	-	-	**24.4**	-	-
YVD-15	YVD-060318-08	6/3/2018	N	874568	**401**	-	-	**401**	-	-	0.070	U	FBK	-	-	-	**100**	-	-	**22.0**	-	-	**0.34**	-	-	**45.50**	-	-	**27.0**	-	-
YVD-15	YVD-090918-11	9/9/2018	N	880601	**395**	-	-	**395**	-	-	0.070	U	-	-	-	-	**97.5**	-	-	**22.8**	-	-	**0.35**	-	-	**42.70**	-	-	**24.4**	-	-
YVD-15	YVD-121018-06	12/10/2018	N	884857	**400**	-	-	**400**	-	-	0.070	U	-	-	-	-	**92.5**	-	-	**24.3**	-	-	0.33	U	FBK	**41.00**	J	MSD	**26.3**	-	-
YVD-15	YVD-031719-10	3/17/2019	N	988239	**394**	-	-	**394**	-	-	0.070	U	-	-	-	-	**91.5**	-	-	**21.1**	-	-	0.31	U	FBK	**39.75**	-	-	**24.3**	-	-
YVD-15	YVD-060419-29	6/4/2019	N	992242	**390**	-	-	**390**	-	-	0.070	U	-	-	-	-	**92.0**	-	-	**19.5**	-	-	**0.30**	-	-	**40.80**	-	-	**23.6**	-	-
YVD-15	YVD-090919-11	9/9/2019	N	998357	**407**	-	-	**407**	-	-	0.070	U	-	-	-	-	**91.0**	-	-	**21.8**	-	-	**0.34**	-	-	**39.40**	-	-	**23.4**	-	-
YVD-15	YVD-121019-19	12/10/2019	N	902321	**400**	-	-	**400**	-	-	0.070	U	-	-	-	-	**88.0**	-	-	**20.5**	-	-	**0.37**	-	-	**38.65**	-	-	**23.5**	-	-
YVD-15	YVD-033020-06	3/30/2020	N	006241	**396**	-	-	**396**	-	-	0.070	U	-	-	-	-	**86.5**	-	-	**20.6**	-	-	**0.37**	--	--	**38.25**	-	-	**22.3**	-	-
YVD-15	YVD-060920-16	6/9/2020	N	009269	**397**	--	--	**397**	--	--	0.070	U	--	-	-	-	**86.5**	--	--	**20.8**	--	--	**0.31**	--	--	**38.10**	--	--	**21.0**	--	--
YVD-15	YVD-092020-09	9/20/2020	N	013864	**390**	--	--	**390**	--	--	0.070	U	--	-	-	-	**87.5**	--	--	**21.1**	--	--	**0.31**	--	--	**38.70**	--	--	**21.2**	--	--
YVD-15	YVD-120720-14	12/7/2020	N	017035	**390**	--	--	**390**	--	--	0.070	U	--	-	-	-	**87.0**	--	--	**20.7**	--	--	**0.42**	--	--	**39.00**	--	--	**19.7**	--	--

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-15	YVD-030121-14	3/1/2021	N	119931	**397**	--	--	**397**	--	--	0.070	U	--	-	-	-	**87.5**	--	--	**21.1**	--	--	**0.34**	--	--	**39.35**	--	--	**22.0**	--	--
YVD-15	YVD-060621-08	6/6/2021	N	124053	**428**	--	--	**428**	--	--	0.070	U	--	-	-	-	**94.5**	--	--	**21.8**	--	--	**0.29**	--	--	**41.65**	--	--	**21.6**	--	--
YVD-15	YVD-121421-07	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**15.1**	--	--
YVD-16	YVD-16-130923	09/23/2013	N	SWI0178	**391**	--	--	**391**	--	--	-	-	-	0.1	U	-	**85.0**	-	-	-	-	-	-	-	-	**32.9**	-	-	-	-	-
YVD-16	YVD-16-130926	09/26/2013	N	SWI0190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**44.1**	-	-	5	U	-	-	-	-	**28.8**	-	-
YVD-16	YVD-16-131212	12/12/2013	N	SWL0073	**309**	-	-	**310**	-	-	-	-	-	0.02	UJ	MSD	**87.7**	-	-	**46.7**	-	-	5	U	-	**32.1**	-	-	**28.8**	-	-
YVD-16	YVD-16-140318	03/18/2014	N	SXC0107	**298**	-	-	**300**	-	-	-	-	-	0.1	U	-	**105.0**	-	-	**46.1**	-	-	5	U	-	**53.2**	-	-	**23.5**	-	-
YVD-16	YVD-16-140603	06/03/2014	N	SXF0017	**287**	-	-	**288**	-	-	-	-	-	0.1	U	-	**86.3**	-	-	**36.7**	-	-	2	U	-	**37.0**	-	-	**21.9**	-	-
YVD-16	YVD-16-140923	09/23/2014	N	SXI0173	**303**	-	-	**305**	-	-	-	-	-	0.1	U	-	**99.2**	-	-	**38**	-	-	2.5	U	-	**38.9**	-	-	**21.4**	-	-
YVD-16	YVD-16-141217	12/17/2014	N	SXL0121	**298**	-	-	**300**	-	-	-	-	-	0.1	U	-	**94.9**	-	-	**37.9**	-	-	2.5	U	-	**37.1**	-	-	**20.6**	-	-
YVD-16	YVD-D3-141217	12/17/2014	FD	SXL0121	**308**	-	-	**310**	-	-	-	-	-	0.1	U	-	**92.9**	-	-	**39.9**	-	-	0.5	U	-	**36.2**	-	-	**22.4**	-	-
YVD-16	YVD-16-150317	03/17/2015	N	5904651	**310**	-	-	**310**	-	-	-	-	-	**0.11**	-	-	**93.0**	-	-	**39**	-	-	2.5	U	-	**34.0**	-	-	**22**	-	-
YVD-16	YVD-16-150616	06/16/2015	N	59010961	**310**	-	-	**310**	-	-	-	-	-	**0.1**	-	-	**96.0**	-	-	**43**	-	-	2.5	U	-	**35.0**	-	-	**23**	-	-
YVD-16	YVD-16-150923	09/23/2015	N	59020281	**330**	-	-	**330**	-	-	-	-	-	0.1	U	-	**88.0**	-	-	**39**	-	-	2.5	U	-	**37.0**	-	-	**23**	-	-
YVD-16	YVD-16-151215	12/15/2015	N	59025431	**350**	J	FDP	**350**	J	FDP	-	-	-	-	R	MSD	**89.0**	-	-	**38**	-	-	2.5	U	-	**34.0**	-	-	**22**	-	-
YVD-16	YVD-16-160309	03/09/2016	N	59029711	**300**	-	-	**300**	-	-	-	-	-	**0.15**	J	FDP	**90.0**	-	-	**39**	-	-	2.5	U	-	**36.0**	-	-	**23**	-	-
YVD-16	YVD-16-160621	6/21/2016	N	59037151	**300**	-	-	**300**	-	-	-	-	-	0.1	U	-	**85.0**	-	-	**42**	-	-	2.5	U	-	**33.0**	-	-	**22**	-	-
YVD-16	YVD-D2-160621	6/21/2016	FD	59037151	**300**	-	-	**300**	-	-	-	-	-	0.1	U	-	**86.0**	-	-	**40**	-	-	0.5	U	-	**34.0**	-	-	**22**	-	-
YVD-16	YVD-16-160928	9/28/2016	N	K1611629	**301**	-	-	**301**	-	-	-	-	-	0.050	U	MBK	**92.4**	-	-	**33.3**	-	-	**0.22**	-	-	**33.2**	-	-	**19.7**	-	-
YVD-16	YVD-16-161215	12/15/2016	N	K1615126	**298**	-	-	**298**	-	-	-	-	-	0.050	U	-	**88.4**	-	-	**33.7**	-	-	**0.24**	-	-	**31.1**	-	-	**19.7**	-	-
YVD-16	YVD-030917-22	3/9/2017	N	K1702404	**295**	-	-	**295**	-	-	-	-	-	0.050	U	-	**87.1**	-	-	**33.9**	-	-	**0.25**	-	-	**31.2**	-	-	**20.1**	J	HTQ
YVD-16	YVD-060517-12	6/5/2017	N	K1705754	**298**	-	-	**298**	-	-	-	-	-	0.050	U	-	**86.8**	-	-	**33.6**	-	-	**0.25**	-	-	**31.6**	-	-	**19.7**	-	-
YVD-16	YVD-092617-28	9/26/2017	N	K1710381	**309**	-	-	**309**	-	-	-	-	-	0.050	U	-	**89.0**	-	-	**32.8**	-	-	**0.23**	-	-	**31.7**	-	-	**19.1**	J	HTQ
YVD-16	YVD-120517-22	12/5/2017	N	K1713091	**294**	-	-	**294**	-	-	-	-	-	0.050	U	-	**87.9**	-	-	**33.3**	-	-	**0.24**	-	-	**30.1**	-	-	**19.8**	J	HTQ
YVD-16	YVD-031918-16	3/19/2018	N	870634	**297**	-	-	**297**	-	-	0.070	U	-	-	-	-	**88.5**	-	-	**34.4**	-	-	**0.20**	-	-	**30.25**	-	-	**20.3**	-	-
YVD-16	YVD-060318-10	6/3/2018	N	874568	**314**	-	-	**314**	-	-	0.070	U	FBK	-	-	-	**90.0**	-	-	**34.9**	-	-	**0.22**	-	-	**32.80**	-	-	**20.7**	-	-
YVD-16	YVD-090918-07	9/9/2018	N	880601	**309**	-	-	**309**	-	-	0.070	U	-	-	-	-	**89.5**	-	-	**35.7**	-	-	**0.21**	-	-	**30.55**	-	-	**21.4**	-	-
YVD-16	YVD-121118-20	12/11/2018	N	884939	**306**	-	-	**306**	-	-	0.070	U	-	-	-	-	**89.5**	-	-	**32.6**	-	-	**0.19**	-	-	**31.05**	-	-	**21.8**	-	-
YVD-16	YVD-031719-08	3/17/2019	N	988239	**300**	-	-	**300**	-	-	0.070	U	-	-	-	-	**88.5**	-	-	**35.4**	-	-	0.18	U	FBK	**30.65**	-	-	**22.5**	-	-
YVD-16	YVD-060219-06	6/2/2019	N	991939	**301**	-	-	**301**	-	-	0.070	U	-	-	-	-	**88.5**	-	-	24.6	U	FBK	0.17	U	FBK	**30.90**	-	-	**23.3**	-	-
YVD-16	YVD-090919-07	9/9/2019	N	998357	**303**	-	-	**303**	-	-	0.070	U	-	-	-	-	**86.5**	-	-	**36.9**	-	-	**0.21**	-	-	**30.40**	-	-	**22.9**	-	-
YVD-16	YVD-120919-11	12/9/2019	N	902276	**296**	-	-	**296**	-	-	0.070	U	-	-	-	-	**86.0**	-	-	**36.7**	-	-	**0.24**	-	-	**30.35**	-	-	**23.5**	-	-
YVD-16	YVD-033120-16	3/31/2020	N	006260	**287**	-	-	**287**	-	-	0.070	U	-	-	-	-	**85.5**	-	-	**38.0**	-	-	**0.18**	--	--	**30.30**	-	-	**22.8**	-	-
YVD-16	YVD-061020-30	6/10/2020	N	009361	**289**	--	--	**289**	--	--	0.070	U	--	-	-	-	**81.5**	--	--	**37.8**	--	--	**0.17**	--	--	**28.80**	J	MS	**21.8**	--	--
YVD-16	YVD-092020-06	9/20/2020	N	013864	**292**	--	--	**292**	--	--	0.070	U	--	-	-	-	**88.0**	--	--	**39.0**	--	--	**0.17**	--	--	**31.40**	--	--	**22.4**	--	--
YVD-16	YVD-120720-08	12/7/2020	N	017035	**298**	--	--	**298**	--	--	0.070	U	--	-	-	-	**92.5**	--	--	**41.2**	--	--	**0.19**	--	--	**33.15**	--	--	**24.6**	--	--
YVD-16	YVD-030121-02	3/1/2021	N	119931	**290**	--	--	**290**	--	--	0.070	U	--	-	-	-	**90.0**	--	--	**42.9**	--	--	**0.20**	--	--	**32.10**	--	--	**24.3**	--	--
YVD-16	YVD-030121-04	3/1/2021	FD	119931	**288**	--	--	**288**	--	--	0.070	U	--	-	-	-	**91.5**	--	--	**42.9**	--	--	**0.20**	--	--	**32.65**	--	--	**24.7**	--	--
YVD-16	YVD-060621-03	6/6/2021	N	124053	**299**	--	--	**299**	--	--	0.070	U	--	-	-	-	**88.5**	--	--	**37.5**	--	--	**0.16**	--	--	**31.85**	--	--	**21.8**	--	--
YVD-16	YVD-121421-02	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**19.7**	J	HTQ, MS
YVD-16	YVD-121421-03	12/14/2021	FD	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**20.1**	--	--
YVD-17	YVD-17-130919	09/19/2013	N	SWI0142	**213**	-	-	**215**	-	-	-	-	-	0.1	U	-	**72.7**	-	-	**3.1**	-	-	0.5	U	-	**35.8**	-	-	-	-	-
YVD-17	YVD-17-130924	09/24/2013	N	SWI0175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.8**	-	-
YVD-17	YVD-17-131210	12/10/2013	N	SWL0055	**169**	-	-	**170**	-	-	-	-	-	0.02	UJ	MSD	**54.2**	-	-	**2.98**	-	-	0.5	U	-	**28.4**	-	-	**0.68**	-	-
YVD-17	YVD-17-140316	03/16/2014	N	SXC0081	**144**	-	-	**145**	-	-	-	-	-	**0.166**	-	-	**36.0**	-	-	**3.45**	-	-	**0.65**	-	-	**17.6**	-	-	**1.07**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-17	YVD-17-140601	06/01/2014	N	SXF0008	**169**	-	-	**170**	-	-	-	-	-	0.1	U	-	**42.3**	-	-	**3.17**	-	-	0.5	U	-	**18.5**	-	-	**0.67**	-	-
YVD-17	YVD-17-140922	09/22/2014	N	SXI0148	**183**	-	-	**185**	-	-	-	-	-	0.1	U	-	**47.5**	-	-	**2.87**	-	-	0.5	U	-	**21.2**	-	-	**0.96**	-	-
YVD-17	YVD-17-141215	12/15/2014	N	SXL0103	**168**	-	-	**170**	-	-	-	-	-	0.1	U	-	**42.1**	-	-	**2.99**	J+	MSD	0.5	U	-	**17.8**	-	-	**0.66**	J	DUP
YVD-17	YVD-17-150316	03/16/2015	N	5904471	**130**	-	-	**130**	-	-	-	-	-	0.1	U	-	**33.0**	-	-	**3.5**	-	-	**0.5**	-	-	**17.0**	-	-	**1.1**	-	-
YVD-17	YVD-D1-150316	03/16/2015	FD	5904471	**130**	-	-	**130**	-	-	-	-	-	0.1	U	-	**33.0**	-	-	**3.5**	-	-	**0.51**	-	-	**17.0**	-	-	**1.2**	-	-
YVD-17	YVD-17-150617	06/17/2015	N	59010961	**160**	-	-	**160**	-	-	-	-	-	0.1	U	-	**41.0**	-	-	**3**	-	-	0.5	U	-	**18.0**	-	-	**0.59**	-	-
YVD-17	YVD-17-150924	09/24/2015	N	59020391	**170**	-	-	**170**	-	-	-	-	-	0.1	UJ	MSD	**40.0**	-	-	**3.1**	-	-	**0.6**	-	-	**18.0**	-	-	0.2	U	-
YVD-17	YVD-17-151216	12/16/2015	N	59025501	**180**	-	-	**180**	-	-	-	-	-	-	R	MSD	**38.0**	-	-	**2.6**	-	-	0.5	U	-	**17.0**	-	-	**0.55**	-	-
YVD-17	YVD-17-160310	03/10/2016	N	59029941	**150**	-	-	**150**	-	-	-	-	-	0.1	U	-	**35.0**	-	-	**2.8**	-	-	0.5	U	-	**16.0**	-	-	**0.32**	-	-
YVD-17	YVD-17-160623	6/23/2016	N	59037371	**170**	-	-	**170**	-	-	-	-	-	-	R	MSD	**39.0**	-	-	**3.4**	-	-	0.5	U	-	**18.0**	-	-	**0.55**	-	-
YVD-17	YVD-17-160926	9/26/2016	N	K1611565	**182**	-	-	**182**	-	-	-	-	-	0.050	U	MBK	**40.8**	-	-	**2.91**	-	-	**0.32**	-	-	**17.3**	-	-	**1.16**	-	-
YVD-17	YVD-17-161215	12/15/2016	N	K1615174	**154**	-	-	**157**	J	-	-	-	-	0.050	U	-	**39.6**	-	-	**2.42**	-	-	**0.34**	-	-	**15.8**	-	-	**0.59**	-	-
YVD-17	YVD-031017-29	3/10/2017	N	K1702448	**142**	-	-	**156**	J	-	-	-	-	0.050	U	-	**36.6**	-	-	**2.65**	-	-	**0.33**	-	-	**15.7**	-	-	**0.42**	-	-
YVD-17	YVD-060617-24	6/6/2017	N	K1705754	**167**	-	-	**167**	-	-	-	-	-	0.050	U	-	**40.2**	-	-	**2.40**	-	-	**0.35**	-	-	**15.8**	-	-	**0.50**	-	-
YVD-17	YVD-092517-08	9/25/2017	N	K1710274	**179**	-	-	**179**	-	-	-	-	-	0.050	U	-	**43.1**	-	-	**2.89**	-	-	**0.37**	-	-	**16.4**	-	-	**0.99**	-	-
YVD-17	YVD-120517-26	12/5/2017	N	K1713091	**187**	-	-	**187**	-	-	-	-	-	0.050	U	-	**43.6**	-	-	**2.71**	-	-	**0.39**	-	-	**15.4**	-	-	**0.71**	-	-
YVD-17	YVD-060418-20	6/4/2018	N	874662	**160**	-	-	**160**	-	-	0.09	U	FBK	-	-	-	**39.1**	-	-	**2.87**	-	-	**0.30**	-	-	**16.5**	-	-	**0.66**	-	-
YVD-17	YVD-060219-12	6/2/2019	N	991939	**149**	-	-	**149**	-	-	0.070	U	-	-	-	-	**35.0**	-	-	2.91	U	FBK	0.24	U	FBK	**15.15**	-	-	**0.49**	-	-
YVD-17	YVD-060820-10	6/8/2020	N	009144	**146**	--	--	**146**	--	--	0.070	U	--	-	-	-	**34.4**	--	--	**3.17**	--	--	**0.25**	--	--	**15.15**	--	--	**0.70**	--	--
YVD-17	YVD-060621-04	6/6/2021	N	124053	**144**	--	--	**144**	--	--	0.070	U	--	-	-	-	**33.3**	--	--	**2.36**	J	FDP	**0.19**	--	--	**14.55**	--	--	**0.40**	--	--
YVD-17	YVD-060621-05	6/6/2021	FD	124053	**144**	--	--	**144**	--	--	0.070	U	--	-	-	-	**33.5**	--	--	**2.99**	J	FDP	**0.24**	--	--	**14.70**	--	--	**0.47**	--	--
YVD-18	YVD-18-130919	09/19/2013	N	SWI0142	**119**	-	-	**120**	-	-	-	-	-	0.1	U	-	**42.9**	-	-	**61.4**	-	-	5	U	-	**13.7**	-	-	-	-	-
YVD-18	YVD-18-130925	09/25/2013	N	SWI0175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**13.6**	-	-
YVD-18	YVD-18-131211	12/11/2013	N	SWL0073	**109**	-	-	**110**	-	-	-	-	-	0.02	UJ	MSD	**50.4**	-	-	**62.9**	-	-	5	U	-	**17.1**	-	-	**14.2**	J	FDP
YVD-18	YVD-D2-131211	12/11/2013	FD	SWL0073	**114**	-	-	**115**	-	-	-	-	-	0.02	UJ	MSD	**50.2**	-	-	**66.5**	-	-	5	U	-	**16.7**	-	-	**23.5**	J	FDP
YVD-18	YVD-18-140318	03/18/2014	N	SXC0095	**119**	-	-	**120**	-	-	-	-	-	**0.134**	J	FDP	**51.7**	-	-	**66.7**	-	-	5	U	-	**16.5**	-	-	**18.8**	-	-
YVD-18	YVD-D2-140318	03/18/2014	FD	SXC0095	**124**	-	-	**125**	-	-	-	-	-	**0.28**	J	FDP	**52.0**	-	-	**62.1**	-	-	5	U	-	**16.6**	-	-	**17.1**	-	-
YVD-18	YVD-18-140603	06/03/2014	N	SXF0017	**117**	-	-	**118**	-	-	-	-	-	0.1	U	-	**46.8**	-	-	**64**	-	-	2	U	-	**15.4**	-	-	**16.9**	-	-
YVD-18	YVD-18-140923	09/23/2014	N	SXI0173	**114**	-	-	**115**	-	-	-	-	-	0.1	U	-	**48.5**	-	-	**54.7**	-	-	2.5	U	-	**15.6**	-	-	**13.8**	-	-
YVD-18	YVD-18-141216	12/16/2014	N	SXL0121	**114**	-	-	**115**	-	-	-	-	-	0.1	U	-	**52.7**	-	-	**59.6**	-	-	2.5	U	-	**17.7**	-	-	**16.5**	-	-
YVD-18	YVD-18-150317	03/17/2015	N	5904541	**110**	-	-	**110**	-	-	-	-	-	0.1	U	-	**56.0**	-	-	**64**	-	-	2.5	U	-	**19.0**	-	-	**20**	J-	MSD
YVD-18	YVD-18-150617	06/17/2015	N	59010961	**110**	-	-	**110**	-	-	-	-	-	0.1	U	-	**55.0**	-	-	**65**	-	-	2.5	U	-	**18.0**	-	-	**17**	-	-
YVD-18	YVD-18-150924	09/24/2015	N	59020391	**120**	-	-	**120**	-	-	-	-	-	0.1	UJ	MSD	**52.0**	-	-	**63**	-	-	2.5	U	-	**19.0**	-	-	**20**	J+	MSD
YVD-18	YVD-18-151216	12/16/2015	N	59025501	**120**	-	-	**120**	-	-	-	-	-	-	R	MSD	**60.0**	-	-	**66**	-	-	2.5	U	-	**20.0**	-	-	**23**	-	-
YVD-18	YVD-18-160309	03/09/2016	N	59029941	**120**	-	-	**120**	-	-	-	-	-	0.1	U	-	**62.0**	-	-	**63**	-	-	2.5	U	-	**21.0**	-	-	**22**	-	-
YVD-18	YVD-18-160622	6/22/2016	N	59037271	**130**	-	-	**130**	-	-	-	-	-	0.1	UJ	MSD	**55.0**	-	-	**61**	-	-	2.5	U	-	**19.0**	-	-	**21**	-	-
YVD-18	YVD-18-160928	9/28/2016	N	K1611629	**114**	-	-	**114**	-	-	-	-	-	0.050	U	MBK	**58.2**	-	-	**56.8**	-	-	**0.36**	-	-	**19.7**	-	-	**20.5**	-	-
YVD-18	YVD-18-161214	12/14/2016	N	K1615083	**111**	-	-	**111**	-	-	-	-	-	0.050	U	-	**62.5**	-	-	**56.3**	-	-	**0.38**	-	-	**19.6**	-	-	**21.5**	-	-
YVD-18	YVD-D3-161214	12/14/2016	FD	K1615083	**111**	-	-	**111**	-	-	-	-	-	**0.115**	-	-	**60.6**	-	-	**56.4**	-	-	**0.37**	-	-	**20.1**	-	-	**21.5**	-	-
YVD-18	YVD-030617-05	3/6/2017	N	K1702324	**110**	-	-	**110**	-	-	-	-	-	1	U	-	**65.4**	-	-	**55.9**	-	-	**0.40**	-	-	**20.5**	-	-	**23.7**	J	HTQ

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-18	YVD-060717-31	6/7/2017	N	K1705833	**114**	-	-	**114**	-	-	-	-	-	0.050	U	-	**65.2**	-	-	**57.0**	-	-	**0.34**	-	-	**21.4**	-	-	**22.9**	-	-
YVD-18	YVD-092617-27	9/26/2017	N	K1710333	**115**	-	-	**115**	-	-	-	-	-	0.050	U	-	**58.5**	-	-	**54.8**	-	-	**0.38**	-	-	**18.3**	-	-	**21.6**	-	-
YVD-18	YVD-120417-05	12/4/2017	N	K1713026	**114**	-	-	**114**	-	-	-	-	-	0.050	U	-	**62.6**	-	-	**58.9**	-	-	**0.40**	-	-	**20.0**	-	-	**24.4**	-	-
YVD-18	YVD-031918-17	3/19/2018	N	870634	**111**	-	-	**111**	-	-	0.070	U	-	-	-	-	**67.5**	-	-	**68.2**	-	-	**0.34**	-	-	**22.00**	-	-	**27.7**	-	-
YVD-18	YVD-060318-07	6/3/2018	N	874568	**110**	-	-	**110**	-	-	0.070	U	-	-	-	-	**70.0**	-	-	**65.9**	-	-	**0.33**	-	-	**23.30**	-	-	**26.3**	-	-
YVD-18	YVD-090918-12	9/9/2018	N	880601	**112**	-	-	**112**	-	-	0.070	U	-	-	-	-	**67.5**	-	-	**67.1**	-	-	**0.35**	-	-	**22.05**	-	-	**26.0**	-	-
YVD-18	YVD-121018-09	12/10/2018	N	884857	**115**	-	-	**115**	-	-	0.070	U	-	-	-	-	**68.0**	-	-	**66.8**	-	-	0.32	U	FBK	**22.00**	J	MSD	**27.0**	-	-
YVD-18	YVD-031819-13	3/18/2019	N	988273	**118**	-	-	**118**	-	-	0.070	U	-	-	-	-	**75.0**	-	-	**74.5**	-	-	**0.73**	-	-	**23.70**	-	-	**29.8**	-	-
YVD-18	YVD-060319-23	6/3/2019	N	992053	**118**	-	-	**118**	-	-	0.070	U	-	-	-	-	**75.0**	-	-	**71.0**	-	-	**0.25**	-	-	**23.35**	-	-	**28.4**	-	-
YVD-18	YVD-090919-06	9/9/2019	N	998357	**115**	-	-	**115**	-	-	0.070	U	-	-	-	-	**65.0**	-	-	**61.5**	-	-	**0.38**	-	-	**20.65**	-	-	**28.4**	-	-
YVD-18	YVD-090919-08	9/9/2019	FD	998357	**114**	-	-	**114**	-	-	0.070	U	-	-	-	-	**65.5**	-	-	**60.9**	-	-	**0.38**	-	-	**20.75**	-	-	**28.3**	-	-
YVD-18	YVD-120919-08	12/9/2019	N	902276	**113**			**113**			0.070	U		-	-	-	**70.0**			**68.1**			**0.34**			**22.95**			**28.8**		
YVD-18	YVD-033020-07	3/30/2020	N	006241	**117**	-	-	**117**	-	-	0.070	U	-	-	-	-	**73.5**	-	-	**71.6**	-	-	**0.30**	--	--	**23.30**	-	-	**28.5**	-	-
YVD-18	YVD-060920-19	6/9/2020	N	009269	**120**	--	--	**120**	--	--	0.070	U	--	-	-	-	**70.5**	--	--	**69.1**	--	--	**0.29**	--	--	**22.50**	--	--	**27.4**	--	--
YVD-18	YVD-092120-15	9/21/2020	N	013896	**115**	--	--	**115**	--	--	0.070	U	--	-	-	-	**67.0**	--	--	**70.9**	--	--	**0.31**	--	--	**21.55**	--	--	**27.4**	--	--
YVD-18	YVD-092120-17	9/21/2020	FD	013896	**113**	--	--	**113**	--	--	0.070	U	--	-	-	-	**65.5**	--	--	**70.4**	--	--	**0.31**	--	--	**21.15**	--	--	**27.2**	--	--
YVD-18	YVD-120820-15	12/8/2020	N	017137	**116**	--	--	**116**	--	--	0.070	U	--	-	-	-	**71.0**	--	--	**64.8**	--	--	**0.42**	--	--	**22.70**	--	--	**26.6**	--	--
YVD-18	YVD-030221-17	3/2/2021	N	120034	**122**	--	--	**122**	--	--	0.070	U	--	-	-	-	**76.0**	--	--	**72.2**	--	--	**0.31**	--	--	**23.70**	--	--	**28.2**	--	--
YVD-18	YVD-060821-30	6/8/2021	N	124212	**120**	--	--	**120**	--	--	0.070	U	--	-	-	-	**71.0**	--	--	**75.8**	--	--	**0.31**	--	--	**22.75**	--	--	**31.8**	--	--
YVD-18	YVD-121521-12	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**26.6**	J	HTQ, MS
YVD-18	YVD-121521-14	12/15/2021	FD	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**26.7**	J	HTQ, MS
Equipment Blank	YVD-EB-130918	09/18/2013	EB	SWI0123	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-130925	09/25/2013	EB	SWI0175	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-131212	12/12/2013	EB	SWL0078	4	U	-	4	U	-	0.02	U	-	0.02	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-140317	03/17/2014	EB	SXC0081	4	U	-	4	U	-	**0.124**	-	-	**0.124**	-	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-140318	03/18/2014	EB	SXC0095	4	U	-	4	U	-	**0.13**	-	-	**0.13**	-	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-140319	03/19/2014	EB	SXC0107	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-140604	06/04/2014	EB	SXF0025	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	**1.46**	-	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-140924	09/24/2014	EB	SXI0173	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-141217	12/17/2014	EB	SXL0144	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	**0.9**	-	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-150617	06/17/2015	EB	59011021	**5**	-	-	**5**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-150925	09/25/2015	EB	59020431	4	U	-	4	U	-	**0.1**	-	-	**0.1**	-	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-151216	12/16/2015	EB	59025501	**5**	-	-	**5**	-	-	**0.12**	J-	MSD	**0.12**	J-	MSD	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-160310	03/10/2016	EB	59029941	**15**	-	-	**15**	-	-	0.1	U	-	0.1	U	-	1	U	-	**1.1**	-	-	**0.67**	-	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-160623	6/23/2016	EB	59037371	**5**	-	-	**5**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Equipment Blank	YVD-EB-160926	9/26/2016	EB	K1611506	2	U	-	2	U	-	0.050	U	MBK	0.050	U	MBK	**0.097**	-	-	0.2	U	-	0.2	U	-	**0.0346**	-	-	0.1	U	-
Equipment Blank	YVD-EB-160927	9/27/2016	EB	K1611629	2	U	-	2	U	-	0.050	U	MBK	0.050	U	MBK	**0.011**	J	-	0.1	U	-	0.1	U	-	**0.0004**	J	-	0.05	UJ	HTQ

Table 8
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Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
Equipment Blank	YVD-EB-160928	9/28/2016	EB	K1611629	2	U	-	2	U	-	0.050	U	MBK	0.050	U	MBK	**0.05**	J	-	**0.03**	J	-	0.1	U	-	0.05	U	-	0.05	U	-
Equipment Blank	YVD-EB1-161214	12/14/2016	EB	K1615083	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Equipment Blank	YVD-EB2-161215	12/15/2016	EB	K1615126	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Equipment Blank	YVD-EB3-161216	12/16/2016	EB	K1615174	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.035	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-F1-130916	09/16/2013	FB	SWI0113	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-130917	09/17/2013	FB	SWI0113	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-130918	09/18/2013	FB	SWI0123	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-130918	09/18/2013	FB	SWI0138	4	U	-	4	U	-	**0.12**	-	-	**0.12**	-	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F5-130919	09/19/2013	FB	SWI0142	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	-	-	-
Field Blank	YVD-F6-130923	09/23/2013	FB	SWI0178	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	-	-	-	-	-	-	0.5	U	-	-	-	-
Field Blank	YVD-F7-130924	09/24/2013	FB	SWI0175	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F7-130926	09/26/2013	FB	SWI0190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	U	-	0.5	U	-	-	-	-	0.2	U	-
Field Blank	YVD-F1-131209	12/09/2013	FB	SWL0055	4	U	-	4	U	-	0.02	U	-	0.02	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-131210	12/10/2013	FB	SWL0063	4	U	-	4	U	-	0.02	U	-	0.02	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-131211	12/11/2013	FB	SWL0073	4	U	-	4	U	-	0.02	U	-	0.02	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-131212	12/12/2013	FB	SWL0078	4	U	-	4	U	-	0.02	U	-	0.02	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F1-140316	03/16/2014	FB	SXC0081	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-140317	03/17/2014	FB	SXC0095	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-140318	03/18/2014	FB	SXC0107	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-140319	03/19/2014	FB	SXC0107	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F1-140601	06/01/2014	FB	SXF0008	**4.25**	-	-	**4.25**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-140602	06/02/2014	FB	SXF0017	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-140603	06/03/2014	FB	SXF0025	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F1-140921	09/21/2014	FB	SXI0148	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-140922	09/22/2014	FB	SXI0148	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-140923	09/23/2014	FB	SXI0158	4	U	-	4	U	-	**0.128**	-	-	**0.128**	-	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-140924	09/24/2014	FB	SXI0173	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F1-141215	12/15/2014	FB	SXL0103	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	UJ	DUP
Field Blank	YVD-F2-141215	12/15/2014	FB	SXL0108	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-141216	12/16/2014	FB	SXL0121	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-141217	12/17/2014	FB	SXL0144	4	U	-	4	U	-	**0.101**	-	-	**0.101**	-	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	-	R	HTQ
Field Blank	YVD-F1-150315	03/15/2015	FB	5904471	**15**	-	-	**15**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-150316	03/16/2015	FB	5904541	**7.5**	-	-	**7.5**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-150317	03/17/2015	FB	5904651	**4.5**	-	-	**4.5**	-	-	0.1	U	-	0.1	U	-	**1.2**	-	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F1-150615	06/15/2015	FB	59010751	**10**	-	-	**10**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-150616	06/16/2015	FB	59010961	**5**	-	-	**5**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-150617	06/17/2015	FB	59011021	**5**	-	-	**5**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F1-150922	09/22/2015	FB	59020141	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-150923	09/23/2015	FB	59020281	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-150923	09/23/2015	FB	59020391	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-150924	09/24/2015	FB	59020391	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F5-150925	09/25/2015	FB	59020431	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F1-151213	12/13/2015	FB	59025351	**5**	-	-	**5**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-151214	12/14/2015	FB	59025431	**5**	-	-	**5**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-151215	12/15/2015	FB	59025501	**5**	-	-	**5**	-	-	-	R	MSD	-	R	MSD	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-151216	12/16/2015	FB	59025501	**5**	-	-	**5**	-	-	-	R	MSD	-	R	MSD	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
Field Blank	YVD-F1-160307	03/07/2016	FB	59029521	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-160308	03/08/2016	FB	59029711	4	U	-	4	U	-	**0.19**	-	-	**0.19**	-	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-160309	03/09/2016	FB	59029941	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-160310	03/10/2016	FB	59029941	**13**	-	-	**13**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F1-160620	6/20/2016	FB	59037101	**5**	-	-	**5**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F2-160621	6/21/2016	FB	59037151	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F3-160622	6/22/2016	FB	59037271	**5**	-	-	**5**	-	-	**0.22**	-	-	**0.22**	-	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-F4-160623	6/23/2016	FB	59037371	**10**	-	-	**10**	-	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Field Blank	YVD-FB-160926	9/26/2016	FB	K1611506	2	U	-	2	U	-	0.050	U	MBK	0.050	U	MBK	0.02	U	MBK	0.2	U	-	0.2	U	-	**0.0025**	J	-	0.1	U	-
Field Blank	YVD-FB-160927	9/27/2016	FB	K1611565	2	U	-	2	U	-	0.050	U	MBK	0.050	U	MBK	0.02	U	MBK	0.2	U	-	0.2	U	-	0.05	U	-	0.1	U	-
Field Blank	YVD-FB-160928	9/28/2016	FB	K1611629	15	U	-	15	U	-	0.050	U	MBK	0.050	U	MBK	**0.05**	J	-	0.1	U	-	0.1	U	-	0.05	U	-	0.05	U	-
Field Blank	YVD-FB-160929	9/29/2016	FB	K1611698	2	U	-	2	U	-	0.050	U	MBK	0.050	U	MBK	**0.07**	J	-	0.2	U	-	0.2	U	-	0.05	U	-	0.1	U	-
Field Blank	YVD-FB1-161212	12/12/2016	FB	K1615029	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	HTQ
Field Blank	YVD-FB2-161213	12/13/2016	FB	K1615045	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-FB3-161214	12/14/2016	FB	K1615083	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	-	0.1	U	-
Field Blank	YVD-FB4-161215	12/15/2016	FB	K1615126	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-FB5-161216	12/16/2016	FB	K1615174	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-030617-01	3/6/2017	FB	K1702228	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-030717-06	3/7/2017	FB	K1702324	2	U	-	2	U	-	1	U	-	1	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	UJ	HTQ
Field Blank	YVD-030817-11	3/8/2017	FB	K1702324	2	U	-	2	U	-	1	U	-	1	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-030917-17	3/9/2017	FB	K1702404	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-031017-26	3/10/2017	FB	K1702448	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-031317-30	3/13/2017	FB	K1702489	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-060417-01	6/4/2017	FB	K1705702	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.025	U	MBK	21	U	-	0.2	U	-	0.0053	U	MBK	5.3	U	-
Field Blank	YVD-060517-07	6/5/2017	FB	K1705702	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.029	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-060617-17	6/6/2017	FB	K1705754	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-060717-28	6/7/2017	FB	K1705833	2	U	-	2	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.2	U	-	0.2	U	-	0.0053	U	MBK	0.1	U	-
Field Blank	YVD-092517-01	9/25/2017	FB	K1710274	2.0	U	-	2.0	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.20	U	-	0.20	U	-	**0.0018**	J	-	0.10	U	-
Field Blank	YVD-092617-16	9/26/2017	FB	K1710333	2.0	U	-	2.0	U	-	0.050	U	-	0.050	U	-	0.026	U	MBK	0.20	U	-	0.20	U	-	0.0076	U	MBK	0.10	U	-
Field Blank	YVD-120417-01	12/4/2017	FB	K1713026	15	U	MBK	15	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	0.20	U	-	0.20	U	-	0.0053	U	MBK	0.10	U	-
Field Blank	YVD-120517-32	12/5/2017	FB	K1713091	15	U	MBK	15	U	-	0.050	U	-	0.050	U	-	0.021	U	MBK	**0.42**	-	-	0.20	U	-	0.0053	U	MBK	0.10	U	HTQ
Field Blank	YVD-120617-25	12/6/2017	FB	K1713157	15	U	MBK	15	U	-	0.050	U	MBK	0.050	U	MBK	0.021	U	MBK	0.20	U	-	0.20	U	-	0.0053	U	MBK	0.10	U	-
Field Blank	YVD-031818-01	3/18/2018	FB	870610	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-031918-10	3/19/2018	FB	870634	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-060318-01	6/3/2018	FB	874568	5	U	-	5	U	-	**0.18**	-	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-060418-12	6/4/2018	FB	874568	5	U	-	5	U	-	**0.08**	-	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-060518-26	6/5/2018	FB	874860	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-061218-33	6/12/2018	FB	875438	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-090918-01	9/9/2018	FB	880601	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-121018-01	12/10/2018	FB	884857	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	**0.28**	-	-	**0.10**	-	-	0.06	UJ	MSD	0.05	U	-
Field Blank	YVD-121118-12	12/11/2018	FB	884939	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	**0.14**	-	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-031719-01	3/17/2019	FB	988239	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	**0.22**	-	-	0.12	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-031819-11	3/18/2019	FB	988273	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-032019-20	3/20/2019	FB	988477	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-060219-01	6/2/2019	FB	991939	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	**11.0**	-	-	**0.63**	-	-	0.06	U	-	0.05	U	-
Field Blank	YVD-060319-13	6/3/2019	FB	992053	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	**0.31**	-	-	0.1	U	-	0.06	U	-	**0.08**	-	-
Field Blank	YVD-060419-26	6/4/2019	FB	992242	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-090919-01	9/9/2019	FB	998357	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-090919-03	9/9/2019	FB	998357	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Alkalinity, Bicarbonate (as CaCO3)			Alkalinity, Total (as CaCO3)			Ammonia (as N)			Ammonia (as N)			Calcium			Chloride			Fluoride			Magnesium			Nitrate (as N)		
Analytical Method					SM 2320B			SM 2320B			SM 4500 NH3-G			EPA 350.1			EPA 200.7			EPA 300			EPA 300.0			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
Field Blank	YVD-091019-15	9/10/2019	FB	998438	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-091019-17	9/10/2019	FB	998438	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-120919-01	12/9/2019	FB	902276	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-120919-09	12/9/2019	FB	902276	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-121019-16	12/10/2019	FB	902321	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-121019-18	12/10/2019	FB	902321	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-033020-01	3/30/2020	FB	006241	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-033020-03	3/30/2020	FB	006241	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-033120-13	3/31/2020	FB	006260	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-033120-15	3/31/2020	FB	006260	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-060820-01	6/8/2020	FB	009144	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-060820-02	6/8/2020	FB	009144	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-060920-11	6/9/2020	FB	009269	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-060920-13	6/9/2020	FB	009269	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-061020-29	6/10/2020	FB	009361	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-061020-28	6/10/2020	FB	009361	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-092020-01	9/20/2020	FB	013864	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-092020-02	9/20/2020	FB	013864	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-092120-10	9/21/2020	FB	013896	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-092120-12	9/21/2020	FB	013896	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-120720-01	12/7/2020	FB	017035	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-120720-03	12/7/2020	FB	017035	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-120820-16	12/8/2020	FB	017137	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-120820-18	12/8/2020	FB	017137	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-030121-01	3/1/2021	FB	119931	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-030121-03	3/1/2021	FB	119931	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-030221-11	3/2/2021	FB	120034	5	U	-	5	U	-	0.07	U	-	-	-	-	0.4	U	-	0.1	U	-	0.1	U	-	0.06	U	-	0.05	U	-
Field Blank	YVD-030221-13	3/2/2021	FB	120034	NS	-	-	NS	-	-	0.07	U	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-060621-01	6/6/2021	FB	124053	5.0	U	-	5.0	U	-	0.070	U	-	-	-	-	0.40	U	-	0.10	U	-	0.10	U	-	0.060	U	-	0.050	U	-
Field Blank	YVD-060621-02	6/6/2021	FB	124053	-	-	-	-	-	-	0.070	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Blank	YVD-060721-11	6/7/2021	FB	124105	5.0	U	-	5.0	U	-	0.070	U	-	-	-	-	0.40	U	-	0.10	U	-	0.10	U	-	0.060	U	-	0.050	U	-
Field Blank	YVD-060721-12	6/7/2021	FB	124105	-	-	-	-	-	-	0.070	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Blank	YVD-060821-20	6/8/2021	FB	124212	5.0	U	-	5.0	U	-	0.070	U	-	-	-	-	0.40	U	-	0.10	U	-	0.10	U	-	0.060	U	-	0.050	U	-
Field Blank	YVD-060821-21	6/8/2021	FB	124212	-	-	-	-	-	-	0.070	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Blank	YVD-121421-01	12/14/2021	FB	K2114499																									0.10	U	--
Field Blank	YVD-121521-13	12/15/2021	FB	K2114550																									0.10	UJ	ERL
Blank Check	WW-1	4/25/2016	BC	59032861	**110**	-	-	**110**	-	-	**0.33**	-	-	**0.33**	-	-	1.7	U	-	160	U	-	100	U	-	0.83	U	-	40	U	-
Blank Check	DW-1	4/25/2016	BC	59032861	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-
Blank Check	DI-1	4/25/2016	BC	59032861	4	U	-	4	U	-	0.1	U	-	0.1	U	-	1	U	-	0.8	U	-	0.5	U	-	0.5	U	-	0.2	U	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-01	DC-01-130104	01/04/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-01	DC-01-130924	09/24/2013	N	SWI0178	0.2	U	-	0.25	U	-	-	-	-	-	-	-	**0.123**	-	-	-	-	-	**6.10**	-	-	**43.0**	-	-	**223**	-	-
DC-01	DC-01-131211	12/11/2013	N	SWL0063	2	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	**0.186**	-	-	**5.94**	-	-	**41.9**	-	-	**280**	J-	MSD
DC-01	DC-01-140318	03/18/2014	N	SXC0095	2	U	-	**0.304**	-	-	**0.079**	-	-	-	-	-	-	-	-	-	-	-	**5.93**	-	-	**40.2**	-	-	**250**	J-	MSD
DC-01	DC-01-140602	06/02/2014	N	SXF0017	0.8	U	-	**0.45**	-	-	**0.81**	-	-	-	-	-	-	-	-	-	-	-	**6.74**	-	-	**41.8**	-	-	**224**	J-	MSD
DC-01	DC-01-140923	09/23/2014	N	SXI0158	2	U	-	0.25	U	-	**0.12**	-	-	-	-	-	-	-	-	-	-	-	**6.02**	-	-	**44.3**	J+	MSD	**216**	-	-
DC-01	DC-01-141216	12/16/2014	N	SXL0121	2	U	-	0.25	UJ	MSD	0.1	U	-	-	-	-	-	-	-	-	-	-	**6.18**	-	-	**43.1**	-	-	**463**	-	-
DC-01	DC-01-150316	03/16/2015	N	5904471	2	U	-	0.25	UJ	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**6.50**	-	-	**44.0**	-	-	**220**	-	-
DC-01	DC-01-150616	06/16/2015	N	59010751	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.20**	J+	MSD	**42.0**	J+	MSD	**200**	J-	MSD
DC-01	DC-01-150923	09/23/2015	N	59020281	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.00**	-	-	**43.0**	-	-	**200**	-	-
DC-01	YVD-D1-150923	09/23/2015	FD	59020281	0.2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.10**	-	-	**43.0**	-	-	**210**	-	-
DC-01	DC-01-151214	12/14/2015	N	59025431	2	U	-	-	R	MSD	**0.3**	J	FDP	-	-	-	-	-	-	-	-	-	**6.80**	-	-	**48.0**	-	-	**220**	-	-
DC-01	DC-01-160308	03/08/2016	N	59029711	2	U	-	-	R	MSD	**0.26**	-	-	-	-	-	-	-	-	-	-	-	**6.20**	-	-	**42.0**	-	-	**210**	J+	MSD
DC-01	DC-01-160620	6/20/2016	N	59037101	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.50**	-	-	**46.0**	-	-	**220**	J-	MSD
DC-01	DC-01-160928	9/28/2016	N	K1611629	0.10	U	-	0.5	U	-	-	-	-	**0.009**	J	-	-	-	-	-	-	-	**5.76**	-	-	**41.6**	-	-	**193**	-	-
DC-01	DC-01-161212	12/12/2016	N	K1615045	0.10	UJ	HTQ	0.5	U	-	-	-	-	**0.040**	-	-	-	-	-	-	-	-	**5.52**	-	-	**40.4**	-	-	**191**	-	-
DC-01	YVD-030817-18	3/8/2017	N	K1702324	0.10	U	-	0.5	U	-	-	-	-	**0.008**	J	-	-	-	-	-	-	-	**5.13**	-	-	**37.4**	-	-	**175**	-	-
DC-01	YVD-060417-03	6/4/2017	N	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**5.22**	-	-	**37.4**	-	-	**203**	-	-
DC-01	YVD-060417-05	6/4/2017	FD	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**5.08**	-	-	**36.9**	-	-	**203**	-	-
DC-01	YVD-092517-13	9/25/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	**5.31**	-	-	**39.1**	-	-	**194**	-	-
DC-01	YVD-120617-31	12/6/2017	N	K1713157	0.10	U	-	0.5	U	-	-	-	-	**0.010**	-	-	-	-	-	-	-	-	**5.56**	-	-	**40.6**	-	-	**182**	-	-
DC-01	YVD-060418-19	6/4/2018	N	874662	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.80**	-	-	**42.4**	-	-	**171**	-	-
DC-01	YVD-060219-03	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.50**	-	-	**39.0**	-	-	**168**	-	-
DC-01	YVD-060820-07	6/8/2020	N	009144	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	**0.16**	--	--	**5.80**	--	--	**40.7**	--	--	**164**	--	--
DC-01	YVD-060721-10	6/7/2021	N	124105	0.050	U	--	5.0	UJ	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.30**	--	--	**36.4**	--	--	**136**	--	--
DC-03	DC-03-130102	01/02/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-03	DC-03-130918	09/18/2013	N	SWI0138	2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**2.73**	-	-	**173**	-	-	**176**	-	-
DC-03	DC-03-131212	12/12/2013	N	SWL0078	2	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	**0.221**	-	-	**3.29**	-	-	**172**	-	-	**176**	-	-
DC-03	YVD-D3-131212	12/12/2013	FD	SWL0078	2	U	-	0.8311	U	ERL	-	-	-	-	-	-	-	-	-	**0.244**	-	-	**3.53**	-	-	**181**	-	-	**160**	-	-
DC-03	DC-03-140319	03/19/2014	N	SXC0107	2	U	-	**0.938**	J-	MSD	**0.057**	-	-	-	-	-	-	-	-	-	-	-	**2.91**	-	-	**165**	-	-	**189**	J	FDP
DC-03	YVD-D3-140319	03/19/2014	FD	SXC0107	2	U	-	**0.718**	J-	MSD	**0.062**	-	-	-	-	-	-	-	-	-	-	-	**2.81**	-	-	**166**	-	-	**150**	J	FDP
DC-03	DC-03-140604	06/04/2014	N	SXF0025	4	U	-	0.25	UJ	MSD	**0.12**	-	-	-	-	-	-	-	-	-	-	-	**3.11**	-	-	**177**	-	-	**214**	-	-
DC-03	DC-03-140924	09/24/2014	N	SXI0173	2	U	-	**2.27**	J+	MSD	**0.073**	J+	FBK	-	-	-	-	-	-	-	-	-	**3.28**	-	-	**178**	-	-	**166**	-	-
DC-03	DC-03-141217	12/17/2014	N	SXL0144	4	U	-	-	R	MSD	0.1	UJ	MSD	-	-	-	-	-	-	-	-	-	**3.76**	-	-	**185**	-	-	**182**	-	-
DC-03	YVD-D4-141217	12/17/2014	FD	SXL0144	10	U	-	-	R	MSD	**0.13**	J-	MSD	-	-	-	-	-	-	-	-	-	**3.19**	-	-	**180**	-	-	**211**	-	-
DC-03	DC-03-150318	03/18/2015	N	5904651	2	U	-	**0.45**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.30**	J-	MSD	**180**	-	-	**160**	-	-
DC-03	YVD-D4-150318	03/18/2015	FD	5904651	1	U	-	**0.53**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.60**	J-	MSD	**180**	-	-	**160**	-	-
DC-03	DC-03-150617	06/17/2015	N	59011021	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.60**	J	RPD	**190**	J	RPD	**170**	-	-
DC-03	YVD-D4-150617	06/17/2015	FD	59011021	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.60**	J	RPD	**190**	J	RPD	**180**	-	-
DC-03	DC-03-150925	09/25/2015	N	59020431	4	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.30**	-	-	**180**	-	-	**150**	-	-
DC-03	YVD-D4-150925	09/25/2015	FD	59020431	4	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.20**	-	-	**180**	-	-	**160**	-	-
DC-03	DC-03-151216	12/16/2015	N	59025501	2	U	-	-	R	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**160**	-	-	**130**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-03	YVD-D4-151216	12/16/2015	FD	59025501	1	U	-	-	R	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**160**	-	-	**130**	-	-
DC-03	DC-03-160310	03/10/2016	N	59029941	2	U	-	**0.94**	J-	FDP, MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.10**	-	-	**180**	-	-	**170**	J	DUP
DC-03	YVD-D4-160310	03/10/2016	FD	59029941	2	U	-	0.25	UJ	FDP, MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.00**	-	-	**180**	-	-	**180**	J	DUP
DC-03	DC-03-160623	6/23/2016	N	59037371	2	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**190**	-	-	**160**	-	-
DC-03	YVD-D4-160623	6/23/2016	FD	59037371	1	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.30**	-	-	**180**	-	-	**160**	-	-
DC-03	DC-03-160927	9/27/2016	N	K1611565	0.10	U	-	-	R	MSD	-	-	-	**0.006**	J	-	-	-	-	-	-	-	**2.85**	-	-	**182**	-	-	**139**	-	-
DC-03	DC-03-D2-160927	9/27/2016	FD	K1611565	0.10	U	-	-	R	MSD	-	-	-	0.010	U	-	-	-	-	-	-	-	**2.87**	-	-	**183**	-	-	**138**	-	-
DC-03	DC-03-161212	12/12/2016	N	K1615029	0.10	U	-	0.5	U	-	-	-	-	**0.199**	-	-	-	-	-	-	-	-	**3.05**	-	-	**167**	-	-	**112**	-	-
DC-03	YVD-030817-13	3/8/2017	N	K1702324	**0.12**	-	-	0.5	U	-	-	-	-	**0.006**	J	-	-	-	-	-	-	-	**2.58**	-	-	**159**	-	-	**104**	-	-
DC-03	YVD-060517-02	6/5/2017	N	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.022**	-	-	-	-	-	-	-	-	**2.49**	-	-	**157**	-	-	**147**	-	-
DC-03	YVD-060517-04	6/5/2017	FD	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.019**	-	-	-	-	-	-	-	-	**2.49**	-	-	**158**	-	-	**122**	-	-
DC-03	YVD-092617-22	9/26/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**2.92**	-	-	**159**	-	-	**115**	-	-
DC-03	YVD-120417-10	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	0.017	U	MBK	-	-	-	-	-	-	**2.76**	-	-	**161**	-	-	**108**	-	-
DC-03	YVD-031818-04	3/18/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.01**	-	-	**180**	-	-	**111**	-	-
DC-03	YVD-060418-22	6/4/2018	N	874860	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.34**	-	-	**174**	-	-	**108**	-	-
DC-03	YVD-090918-17	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.82**	-	-	**160**	-	-	**136**	-	-
DC-03	YVD-121018-03	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.24**	-	-	**170**	-	-	**134**	-	-
DC-03	YVD-031819-19	3/18/2019	N	988273	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.19**	-	-	**178**	-	-	**148**	-	-
DC-03	YVD-060419-32	6/4/2019	N	992242	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.02**	-	-	**172**	-	-	**152**	-	-
DC-03	YVD-091019-23	9/10/2019	N	998438	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.06**	-	-	**159**	-	-	**154**	-	-
DC-03	YVD-121019-22	12/10/2019	N	902321	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.60**	-	-	**164**	-	-	**156**	-	-
DC-03	YVD-033120-22	3/31/2020	N	006260	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.14**	-	-	**168**	-	-	**146**	-	-
DC-03	YVD-060920-26	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS										0.070	U	--	**3.30**	--	--	**174**	--	--	**161**	--	--
DC-03	YVD-092120-21	9/21/2020	N	013896	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.06**	--	--	**160**	--	--	**166**	--	--
DC-03	YVD-120720-05	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.58**	--	--	**170**	--	--	**160**	--	--
DC-03	YVD-120720-07	12/7/2020	FD	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.66**	--	--	**166**	--	--	**161**	--	--
DC-03	YVD-030221-23	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.22**	--	--	**166**	--	--	**154**	--	--
DC-03	YVD-060821-27	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.07**	--	--	**160**	--	--	**162**	--	--
DC-03	YVD-121421-11	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-03D	DC-03D-130918	09/18/2013	N	SWI0138	2	U	-	**0.255**	-	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**2.71**	-	-	**62.1**	-	-	**101**	-	-
DC-03D	DC-03D-131212	12/12/2013	N	SWL0073	2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	0.06	U	-	**2.67**	-	-	**59.7**	-	-	**99.1**	-	-
DC-03D	DC-03D-140319	03/19/2014	N	SXC0107	2	U	-	**0.427**	J-	MSD	0.05	U	-	-	-	-	-	-	-	-	-	-	**2.67**	-	-	**57.5**	-	-	**106**	-	-
DC-03D	DC-03D-140603	06/03/2014	N	SXF0017	0.8	U	-	**0.468**	-	-	**0.074**	J+	FBK	-	-	-	-	-	-	-	-	-	**2.66**	-	-	**59.0**	-	-	**103**	J-	MSD
DC-03D	DC-03D-140923	09/23/2014	N	SXI0173	1	U	-	0.25	U	-	**0.098**	-	-	-	-	-	-	-	-	-	-	-	**3.40**	-	-	**67.8**	-	-	**89.4**	-	-
DC-03D	DC-03D-141217	12/17/2014	N	SXL0121	1	U	-	**0.282**	J-	MSD	0.1	U	-	-	-	-	-	-	-	-	-	-	**2.92**	-	-	**60.7**	-	-	**92.2**	-	-
DC-03D	DC-03D-150317	03/17/2015	N	5904651	1	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.00**	J-	MSD	**68.0**	-	-	**87**	-	-
DC-03D	DC-03D-150617	06/17/2015	N	59011021	1	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.20**	J	RPD	**68.0**	J	RPD	**93**	-	-
DC-03D	DC-03D-150925	09/25/2015	N	59020431	4	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.00**	-	-	**65.0**	-	-	**86**	-	-
DC-03D	DC-03D-151216	12/16/2015	N	59025501	1	U	-	-	R	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**3.20**	-	-	**69.0**	-	-	**94**	-	-
DC-03D	DC-03D-160310	03/10/2016	N	59029941	1	U	-	0.25	UJ	FDP, MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.00**	-	-	**68.0**	-	-	**90**	J	DUP
DC-03D	DC-03D-160623	6/23/2016	N	59037371	2	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.00**	-	-	**70.0**	-	-	**89**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-03D	DC-03D-160927	9/27/2016	N	K1611565	0.10	U	-	-	R	MSD	-	-	-	**0.006**	J	-	-	-	-	-	-	-	**2.73**	-	-	**63.0**	-	-	**90.9**	-	-
DC-03D	DC-03D-161212	12/12/2016	N	K1615029	0.10	U	-	0.5	U	-	-	-	-	**0.085**	-	-	-	-	-	-	-	-	**2.98**	-	-	**65.0**	-	-	**90.7**	-	-
DC-03D	YVD-030817-14	3/8/2017	N	K1702324	**0.05**	J	-	0.5	U	-	-	-	-	**0.008**	J	-	-	-	-	-	-	-	**2.75**	-	-	**61.3**	-	-	**80.8**	-	-
DC-03D	YVD-030817-16	3/8/2017	FD	K1702324	**0.04**	J	-	0.5	U	-	-	-	-	**0.008**	J	-	-	-	-	-	-	-	**2.69**	-	-	**60.2**	-	-	**79.6**	-	-
DC-03D	YVD-060517-09	6/5/2017	N	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.006**	J	-	-	-	-	-	-	-	**2.66**	-	-	**59.7**	-	-	**91.6**	-	-
DC-03D	YVD-092617-24	9/26/2017	N	K1710333	0.10	U	-	-	R	MSD	-	-	-	**0.011**	-	-	-	-	-	-	-	-	**3.16**	-	-	**67.1**	-	-	**101**	-	-
DC-03D	YVD-120417-08	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	0.011	U	MBK	-	-	-	-	-	-	**2.64**	-	-	**60.9**	-	-	**86.7**	-	-
DC-03D	YVD-031818-02	3/18/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.02**	-	-	**70.0**	-	-	**86.1**	-	-
DC-03D	YVD-060418-24	6/4/2018	N	874860	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.24**	-	-	**67.0**	-	-	**82.1**	-	-
DC-03D	YVD-090918-15	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.01**	-	-	**68.0**	-	-	**88.6**	-	-
DC-03D	YVD-121018-05	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.18**	-	-	**67.0**	-	-	**83.0**	-	-
DC-03D	YVD-031819-17	3/18/2019	N	988273	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.16**	-	-	**66.5**	-	-	**82.0**	-	-
DC-03D	YVD-060419-30	6/4/2019	N	992242	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.94**	-	-	**65.5**	-	-	**81.8**	-	-
DC-03D	YVD-060419-31	6/4/2019	FD	992242	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.96**	-	-	**66.0**	-	-	**82.6**	-	-
DC-03D	YVD-091019-21	9/10/2019	N	998438	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.99**	-	-	**65.0**	-	-	**81.7**	-	-
DC-03D	YVD-091019-22	9/10/2019	FD	998438	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.98**	-	-	**65.0**	-	-	**81.7**	-	-
DC-03D	YVD-121019-20	12/10/2019	N	902321	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.18**	-	-	**61.5**	-	-	**80.9**	-	-
DC-03D	YVD-033120-20	3/31/2020	N	006260	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.92**	-	-	**64.0**	-	-	**74.5**	-	-
DC-03D	YVD-061020-34	6/10/2020	N	009361	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.85**	--	--	**62.5**	--	--	**75.0**	--	--
DC-03D	YVD-092120-19	9/21/2020	N	013896	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.96**	--	--	**65.0**	--	--	**82.4**	--	--
DC-03D	YVD-120720-09	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.31**	--	--	**63.5**	--	--	**77.0**	--	--
DC-03D	YVD-030221-21	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.96**	--	--	**63.5**	--	--	**80.6**	--	--
DC-03D	YVD-030221-21	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.96**	--	--	**63.5**	--	--	**80.6**	--	--
DC-03D	YVD-060821-29	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.04**	--	--	**63.5**	--	--	**83.7**	--	--
DC-03D	YVD-060821-31	6/8/2021	FD	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.98**	--	--	**62.5**	--	--	**81.0**	--	--
DC-03D	YVD-121421-10	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-04	DC-04-130103	01/03/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-04	DC-04-130920	09/20/2013	N	SWI0142	-	-	-	**3.03**	-	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**3.45**	-	-	**32.1**	-	-	**93.6**	-	-
DC-04	DC-04-130924	09/24/2013	N	SWI0175	2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-04	DC-04-131212	12/12/2013	N	SWL0073	2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	**0.104**	-	-	**3.51**	-	-	**31.7**	-	-	**110**	-	-
DC-04	DC-04-140318	03/18/2014	N	SXC0107	2	U	-	**0.707**	J-	MSD	**0.13**	-	-	-	-	-	-	-	-	-	-	-	**3.58**	-	-	**30.4**	-	-	**107**	-	-
DC-04	DC-04-140603	06/03/2014	N	SXF0017	0.8	U	-	**0.645**	-	-	**0.24**	J+	FBK	-	-	-	-	-	-	-	-	-	**3.65**	-	-	**32.3**	-	-	**104**	J-	MSD
DC-04	DC-04-140923	09/23/2014	N	SXI0173	1	U	-	**0.524**	J+	MSD	**0.29**	-	-	-	-	-	-	-	-	-	-	-	**4.51**	-	-	**35.5**	-	-	**108**	-	-
DC-04	DC-04-141217	12/17/2014	N	SXL0121	1	U	-	0.25	UJ	MSD	**0.17**	-	-	-	-	-	-	-	-	-	-	-	**4.34**	-	-	**34.9**	-	-	**120**	-	-
DC-04	DC-04-150317	03/17/2015	N	5904651	1	U	-	**0.33**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.90**	J-	MSD	**36.0**	-	-	**110**	-	-
DC-04	DC-04-150617	06/17/2015	N	59010961	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.10**	J+	MSD	**36.0**	J+	MSD	**110**	-	-
DC-04	DC-04-150924	09/24/2015	N	59020391	1	U	-	**0.25**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.90**	-	-	**33.0**	-	-	**140**	J-	MSD
DC-04	YVD-D3-150924	09/24/2015	FD	59020391	1	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.10**	-	-	**35.0**	-	-	**150**	J-	MSD
DC-04	DC-04-151215	12/15/2015	N	59025431	1	U	-	-	R	MSD	0.25	UJ	FDP	-	-	-	-	-	-	-	-	-	**4.20**	-	-	**36.0**	-	-	**130**	-	-
DC-04	DC-04-160309	03/09/2016	N	59029711	1	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.00**	-	-	**36.0**	-	-	**150**	J+	MSD
DC-04	DC-04-160621	6/21/2016	N	59037271	1	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.40**	-	-	**39.0**	-	-	**150**	-	-
DC-04	DC-04-160926	9/26/2016	N	K1611506	0.10	U	-	-	R	MSD	-	-	-	**0.137**	-	-	-	-	-	-	-	-	**4.50**	-	-	**38.2**	-	-	**142**	-	-
DC-04	DC-04-161216	12/12/2016	N	K1615174	0.10	U	-	0.5	U	-	-	-	-	**0.052**	-	-	-	-	-	-	-	-	**4.11**	-	-	**36.9**	-	-	**155**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-04	YVD-031017-31	3/10/2017	N	K1702448	0.10	U	-	0.5	U	-	-	-	-	**0.035**	J	FDP	-	-	-	-	-	-	**3.75**	-	-	**32.4**	-	-	**153**	-	-
DC-04	YVD-031017-33	3/10/2017	FD	K1702448	0.10	U	-	0.5	U	-	-	-	-	**0.053**	J	FDP	-	-	-	-	-	-	**3.74**	-	-	**32.3**	-	-	**152**	-	-
DC-04	YVD-060617-26	6/6/2017	N	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.085**	-	-	-	-	-	-	-	-	**3.96**	-	-	**34.7**	-	-	**129**	-	-
DC-04	YVD-092517-06	9/25/2017	N	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.044**	-	-	-	-	-	-	-	-	**4.06**	-	-	**35.9**	-	-	**140**	-	-
DC-04	YVD-120517-24	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.037**	-	-	-	-	-	-	-	-	**3.62**	-	-	**32.7**	-	-	**121**	-	-
DC-04	YVD-031818-07	3/18/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.02**	-	-	**35.6**	-	-	**115**	-	-
DC-04	YVD-060418-18	6/4/2018	N	874662	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.18**	-	-	**34.4**	-	-	**119**	-	-
DC-04	YVD-090918-18	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.98**	-	-	**32.8**	-	-	**109**	-	-
DC-04	YVD-121118-18	12/11/2018	N	884939	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.08**	-	-	**32.0**	-	-	**102**	-	-
DC-04	YVD-032019-21	3/20/2019	N	988477	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.93**	-	-	**32.2**	-	-	**100**	-	-
DC-04	YVD-060219-14	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.00**	-	-	**32.2**	-	-	**103**	-	-
DC-04	YVD-090919-09	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.98**	-	-	**31.6**	-	-	**102**	-	-
DC-04	YVD-120919-07	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.20**	-	-	**32.2**	J	MSD	**101**	-	-
DC-04	YVD-033120-18	3/31/2020	N	006260	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.04**	-	-	**32.8**	-	-	**101**	-	-
DC-04	YVD-060820-08	6/8/2020	N	009144	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	**0.07**	--	--	**4.14**	--	--	**33.8**	--	--	**102**	--	--
DC-04	YVD-092020-07	9/20/2020	N	013864	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.22**	--	--	**34.6**	--	--	**108**	--	--
DC-04	YVD-120820-23	12/8/2020	N	017137	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.32**	--	--	**35.2**	--	--	**121**	--	--
DC-04	YVD-030221-20	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.40**	--	--	**34.7**	--	--	**112**	--	--
DC-04	YVD-030221-22	3/2/2021	FD	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.22**	--	--	**34.3**	--	--	**111**	--	--
DC-04	YVD-030221-20	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.40**	--	--	**34.7**	--	--	**112**	--	--
DC-04	YVD-030221-22	3/2/2021	FD	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.22**	--	--	**34.3**	--	--	**111**	--	--
DC-04	YVD-060621-06	6/6/2021	N	124053	0.050	U	--	5.0	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.22**	--	--	**33.2**	--	--	**109**	--	--
DC-04	YVD-121521-21	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-05	DC-05-130104	01/04/2013	N	EPA01	-		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-		-
DC-05	DC-05-130920	09/20/2013	N	SWI0142	-		-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**2.88**		-	**64.2**		-	**154**		-
DC-05	DC-05-130924	09/24/2013	N	SWI0175	2	U	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-		-
DC-05	DC-05-131212	12/12/2013	N	SWL0073	2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	**0.723**	-	-	**3.92**	-	-	**64.2**	-	-	**178**	-	-
DC-05	DC-05-140318	03/18/2014	N	SXC0107	2	U	-	**0.558**	J-	MSD	**0.06**	-	-	-	-	-	-	-	-	-	-	-	**2.90**	-	-	**59.4**	-	-	**150**	-	-
DC-05	DC-05-140603	06/03/2014	N	SXF0017	0.8	U	-	**0.581**	-	-	**0.28**	J+	FBK	-	-	-	-	-	-	-	-	-	**3.25**	-	-	**61.3**	-	-	**128**	J-	MSD
DC-05	DC-05-140923	09/23/2014	N	SXI0173	1	U	-	**0.998**	J+	MSD	**0.16**	-	-	-	-	-	-	-	-	-	-	-	**3.86**	-	-	**71.0**	-	-	**122**	-	-
DC-05	DC-05-141217	12/17/2014	N	SXL0121	1	U	-	0.25	UJ	MSD	**0.13**	-	-	-	-	-	-	-	-	-	-	-	**3.41**	-	-	**59.0**	-	-	**141**	-	-
DC-05	DC-05-150317	03/17/2015	N	5904541	0.8	U	-	**0.27**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.00**	-	-	**61.0**	-	-	**140**	J-	MSD
DC-05	DC-05-150616	06/16/2015	N	59010961	0.8	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.00**	J+	MSD	**64.0**	J+	MSD	**120**	-	-
DC-05	YVD-D2-150616	06/16/2015	FD	59010961	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.30**	J+	MSD	**64.0**	J+	MSD	**110**	-	-
DC-05	DC-05-150923	09/23/2015	N	59020391	0.8	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.10**	-	-	**56.0**	-	-	**110**	J-	MSD
DC-05	DC-05-151215	12/15/2015	N	59025431	0.8	U	-	-	R	MSD	0.25	UJ	FDP	-	-	-	-	-	-	-	-	-	**2.90**	-	-	**51.0**	-	-	**120**	-	-
DC-05	DC-05-160309	03/09/2016	N	59029711	0.8	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.90**	-	-	**53.0**	-	-	**140**	J+	MSD
DC-05	DC-05-160621	6/21/2016	N	59037151	0.8	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.80**	-	-	**53.0**	-	-	**130**	-	-
DC-05	DC-05-160926	9/26/2016	N	K1611506	0.10	U	-	-	R	MSD	-	-	-	**0.031**	-	-	-	-	-	-	-	-	**2.89**	-	-	**54.9**	-	-	**114**	-	-
DC-05	DC-05-D1-160926	9/26/2016	FD	K1611506	0.10	U	-	-	R	MSD	-	-	-	**0.028**	-	-	-	-	-	-	-	-	**3.06**	-	-	**58.1**	-	-	**114**	-	-
DC-05	DC-05-161216	12/16/2016	N	K1615174	0.10	U	-	0.5	U	-	-	-	-	**0.048**	-	-	-	-	-	-	-	-	**2.60**	-	-	**47.9**	-	-	**108**	-	-
DC-05	YVD-D5-161216	12/16/2016	FD	K1615174	0.10	U	-	0.5	U	-	-	-	-	**0.04**	-	-	-	-	-	-	-	-	**2.65**	-	-	**49.6**	-	-	**107**	-	-
DC-05	YVD-030717-09	3/7/2017	N	K1702324	0.10	U	-	0.5	U	-	-	-	-	**0.026**	-	-	-	-	-	-	-	-	**2.61**	-	-	**58.3**	-	-	**97.6**	-	-
DC-05	YVD-060717-30	6/7/2017	N	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.059**	J	FDP	-	-	-	-	-	-	**2.82**	-	-	**63.9**	-	-	**102**	-	-
DC-05	YVD-060717-32	6/7/2017	FD	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.031**	J	FDP	-	-	-	-	-	-	**2.77**	-	-	**62.6**	-	-	**102**	-	-
DC-05	YVD-092517-04	9/25/2017	N	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.039**	-	-	-	-	-	-	-	-	**2.99**	-	-	**62.0**	-	-	**107**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-05	YVD-120517-16	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.014**	-	-	-	-	-	-	-	-	**2.52**	-	-	**59.1**	-	-	**88.8**	-	-
DC-05	YVD-120517-18	12/5/2017	FD	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.014**	-	-	-	-	-	-	-	-	**2.53**	-	-	**60.0**	-	-	**89.3**	-	-
DC-05	YVD-031818-03	3/18/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.94**	-	-	**75.0**	-	-	**97.4**	-	-
DC-05	YVD-031818-05	3/18/2018	FD	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.94**	-	-	**75.0**	-	-	**96.7**	-	-
DC-05	YVD-060318-02	6/3/2018	FD	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.02**	-	-	**72.0**	-	-	**88.3**	-	-
DC-05	YVD-090918-03	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.91**	-	-	**65.5**	-	-	**95.4**	-	-
DC-05	YVD-121118-16	12/11/2018	N	884939	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.05**	-	-	**68.1**	-	-	**92.2**	-	-
DC-05	YVD-031719-02	3/17/2019	N	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.10**	-	-	**68.5**	-	-	**117**	-	-
DC-05	YVD-060219-08	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.14**	-	-	**71.0**	-	-	**122**	-	-
DC-05	YVD-090919-14	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.02**	-	-	**65.5**	-	-	**129**	-	-
DC-05	YVD-120919-03	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.12**	-	-	**72.5**	J	MSD	**110**	-	-
DC-05	YVD-033020-12	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.20**	-	-	**76.0**	-	-	**142**	-	-
DC-05	YVD-060820-06	6/8/2020	N	009144	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.26**	--	--	**76.0**	--	--	**114**	--	--
DC-05	YVD-092020-03	9/20/2020	N	013864	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.18**	--	--	**72.0**	--	--	**149**	--	--
DC-05	YVD-120720-06	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.42**	--	--	**65.0**	--	--	**166**	--	--
DC-05	YVD-030221-16	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.24**	--	--	**60.0**	--	--	**143**	--	--
DC-05	YVD-060721-14	6/7/2021	N	124105	0.050	U	--	5.0	UJ	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.26**	--	--	**52.0**	--	--	**102**	--	--
DC-05	YVD-121521-15	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-05D	DC-05D-130920	09/20/2013	N	SWI0142	-	-	-	**0.361**	-	-	-	-	-	-	-	-	**0.163**	-	-	-	-	-	**3.67**	-	-	**40.5**	-	-	**167**	-	-
DC-05D	DC-05D-130924	09/24/2013	N	SWI0178	0.2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-05D	DC-05D-131211	12/11/2013	N	SWL0073	2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	0.06	U	-	**3.52**	-	-	**37.5**	-	-	**145**	-	-
DC-05D	DC-05D-140318	03/18/2014	N	SXC0095	2	U	-	0.25	U	-	**0.072**	-	-	-	-	-	-	-	-	-	-	-	**3.73**	-	-	**36.7**	-	-	**137**	J-	MSD
DC-05D	DC-05D-140602	06/02/2014	N	SXF0017	0.8	U	-	**0.591**	-	-	**0.56**	J+	FBK	-	-	-	-	-	-	-	-	-	**4.99**	-	-	**34.3**	-	-	**122**	J-	MSD
DC-05D	DC-05D-140922	09/22/2014	N	SXI0148	0.8	U	-	**0.424**	-	-	**0.057**	-	-	-	-	-	-	-	-	-	-	-	**3.56**	-	-	**37.8**	-	-	**127**	-	-
DC-05D	DC-05D-141216	12/16/2014	N	SXL0121	0.2	U	-	0.25	UJ	MSD	**0.39**	-	-	-	-	-	-	-	-	-	-	-	**5.18**	-	-	**36.8**	-	-	**140**	-	-
DC-05D	DC-05D-150317	03/17/2015	N	5904541	0.8	U	-	0.25	UJ	MSD	**0.3**	-	-	-	-	-	-	-	-	-	-	-	**4.60**	-	-	**39.0**	-	-	**120**	J-	MSD
DC-05D	DC-05D-150616	06/16/2015	N	59010961	0.8	U	-	0.25	UJ	MSD	**0.27**	-	-	-	-	-	-	-	-	-	-	-	**4.70**	J+	MSD	**41.0**	J+	MSD	**120**	-	-
DC-05D	DC-05D-150923	09/23/2015	N	59020391	0.8	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.40**	-	-	**38.0**	-	-	**120**	J-	MSD
DC-05D	YVD-D2-150923	09/23/2015	FD	59020391	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.40**	-	-	**38.0**	-	-	**120**	J-	MSD
DC-05D	DC-05D-151215	12/15/2015	N	59025431	0.8	U	-	-	R	MSD	0.25	UJ	FDP	-	-	-	-	-	-	-	-	-	**4.40**	-	-	**39.0**	-	-	**120**	-	-
DC-05D	DC-05D-160309	03/09/2016	N	59029711	0.8	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.30**	-	-	**41.0**	-	-	**140**	J+	MSD
DC-05D	DC-05D-160621	6/21/2016	N	59037271	0.8	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.10**	-	-	**41.0**	-	-	**130**	-	-
DC-05D	DC-05D-160926	9/26/2016	N	K1611506	0.10	U	-	-	R	MSD	-	-	-	**0.014**	-	-	-	-	-	-	-	-	**3.93**	-	-	**39.4**	J	MSD	**113**	-	-
DC-05D	DC-05D-161214	12/14/2016	N	K1615126	0.10	U	-	0.5	U	-	-	-	-	**0.015**	-	-	-	-	-	-	-	-	**3.90**	-	-	**38.2**	-	-	**114**	-	-
DC-05D	YVD-030717-12	3/7/2017	N	K1702324	0.10	U	-	0.5	U	-	-	-	-	**0.041**	-	-	-	-	-	-	-	-	**3.64**	-	-	**35.6**	-	-	**105**	-	-
DC-05D	YVD-060717-34	6/7/2017	N	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.012**	-	-	-	-	-	-	-	-	**3.78**	-	-	**37.4**	-	-	**101**	-	-
DC-05D	YVD-092517-02	9/25/2017	N	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.024**	J	FDP	-	-	-	-	-	-	**3.91**	-	-	**38.7**	-	-	**118**	-	-
DC-05D	YVD-092517-03	9/25/2017	FD	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.008**	J	FDP	-	-	-	-	-	-	**4.02**	-	-	**38.9**	-	-	**115**	-	-
DC-05D	YVD-120517-20	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.013**	-	-	-	-	-	-	-	-	**3.69**	-	-	**37.6**	-	-	**112**	-	-
DC-05D	YVD-031818-08	3/18/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.97**	-	-	**41.2**	-	-	**108**	-	-
DC-05D	YVD-060318-03	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.12**	-	-	**39.6**	-	-	**105**	-	-
DC-05D	YVD-060318-05	6/3/2018	FD	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.14**	-	-	**39.6**	-	-	**105**	-	-
DC-05D	YVD-090918-02	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.00**	-	-	**38.0**	-	-	**107**	-	-
DC-05D	YVD-121118-14	12/11/2018	N	884939	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.15**	-	-	**38.0**	-	-	**102**	-	-
DC-05D	YVD-031719-04	3/17/2019	N	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.06**	-	-	**38.2**	-	-	**110**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-05D	YVD-031719-06	3/17/2019	FD	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.11**	-	-	**38.6**	-	-	**109**	-	-
DC-05D	YVD-060219-10	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.00**	-	-	**37.8**	-	-	**109**	-	-
DC-05D	YVD-090919-12	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.96**	-	-	**35.4**	-	-	**105**	-	-
DC-05D	YVD-120919-05	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.97**	-	-	**36.6**	J	MSD	**105**	-	-
DC-05D	YVD-033020-14	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.01**	-	-	**37.6**	-	-	**107**	-	-
DC-05D	YVD-060820-02	6/8/2020	N	009144	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.03**	--	--	**38.6**	--	--	**118**	--	--
DC-05D	YVD-060820-04	6/8/2020	FD	009144	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.06**	--	--	**38.7**	--	--	**102**	--	--
DC-05D	YVD-092020-04	9/20/2020	N	013864/20I0421	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.02**	--	--	**38.0**	--	--	**107**	--	--
DC-05D	YVD-092020-05	9/20/2020	FD	013864/20I0421	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.03**	--	--	**37.8**	--	--	**106**	--	--
DC-05D	YVD-120720-02	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.30**	--	--	**38.4**	--	--	**108**	--	--
DC-05D	YVD-120720-04	12/7/2020	FD	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.26**	--	--	**38.2**	--	--	**108**	--	--
DC-05D	YVD-030221-18	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.07**	--	--	**37.8**	--	--	**107**	--	--
DC-05D	YVD-060721-13	6/7/2021	N	124105	0.050	U	--	5.0	UJ	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.11**	--	--	**36.9**	--	--	**106**	--	--
DC-05D	YVD-121421-04	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-07	DC-07-130103	01/03/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-07	DC-07-130918	09/18/2013	N	SWI0123	2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1.00	U	-	**45.7**	-	-	**168**	-	-
DC-07	YVD-D1-130918	09/18/2013	FD	SWI0123	2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1.00	U	-	**46.1**	-	-	**179**	-	-
DC-07	DC-07-131210	12/10/2013	N	SWL0055	2	U	-	0.4366	UJ	ERL, MSD	-	-	-	-	-	-	-	-	-	**0.0648**	-	-	**3.82**	-	-	**38.4**	-	-	**117**	-	-
DC-07	DC-07-140316	03/16/2014	N	SXC0081	0.8	U	-	0.25	U	-	**0.11**	-	-	-	-	-	-	-	-	-	-	-	**1.04**	-	-	**33.5**	-	-	**78.9**	-	-
DC-07	DC-07-140602	06/02/2014	N	SXF0008	0.8	U	-	**0.34**	-	-	**0.12**	-	-	-	-	-	-	-	-	-	-	-	1.00	U	-	**36.3**	-	-	**105**	-	-
DC-07	DC-07-140922	09/22/2014	N	SXI0148	0.8	U	-	**0.487**	-	-	**0.19**	-	-	-	-	-	-	-	-	-	-	-	1.00	U	-	**33.7**	-	-	**98.2**	-	-
DC-07	DC-07-141216	12/16/2014	N	SXL0108	0.8	U	-	**0.261**	-	-	0.1	U	-	-	-	-	-	-	-	-	-	-	1.00	U	-	**30.6**	-	-	**80.4**	-	-
DC-07	YVD-D2-141216	12/16/2014	FD	SXL0108	0.2	U	-	**0.305**	-	-	0.1	U	-	-	-	-	-	-	-	-	-	-	1.00	U	-	**30.8**	-	-	**82.1**	-	-
DC-07	DC-07-150317	03/17/2015	N	5904541	0.8	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**1.00**	-	-	**35.0**	-	-	**83**	J-	MSD
DC-07	DC-07-150617	06/17/2015	N	59011021	0.8	U	-	**0.28**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	1.00	U	-	**37.0**	J	RPD	**93**	-	-
DC-07	DC-07-150924	09/24/2015	N	59020391	0.8	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	1.00	U	-	**33.0**	-	-	**95**	J-	MSD
DC-07	DC-07-151215	12/15/2015	N	59025501	0.8	U	-	-	R	MSD	**0.41**	J-	MSD	-	-	-	-	-	-	-	-	-	1.00	U	-	**34.0**	-	-	**70**	-	-
DC-07	DC-07-160309	03/09/2016	N	59029941	0.8	U	-	-	R	FBK, FDP, MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**1.10**	-	-	**36.0**	-	-	**78**	J	DUP
DC-07	DC-07-160621	6/21/2016	N	59037271	0.8	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**1.20**	-	-	**38.0**	-	-	**96**	-	-
DC-07	DC-07-160926	9/26/2016	N	K1611565	0.10	U	-	-	R	MSD	-	-	-	**0.057**	-	-	-	-	-	-	-	-	**1.06**	-	-	**36.6**	-	-	**92.3**	-	-
DC-07	DC-07-161214	12/14/2016	N	K1615083	0.10	U	-	0.5	U	-	-	-	-	**0.078**	-	-	-	-	-	-	-	-	**1.05**	-	-	**32.0**	-	-	**72.4**	-	-
DC-07	YVD-030917-25	3/9/2017	N	K1702448	0.10	U	-	0.5	U	-	-	-	-	**0.093**	-	-	-	-	-	-	-	-	**1.03**	-	-	**32.1**	-	-	**59.8**	-	-
DC-07	YVD-060617-18	6/6/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.061**	-	-	-	-	-	-	-	-	**1.10**	-	-	**34.6**	-	-	**70.4**	-	-
DC-07	YVD-092517-12	9/25/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.058**	-	-	-	-	-	-	-	-	**1.14**	-	-	**34.5**	-	-	**94.2**	-	-
DC-07	YVD-120417-14	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	**0.064**	-	-	-	-	-	-	-	-	**1.17**	-	-	**33.0**	-	-	**81.9**	-	-
DC-07	YVD-060318-17	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**1.52**	-	-	**37.8**	-	-	**93.4**	-	-
DC-07	YVD-060319-20	6/3/2019	N	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**0.82**	-	-	**44.0**	-	-	**49.5**	-	-
DC-07	YVD-060920-18	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**0.98**	--	--	**59.5**	--	--	**110**	--	--
DC-07	YVD-092120-22	9/21/2020	N	013896	0.050	U	--	2.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**1.02**	--	--	**62.0**	--	--	**77.1**	--	--
DC-07	YVD-120820-22	12/8/2020	N	017137	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**1.06**	--	--	**54.5**	--	--	**59.8**	--	--
DC-07	YVD-030121-10	3/1/2021	N	119931	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**1.02**	--	--	**50.5**	--	--	**73.2**	--	--
DC-07	YVD-060721-16	6/7/2021	N	124105	0.050	U	--	5.0	UJ	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	--	**0.96**	--	--	**48.4**	--	--	**23.1**	J	FDP
DC-07	YVD-060721-17	6/7/2021	FD	124105	0.050	U	--	5.0	UJ	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	--	**0.97**	--	--	**48.1**	--	--	**37.8**	J	FDP
DC-07	YVD-121521-17	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-09	DC-09-130103	01/03/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-09	DC-09-130923	09/23/2013	N	SWI0178	-	-	-	**0.447**	-	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**2.75**	-	-	**39.7**	-	-	-	-	-
DC-09	DC-09-130926	09/26/2013	N	SWI0190	0.2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**30.7**	-	-
DC-09	DC-09-131211	12/11/2013	N	SWL0063	0.2	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	**0.125**	-	-	**2.48**	-	-	**39.1**	-	-	**34.4**	J-	MSD
DC-09	DC-09-140317	03/17/2014	N	SXC0095	0.2	U	-	**0.251**	-	-	**0.18**	-	-	-	-	-	-	-	-	-	-	-	**2.88**	-	-	**36.5**	-	-	**28.8**	J-	MSD
DC-09	DC-09-140602	06/02/2014	N	SXF0008	0.2	U	-	**0.279**	-	-	**0.22**	J	FDP	-	-	-	-	-	-	-	-	-	**2.92**	-	-	**38.1**	-	-	**29.4**	-	-
DC-09	YVD-D3-140602	06/02/2014	FD	SXF0008	0.2	U	-	**0.359**	-	-	**0.16**	J	FDP	-	-	-	-	-	-	-	-	-	**3.08**	-	-	**37.9**	-	-	**29.1**	-	-
DC-09	DC-09-140923	09/23/2014	N	SXI0158	0.2	U	-	0.25	U	-	0.05	U	-	-	-	-	-	-	-	-	-	-	**1.94**	-	-	**38.9**	J+	MSD	**29.6**	-	-
DC-09	DC-09-141216	12/16/2014	N	SXL0108	0.2	U	-	0.25	U	-	**0.13**	-	-	-	-	-	-	-	-	-	-	-	**2.48**	-	-	**39.1**	-	-	**30.2**	-	-
DC-09	DC-09-150316	03/16/2015	N	5904541	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.60**	-	-	**43.0**	-	-	**29**	J-	MSD
DC-09	DC-09-150616	06/16/2015	N	59010751	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.30**	J+	MSD	**38.0**	J+	MSD	**28**	J-	MSD
DC-09	DC-09-150923	09/23/2015	N	59020281	0.2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.50**	-	-	**40.0**	-	-	**30**	-	-
DC-09	DC-09-151214	12/14/2015	N	59025431	0.2	U	-	-	R	MSD	**0.3**	J	FDP	-	-	-	-	-	-	-	-	-	**2.70**	-	-	**40.0**	-	-	**31**	-	-
DC-09	DC-09-160308	03/08/2016	N	59029711	0.2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.30**	-	-	**39.0**	-	-	**31**	J+	MSD
DC-09	YVD-D2-160308	03/08/2016	FD	59029711	0.2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.10**	-	-	**39.0**	-	-	**31**	J+	MSD
DC-09	DC-09-160621	6/21/2016	N	59037151	0.2	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.20**	-	-	**41.0**	-	-	**32**	-	-
DC-09	DC-09-160929	9/29/2016	N	K1611704	0.10	U	-	0.5	U	-	-	-	-	**0.016**	-	-	-	-	-	-	-	-	**2.00**	-	-	**39.3**	-	-	**29.8**	-	-
DC-09	DC-09-D4-160929	9/29/2016	FD	K1611704	0.10	U	-	0.5	U	-	-	-	-	**0.013**	-	-	-	-	-	-	-	-	**1.98**	-	-	**38.8**	-	-	**29.6**	-	-
DC-09	DC-09-161215	12/15/2016	N	K1615126	0.10	U	-	0.5	U	-	-	-	-	**0.009**	J	-	-	-	-	-	-	-	**1.99**	-	-	**38.9**	-	-	**30.6**	-	-
DC-09	YVD-D4-161215	12/15/2016	FD	K1615126	0.10	U	-	0.5	U	-	-	-	-	**0.007**	J	-	-	-	-	-	-	-	**1.98**	-	-	**37.8**	-	-	**30.6**	-	-
DC-09	YVD-031317-36	3/13/2017	N	K1702489	0.10	U	-	0.5	U	-	-	-	-	**0.024**	-	-	-	-	-	-	-	-	**2.00**	-	-	**38.8**	-	-	**28.2**	-	-
DC-09	YVD-060717-27	6/7/2017	N	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.029**	-	-	-	-	-	-	-	-	**1.97**	-	-	**39.3**	-	-	**30.3**	-	-
DC-09	YVD-092617-23	9/26/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	**1.98**	-	-	**38.5**	-	-	**32.5**	-	-
DC-09	YVD-120417-09	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	0.014	U	MBK	-	-	-	-	-	-	**1.86**	-	-	**37.3**	-	-	**30.6**	-	-
DC-09	YVD-060418-25	6/4/2018	N	874860	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.08**	-	-	**40.2**	-	-	**29.2**	-	-
DC-09	YVD-060319-19	6/3/2019	N	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.06**	-	-	**39.2**	-	-	**27.6**	-	-
DC-09	YVD-060920-25	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.04**	--	--	**40.8**	--	--	**30.8**	--	--
DC-09	YVD-060721-15	6/7/2021	N	124105	0.050	U	--	5.0	UJ	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.13**	--	--	**37.4**	--	--	**14.8**	--	--
DC-14	DC-14-130103	01/03/2013	N	EPA01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC-14	DC-14-130917	09/17/2013	N	SWI0113	0.2	U	-	**0.31**	-	-	-	-	-	-	-	-	**0.199**	-	-	-	-	-	**5.85**	-	-	**94.9**	-	-	**34.2**	-	-
DC-14	DC-14-131211	12/11/2013	N	SWL0063	2	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	**0.167**	-	-	**4.71**	-	-	**94.0**	-	-	**33.9**	J-	MSD
DC-14	DC-14-140318	03/18/2014	N	SXC0095	2	U	-	0.25	U	-	**0.26**	-	-	-	-	-	-	-	-	-	-	-	**5.25**	-	-	**87.0**	-	-	**35.7**	J-	MSD
DC-14	DC-14-140602	06/02/2014	N	SXF0017	0.4	U	-	**0.367**	-	-	**0.42**	J+	FBK	-	-	-	-	-	-	-	-	-	**5.37**	-	-	**83.2**	-	-	**24.2**	J-	MSD
DC-14	DC-14-140923	09/23/2014	N	SXI0158	0.4	U	-	**0.315**	-	-	**0.3**	-	-	-	-	-	-	-	-	-	-	-	**4.95**	-	-	**88.6**	J+	MSD	**25.9**	-	-
DC-14	DC-14-141216	12/16/2014	N	SXL0108	0.4	U	-	0.25	U	-	**0.14**	-	-	-	-	-	-	-	-	-	-	-	**5.57**	-	-	**84.5**	-	-	**29.8**	-	-
DC-14	DC-14-150316	03/16/2015	N	5904541	0.4	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.10**	-	-	**100**	-	-	**38**	J-	MSD
DC-14	DC-14-150616	06/16/2015	N	59010961	0.4	U	-	0.25	UJ	MSD	**0.3**	-	-	-	-	-	-	-	-	-	-	-	**6.50**	J+	MSD	**85.0**	J+	MSD	**29**	-	-
DC-14	DC-14-150924	09/24/2015	N	59020391	0.4	U	-	0.25	UJ	MSD	**0.31**	-	-	-	-	-	-	-	-	-	-	-	**6.30**	-	-	**92.0**	-	-	**42**	J-	MSD
DC-14	DC-14-151214	12/14/2015	N	59025351	0.4	U	-	0.25	UJ	MSD	**0.35**	-	-	-	-	-	-	-	-	-	-	-	**6.60**	-	-	**100**	-	-	**39**	-	-
DC-14	YVD-D1-151214	12/14/2015	FD	59025351	0.2	U	-	0.25	UJ	MSD	**0.38**	-	-	-	-	-	-	-	-	-	-	-	**6.60**	-	-	**100**	-	-	**41**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
DC-14	DC-14-160309	03/09/2016	N	59029711	0.4	U	-	-	R	MSD	**0.33**	-	-	-	-	-	-	-	-	-	-	-	**6.60**	-	-	**95.0**	-	-	**39**	J+	MSD
DC-14	DC-14-160620	6/20/2016	N	59037151	0.4	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.00**	-	-	**92.0**	-	-	**38**	-	-
DC-14	DC-14-160929	9/29/2016	N	K1611704	0.10	U	-	0.5	U	-	-	-	-	**0.009**	J	-	-	-	-	-	-	-	**4.75**	-	-	**74.9**	-	-	**23.1**	-	-
DC-14	DC-14-161216	12/16/2016	N	K1615174	0.10	U	-	0.5	U	-	-	-	-	**0.014**	-	-	-	-	-	-	-	-	**4.37**	-	-	**68.8**	-	-	**21.9**	-	-
DC-14	YVD-031317-38	3/14/2017	N	K1702542	0.10	U	-	0.5	U	-	-	-	-	**0.074**	-	-	-	-	-	-	-	-	**4.57**	-	-	**68.4**	-	-	**20.8**	-	-
DC-14	YVD-060617-19	6/6/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**4.40**	-	-	**65.2**	-	-	**26.9**	-	-
DC-14	YVD-092517-11	9/25/2017	N	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.005**	J	-	-	-	-	-	-	-	**4.63**	-	-	**64.3**	-	-	**23.9**	-	-
DC-14	YVD-120617-27	12/6/2017	N	K1713157	0.10	U	-	0.5	U	-	-	-	-	**0.020**	-	-	-	-	-	-	-	-	**4.49**	-	-	**60.5**	-	-	**20.3**	-	-
DC-14	YVD-120617-29	12/6/2017	FD	K1713157	0.10	U	-	0.5	U	-	-	-	-	**0.021**	-	-	-	-	-	-	-	-	**4.44**	-	-	**60.6**	-	-	**20.0**	-	-
DC-14	YVD-031918-20	3/19/2018	N	870634	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.56**	-	-	**58.0**	-	-	**17.8**	-	-
DC-14	YVD-060518-28	6/5/2018	N	874860	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.62**	-	-	**56.0**	-	-	**16.1**	-	-
DC-14	YVD-060518-30	6/5/2018	FD	874860	-	R	PRS	0.5	UJ	MBK	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.78**	-	-	**57.5**	-	-	-	R	PRS
DC-14	YVD-090918-08	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.80**	-	-	**54.0**	-	-	**16.0**	-	-
DC-14	YVD-090918-10	9/9/2018	FD	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.78**	-	-	**53.5**	-	-	**15.3**	-	-
DC-14	YVD-121018-07	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.92**	-	-	**55.5**	-	-	**14.9**	-	-
DC-14	YVD-031719-09	3/17/2019	N	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.05**	-	-	**53.5**	-	-	**15.1**	-	-
DC-14	YVD-060319-17	6/3/2019	N	992053	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.15**	-	-	**53.5**	-	-	**13.6**	-	-
DC-14	YVD-091019-18	9/10/2019	N	998438	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.20**	-	-	**53.5**	-	-	**17.1**	-	-
DC-14	YVD-120919-14	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.40**			**54.5**	J	MSD	**20.3**	-	-
DC-14	YVD-033120-19	3/31/2020	N	006260	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.25**	-	-	**53.5**	-	-	**21.1**	-	-
DC-14	YVD-033120-21	3/31/2020	FD	006260	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.35**	-	-	**54.5**	-	-	**21.3**	-	-
DC-14	YVD-061020-32	6/10/2020	N	009361	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.45**	--	--	**53.0**	--	--	**22.5**	--	--
DC-14	YVD-061020-33	6/10/2020	FD	009361	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.35**	--	--	**52.0**	--	--	**22.4**	--	--
DC-14	YVD-092120-23	9/21/2020	N	013896	0.050	U	--	1.0	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.60**	--	--	**56.5**	--	--	**24.4**	--	--
DC-14	YVD-120820-21	12/8/2020	N	017137	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**6.10**	--	--	**57.5**	--	--	**26.6**	--	--
DC-14	YVD-030121-09	3/1/2021	N	119931	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**6.15**	--	--	**58.0**	--	--	**32.1**	--	--
DC-14	YVD-060821-33	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**6.35**	--	--	**57.0**	--	--	**27.9**	--	--
DC-14	YVD-121521-19	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-02	YVD-02-130924	09/24/2013	N	SWI0178	0.2	U	-	0.25	U	-	-	-	-	-	-	-	**0.124**	-	-	-	-	-	**3.50**	-	-	**8.6**	-	-	**5.77**	-	-
YVD-02	YVD-02-140316	03/16/2014	N	SXC0081	0.2	U	-	0.25	U	-	**0.54**	-	-	-	-	-	-	-	-	-	-	-	**12.60**	-	-	**88.6**	-	-	**66.9**	-	-
YVD-02	YVD-02-140602	06/02/2014	N	SXF0008	0.2	U	-	**0.49**	-	-	**3.8**	-	-	-	-	-	-	-	-	-	-	-	**8.53**	-	-	**23.0**	-	-	**3.12**	-	-
YVD-02	YVD-02-140921	09/21/2014	N	SXI0148	0.2	U	-	**0.274**	-	-	**1.2**	J	FDP	-	-	-	-	-	-	-	-	-	**4.53**	-	-	**11.6**	J	FDP	**13.8**	-	-
YVD-02	YVD-D1-140921	09/21/2014	FD	SXI0148	0.2	U	-	0.25	U	-	**0.86**	J	FDP	-	-	-	-	-	-	-	-	-	**5.05**	-	-	**15.7**	J	FDP	**15.6**	-	-
YVD-02	YVD-02-141215	12/15/2014	N	SXL0103	0.2	U	-	**0.358**	-	-	**0.61**	-	-	-	-	-	-	-	-	-	-	-	**5.35**	-	-	**16.1**	-	-	**33.6**	J+	MSD, DUP
YVD-02	YVD-02-150615	06/15/2015	N	59010751	0.2	U	-	0.25	UJ	MSD	**1.1**	-	-	-	-	-	-	-	-	-	-	-	**4.10**	J+	MSD	**12.0**	J+	MSD	**3.2**	J-	MSD
YVD-02	YVD-02-150923	09/23/2015	N	59020281	0.2	U	-	**0.25**	J-	MSD	**1**	J+	FBK		-	-	-	-	-	-	-	-	**4.80**	-	-	**14.0**	-	-	**9.5**	-	-
YVD-02	YVD-02-151214	12/14/2015	N	59025351	0.2	U	-	**0.76**	J-	MSD	**0.68**	-	-	-	-	-	-	-	-	-	-	-	**6.30**	-	-	**25.0**	-	-	**24**	-	-
YVD-02	YVD-02-160308	03/08/2016	N	59029521	0.2	U	-	**0.25**	J-	MSD	**0.59**	-	-	-	-	-	-	-	-	-	-	-	**5.80**	-	-	**22.0**	-	-	**54**	-	-
YVD-02	YVD-02-160620	6/20/2016	N	59037101	0.2	U	-	**0.35**	J-	MSD	**0.52**	-	-	-	-	-	-	-	-	-	-	-	**4.20**	-	-	**9.7**	-	-	**8**	J-	MSD
YVD-02	YVD-02-160928	9/28/2016	N	K1611629	0.10	U	-	0.5	U	-	-	-	-	**0.092**	-	-	-	-	-	-	-	-	**3.41**	-	-	**5.07**	-	-	**3.13**	-	-
YVD-02	YVD-030817-15	3/8/2017	N	K1702324	0.10	U	-	0.5	U	-	-	-	-	**0.099**	-	-	-	-	-	-	-	-	**3.51**	-	-	**7.06**	-	-	**11.7**	-	-
YVD-02	YVD-060617-14	6/6/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.093**	-	-	-	-	-	-	-	-	**3.00**	-	-	**5.95**	-	-	**3.43**	J	FDP
YVD-02	YVD-060617-16	6/6/2017	FD	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.081**	-	-	-	-	-	-	-	-	**3.00**	-	-	**5.91**	-	-	**12.2**	J	FDP
YVD-02	YVD-092617-20	9/26/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.09**	-	-	-	-	-	-	-	-	**3.06**	-	-	**5.20**	-	-	**4.79**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-02	YVD-120417-02	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	**0.080**	-	-	-	-	-	-	-	-	**3.18**	-	-	**9.59**	-	-	**16.1**	-	-
YVD-02	YVD-120417-04	12/4/2017	FD	K1713026	0.10	U	-	0.5	U	-	-	-	-	**0.074**	-	-	-	-	-	-	-	-	**3.08**	-	-	**9.58**	-	-	**15.8**	-	-
YVD-02	YVD-061218-32	6/12/2018	N	875438	-	R	NR	-	R	NR	-	-	-	-	-	-	-	-	-	-	R	NR	-	R	NR	-	R	NR	-	R	NR
YVD-02	YVD-060419-28	6/4/2019	N	992242	**0.24**	-	-	0.5	U	-	-	-	-	-	-	-	-	-	-	**0.10**	-	-	**5.15**	-	-	**14.8**	-	-	**39.9**	-	-
YVD-02	YVD-070219-33	7/2/2019	N	994356	**0.90**	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	0.07	U	-	**6.50**	-	-	**26.8**	-	-	**47.5**	-	-
YVD-02	YVD-091019-19	9/10/2019	N	998438	0.05	U	-	UJ	MSD	-	-	-	-	-	-	-	-	-	-	**0.07**	-	-	**6.60**	-	-	**21.6**	-	-	**40.4**	-	-
YVD-02	YVD-121019-23	12/10/2019	N	902321	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	**7.10**	-	-	**38.3**	-	-	**62.2**	-	-
YVD-02	YVD-040120-23	4/1/2020	N	006311	**4.38**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	--	--	--	**6.25**	-	-	**75.0**	-	-	**96.6**	-	-
YVD-02	YVD-061120-35	6/11/2020	N	009430	NS	--	--	NS	--	--	-	-	-	-	-	-	-	-	-	NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--	-	-	-	-	-	-	-	-	-	NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--	-	-	-	-	-	-	-	-	-	NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--										NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--										NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-02	NS	--	--	--	NS	--	--	NS	--	--										NS	--	--	NS	--	--	NS	--	--	NS	--	--
YVD-03	YVD-03-130916	09/16/2013	N	SWI0113	**0.49**	-	-	**0.488**	-	-	-	-	-	-	-	-	**0.89**	-	-	-	-	-	**9.00**	-	-	**43.0**	-	-	**70.7**	-	-
YVD-03	YVD-03-131210	12/10/2013	N	SWL0063	0.4	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	**1.02**	-	-	**6.67**	-	-	**40.2**	-	-	**54.8**	J-	MSD
YVD-03	YVD-03-140317	03/17/2014	N	SXC0081	0.2	U	-	0.25	U	-	**0.23**	-	-	-	-	-	-	-	-	-	-	-	**4.10**	-	-	**37.6**	-	-	**38**	-	-
YVD-03	YVD-03-140602	06/02/2014	N	SXF0008	0.2	U	-	**0.261**	-	-	**0.3**	-	-	-	-	-	-	-	-	-	-	-	**3.93**	-	-	**36.8**	-	-	**36**	-	-
YVD-03	YVD-03-140923	09/23/2014	N	SXI0158	0.2	U	-	0.25	U	-	**0.33**	J	FDP	-	-	-	-	-	-	-	-	-	**4.66**	J	FDP	**40.7**	J+	MSD	**34.7**	-	-
YVD-03	YVD-D3-140923	09/23/2014	FD	SXI0158	0.2	U	-	0.25	U	-	**0.24**	J	FDP	-	-	-	-	-	-	-	-	-	**3.62**	J	FDP	**38.0**	J+	MSD	**34.4**	-	-
YVD-03	YVD-03-141215	12/15/2014	N	SXL0108	0.2	U	-	**0.4**	-	-	**0.76**	-	-	-	-	-	-	-	-	-	-	-	**4.47**	-	-	**39.1**	-	-	**37**	-	-
YVD-03	YVD-03-150316	03/16/2015	N	5904541	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.90**	-	-	**39.0**	-	-	**33**	J-	MSD
YVD-03	YVD-03-150616	06/16/2015	N	59010751	0.2	U	-	0.25	UJ	MSD	**0.59**	-	-	-	-	-	-	-	-	-	-	-	**6.10**	J+	MSD	**37.0**	J+	MSD	**41**	J-	MSD
YVD-03	YVD-03-150922	09/22/2015	N	59020141	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.50**	-	-	**40.0**	-	-	**51**	-	-
YVD-03	YVD-03-151214	12/14/2015	N	59025351	0.2	U	-	0.25	UJ	MSD	**0.78**	-	-	-	-	-	-	-	-	-	-	-	**7.80**	-	-	**43.0**	-	-	**51**	-	-
YVD-03	YVD-03-160307	03/07/2016	N	59029521	0.2	U	-	0.25	UJ	MSD	**0.34**	-	-	-	-	-	-	-	-	-	-	-	**7.10**	-	-	**40.0**	-	-	**47**	-	-
YVD-03	YVD-03-160620	6/20/2016	N	59037151	0.2	U	-	0.25	U	-	**0.47**	-	-	-	-	-	-	-	-	-	-	-	**7.70**	-	-	**40.0**	-	-	**61**	-	-
YVD-03	YVD-03-160929	9/29/2016	N	K1611758	0.10	U	-	0.5	U	-	-	-	-	**0.047**	-	-	-	-	-	-	-	-	**6.89**	-	-	**41.4**	-	-	**44.4**	-	-
YVD-03	YVD-03-161213	12/13/2016	N	K1615045	0.10	U	-	0.5	U	-	-	-	-	**0.11**	-	-	-	-	-	-	-	-	**6.57**	-	-	**38.9**	-	-	**43.3**	-	-
YVD-03	YVD-030617-02	3/6/2017	N	K1702228	0.10	U	-	0.5	U	-	-	-	-	**0.083**	J	FDP	-	-	-	-	-	-	**6.53**	-	-	**38.5**	-	-	**40.7**	-	-
YVD-03	YVD-030617-03	3/6/2017	FD	K1702228	0.10	U	-	0.5	U	-	-	-	-	**0.061**	J	FDP	-	-	-	-	-	-	**6.48**	-	-	**38.4**	-	-	**40.7**	-	-
YVD-03	YVD-060517-13	6/5/2017	N	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.045**	-	-	-	-	-	-	-	-	**6.27**	-	-	**36.4**	-	-	**46.4**	-	-
YVD-03	YVD-092517-05	9/25/2017	N	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.038**	-	-	-	-	-	-	-	-	**6.85**	-	-	**40.9**	-	-	**46.3**	-	-
YVD-03	YVD-120517-19	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.047**	-	-	-	-	-	-	-	-	**6.39**	-	-	**38.0**	-	-	**50.8**	-	-
YVD-03	YVD-060518-27	6/5/2018	N	874860	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**6.70**	-	-	**39.3**	-	-	**41.7**	-	-
YVD-03	YVD-060219-07	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**6.65**	-	-	**38.5**	-	-	**26.1**	-	-
YVD-03	YVD-060820-09	6/8/2020	N	009144	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**6.65**	--	--	**39.6**	--	--	**48.6**	--	--
YVD-03	YVD-060821-24	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**6.85**	--	--	**37.6**	--	--	**33.0**	--	--
YVD-04	YVD-04-130916	09/16/2013	N	SWI0113	0.2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**4.23**	-	-	**49.2**	-	-	**39.1**	-	-
YVD-04	YVD-04-131210	12/10/2013	N	SWL0063	0.4	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	**0.112**	-	-	**4.44**	-	-	**49.9**	-	-	**42.2**	J-	MSD
YVD-04	YVD-04-140317	03/17/2014	N	SXC0081	0.2	U	-	0.25	U	-	**0.078**	-	-	-	-	-	-	-	-	-	-	-	**4.46**	-	-	**47.8**	-	-	**35.2**	-	-
YVD-04	YVD-04-140602	06/02/2014	N	SXF0008	0.4	U	-	0.25	U	-	**0.053**	-	-	-	-	-	-	-	-	-	-	-	**4.41**	-	-	**50.5**	-	-	**36.2**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-04	YVD-04-140923	09/23/2014	N	SXI0158	0.2	U	-	0.25	U	-	**0.061**	-	-	-	-	-	-	-	-	-	-	-	**4.49**	-	-	**52.2**	J+	MSD	**35.8**	-	-
YVD-04	YVD-04-141215	12/15/2014	N	SXL0108	0.2	U	-	0.25	U	-	0.1	U	-	-	-	-	-	-	-	-	-	-	**4.62**	-	-	**50.0**	-	-	**35.8**	-	-
YVD-04	YVD-04-150315	03/15/2015	N	5904471	0.2	U	-	0.25	UJ	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**4.70**	-	-	**52.0**	-	-	**34**	-	-
YVD-04	YVD-04-150615	06/15/2015	N	59010751	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.70**	J+	MSD	**49.0**	J+	MSD	**34**	J-	MSD
YVD-04	YVD-04-150922	09/22/2015	N	59020141	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.60**	-	-	**51.0**	-	-	**35**	-	-
YVD-04	YVD-04-151213	12/13/2015	N	59025351	0.2	U	-	0.25	UJ	MSD	**0.39**	-	-	-	-	-	-	-	-	-	-	-	**4.90**	-	-	**53.0**	-	-	**36**	-	-
YVD-04	YVD-04-160307	03/07/2016	N	59029521	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.60**	-	-	**51.0**	-	-	**34**	-	-
YVD-04	YVD-04-160620	6/20/2016	N	59037101	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.80**	-	-	**53.0**	-	-	**35**	J-	MSD
YVD-04	YVD-D1-160620	6/20/2016	FD	59037101	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.50**	-	-	**51.0**	-	-	**36**	J-	MSD
YVD-04	YVD-04-160928	9/28/2016	N	K1611629	0.10	U	-	0.5	U	-	-	-	-	**0.014**	-	-	-	-	-	-	-	-	**4.42**	-	-	**48.5**	-	-	**31.4**	-	-
YVD-04	YVD-04-D3-160928	9/28/2016	FD	K1611629	0.10	U	-	0.5	U	-	-	-	-	**0.008**	J	-	-	-	-	-	-	-	**4.49**	-	-	**49.9**	-	-	**32.2**	-	-
YVD-04	YVD-04-161213	12/13/2016	N	K1615045	0.10	U	-	0.5	U	-	-	-	-	**0.026**	-	-	-	-	-	-	-	-	**4.43**	-	-	**47.5**	-	-	**31.7**	-	-
YVD-04	YVD-031017-28	3/10/2017	N	K1702448	0.10	U	-	0.5	U	-	-	-	-	**0.018**	-	-	-	-	-	-	-	-	**4.25**	-	-	**46.7**	-	-	**32.9**	-	-
YVD-04	YVD-060517-11	6/5/2017	N	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.006**	J	-	-	-	-	-	-	-	**4.05**	-	-	**44.4**	-	-	**33.4**	-	-
YVD-04	YVD-092517-07	9/25/2017	N	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.026**	-	-	-	-	-	-	-	-	**4.62**	-	-	**51.1**	-	-	**32.7**	-	-
YVD-04	YVD-120417-13	12/4/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.013**	-	-	-	-	-	-	-	-	**4.29**	-	-	**49.9**	-	-	**32.5**	-	-
YVD-04	YVD-060418-21	6/4/2018	N	874662	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.46**	-	-	**51.0**	-	-	**30.4**	-	-
YVD-04	YVD-060219-05	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.52**	-	-	**49.0**	-	-	**30.6**	-	-
YVD-04	YVD-060820-05	6/8/2020	N	009144	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.32**	--	--	**49.8**	--	--	**30.5**	--	--
YVD-04	YVD-060821-22	6/8/2021	N	124212	0.050	U	--	1.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.32**	--	--	**47.4**	--	--	**29.5**	--	--
YVD-05	YVD-05-130917	09/17/2013	N	SWI0113	0.2	U	-	**0.435**	-	-	-	-	-	-	-	-	**1.62**	-	-	-	-	-	**6.95**	-	-	**46.2**	-	-	**76.8**	-	-
YVD-05	YVD-05-131211	12/11/2013	N	SWL0063	0.4	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	**0.462**	-	-	**3.33**	-	-	**45.5**	-	-	**68.4**	J-	MSD
YVD-05	YVD-05-140317	03/17/2014	N	SXC0081	0.4	U	-	0.25	U	-	**0.14**	-	-	-	-	-	-	-	-	-	-	-	**2.75**	-	-	**43.1**	-	-	**52.7**	-	-
YVD-05	YVD-05-140601	06/01/2014	N	SXF0008	0.4	U	-	0.25	U	-	**0.15**	-	-	-	-	-	-	-	-	-	-	-	**2.84**	-	-	**43.9**	-	-	**50.5**	-	-
YVD-05	YVD-05-140922	09/22/2014	N	SXI0148	0.4	U	-	**0.259**	-	-	**0.2**	-	-	-	-	-	-	-	-	-	-	-	**2.75**	-	-	**45.1**	-	-	**48.1**	-	-
YVD-05	YVD-05-141215	12/15/2014	N	SXL0103	0.4	U	-	**0.272**	-	-	**0.29**	J	FDP	-	-	-	-	-	-	-	-	-	**4.21**	-	-	**45.5**	-	-	**27.7**	J+	MSD, FDP, DUP
YVD-05	YVD-D1-141215	12/15/2014	FD	SXL0103	0.2	U	-	**0.264**	-	-	**0.44**	J	FDP	-	-	-	-	-	-	-	-	-	**3.54**	-	-	**44.9**	-	-	**46**	J+	MSD, FDP, DUP
YVD-05	YVD-05-150316	03/16/2015	N	5904471	0.4	U	-	0.25	UJ	-	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**3.60**	-	-	**47.0**	-	-	**47**	-	-
YVD-05	YVD-05-150616	06/16/2015	N	59010751	0.4	U	-	0.25	UJ	-	**0.51**	-	-	-	-	-	-	-	-	-	-	-	**4.00**	J+	MSD	**47.0**	J+	MSD	**49**	J-	MSD
YVD-05	YVD-05-150922	09/22/2015	N	59020281	0.4	U	-	-	R	MSD	**0.8**	-	-	-	-	-	-	-	-	-	-	-	**4.90**	-	-	**51.0**	-	-	**51**	-	-
YVD-05	YVD-05-151214	12/14/2015	N	59025351	0.4	U	-	**0.6**	J-	MSD	**0.65**	-	-	-	-	-	-	-	-	-	-	-	**4.30**	-	-	**52.0**	-	-	**48**	-	-
YVD-05	YVD-05-160307	03/07/2016	N	59029521	0.4	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.60**	-	-	**48.0**	-	-	**47**	-	-
YVD-05	YVD-D1-160307	03/07/2016	FD	59029521	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.60**	-	-	**48.0**	-	-	**48**	-	-
YVD-05	YVD-05-160620	6/20/2016	N	59037151	0.4	U	-	0.25	U	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.40**	-	-	**48.0**	-	-	**49**	-	-
YVD-05	YVD-05-160928	9/28/2016	N	K1611698	0.10	U	-	-	R	MSD	-	-	-	**0.01**	-	-	-	-	-	-	-	-	**3.54**	-	-	**48.5**	-	-	**46.7**	-	-
YVD-05	YVD-05-161215	12/15/2016	N	K1615174	0.10	U	-	0.5	U	-	-	-	-	**0.04**	-	-	-	-	-	-	-	-	**3.37**	-	-	**46.5**	-	-	**49.0**	-	-
YVD-05	YVD-031317-32	3/13/2017	N	K1702489	0.10	U	-	0.5	U	-	-	-	-	**0.03**	-	-	-	-	-	-	-	-	**3.44**	-	-	**46.0**	-	-	**41.5**	-	-
YVD-05	YVD-031317-34	3/13/2017	FD	K1702489	0.10	U	-	0.5	U	-	-	-	-	**0.02**	-	-	-	-	-	-	-	-	**3.38**	-	-	**45.6**	-	-	**41.4**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-05	YVD-060617-23	6/6/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.016**	-	-	-	-	-	-	-	-	**3.51**	-	-	**48.1**	-	-	**48.0**	-	-
YVD-05	YVD-092517-09	9/25/2017	N	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.012**	-	-	-	-	-	-	-	-	**3.61**	-	-	**48.4**	-	-	**46.6**	-	-
YVD-05	YVD-120517-15	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.015**	-	-	-	-	-	-	-	-	**3.36**	-	-	**46.5**	-	-	**41.8**	-	-
YVD-05	YVD-060518-29	6/5/2018	N	874860	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.58**	-	-	**46.4**	-	-	**43.6**	-	-
YVD-05	YVD-060219-09	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.62**	-	-	**44.2**	-	-	**43.6**	-	-
YVD-05	YVD-060920-15	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.66**	--	--	**46.2**	--	--	**50.0**	--	--
YVD-05	YVD-060821-26	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.94**	--	--	**47.7**	--	--	**61.1**	--	--
YVD-06	YVD-06-130917	09/17/2013	N	SWI0113	0.2	U	-	**0.4**	-	-	-	-	-	-	-	-	**0.41**	-	-	-	-	-	**4.07**	-	-	**17.6**	-	-	**8.14**	-	-
YVD-06	YVD-06-131209	12/09/2013	N	SWL0055	0.2	U	-	**0.62**	J	FBK, MSD, FDP	-	-	-	-	-	-	-	-	-	0.06	U	-	**1.76**	-	-	**13.0**	J	FDP	**8.53**	-	-
YVD-06	YVD-D1-131209	12/09/2013	FD	SWL0055	2	U	-	**0.4**	J	FBK, MSD, FDP	-	-	-	-	-	-	-	-	-	0.06	U	-	**2.24**	-	-	**16.5**	J	FDP	**9.1**	-	-
YVD-06	YVD-06-140316	03/16/2014	N	SXC0081	0.2	U	-	**0.297**	-	-	**0.14**	-	-	-	-	-	-	-	-	-	-	-	**2.68**	-	-	**16.2**	-	-	**8.33**	-	-
YVD-06	YVD-D1-140316	03/16/2014	FD	SXC0081	0.2	U	-	0.25	U	-	**0.13**	-	-	-	-	-	-	-	-	-	-	-	**2.74**	-	-	**16.6**	-	-	**8.18**	-	-
YVD-06	YVD-06-140601	06/01/2014	N	SXF0008	0.2	U	-	0.25	U	-	**0.064**	-	-	-	-	-	-	-	-	-	-	-	**2.28**	-	-	**16.7**	-	-	**7.59**	-	-
YVD-06	YVD-D1-140601	06/01/2014	FD	SXF0008	0.2	U	-	0.25	U	-	**0.057**	-	-	-	-	-	-	-	-	-	-	-	**2.30**	-	-	**16.9**	-	-	**7.63**	-	-
YVD-06	YVD-06-140921	09/21/2014	N	SXI0148	0.2	U	-	**0.359**	-	-	**0.18**	-	-	-	-	-	-	-	-	-	-	-	**2.69**	-	-	**17.4**	-	-	**7.98**	-	-
YVD-06	YVD-06-141215	12/15/2014	N	SXL0103	0.2	U	-	0.25	U	-	0.1	U	-	-	-	-	-	-	-	-	-	-	**2.58**	-	-	**16.9**	-	-	**7.47**	J+	MSD, DUP
YVD-06	YVD-06-150316	03/16/2015	N	5904471	0.2	U	-	0.25	UJ	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**2.20**	-	-	**17.0**	-	-	**10**	-	-
YVD-06	YVD-06-150616	06/16/2015	N	59010751	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.20**	J+	MSD	**17.0**	J+	MSD	**7.9**	J-	MSD
YVD-06	YVD-06-150922	09/22/2015	N	59020141	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.10**	-	-	**17.0**	-	-	**7.9**	-	-
YVD-06	YVD-06-151214	12/14/2015	N	59025351	0.2	U	-	**0.57**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.40**	-	-	**18.0**	-	-	**8**	-	-
YVD-06	YVD-06-160307	03/07/2016	N	59029521	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.50**	-	-	**17.0**	-	-	**7.8**	-	-
YVD-06	YVD-06-160620	6/20/2016	N	59037151	0.2	U	-	**0.42**	-	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.30**	-	-	**17.0**	-	-	**8.1**	-	-
YVD-06	YVD-06-160929	9/29/2016	N	K1611704	0.10	U	-	0.5	U	-	-	-	-	**0.022**	-	-	-	-	-	-	-	-	**2.26**	-	-	**17.1**	-	-	**8.55**	-	-
YVD-06	YVD-06-161215	12/15/2016	N	K1615126	0.10	U	-	0.5	U	-	-	-	-	**0.010**	-	-	-	-	-	-	-	-	**2.12**	-	-	**17.1**	-	-	**10.2**	-	-
YVD-06	YVD-030617-04	3/6/2017	N	K1702228	0.10	U	-	0.5	U	FBK	-	-	-	**0.014**	-	-	-	-	-	-	-	-	**2.20**	-	-	**17.0**	-	-	**8.38**	-	-
YVD-06	YVD-060617-21	6/6/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**2.17**	-	-	**16.3**	-	-	**8.44**	-	-
YVD-06	YVD-092617-17	9/26/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.009**	J	-	-	-	-	-	-	-	**1.97**	-	-	**15.6**	-	-	**9.61**	-	-
YVD-06	YVD-092617-18	9/26/2017	FD	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**2.03**	-	-	**16.1**	-	-	**9.58**	-	-
YVD-06	YVD-120517-17	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.021**	-	-	-	-	-	-	-	-	**2.11**	-	-	**17.3**	-	-	**9.87**	-	-
YVD-06	YVD-060318-15	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.36**	-	-	**17.3**	-	-	**7.86**	-	-
YVD-06	YVD-060219-11	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.20**	-	-	**16.6**	-	-	**6.42**	-	-
YVD-06	YVD-060920-17	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.16**	--	--	**17.6**	--	--	**8.86**	--	--
YVD-06	YVD-060721-19	6/7/2021	N	124105	0.050	U	--	0.50	UJ	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.28**	--	--	**16.2**	--	--	**6.80**	--	--
YVD-07	YVD-07-130923	09/23/2013	N	SWI0178	-	-	-	**0.395**	-	-	-	-	-	-	-	-	**0.516**	-	-	-	-	-	**5.03**	-	-	**37.7**	-	-	-	-	-
YVD-07	YVD-07-130926	09/26/2013	N	SWI0190	0.2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**37.4**	-	-
YVD-07	YVD-07-131210	12/10/2013	N	SWL0055	0.2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	0.06	U	-	1.00	U	-	**40.4**	-	-	**50**	-	-
YVD-07	YVD-07-140316	03/16/2014	N	SXC0081	0.2	U	-	0.25	U	-	**0.22**	-	-	-	-	-	-	-	-	-	-	-	**4.45**	-	-	**42.5**	-	-	**69.2**	-	-
YVD-07	YVD-07-140604	06/04/2014	N	SXF0025	0.4	U	-	**0.348**	J-	MSD	**0.69**	-	-	-	-	-	-	-	-	-	-	-	**5.57**	-	-	**44.5**	-	-	**57**	-	-
YVD-07	YVD-07-140922	09/22/2014	N	SXI0158	0.4	U	-	0.25	U	-	**0.2**	-	-	-	-	-	-	-	-	-	-	-	**4.05**	-	-	**42.7**	J+	MSD	**51.8**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-07	YVD-07-141216	12/16/2014	N	SXL0108	0.4	U	-	0.25	U	-	0.1	U	-	-	-	-	-	-	-	-	-	-	**3.83**	-	-	**40.6**	-	-	**51.2**	-	-
YVD-07	YVD-07-150316	03/16/2015	N	5904541	0.4	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.30**	-	-	**50.0**	-	-	**73**	J-	MSD
YVD-07	YVD-D2-150316	03/16/2015	FD	5904541	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.30**	-	-	**48.0**	-	-	**70**	J-	MSD
YVD-07	YVD-07-150616	06/16/2015	N	59010751	0.4	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.20**	J+	MSD	**43.0**	J+	MSD	**74**	J-	MSD
YVD-07	YVD-D1-150616	06/16/2015	FD	59010751	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.20**	J+	MSD	**44.0**	J+	MSD	**74**	J-	MSD
YVD-07	YVD-07-150923	09/23/2015	N	59020281	0.4	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.20**	-	-	**48.0**	-	-	**68**	-	-
YVD-07	YVD-07-151214	12/14/2015	N	59025431	0.4	U	-	-	R	MSD	**0.97**	J	FDP	-	-	-	-	-	-	-	-	-	**4.50**	-	-	**48.0**	-	-	**59**	-	-
YVD-07	YVD-07-160308	03/08/2016	N	59029711	0.4	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.00**	-	-	**42.0**	-	-	**49**	J+	MSD
YVD-07	YVD-07-160621	6/21/2016	N	59037151	0.4	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**37.0**	-	-	**31**	-	-
YVD-07	YVD-07-160929	9/29/2016	N	K1611704	0.10	U	-	0.5	U	-	-	-	-	**0.020**	-	-	-	-	-	-	-	-	**3.31**	-	-	**34.0**	-	-	**37.1**	-	-
YVD-07	YVD-07-161213	12/13/2016	N	K1615083	0.10	U	-	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**3.59**	-	-	**36.6**	-	-	**64.0**	-	-
YVD-07	YVD-030717-07	3/7/2017	N	K1702324	0.10	UJ	HTQ	0.5	U	-	-	-	-	**0.019**	-	-	-	-	-	-	-	-	**2.83**	-	-	**31.4**	-	-	**25.4**	-	-
YVD-07	YVD-060517-15	6/5/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.004**	J	-	-	-	-	-	-	-	**2.98**	-	-	**32.9**	-	-	**33.5**	-	-
YVD-07	YVD-092617-21	9/26/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.022**	-	-	-	-	-	-	-	-	**3.26**	-	-	**34.0**	-	-	**51.0**	-	-
YVD-07	YVD-120417-11	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	**0.022**	-	-	-	-	-	-	-	-	**3.56**	-	-	**36.1**	-	-	**56.5**	-	-
YVD-07	YVD-060418-23	6/4/2018	N	874662	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.76**	-	-	**39.4**	-	-	**63.5**	-	-
YVD-07	YVD-060319-16	6/3/2019	N	992053	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.76**	-	-	**35.8**	-	-	**27.6**	-	-
YVD-07	YVD-060920-27	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.27**	--	--	**41.8**	--	--	**62.9**	--	--
YVD-07	YVD-060821-34	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.28**	--	--	**37.6**	--	--	**40.8**	--	--
YVD-08	YVD-08-130919	09/19/2013	N	SWI0138	2	U	-	**0.935**	J+	FBK	-	-	-	-	-	-	0.1	U	-	-	-	-	**6.03**	-	-	**88.3**	-	-	**105**	-	-
YVD-08	YVD-08-131211	12/11/2013	N	SWL0063	2	U	-	0.75	U	ERL	-	-	-	-	-	-	-	-	-	**1.46**	-	-	**7.55**	-	-	**82.2**	-	-	**273**	J-	MSD
YVD-08	YVD-08-140317	03/17/2014	N	SXC0095	2	U	-	**0.702**	-	-	**0.13**	-	-	-	-	-	-	-	-	-	-	-	**5.30**	-	-	**75.1**	-	-	**173**	J-	MSD
YVD-08	YVD-08-140602	06/02/2014	N	SXF0017	0.8	U	-	**1.12**	-	-	**2.7**	-	-	-	-	-	-	-	-	-	-	-	**11.20**	-	-	**78.3**	-	-	**175**	J-	MSD
YVD-08	YVD-08-140923	09/23/2014	N	SXI0173	1	U	-	**0.867**	J+	MSD	**0.35**	-	-	-	-	-	-	-	-	-	-	-	**5.87**	-	-	**76.9**	-	-	**107**	-	-
YVD-08	YVD-08-141216	12/16/2014	N	SXL0108	1	U	-	**0.369**	-	-	**0.34**	-	-	-	-	-	-	-	-	-	-	-	**5.92**	-	-	**77.2**	-	-	**140**	-	-
YVD-08	YVD-08-150317	03/17/2015	N	5904541	1	U	-	**0.39**	J-	MSD	**0.67**	-	-	-	-	-	-	-	-	-	-	-	**5.90**	-	-	**77.0**	-	-	**130**	J-	MSD
YVD-08	YVD-D3-150317	03/17/2015	FD	5904541	0.2	U	-	0.25	UJ	MSD	**0.49**	-	-	-	-	-	-	-	-	-	-	-	**5.70**	-	-	**76.0**	-	-	**150**	J-	MSD
YVD-08	YVD-08-150617	06/17/2015	N	59010961	1	U	-	**0.26**	J-	MSD, FDP	**0.53**	-	-	-	-	-	-	-	-	-	-	-	**6.00**	J+	MSD	**82.0**	J+	MSD	**140**	-	-
YVD-08	YVD-D3-150617	06/17/2015	FD	59010961	0.2	U	-	**0.86**	J-	MSD, FDP	**0.39**	-	-	-	-	-	-	-	-	-	-	-	**5.70**	J+	MSD	**77.0**	J+	MSD	**170**	-	-
YVD-08	YVD-08-150924	09/24/2015	N	59020391	1	U	-	0.25	UJ	MSD	**0.31**	-	-	-	-	-	-	-	-	-	-	-	**5.60**	-	-	**82.0**	-	-	**170**	J-	MSD
YVD-08	YVD-08-151215	12/15/2015	N	59025501	1	U	-	-	R	MSD	**0.33**	J-	MSD	-	-	-	-	-	-	-	-	-	**6.20**	-	-	**85.0**	-	-	**190**	-	-
YVD-08	YVD-D3-151215	12/15/2015	FD	59025501	0.2	U	-	-	R	MSD	**0.27**	J-	MSD	-	-	-	-	-	-	-	-	-	**6.20**	-	-	**85.0**	-	-	**180**	-	-
YVD-08	YVD-08-160310	03/10/2016	N	59029941	1	U	-	0.25	UJ	FDP, MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**5.60**	-	-	**87.0**	-	-	**210**	J	DUP
YVD-08	YVD-08-160622	6/22/2016	N	59037271	1	U	-	-	R	MSD	**0.31**	-	-	-	-	-	-	-	-	-	-	-	**5.90**	-	-	**87.0**	-	-	**200**	-	-
YVD-08	YVD-D3-160622	6/22/2016	FD	59037271	0.2	U	-	-	R	MSD	**0.28**	-	-	-	-	-	-	-	-	-	-	-	**6.00**	-	-	**88.0**	-	-	**200**	-	-
YVD-08	YVD-08-160927	9/27/2016	N	K1611565	0.10	U	-	-	R	MSD	-	-	-	**0.049**	-	-	-	-	-	-	-	-	**4.95**	-	-	**84.7**	-	-	**193**	-	-
YVD-08	YVD-08-161213	12/13/2016	N	K1615045	0.10	U	-	0.5	U	-	-	-	-	**0.058**	-	-	-	-	-	-	-	-	**5.10**	-	-	**84.5**	-	-	**182**	-	-
YVD-08	YVD-030917-24	3/9/2017	N	K1702448	0.10	U	-	0.5	U	-	-	-	-	**0.018**	-	-	-	-	-	-	-	-	**4.95**	-	-	**83.4**	-	-	**203**	-	-
YVD-08	YVD-060717-29	6/7/2017	N	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.025**	-	-	-	-	-	-	-	-	**5.13**	-	-	**92.1**	-	-	**194**	-	-
YVD-08	YVD-092617-19	9/26/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.01**	-	-	-	-	-	-	-	-	**5.12**	-	-	**89.3**	-	-	**213**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-08	YVD-120517-23	12/5/2017	N	K1713157	0.10	U	-	0.5	U	-	-	-	-	**0.013**	-	-	-	-	-	-	-	-	**5.23**	-	-	**93.2**	-	-	**184**	-	-
YVD-08	YVD-031918-15	3/19/2018	N	870634	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.40**	-	-	**90.5**	-	-	**183**	-	-
YVD-08	YVD-060518-31	6/5/2018	N	874860	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.55**	-	-	**98.0**	-	-	**197**	-	-
YVD-08	YVD-090918-04	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.70**	-	-	**99.5**	-	-	**195**	-	-
YVD-08	YVD-121118-19	12/11/2018	N	884939	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**6.00**	-	-	**98.5**	-	-	**207**	-	-
YVD-08	YVD-031719-03	3/17/2019	N	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.50**	-	-	**96.0**	-	-	**203**	-	-
YVD-08	YVD-060319-21	6/3/2019	N	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.55**	-	-	**97.5**	-	-	**190**	-	-
YVD-08	YVD-090919-02	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.45**	-	-	**91.5**	-	-	**184**	-	-
YVD-08	YVD-120919-02	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.55**	-	-	**96.5**	J	MSD	**177**	-	-
YVD-08	YVD-120919-04	12/9/2019	FD	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.55**	-	-	**96.0**	J	MSD	**173**	-	-
YVD-08	YVD-033120-17	3/31/2020	N	006260	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.35**	-	-	**99.0**	-	-	**184**	-	-
YVD-08	YVD-060920-23	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.50**	--	--	**106**	--	--	**176**	--	--
YVD-08	YVD-092120-11	9/21/2020	N	013896	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.60**	--	--	**104**	--	--	**179**	--	--
YVD-08	YVD-120720-11	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**6.05**	--	--	**104**	--	--	**174**	--	--
YVD-08	YVD-030121-07	3/1/2021	N	119931	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.55**	--	--	**102**	--	--	**177**	--	--
YVD-08	YVD-060821-28	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.45**	--	--	**102**	--	--	**179**	--	--
YVD-08	YVD-121521-20	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-09	YVD-09-130919	09/19/2013	N	SWI0138	2	U	-	-	R	FBK	-	-	-	-	-	-	-	R	FBK	-	-	-	**8.21**	-	-	**189**	-	-	**236**	-	-
YVD-09	YVD-09-131212	12/12/2013	N	SWL0078	2	U	-	0.661	U	ERL	-	-	-	-	-	-	-	-	-	**0.647**	-	-	**9.21**	-	-	**176**	-	-	**193**	-	-
YVD-09	YVD-09-140319	03/19/2014	N	SXC0107	2	U	-	**0.653**	J-	MSD	**0.53**	-	-	-	-	-	-	-	-	-	-	-	**9.33**	-	-	**173**	-	-	**214**	-	-
YVD-09	YVD-09-140603	06/03/2014	N	SXF0025	2	U	-	**0.613**	J-	MSD	**0.72**	-	-	-	-	-	-	-	-	-	-	-	**10.10**	-	-	**193**	-	-	**214**	-	-
YVD-09	YVD-09-140924	09/24/2014	N	SXI0173	2	U	-	**0.502**	J+	MSD	**0.32**	J+	FBK	-	-	-	-	-	-	-	-	-	**8.88**	-	-	**203**	-	-	**166**	-	-
YVD-09	YVD-09-141217	12/17/2014	N	SXL0121	2	U	-	0.25	UJ	MSD	**1.3**	-	-	-	-	-	-	-	-	-	-	-	**12.90**	-	-	**187**	-	-	**223**	-	-
YVD-09	YVD-09-150318	03/18/2015	N	5904651	2	U	-	0.25	UJ	MSD	**0.38**	-	-	-	-	-	-	-	-	-	-	-	**9.30**	J-	MSD	**190**	-	-	**190**	-	-
YVD-09	YVD-09-150617	06/17/2015	N	59010961	2	U	-	**0.37**	J-	MSD	**0.36**	-	-	-	-	-	-	-	-	-	-	-	**9.80**	J+	MSD	**190**	J+	MSD	**230**	-	-
YVD-09	YVD-09-150923	09/23/2015	N	59020391	0.2	U	-	**0.26**	J-	MSD	**0.27**	-	-	-	-	-	-	-	-	-	-	-	**9.60**	-	-	**180**	-	-	**270**	J-	MSD
YVD-09	YVD-09-151215	12/15/2015	N	59025501	2	U	-	-	R	MSD	**0.25**	J-	MSD	-	-	-	-	-	-	-	-	-	**9.60**	-	-	**190**	-	-	**250**	-	-
YVD-09	YVD-09-160310	03/10/2016	N	59029941	2	U	-	0.25	UJ	FDP, MSD	**0.33**	-	-	-	-	-	-	-	-	-	-	-	**9.20**	-	-	**190**	-	-	**250**	J	DUP
YVD-09	YVD-09-160622	6/22/2016	N	59037271	2	U	-	-	R	MSD	**0.29**	-	-	-	-	-	-	-	-	-	-	-	**8.90**	-	-	**190**	-	-	**260**	-	-
YVD-09	YVD-09-160929	9/29/2016	N	K1611704	0.10	U	-	0.5	U	-	-	-	-	**0.016**	-	-	-	-	-	-	-	-	**7.62**	-	-	**184**	-	-	**243**	-	-
YVD-09	YVD-09-161213	12/13/2016	N	K1615045	0.10	U	-	0.5	U	-	-	-	-	**0.048**	-	-	-	-	-	-	-	-	**8.42**	-	-	**185**	-	-	**238**	-	-
YVD-09	YVD-D2-161213	12/13/2016	FD	K1615045	0.10	U	-	0.5	U	-	-	-	-	**0.078**	-	-	-	-	-	-	-	-	**8.04**	-	-	**181**	-	-	**240**	-	-
YVD-09	YVD-031317-35	3/13/2017	N	K1702489	**0.04**	J	-	0.5	U	-	-	-	-	**0.025**	-	-	-	-	-	-	-	-	**7.78**	-	-	**185**	-	-	**225**	-	-
YVD-09	YVD-060517-08	6/5/2017	N	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.007**	J	-	-	-	-	-	-	-	**6.98**	-	-	**163**	-	-	**237**	-	-
YVD-09	YVD-092617-29	9/26/2017	N	K1710381	0.10	U	-	0.5	U	-	-	-	-	**0.029**	-	-	-	-	-	-	-	-	**8.07**	-	-	**175**	-	-	**223**	-	-
YVD-09	YVD-092617-30	9/26/2017	FD	K1710381	0.10	U	-	0.5	U	-	-	-	-	**0.039**	-	-	-	-	-	-	-	-	**8.11**	-	-	**176**	-	-	**224**	-	-
YVD-09	YVD-120517-21	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.009**	J	-	-	-	-	-	-	-	**7.27**	-	-	**174**	-	-	**211**	-	-
YVD-09	YVD-031918-18	3/19/2018	N	870634	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**7.80**	-	-	**166**	-	-	**180**	-	-
YVD-09	YVD-060318-13	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**8.35**	-	-	**182**	-	-	**182**	-	-
YVD-09	YVD-090918-06	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**8.10**	-	-	**174**	-	-	**172**	-	-
YVD-09	YVD-121118-15	12/11/2018	N	884939	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**8.60**	-	-	**172**	-	-	**166**	-	-
YVD-09	YVD-121118-17	12/11/2018	FD	884939	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**8.75**	-	-	**175**	-	-	**170**	-	-
YVD-09	YVD-031719-05	3/17/2019	N	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**8.05**	-	-	**166**	-	-	**162**	-	-
YVD-09	YVD-060319-15	6/3/2019	N	992053	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**8.00**	-	-	**166**	-	-	**146**	-	-
YVD-09	YVD-090919-04	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**8.20**	-	-	**160**	-	-	**148**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-09	YVD-120919-06	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U		**8.40**	-	-	**166**	J	MSD	**143**	-	-
YVD-09	YVD-033020-05	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**7.95**	-	-	**163**	-	-	**150**	-	-
YVD-09	YVD-060920-24	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**7.90**	--	--	**167**	--	--	**158**	--	--
YVD-09	YVD-092120-16	9/21/2020	N	013896	0.050	U	--	2.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**7.85**	--	--	**164**	--	--	**151**	--	--
YVD-09	YVD-120720-13	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**8.65**	--	--	**164**	--	--	**159**	--	--
YVD-09	YVD-030121-05	3/1/2021	N	119931	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**8.05**	--	--	**161**	--	--	**152**	--	--
YVD-09	YVD-060721-18	6/7/2021	N	124105	0.050	U	--	5.0	UJ	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	--	**8.15**	--	--	**157**	--	--	**135**	--	--
YVD-09	YVD-121421-09	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-10	YVD-10-130917	09/17/2013	N	SWI0123	2	U	-	0.25	U	-	-	-	-	-	-	-	**0.148**	-	-	-	-	-	**3.28**	-	-	**104**	-	-	**199**	-	-
YVD-10	YVD-10-131212	12/12/2013	N	SWL0078	2	U	-	0.6495	U	ERL	-	-	-	-	-	-	-	-	-	**1.4**	-	-	**4.49**	-	-	**102**	-	-	**174**	-	-
YVD-10	YVD-10-140319	03/19/2014	N	SXC0107	2	U	-	**0.507**	J-	MSD	**0.77**	-	-	-	-	-	-	-	-	-	-	-	**3.93**	-	-	**96.8**	-	-	**163**	-	-
YVD-10	YVD-10-140603	06/03/2014	N	SXF0025	2	U	-	**0.577**	J-	MSD	**0.8**	-	-	-	-	-	-	-	-	-	-	-	**4.07**	-	-	**103**	-	-	**188**	-	-
YVD-10	YVD-10-140924	09/24/2014	N	SXI0173	2	U	-	**0.443**	J+	MSD	**0.48**	J+	FBK	-	-	-	-	-	-	-	-	-	**3.86**	-	-	**116**	-	-	**217**	-	-
YVD-10	YVD-10-141217	12/17/2014	N	SXL0144	2	U	-	-	R	MSD	**0.69**	J-	MSD	-	-	-	-	-	-	-	-	-	**3.88**	-	-	**110**	-	-	**180**	-	-
YVD-10	YVD-10-150318	03/18/2015	N	5904651	2	U	-	0.25	UJ	MSD	**0.42**	-	-	-	-	-	-	-	-	-	-	-	**4.00**	J-	MSD	**130**	-	-	**370**	-	-
YVD-10	YVD-10-150617	06/17/2015	N	59010961	2	U	-	**0.44**	J-	MSD	**0.72**	-	-	-	-	-	-	-	-	-	-	-	**4.60**	J+	MSD	**130**	J+	MSD	**110**	-	-
YVD-10	YVD-10-150923	09/23/2015	N	59020391	2	U	-	0.25	UJ	MSD	**0.56**	-	-	-	-	-	-	-	-	-	-	-	**4.30**	-	-	**120**	-	-	**370**	J-	MSD
YVD-10	YVD-10-151214	12/14/2015	N	59025351	2	U	-	0.25	UJ	MSD	**0.58**	-	-	-	-	-	-	-	-	-	-	-	**4.30**	-	-	**120**	-	-	**360**	-	-
YVD-10	YVD-10-160309	03/09/2016	N	59029711	2	U	-	-	R	MSD	**0.42**	-	-	-	-	-	-	-	-	-	-	-	**4.10**	-	-	**120**	-	-	**280**	J+	MSD
YVD-10	YVD-10-160621	6/21/2016	N	59037271	2	U	-	-	R	MSD	**0.71**	-	-	-	-	-	-	-	-	-	-	-	**4.50**	-	-	**110**	-	-	**240**	-	-
YVD-10	YVD-10-160929	9/29/2016	N	K1611698	0.10	U	-	-	R	MSD	-	-	-	**0.028**	-	-	-	-	-	-	-	-	**2.48**	-	-	**114**	-	-	**223**	-	-
YVD-10	YVD-10-161212	12/12/2016	N	K1615029	0.10	U	-	0.5	U	-	-	-	-	**0.074**	-	-	-	-	-	-	-	-	**2.68**	-	-	**118**	-	-	**191**	-	-
YVD-10	YVD-030917-27	3/9/2017	N	K1702448	0.10	U	-	0.5	U	-	-	-	-	**0.066**	-	-	-	-	-	-	-	-	**2.89**	-	-	**133**	-	-	**799**	-	-
YVD-10	YVD-060617-22	6/6/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.036**	-	-	-	-	-	-	-	-	**2.57**	-	-	**119**	-	-	**368**	-	-
YVD-10	YVD-092617-31	9/26/2017	N	K1710381	0.10	U	-	0.5	U	-	-	-	-	**0.011**	-	-	-	-	-	-	-	-	**2.56**	-	-	**111**	-	-	**265**	-	-
YVD-10	YVD-120517-30	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.023**	-	-	-	-	-	-	-	-	**2.37**	-	-	**114**	-	-	**224**	-	-
YVD-10	YVD-031818-06	3/18/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.60**	-	-	**123**	-	-	**202**	-	-
YVD-10	YVD-060318-06	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.93**	-	-	**118**	-	-	**208**	-	-
YVD-10	YVD-090918-13	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.58**	-	-	**114**	-	-	**238**	-	-
YVD-10	YVD-121018-08	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.64**	-	-	**112**	-	-	**196**	-	-
YVD-10	YVD-031819-16	3/18/2019	N	988273	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	**0.07**	-	-	**2.62**	-	-	**108**	-	-	**196**	-	-
YVD-10	YVD-060319-18	6/3/2019	N	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.56**	-	-	**106**	-	-	**220**	-	-
YVD-10	YVD-091019-20	9/10/2019	N	998438	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.49**	-	-	**104**	-	-	**165**	-	-
YVD-10	YVD-121019-21	12/10/2019	N	902321	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.94**	-	-	**102**	-	-	**199**	-	-
YVD-10	YVD-033020-08	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.64**	-	-	**100**	-	-	**183**	-	-
YVD-10	YVD-060920-12	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.71**	--	--	**108**	--	--	**224**	--	--
YVD-10	YVD-092020-08	9/20/2020	N	013864	0.050	U	--	0.5	U	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.73**	--	--	**102**	--	--	**229**	--	--
YVD-10	YVD-120720-12	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.24**	--	--	**106**	--	--	**288**	--	--
YVD-10	YVD-030121-12	3/1/2021	N	119931	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.34**	--	--	**134**	--	--	**896**	--	--
YVD-10	YVD-060621-07	6/6/2021	N	124053	0.050	U	--	5.0	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.80**	--	--	**106**	--	--	**219**	--	--
YVD-10	YVD-121421-06	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-11	YVD-11-130923	09/23/2013	N	SWI0178	-	-	-	0.25	U	-	-	-	-	-	-	-	0.1	UJ	FDP	-	-	-	**5.44**	J	FDP	**23.2**	-	-	-	-	-
YVD-11	YVD-D2-130923	09/23/2013	FD	SWI0178	-	-	-	0.25	U	-	-	-	-	-	-	-	**0.753**	J	FDP	-	-	-	**3.60**	J	FDP	**23.0**	-	-	-	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-11	YVD-11-130926	09/26/2013	N	SWI0190	2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**207**	-	-
YVD-11	YVD-D3-130926	09/26/2013	FD	SWI0190	2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**228**	-	-
YVD-11	YVD-11-131212	12/12/2013	N	SWL0073	2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	**0.245**	-	-	**3.37**	-	-	**23.2**	-	-	**208**	-	-
YVD-11	YVD-11-140318	03/18/2014	N	SXC0107	2	U	-	**0.503**	J-	MSD	**0.17**	-	-	-	-	-	-	-	-	-	-	-	**3.15**	-	-	**22.2**	-	-	**193**	-	-
YVD-11	YVD-11-140603	06/03/2014	N	SXF0017	2	U	-	**0.564**	-	-	**0.84**	-	-	-	-	-	-	-	-	-	-	-	**5.38**	-	-	**26.1**	-	-	**203**	J-	MSD
YVD-11	YVD-11-140924	09/24/2014	N	SXI0173	1	U	-	**0.453**	J+	MSD	**0.17**	J+	FBK	-	-	-	-	-	-	-	-	-	**3.86**	-	-	**25.6**	-	-	**159**	-	-
YVD-11	YVD-11-141217	12/17/2014	N	SXL0121	2	U	-	0.25	UJ	MSD	**0.46**	-	-	-	-	-	-	-	-	-	-	-	**4.77**	-	-	**25.6**	-	-	**158**	-	-
YVD-11	YVD-11-150317	03/17/2015	N	5904651	2	U	-	0.25	UJ	MSD	**0.3**	-	-	-	-	-	-	-	-	-	-	-	**4.30**	J-	MSD	**26.0**	-	-	**150**	-	-
YVD-11	YVD-11-150616	06/16/2015	N	59010961	2	U	-	**0.31**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.20**	J+	MSD	**27.0**	J+	MSD	**140**	-	-
YVD-11	YVD-11-150923	09/23/2015	N	59020281	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.40**	-	-	**25.0**	-	-	**130**	-	-
YVD-11	YVD-11-151215	12/15/2015	N	59025431	2	U	-	-	R	MSD	**0.59**	J	FDP	-	-	-	-	-	-	-	-	-	**5.20**	-	-	**25.0**	-	-	**140**	-	-
YVD-11	YVD-D2-151215	12/15/2015	FD	59025431	0.2	U	-	-	R	MSD	**1.5**	J	FDP	-	-	-	-	-	-	-	-	-	**4.90**	-	-	**25.0**	-	-	**130**	-	-
YVD-11	YVD-11-160309	03/09/2016	N	59029711	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.30**	-	-	**25.0**	-	-	**140**	J+	MSD
YVD-11	YVD-11-160621	6/21/2016	N	59037151	2	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**27.0**	-	-	**130**	-	-
YVD-11	YVD-11-160927	9/27/2016	N	K1611629	0.10	U	-	0.5	U	-	-	-	-	**0.071**	-	-	-	-	-	-	-	-	**3.13**	-	-	**26.1**	-	-	**100**	-	-
YVD-11	YVD-11-161214	12/14/2016	N	K1615126	0.10	U	-	0.5	U	-	-	-	-	**0.421**	-	-	-	-	-	-	-	-	**4.82**	-	-	**25.6**	-	-	**104**	-	-
YVD-11	YVD-031317-37	3/13/2017	N	K1702489	**0.06**	J	-	0.5	U	-	-	-	-	**0.016**	-	-	-	-	-	-	-	-	**3.02**	-	-	**25.5**	-	-	**99.8**	-	-
YVD-11	YVD-060517-10	6/5/2017	N	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.029**	-	-	-	-	-	-	-	-	**2.98**	-	-	**24.9**	-	-	**133**	-	-
YVD-11	YVD-092617-26	9/26/2017	N	K1710381	0.10	UJ	HTQ	0.5	U	-	-	-	-	**0.006**	J	-	-	-	-	-	-	-	**3.24**	-	-	**28.8**	-	-	**219**	-	-
YVD-11	YVD-120417-06	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	0.015	U	MBK	-	-	-	-	-	-	**2.78**	-	-	**25.8**	-	-	**124**	-	-
YVD-11	YVD-031918-12	3/19/2018	N	870634	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.98**	-	-	**26.0**	-	-	**103**	-	-
YVD-11	YVD-031918-14	3/19/2018	FD	870634	0.050	U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.94**	-	-	**25.8**	-	-	**100**	-	-
YVD-11	YVD-060418-14	6/4/2018	N	874662	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.26**	-	-	**28.4**	-	-	**91.2**	-	-
YVD-11	YVD-060418-16	6/4/2018	FD	874662	0.050	U	-	**0.6**	J	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.28**	-	-	**28.9**	-	-	**90.0**	-	-
YVD-11	YVD-090918-05	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.05**	-	-	**28.2**	-	-	**90.6**	-	-
YVD-11	YVD-121018-10	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.88**	-	-	**27.4**	-	-	**75.4**	-	-
YVD-11	YVD-031819-18	3/18/2019	N	988273	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.76**	-	-	**26.2**	-	-	**60.4**	-	-
YVD-11	YVD-060219-02	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.60**	-	-	**25.4**	-	-	**58.2**	-	-
YVD-11	YVD-060219-04	6/2/2019	FD	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.68**	-	-	**25.6**	-	-	**58.4**	-	-
YVD-11	YVD-090919-05	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.66**	-	-	**27.2**	-	-	**60.4**	-	-
YVD-11	YVD-120919-13	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.76**	-	-	**29.6**	J	MSD	**57.2**	-	-
YVD-11	YVD-033020-10	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.68**	-	-	**29.8**	-	-	**55.5**	-	-
YVD-11	YVD-061020-31	6/10/2020	N	009361	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.64**	--	--	**31.0**	--	--	**48.8**	--	--
YVD-11	YVD-092120-20	9/21/2020	N	013896	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.70**	--	--	**33.4**	--	--	**60.3**	--	--
YVD-11	YVD-120720-10	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.05**	--	--	**36.4**	--	--	**52.8**	--	--
YVD-11	YVD-030121-06	3/1/2021	N	119931	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.94**	--	--	**37.6**	--	--	**56.0**	--	--
YVD-11	YVD-060821-23	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.80**	--	--	**35.6**	--	--	**36.0**	--	--
YVD-11	YVD-121421-05	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-12	YVD-12-130919	09/19/2013	N	SWI0142	-	-	-	-	R	FBK	-	-	-	-	-	-	**0.356**	J+	FBK	-	-	-	**3.14**	-	-	**77.3**	-	-	**245**	-	-
YVD-12	YVD-12-130925	09/25/2013	N	SWI0175	2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-12	YVD-12-131211	12/11/2013	N	SWL0073	2	U	-	-	R	MSD, FBK	-	-	-	-	-	-	-	-	-	**0.218**	-	-	**3.63**	-	-	**73.2**	-	-	**262**	-	-
YVD-12	YVD-12-140318	03/18/2014	N	SXC0095	2	U	-	**0.564**	-	-	**0.22**	-	-	-	-	-	-	-	-	-	-	-	**3.27**	-	-	**73.4**	-	-	**236**	J-	MSD
YVD-12	YVD-12-140603	06/03/2014	N	SXF0017	0.2	U	-	**0.415**	-	-	**0.28**	J+	FBK	-	-	-	-	-	-	-	-	-	**2.96**	-	-	**70.7**	-	-	**21.3**	J-	MSD
YVD-12	YVD-12-140922	09/22/2014	N	SXI0148	2	U	-	**0.669**	-	-	**0.25**	-	-	-	-	-	-	-	-	-	-	-	**3.13**	-	-	**77.9**	-	-	**200**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-12	YVD-D2-140922	09/22/2014	FD	SXI0148	0.8	U	-	**0.653**	-	-	**0.2**	-	-	-	-	-	-	-	-	-	-	-	**3.00**	-	-	**77.8**	-	-	**200**	-	-
YVD-12	YVD-12-141216	12/16/2014	N	SXL0121	2	U	-	0.25	UJ	MSD	**0.25**	-	-	-	-	-	-	-	-	-	-	-	**3.23**	-	-	**71.8**	-	-	**228**	-	-
YVD-12	YVD-12-150317	03/17/2015	N	5904541	2	U	-	**0.56**	J-	MSD	**0.31**	-	-	-	-	-	-	-	-	-	-	-	**3.60**	-	-	**73.0**	-	-	**190**	J-	MSD
YVD-12	YVD-12-150617	06/17/2015	N	59010961	2	U	-	**0.35**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.60**	J+	MSD	**83.0**	J+	MSD	**180**	-	-
YVD-12	YVD-12-150924	09/24/2015	N	59020391	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**73.0**	-	-	**210**	J-	MSD
YVD-12	YVD-12-151216	12/16/2015	N	59025501	2	U	-	**0.58**	J-	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**3.10**	-	-	**74.0**	-	-	**180**	-	-
YVD-12	YVD-12-160309	03/09/2016	N	59029941	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.60**	-	-	**73.0**	-	-	**170**	J	DUP
YVD-12	YVD-D3-160309	03/09/2016	FD	59029941	0.2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.50**	-	-	**72.0**	-	-	**180**	J	DUP
YVD-12	YVD-12-160622	6/22/2016	N	59037271	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**2.90**	-	-	**72.0**	-	-	**180**	-	-
YVD-12	YVD-12-160929	9/29/2016	N	K1611704	0.10	U	-	0.5	U	-	-	-	-	**0.026**	-	-	-	-	-	-	-	-	**2.28**	-	-	**67.7**	-	-	**158**	-	-
YVD-12	YVD-12-161213	12/13/2016	N	K1615083	0.10	U	-	0.5	U	-	-	-	-	**0.018**	-	-	-	-	-	-	-	-	**2.29**	-	-	**67.9**	-	-	**150**	-	-
YVD-12	YVD-030917-20	3/9/2017	N	K1702404	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.008**	J	-	-	-	-	-	-	-	**2.27**	-	-	**67.4**	-	-	**227**	-	-
YVD-12	YVD-060617-25	6/6/2017	N	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**2.24**	-	-	**66.5**	-	-	**155**	-	-
YVD-12	YVD-092517-15	9/25/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	**2.27**	-	-	**64.4**	-	-	**177**	-	-
YVD-12	YVD-120417-03	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	0.013	U	MBK	-	-	-	-	-	-	**2.06**	-	-	**70.8**	-	-	**169**	-	-
YVD-12	YVD-031918-13	3/19/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.30**	-	-	**70.5**	-	-	**167**	-	-
YVD-12	YVD-060318-11	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.58**	-	-	**68.0**	-	-	**171**	-	-
YVD-12	YVD-090918-16	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.52**	-	-	**67.0**	-	-	**180**	-	-
YVD-12	YVD-121018-13	12/10/2018	N	884857	0.050	U	-	10	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.52**	-	-	**69.5**	-	-	**170**	-	-
YVD-12	YVD-031719-07	3/17/2019	N	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.46**	-	-	**70.5**	-	-	**188**	-	-
YVD-12	YVD-060319-27	6/3/2019	N	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.40**	-	-	**66.5**	-	-	**188**	-	-
YVD-12	YVD-090919-16	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.48**	-	-	**60.5**	-	-	**172**	-	-
YVD-12	YVD-120919-12	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**2.48**	-	-	**67.0**	J	MSD	**176**	-	-
YVD-12	YVD-033020-11	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.44**	-	-	**63.0**	-	-	**170**	-	-
YVD-12	YVD-060920-22	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.50**	--	--	**71.5**	--	--	**179**	--	--
YVD-12	YVD-092120-18	9/21/2020	N	013896	0.050	U	--	2.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.38**	--	--	**60.5**	--	--	**168**	--	--
YVD-12	YVD-120820-19	12/8/2020	N	017137	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.59**	--	--	**62.0**	--	--	**174**	--	--
YVD-12	YVD-030221-19	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.44**	--	--	**59.5**	--	--	**168**	--	--
YVD-12	YVD-060821-25	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**2.41**	--	--	**60.0**	--	--	**176**	--	--
YVD-12	YVD-121521-18	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-13	YVD-13-130919	09/19/2013	N	SWI0138	2	U	-	-	R	FBK	-	-	-	-	-	-	-	R	FBK	-	-	-	**4.30**	-	-	**114**	-	-	**365**	-	-
YVD-13	YVD-13-131211	12/11/2013	N	SWL0073	2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	**0.11**	-	-	**4.16**	-	-	**110**	-	-	**278**	-	-
YVD-13	YVD-13-140318	03/18/2014	N	SXC0095	2	U	-	**0.613**	-	-	**0.17**	-	-	-	-	-	-	-	-	-	-	-	**4.27**	-	-	**106**	-	-	**312**	J-	MSD
YVD-13	YVD-13-140603	06/03/2014	N	SXF0017	0.8	U	-	**0.727**	-	-	**0.078**	J+	FBK	-	-	-	-	-	-	-	-	-	**3.70**	-	-	**113**	-	-	**151**	J-	MSD
YVD-13	YVD-13-140923	09/23/2014	N	SXI0173	2	U	-	**9.13**	J+	MSD	0.05	U	-	-	-	-	-	-	-	-	-	-	**4.40**	-	-	**118**	-	-	**328**	-	-
YVD-13	YVD-13-141217	12/17/2014	N	SXL0121	2	U	-	0.25	UJ	MSD	0.1	U	-	-	-	-	-	-	-	-	-	-	**4.74**	-	-	**119**	-	-	**355**	-	-
YVD-13	YVD-13-150317	03/17/2015	N	5904541	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.00**	-	-	**120**	-	-	**290**	J-	MSD
YVD-13	YVD-13-150617	06/17/2015	N	59010961	2	U	-	**0.68**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.40**	J+	MSD	**120**	J+	MSD	**310**	-	-
YVD-13	YVD-13-150924	09/24/2015	N	59020391	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.10**	-	-	**110**	-	-	**330**	J-	MSD
YVD-13	YVD-13-151216	12/16/2015	N	59025501	2	U	-	-	R	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**4.30**	-	-	**120**	-	-	**310**	-	-
YVD-13	YVD-13-160309	03/09/2016	N	59029941	2	U	-	0.25	UJ	FDP, MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.20**	-	-	**120**	-	-	**390**	J	DUP
YVD-13	YVD-13-160622	6/22/2016	N	59037271	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.20**	-	-	**120**	-	-	**390**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-13	YVD-13-160928	9/28/2016	N	K1611698	0.10	U	-	-	R	MSD	-	-	-	**0.014**	-	-	-	-	-	-	-	-	**3.91**	-	-	**113**	-	-	**321**	-	-
YVD-13	YVD-13-161214	12/13/2016	N	K1615083	0.10	U	-	0.5	U	-	-	-	-	**0.047**	-	-	-	-	-	-	-	-	**4.02**	-	-	**111**	-	-	**313**	-	-
YVD-13	YVD-030717-08	3/7/2017	N	K1702324	**0.05**	J	HTQ	0.5	U	-	-	-	-	**0.010**	J	-	-	-	-	-	-	-	**3.63**	-	-	**105**	-	-	**277**	-	-
YVD-13	YVD-030717-10	3/7/2017	FD	K1702324	**0.04**	J	HTQ	0.5	U	-	-	-	-	**0.009**	J	-	-	-	-	-	-	-	**3.71**	-	-	**107**	-	-	**280**	-	-
YVD-13	YVD-060717-33	6/7/2017	N	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.014**	-	-	-	-	-	-	-	-	**3.83**	-	-	**114**	-	-	**282**	-	-
YVD-13	YVD-092617-25	9/26/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	**3.66**	-	-	**105**	-	-	**298**	-	-
YVD-13	YVD-120417-07	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	0.015	U	MBK	-	-	-	-	-	-	**3.41**	-	-	**102**	-	-	**271**	-	-
YVD-13	YVD-031918-19	3/19/2018	N	870634	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.82**	-	-	**102**	-	-	**249**	-	-
YVD-13	YVD-060318-09	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.01**	-	-	**108**	-	-	**235**	-	-
YVD-13	YVD-090918-14	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.90**	-	-	**104**	-	-	**222**	-	-
YVD-13	YVD-121018-11	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.95**	-	-	**104**	-	-	**225**	-	-
YVD-13	YVD-031819-15	3/18/2019	N	988273	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.04**	-	-	**105**	-	-	**223**	-	-
YVD-13	YVD-060319-25	6/3/2019	N	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.87**	-	-	**103**	-	-	**201**	-	-
YVD-13	YVD-090919-10	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.95**	-	-	**95.0**	-	-	**197**	-	-
YVD-13	YVD-120919-10	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.90**	-	-	**102**	J	MSD	**191**	-	-
YVD-13	YVD-033020-09	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.92**	-	-	**100**	-	-	**200**	-	-
YVD-13	YVD-060920-21	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.97**	--	--	**106**	--	--	**176**	--	--
YVD-13	YVD-092120-13	9/21/2020	N	013896	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.04**	--	--	**103**	--	--	**198**	--	--
YVD-13	YVD-120820-17	12/8/2020	N	017137	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.16**	--	--	**102**	--	--	**166**	--	--
YVD-13	YVD-030221-15	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.96**	--	--	**101**	--	--	**195**	--	--
YVD-13	YVD-060821-32	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.96**	--	--	**100**	--	--	**196**	--	--
YVD-13	YVD-121521-16	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-14	YVD-14-130918	09/18/2013	N	SWI0123	2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**3.45**	-	-	**110**	-	-	**213**	-	-
YVD-14	YVD-14-131212	12/12/2013	N	SWL0078	2	U	-	0.7957	U	ERL	-	-	-	-	-	-	-	-	-	0.06	U	-	**3.29**	-	-	**108**	-	-	**186**	-	-
YVD-14	YVD-14-140319	03/19/2014	N	SXC0107	2	U	-	**0.562**	J-	MSD	0.05	U	-	-	-	-	-	-	-	-	-	-	**3.37**	-	-	**102**	-	-	**190**	-	-
YVD-14	YVD-14-140604	06/04/2014	N	SXF0025	2	U	-	0.25	UJ	MSD	**0.078**	-	-	-	-	-	-	-	-	-	-	-	**3.46**	-	-	**112**	-	-	**191**	-	-
YVD-14	YVD-14-140924	09/24/2014	N	SXI0173	2	U	-	0.25	U	-	**0.087**	J+	FBK	-	-	-	-	-	-	-	-	-	**4.10**	-	-	**124**	-	-	**178**	-	-
YVD-14	YVD-14-141217	12/17/2014	N	SXL0121	2	U	-	0.25	UJ	MSD	0.1	U	-	-	-	-	-	-	-	-	-	-	**3.83**	-	-	**113**	-	-	**185**	-	-
YVD-14	YVD-14-150318	03/18/2015	N	5904651	2	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.60**	J-	MSD	**130**	-	-	**180**	-	-
YVD-14R	YVD-14R-151216	12/16/2015	N	59025501	2	U	-	-	R	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**4.40**	-	-	**120**	-	-	**160**	-	-
YVD-14R	YVD-14R-160309	03/09/2016	N	59029941	2	U	-	0.25	UJ	FDP, MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.40**	-	-	**130**	-	-	**180**	J	DUP
YVD-14R	YVD-14R-160622	6/22/2016	N	59037271	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.30**	-	-	**130**	-	-	**150**	-	-
YVD-14R	YVD-14R-160928	9/28/2016	N	K1611698	0.10	U	-	-	R	MSD	-	-	-	**0.015**	-	-	-	-	-	-	-	-	**4.05**	-	-	**126**	-	-	**140**	-	-
YVD-14R	YVD-14R-161212	12/12/2016	N	K1615029	0.10	UJ	HTQ	0.5	U	-	-	-	-	**0.058**	-	-	-	-	-	-	-	-	**4.09**	-	-	**119**	-	-	**158**	-	-
YVD-14R	YVD-D1-161212	12/12/2016	FD	K1615029	0.10	UJ	HTQ	0.5	U	-	-	-	-	**0.092**	-	-	-	-	-	-	-	-	**4.17**	-	-	**121**	-	-	**155**	-	-
YVD-14R	YVD-030917-19	3/9/2017	N	K1702404	0.10	U	-	0.5	U	-	-	-	-	**0.020**	-	-	-	-	-	-	-	-	**3.80**	-	-	**117**	-	-	**147**	-	-
YVD-14R	YVD-030917-21	3/9/2017	FD	K1702404	0.10	U	-	0.5	U	-	-	-	-	**0.019**	-	-	-	-	-	-	-	-	**3.75**	-	-	**115**	-	-	**151**	-	-
YVD-14R	YVD-060517-06	6/5/2017	N	K1705702	0.10	U	-	0.5	U	-	-	-	-	**0.038**	-	-	-	-	-	-	-	-	**3.53**	-	-	**110**	-	-	**142**	-	-
YVD-14R	YVD-092517-14	9/25/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.018**	-	-	-	-	-	-	-	-	**3.85**	-	-	**121**	-	-	**138**	-	-
YVD-14R	YVD-120417-12	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	**0.024**	-	-	-	-	-	-	-	-	**3.54**	-	-	**116**	-	-	**124**	-	-
YVD-14R	YVD-031818-11	3/18/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.96**	-	-	**127**	-	-	**128**	-	-
YVD-14R	YVD-060318-04	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.18**	-	-	**130**	-	-	**123**	-	-
YVD-14R	YVD-090918-09	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.09**	-	-	**130**	-	-	**125**	-	-
YVD-14R	YVD-121018-02	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.39**	-	-	**131**	-	-	**139**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-14R	YVD-121018-04	12/10/2018	FD	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.36**	-	-	**131**	-	-	**136**	-	-
YVD-14R	YVD-031819-12	3/18/2019	N	988273	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.56**	-	-	**136**	-	-	**147**	-	-
YVD-14R	YVD-031819-14	3/18/2019	FD	988273	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.57**	-	-	**136**	-	-	**145**	-	-
YVD-14R	YVD-060319-22	6/3/2019	N	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.42**	-	-	**136**	-	-	**145**	-	-
YVD-14R	YVD-060319-24	6/3/2019	FD	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.38**	-	-	**132**	-	-	**131**	-	-
YVD-14R	YVD-090919-13	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.48**	-	-	**129**	-	-	**133**	-	-
YVD-14R	YVD-121019-15	12/10/2019	N	902321	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.71**	-	-	**128**	-	-	**123**	-	-
YVD-14R	YVD-121019-17	12/10/2019	FD	902321	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.75**	-	-	**128**	-	-	**124**	-	-
YVD-14R	YVD-033020-02	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.20**	-	-	**134**	-	-	**125**	-	-
YVD-14R	YVD-033020-04	3/30/2020	FD	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.34**	-	-	**134**	-	-	**123**	-	-
YVD-14R	YVD-060920-20	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.44**	--	--	**152**	--	--	**132**	--	--
YVD-14R	YVD-092120-14	9/21/2020	N	013896	0.050	U	--	2.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.31**	--	--	**144**	--	--	**124**	--	--
YVD-14R	YVD-120820-20	12/8/2020	N	017137	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.60**	--	--	**144**	--	--	**129**	--	--
YVD-14R	YVD-030121-08	3/1/2021	N	119931	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.59**	--	--	**147**	--	--	**122**	--	--
YVD-14R	YVD-060621-09	6/6/2021	N	124053	0.050	U	--	5.0	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.71**	--	--	**146**	--	--	**114**	--	--
YVD-14R	YVD-121421-08	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-15	YVD-15-130917	09/17/2013	N	SWI0123	2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**2.73**	-	-	**127**	-	-	**51.5**	-	-
YVD-15	YVD-15-131212	12/12/2013	N	SWL0078	2	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	**0.238**	-	-	**4.48**	-	-	**114**	-	-	**114**	-	-
YVD-15	YVD-15-140319	03/19/2014	N	SXC0107	2	U	-	**0.553**	J-	MSD	**0.22**	-	-	-	-	-	-	-	-	-	-	-	**5.23**	-	-	**93.5**	-	-	**44.7**	-	-
YVD-15	YVD-15-140603	06/03/2014	N	SXF0025	2	U	-	**0.475**	J-	MSD	**0.31**	-	-	-	-	-	-	-	-	-	-	-	**5.20**	-	-	**110**	-	-	**39**	-	-
YVD-15	YVD-15-140924	09/24/2014	N	SXI0173	2	U	-	**1.19**	J+	MSD	**0.072**	J+	FBK	-	-	-	-	-	-	-	-	-	**3.11**	-	-	**135**	-	-	**50.7**	-	-
YVD-15	YVD-15-141217	12/17/2014	N	SXL0121	2	U	-	**0.414**	J-	MSD	**0.17**	-	-	-	-	-	-	-	-	-	-	-	**3.67**	-	-	**60.3**	-	-	**53.4**	-	-
YVD-15	YVD-15-150317	03/17/2015	N	5904651	2	U	-	0.25	UJ	MSD	**0.27**	-	-	-	-	-	-	-	-	-	-	-	**8.40**	J-	MSD	**160**	-	-	**53**	-	-
YVD-15	YVD-15-150617	06/17/2015	N	59011021	0.2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.60**	J	RPD	**110**	J	RPD	**59**	-	-
YVD-15	YVD-15-150925	09/25/2015	N	59020431	2	U	-	2.5	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.90**	-	-	**80.0**	-	-	**47**	-	-
YVD-15	YVD-15-151215	12/15/2015	N	59025431	2	U	-	-	R	MSD	0.25	UJ	FDP	-	-	-	-	-	-	-	-	-	**4.10**	-	-	**80.0**	-	-	**40**	-	-
YVD-15	YVD-15-160309	03/09/2016	N	59029711	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.20**	-	-	**75.0**	-	-	**65**	J+	MSD
YVD-15	YVD-15-160621	6/21/2016	N	59037271	2	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**74.0**	-	-	**86**	-	-
YVD-15	YVD-15-160928	9/28/2016	N	K1611629	0.10	U	-	0.5	U	-	-	-	-	**0.023**	-	-	-	-	-	-	-	-	**3.15**	-	-	**66.2**	-	-	**108**	-	-
YVD-15	YVD-15-161215	12/15/2016	N	K1615126	0.10	U	-	0.5	U	-	-	-	-	**0.095**	-	-	-	-	-	-	-	-	**3.40**	-	-	**59.1**	-	-	**108**	-	-
YVD-15	YVD-030917-23	3/9/2017	N	K1702404	0.10	U	-	0.5	U	-	-	-	-	**0.011**	-	-	-	-	-	-	-	-	**2.95**	-	-	**55.3**	-	-	**125**	-	-
YVD-15	YVD-060617-20	6/6/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.017**	-	-	-	-	-	-	-	-	**2.98**	-	-	**62.9**	-	-	**143**	-	-
YVD-15	YVD-092517-10	9/25/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	**3.21**	-	-	**74.5**	-	-	**167**	-	-
YVD-15	YVD-120517-28	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.013**	-	-	-	-	-	-	-	-	**2.89**	-	-	**78.6**	-	-	**145**	-	-
YVD-15	YVD-031818-09	3/18/2018	N	870610	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.25**	-	-	**94.5**	-	-	**129**	-	-
YVD-15	YVD-060318-08	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.36**	-	-	**97.5**	-	-	**118**	-	-
YVD-15	YVD-090918-11	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.18**	-	-	**99.0**	-	-	**110**	-	-
YVD-15	YVD-121018-06	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.25**	-	-	**97.5**	-	-	**111**	-	-
YVD-15	YVD-031719-10	3/17/2019	N	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.22**	-	-	**96.0**	-	-	**110**	-	-
YVD-15	YVD-060419-29	6/4/2019	N	992242	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.18**	-	-	**100**	-	-	**114**	-	-
YVD-15	YVD-090919-11	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.14**	-	-	**92.0**	-	-	**103**	-	-
YVD-15	YVD-121019-19	12/10/2019	N	902321	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.40**	-	-	**91.5**	-	-	**96.9**	-	-
YVD-15	YVD-033020-06	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.12**	-	-	**90.0**	-	-	**90.9**	-	-
YVD-15	YVD-060920-16	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.08**	--	--	**96.0**	--	--	**87.7**	--	--
YVD-15	YVD-092020-09	9/20/2020	N	013864	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.12**	--	--	**89.5**	--	--	**90.0**	--	--
YVD-15	YVD-120720-14	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.35**	--	--	**89.0**	--	--	**89.0**	--	--

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-15	YVD-030121-14	3/1/2021	N	119931	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.15**	--	--	**85.5**	--	--	**86.9**	--	--
YVD-15	YVD-060621-08	6/6/2021	N	124053	0.050	U	--	5.0	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.32**	--	--	**86.5**	--	--	**72.0**	--	--
YVD-15	YVD-121421-07	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-16	YVD-16-130923	09/23/2013	N	SWI0178	-	-	-	**0.375**	-	-	-	-	-	-	-	-	0.1	U	-	-	-	-	**6.16**	-	-	**81.7**	-	-	-	-	-
YVD-16	YVD-16-130926	09/26/2013	N	SWI0190	2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**140**	-	-
YVD-16	YVD-16-131212	12/12/2013	N	SWL0073	2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	0.06	U	-	**5.25**	-	-	**79.8**	-	-	**163**	-	-
YVD-16	YVD-16-140318	03/18/2014	N	SXC0107	2	U	-	**1.01**	J-	MSD	**1.4**	-	-	-	-	-	-	-	-	-	-	-	**15.00**	-	-	**75.5**	-	-	**130**	-	-
YVD-16	YVD-16-140603	06/03/2014	N	SXF0017	0.8	U	-	**0.741**	-	-	**0.83**	-	-	-	-	-	-	-	-	-	-	-	**8.47**	-	-	**78.4**	-	-	**131**	J-	MSD
YVD-16	YVD-16-140923	09/23/2014	N	SXI0173	1	U	-	**0.747**	J+	MSD	**0.22**	-	-	-	-	-	-	-	-	-	-	-	**7.48**	-	-	**94.1**	-	-	**114**	-	-
YVD-16	YVD-16-141217	12/17/2014	N	SXL0121	1	U	-	0.25	UJ	MSD	**0.25**	J	FDP	-	-	-	-	-	-	-	-	-	**6.77**	-	-	**83.7**	-	-	**118**	-	-
YVD-16	YVD-D3-141217	12/17/2014	FD	SXL0121	0.2	U	-	**0.29**	J-	MSD	**0.1**	J	FDP	-	-	-	-	-	-	-	-	-	**6.27**	-	-	**81.7**	-	-	**130**	-	-
YVD-16	YVD-16-150317	03/17/2015	N	5904651	1	U	-	**0.29**	J-	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.10**	J-	MSD	**87.0**	-	-	**120**	-	-
YVD-16	YVD-16-150616	06/16/2015	N	59010961	1	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.20**	J+	MSD	**91.0**	J+	MSD	**120**	-	-
YVD-16	YVD-16-150923	09/23/2015	N	59020281	1	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.50**	-	-	**85.0**	-	-	**130**	-	-
YVD-16	YVD-16-151215	12/15/2015	N	59025431	1	U	-	-	R	MSD	0.25	UJ	FDP	-	-	-	-	-	-	-	-	-	**5.70**	-	-	**85.0**	-	-	**120**	-	-
YVD-16	YVD-16-160309	03/09/2016	N	59029711	1	U	-	-	R	MSD	**0.27**	-	-	-	-	-	-	-	-	-	-	-	**7.40**	-	-	**86.0**	-	-	**130**	J+	MSD
YVD-16	YVD-16-160621	6/21/2016	N	59037151	1	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**5.90**	-	-	**86.0**	-	-	**120**	-	-
YVD-16	YVD-D2-160621	6/21/2016	FD	59037151	0.2	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**6.00**	-	-	**88.0**	-	-	**120**	-	-
YVD-16	YVD-16-160928	9/28/2016	N	K1611629	0.10	U	-	0.5	U	-	-	-	-	**0.016**	-	-	-	-	-	-	-	-	**5.69**	-	-	**90.2**	-	-	**110**	-	-
YVD-16	YVD-16-161215	12/15/2016	N	K1615126	0.10	U	-	0.5	U	-	-	-	-	**0.068**	-	-	-	-	-	-	-	-	**5.59**	-	-	**82.5**	-	-	**112**	-	-
YVD-16	YVD-030917-22	3/9/2017	N	K1702404	0.10	U	-	0.5	U	-	-	-	-	**0.045**	-	-	-	-	-	-	-	-	**5.16**	-	-	**79.8**	-	-	**113**	-	-
YVD-16	YVD-060517-12	6/5/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.021**	-	-	-	-	-	-	-	-	**5.08**	-	-	**83.0**	-	-	**117**	-	-
YVD-16	YVD-092617-28	9/26/2017	N	K1710381	0.10	U	-	0.5	U	-	-	-	-	**0.016**	-	-	-	-	-	-	-	-	**5.44**	-	-	**84.1**	-	-	**115**	-	-
YVD-16	YVD-120517-22	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.048**	-	-	-	-	-	-	-	-	**5.17**	-	-	**80.1**	-	-	**110**	-	-
YVD-16	YVD-031918-16	3/19/2018	N	870634	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.25**	-	-	**79.0**	-	-	**106**	-	-
YVD-16	YVD-060318-10	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.55**	-	-	**88.0**	-	-	**104**	-	-
YVD-16	YVD-090918-07	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.20**	-	-	**83.5**	-	-	**107**	-	-
YVD-16	YVD-121118-20	12/11/2018	N	884939	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.85**	-	-	**84.0**	-	-	**106**	-	-
YVD-16	YVD-031719-08	3/17/2019	N	988239	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.45**	-	-	**82.0**	-	-	**109**	-	-
YVD-16	YVD-060219-06	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.45**	-	-	**80.5**	-	-	**106**	-	-
YVD-16	YVD-090919-07	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.30**	-	-	**77.0**	-	-	**107**	-	-
YVD-16	YVD-120919-11	12/9/2019	N	902276	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**5.35**	-	-	**79.5**	J	MSD	**106**	-	-
YVD-16	YVD-033120-16	3/31/2020	N	006260	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.35**	-	-	**82.0**	-	-	**107**	-	-
YVD-16	YVD-061020-30	6/10/2020	N	009361	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.20**	--	--	**79.0**	--	--	**106**	--	--
YVD-16	YVD-092020-06	9/20/2020	N	013864	0.050	U	--	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.45**	--	--	**81.0**	--	--	**112**	--	--
YVD-16	YVD-120720-08	12/7/2020	N	017035	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.95**	--	--	**84.0**	--	--	**112**	--	--
YVD-16	YVD-030121-02	3/1/2021	N	119931	0.050	U	--	2.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.25**	--	--	**78.0**	--	--	**113**	--	--
YVD-16	YVD-030121-04	3/1/2021	FD	119931	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.50**	--	--	**79.5**	--	--	**115**	--	--
YVD-16	YVD-060621-03	6/6/2021	N	124053	0.050	U	--	5.0	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**5.03**	--	--	**77.5**	--	--	**111**	--	--
YVD-16	YVD-121421-02	12/14/2021	N	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-16	YVD-121421-03	12/14/2021	FD	K2114499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-17	YVD-17-130919	09/19/2013	N	SWI0142	-	-	-	2.5	U	-	-	-	-	-	-	-	**3.64**	-	-	-	-	-	**8.32**	-	-	**12.2**	-	-	**6.48**	-	-
YVD-17	YVD-17-130924	09/24/2013	N	SWI0175	0.2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-17	YVD-17-131210	12/10/2013	N	SWL0055	0.2	U	-	-	R	FBK, MSD	-	-	-	-	-	-	-	-	-	**1.61**	-	-	**5.25**	-	-	**7.9**	-	-	**6.64**	-	-
YVD-17	YVD-17-140316	03/16/2014	N	SXC0081	0.2	U	-	0.25	U	-	**0.3**	-	-	-	-	-	-	-	-	-	-	-	**1.73**	-	-	**6.1**	-	-	**6.42**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-17	YVD-17-140601	06/01/2014	N	SXF0008	0.2	U	-	**0.287**	-	-	**0.52**	-	-	-	-	-	-	-	-	-	-	-	**2.22**	-	-	**8.7**	-	-	**5.74**	-	-
YVD-17	YVD-17-140922	09/22/2014	N	SXI0148	0.2	U	-	**0.293**	-	-	**0.36**	-	-	-	-	-	-	-	-	-	-	-	**2.91**	-	-	**9.9**	-	-	**5.08**	-	-
YVD-17	YVD-17-141215	12/15/2014	N	SXL0103	0.2	U	-	0.25	U	-	**0.19**	-	-	-	-	-	-	-	-	-	-	-	**1.84**	-	-	**9.2**	-	-	**6.01**	J+	MSD, DUP
YVD-17	YVD-17-150316	03/16/2015	N	5904471	0.2	U	-	0.25	UJ	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**1.40**	-	-	**6.3**	-	-	**5.7**	-	-
YVD-17	YVD-D1-150316	03/16/2015	FD	5904471	0.2	U	-	0.25	UJ	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**1.50**	-	-	**6.2**	-	-	**5.7**	-	-
YVD-17	YVD-17-150617	06/17/2015	N	59010961	0.2	U	-	0.25	UJ	MSD	**0.25**	-	-	-	-	-	-	-	-	-	-	-	**1.80**	J+	MSD	**8.7**	J+	MSD	**5.4**	-	-
YVD-17	YVD-17-150924	09/24/2015	N	59020391	**1.2**	-	-	0.25	UJ	MSD	**0.26**	-	-	-	-	-	-	-	-	-	-	-	**2.00**	-	-	**9.0**	-	-	**5.6**	J-	MSD
YVD-17	YVD-17-151216	12/16/2015	N	59025501	0.2	U	-	-	R	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**1.40**	-	-	**8.0**	-	-	**5.4**	-	-
YVD-17	YVD-17-160310	03/10/2016	N	59029941	0.2	U	-	0.25	UJ	FDP	0.25	U	-	-	-	-	-	-	-	-	-	-	**1.20**	-	-	**6.4**	-	-	**4.8**	J	DUP
YVD-17	YVD-17-160623	6/23/2016	N	59037371	0.2	U	-	0.25	U	-	0.25	U	-	-	-	-	-	-	-	-	-	-	**1.60**	-	-	**8.3**	-	-	**5.3**	-	-
YVD-17	YVD-17-160926	9/26/2016	N	K1611565	0.10	U	-	-	R	MSD	-	-	-	**0.095**	-	-	-	-	-	-	-	-	**1.59**	-	-	**8.3**	-	-	**7.9**	-	-
YVD-17	YVD-17-161215	12/15/2016	N	K1615174	0.10	U	-	0.5	U	-	-	-	-	**0.103**	-	-	-	-	-	-	-	-	**1.46**	-	-	**7.4**	-	-	**6.0**	-	-
YVD-17	YVD-031017-29	3/10/2017	N	K1702448	0.10	U	-	0.5	U	-	-	-	-	**0.038**	-	-	-	-	-	-	-	-	**0.26**	-	-	**5.4**	-	-	**6.26**	-	-
YVD-17	YVD-060617-24	6/6/2017	N	K1705754	0.10	U	-	0.5	U	-	-	-	-	**0.055**	-	-	-	-	-	-	-	-	**1.16**	-	-	**7.81**	-	-	**6.02**	-	-
YVD-17	YVD-092517-08	9/25/2017	N	K1710274	0.10	U	-	0.5	U	-	-	-	-	**0.046**	-	-	-	-	-	-	-	-	**1.73**	-	-	**9.5**	-	-	**7.17**	-	-
YVD-17	YVD-120517-26	12/5/2017	N	K1713091	0.10	U	-	0.5	UJ	MSD	-	-	-	**0.036**	-	-	-	-	-	-	-	-	**1.55**	-	-	**9.87**	-	-	**7.53**	-	-
YVD-17	YVD-060418-20	6/4/2018	N	874662	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**0.78**	-	-	**7.20**	-	-	**6.54**	-	-
YVD-17	YVD-060219-12	6/2/2019	N	991939	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	0.62	U	-	**5.95**	-	-	**3.50**	-	-
YVD-17	YVD-060820-10	6/8/2020	N	009144	0.050	U	--	0.5	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	0.62	U	--	**6.20**	--	--	**6.06**	--	--
YVD-17	YVD-060621-04	6/6/2021	N	124053	0.050	U	--	0.50	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	0.62	U	--	**5.75**	--	--	**5.44**	--	--
YVD-17	YVD-060621-05	6/6/2021	FD	124053	0.050	U	--	0.50	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	0.62	U	--	**5.75**	--	--	**5.31**	--	--
YVD-18	YVD-18-130919	09/19/2013	N	SWI0142	-	-	-	-	R	FBK	-	-	-	-	-	-	0.1	U	-	-	-	-	**3.22**	-	-	**78.3**	-	-	**122**	-	-
YVD-18	YVD-18-130925	09/25/2013	N	SWI0175	2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-18	YVD-18-131211	12/11/2013	N	SWL0073	2	U	-	1.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.06	U	-	**3.02**	-	-	**71.3**	-	-	**116**	-	-
YVD-18	YVD-D2-131211	12/11/2013	FD	SWL0073	2	U	-	0.2	UJ	MSD	-	-	-	-	-	-	-	-	-	0.06	U	-	**3.06**	-	-	**70.9**	-	-	**129**	-	-
YVD-18	YVD-18-140318	03/18/2014	N	SXC0095	2	U	-	**0.358**	-	-	**0.068**	-	-	-	-	-	-	-	-	-	-	-	**3.30**	-	-	**77.5**	-	-	**147**	J-	MSD
YVD-18	YVD-D2-140318	03/18/2014	FD	SXC0095	2	U	-	**0.342**	-	-	**0.082**	-	-	-	-	-	-	-	-	-	-	-	**3.26**	-	-	**78.0**	-	-	**140**	J-	MSD
YVD-18	YVD-18-140603	06/03/2014	N	SXF0017	0.8	U	-	**0.796**	-	-	**0.071**	J+	FBK	-	-	-	-	-	-	-	-	-	**3.24**	-	-	**77.7**	-	-	**135**	J-	MSD
YVD-18	YVD-18-140923	09/23/2014	N	SXI0173	1	U	-	**0.335**	J+	MSD	**0.086**	-	-	-	-	-	-	-	-	-	-	-	**3.80**	-	-	**81.6**	-	-	**111**	-	-
YVD-18	YVD-18-141216	12/16/2014	N	SXL0121	1	U	-	0.25	UJ	MSD	0.1	U	-	-	-	-	-	-	-	-	-	-	**3.63**	-	-	**81.8**	-	-	**131**	-	-
YVD-18	YVD-18-150317	03/17/2015	N	5904541	1	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**87.0**	-	-	**140**	J-	MSD
YVD-18	YVD-18-150617	06/17/2015	N	59010961	1	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**4.10**	J+	MSD	**86.0**	J+	MSD	**120**	-	-
YVD-18	YVD-18-150924	09/24/2015	N	59020391	1	U	-	0.25	UJ	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.50**	-	-	**77.0**	-	-	**140**	J-	MSD
YVD-18	YVD-18-151216	12/16/2015	N	59025501	1	U	-	-	R	MSD	0.25	UJ	MSD	-	-	-	-	-	-	-	-	-	**4.00**	-	-	**91.0**	-	-	**150**	-	-
YVD-18	YVD-18-160309	03/09/2016	N	59029941	1	U	-	0.25	UJ	FDP, MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.80**	-	-	**89.0**	-	-	**150**	J	DUP
YVD-18	YVD-18-160622	6/22/2016	N	59037271	1	U	-	-	R	MSD	0.25	U	-	-	-	-	-	-	-	-	-	-	**3.70**	-	-	**86.0**	-	-	**140**	-	-
YVD-18	YVD-18-160928	9/28/2016	N	K1611629	0.10	U	-	0.5	U	-	-	-	-	**0.013**	-	-	-	-	-	-	-	-	**3.75**	-	-	**83.8**	-	-	**135**	-	-
YVD-18	YVD-18-161214	12/14/2016	N	K1615083	0.10	U	-	0.5	U	-	-	-	-	**0.043**	-	-	-	-	-	-	-	-	**3.69**	-	-	**82.5**	-	-	**139**	-	-
YVD-18	YVD-D3-161214	12/14/2016	FD	K1615083	0.10	U	-	0.5	U	-	-	-	-	**0.019**	-	-	-	-	-	-	-	-	**3.82**	-	-	**84.0**	-	-	**142**	-	-
YVD-18	YVD-030617-05	3/6/2017	N	K1702324	**0.04**	J	HTQ	0.5	U	-	-	-	-	**0.024**	-	-	-	-	-	-	-	-	**3.39**	-	-	**78.8**	-	-	**140**	-	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
YVD-18	YVD-060717-31	6/7/2017	N	K1705833	0.10	U	-	0.5	U	-	-	-	-	**0.018**	-	-	-	-	-	-	-	-	**3.82**	-	-	**81.8**	-	-	**135**	-	-
YVD-18	YVD-092617-27	9/26/2017	N	K1710333	0.10	U	-	0.5	U	-	-	-	-	**0.018**	-	-	-	-	-	-	-	-	**3.64**	-	-	**77.0**	-	-	**137**	-	-
YVD-18	YVD-120417-05	12/4/2017	N	K1713026	0.10	U	-	0.5	U	-	-	-	-	0.017	U	MBK	-	-	-	-	-	-	**3.62**	-	-	**81.6**	-	-	**144**	-	-
YVD-18	YVD-031918-17	3/19/2018	N	870634	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**3.78**	-	-	**83.0**	-	-	**161**	-	-
YVD-18	YVD-060318-07	6/3/2018	N	874568	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.18**	-	-	**88.5**	-	-	**147**	-	-
YVD-18	YVD-090918-12	9/9/2018	N	880601	0.050	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.20**	-	-	**78.0**	-	-	**127**	-	-
YVD-18	YVD-121018-09	12/10/2018	N	884857	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.10**	-	-	**87.0**	-	-	**145**	-	-
YVD-18	YVD-031819-13	3/18/2019	N	988273	0.050	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.22**	-	-	**88.0**	-	-	**171**	-	-
YVD-18	YVD-060319-23	6/3/2019	N	992053	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.09**	-	-	**86.0**	-	-	**161**	-	-
YVD-18	YVD-090919-06	9/9/2019	N	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.08**	-	-	**76.5**	-	-	**130**	-	-
YVD-18	YVD-090919-08	9/9/2019	FD	998357	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	-	**4.09**	-	-	**77.0**	-	-	**130**	-	-
YVD-18	YVD-120919-08	12/9/2019	N	902276	0.050	U		0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U		**4.18**			**86.0**	J	MSD	**157**		
YVD-18	YVD-033020-07	3/30/2020	N	006241	0.050	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.04**	-	-	**87.5**	-	-	**170**	-	-
YVD-18	YVD-060920-19	6/9/2020	N	009269	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**3.98**	--	--	**89.0**	--	--	**155**	--	--
YVD-18	YVD-092120-15	9/21/2020	N	013896	0.050	U	--	0.50	UJ	MSD	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.03**	--	--	**83.0**	--	--	**145**	--	--
YVD-18	YVD-092120-17	9/21/2020	FD	013896	0.050	U	--	2.5	UJ	MSD	-	-	-	-	-	-	-	-	-	**0.07**	--	--	**4.00**	--	--	**83.0**	--	--	**144**	--	--
YVD-18	YVD-120820-15	12/8/2020	N	017137	0.050	U	--	0.5	U	--	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.11**	--	--	**88.0**	--	--	**164**	--	--
YVD-18	YVD-030221-17	3/2/2021	N	120034	0.050	U	--	5.0	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.02**	--	--	**87.0**	--	--	**169**	--	--
YVD-18	YVD-060821-30	6/8/2021	N	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	--	**4.02**	--	--	**85.5**	--	--	**161**	--	--
YVD-18	YVD-121521-12	12/15/2021	N	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YVD-18	YVD-121521-14	12/15/2021	FD	K2114550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Blank	YVD-EB-130918	09/18/2013	EB	SWI0123	0.2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-130925	09/25/2013	EB	SWI0175	0.2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-131212	12/12/2013	EB	SWL0078	0.2	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	0.06	U	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-140317	03/17/2014	EB	SXC0081	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-140318	03/18/2014	EB	SXC0095	0.2	U	-	0.25	U	-	-	-	-	**0.05**	-	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-140319	03/19/2014	EB	SXC0107	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-140604	06/04/2014	EB	SXF0025	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	**1.24**	-	-
Equipment Blank	YVD-EB-140924	09/24/2014	EB	SXI0173	0.2	U	-	**1.2**	-	-	-	-	-	**0.062**	-	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-141217	12/17/2014	EB	SXL0144	0.2	U	-	0.25	U	-	-	-	-	0.1	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-150617	06/17/2015	EB	59011021	0.2	U	-	**0.37**	-	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-150925	09/25/2015	EB	59020431	0.2	U	-	**0.38**	-	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-151216	12/16/2015	EB	59025501	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-160310	03/10/2016	EB	59029941	0.2	U	-	**1.9**	-	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	**1.1**	-	-	0.5	U	-
Equipment Blank	YVD-EB-160623	6/23/2016	EB	59037371	0.2	U	-	**0.43**	-	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Equipment Blank	YVD-EB-160926	9/26/2016	EB	K1611506	0.10	U	-	-	R	MSD	-	-	-	0.01	U	-	-	-	-	-	-	-	**0.1**	J	-	**0.13**	J	-	0.2	U	-
Equipment Blank	YVD-EB-160927	9/27/2016	EB	K1611629	0.05	UJ	HTQ	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.2	U	-	**0.04**	J	-	**0.08**	J	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
Equipment Blank	YVD-EB-160928	9/28/2016	EB	K1611629	0.05	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.2	U	-	**0.04**	J	-	**0.51**	-	-
Equipment Blank	YVD-EB1-161214	12/14/2016	EB	K1615083	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	-	0.2	U	-
Equipment Blank	YVD-EB2-161215	12/15/2016	EB	K1615126	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	MBK	0.2	U	-
Equipment Blank	YVD-EB3-161216	12/16/2016	EB	K1615174	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	MBK	**0.4**	-	-
Field Blank	YVD-F1-130916	09/16/2013	FB	SWI0113	0.2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1	U	-	0.5	U	-	**0.53**	-	-
Field Blank	YVD-F2-130917	09/17/2013	FB	SWI0113	0.2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1	U	-	0.5	U	-	**0.51**	-	-
Field Blank	YVD-F3-130918	09/18/2013	FB	SWI0123	0.2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-130918	09/18/2013	FB	SWI0138	0.2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F5-130919	09/19/2013	FB	SWI0142	-	-	-	**0.373**	-	-	-	-	-	-	-	-	**0.243**	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F6-130923	09/23/2013	FB	SWI0178	-	-	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1	U	-	0.5	U	-	-	-	-
Field Blank	YVD-F7-130924	09/24/2013	FB	SWI0175	0.2	U	-	0.25	U	-	-	-	-	-	-	-	0.1	U	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F7-130926	09/26/2013	FB	SWI0190	0.2	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	U	-
Field Blank	YVD-F1-131209	12/09/2013	FB	SWL0055	0.2	U	-	**0.33**	-	-	-	-	-	-	-	-	-	-	-	0.06	U	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-131210	12/10/2013	FB	SWL0063	0.2	U	-	**3.7**	-	-	-	-	-	-	-	-	-	-	-	0.06	U	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-131211	12/11/2013	FB	SWL0073	0.2	U	-	**0.43**	-	-	-	-	-	-	-	-	-	-	-	0.06	U	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-131212	12/12/2013	FB	SWL0078	0.2	U	-	0.2	U	-	-	-	-	-	-	-	-	-	-	0.06	U	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-140316	03/16/2014	FB	SXC0081	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-140317	03/17/2014	FB	SXC0095	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-140318	03/18/2014	FB	SXC0107	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-140319	03/19/2014	FB	SXC0107	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-140601	06/01/2014	FB	SXF0008	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-140602	06/02/2014	FB	SXF0017	0.2	U	-	0.25	U	-	-	-	-	**0.061**	-	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-140603	06/03/2014	FB	SXF0025	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-140921	09/21/2014	FB	SXI0148	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-140922	09/22/2014	FB	SXI0148	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-140923	09/23/2014	FB	SXI0158	0.2	U	-	0.25	U	-	-	-	-	0.05	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-140924	09/24/2014	FB	SXI0173	0.2	U	-	0.25	U	-	-	-	-	**0.054**	-	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-141215	12/15/2014	FB	SXL0103	0.2	U	-	0.25	U	-	-	-	-	0.1	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	UJ	DUP
Field Blank	YVD-F2-141215	12/15/2014	FB	SXL0108	0.2	U	-	0.25	U	-	-	-	-	0.1	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-141216	12/16/2014	FB	SXL0121	0.2	U	-	0.25	U	-	-	-	-	0.1	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-141217	12/17/2014	FB	SXL0144	-	R	HTQ	0.25	U	-	-	-	-	0.1	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-150315	03/15/2015	FB	5904471	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-150316	03/16/2015	FB	5904541	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-150317	03/17/2015	FB	5904651	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-150615	06/15/2015	FB	59010751	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-150616	06/16/2015	FB	59010961	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-150617	06/17/2015	FB	59011021	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-150922	09/22/2015	FB	59020141	0.2	U	-	**0.26**	-	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-150923	09/23/2015	FB	59020281	0.2	U	-	0.25	U	-	-	-	-	**0.26**	-	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-150923	09/23/2015	FB	59020391	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-150924	09/24/2015	FB	59020391	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F5-150925	09/25/2015	FB	59020431	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-151213	12/13/2015	FB	59025351	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-151214	12/14/2015	FB	59025431	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-151215	12/15/2015	FB	59025501	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-151216	12/16/2015	FB	59025501	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-

Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
Field Blank	YVD-F1-160307	03/07/2016	FB	59029521	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-160308	03/08/2016	FB	59029711	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-160309	03/09/2016	FB	59029941	0.2	U	-	**0.3**	-	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-160310	03/10/2016	FB	59029941	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F1-160620	6/20/2016	FB	59037101	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F2-160621	6/21/2016	FB	59037151	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F3-160622	6/22/2016	FB	59037271	0.2	U	-	**0.36**	-	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-F4-160623	6/23/2016	FB	59037371	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Field Blank	YVD-FB-160926	9/26/2016	FB	K1611506	0.10	U	-	-	R	MSD	-	-	-	0.01	U	-	-	-	-	-	-	-	**0.08**	J	-	**0.03**	J	-	0.2	U	-
Field Blank	YVD-FB-160927	9/27/2016	FB	K1611565	0.10	U	-	-	R	MSD	-	-	-	0.01	U	-	-	-	-	-	-	-	0.2	U	-	0.2	U	-	0.2	U	-
Field Blank	YVD-FB-160928	9/28/2016	FB	K1611629	0.05	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.2	U	-	**0.05**	J	-	**3.61**	-	-
Field Blank	YVD-FB-160929	9/29/2016	FB	K1611698	0.10	U	-	-	R	MSD	-	-	-	0.01	U	-	-	-	-	-	-	-	0.2	U	-	**0.05**	J	-	0.2	U	-
Field Blank	YVD-FB1-161212	12/12/2016	FB	K1615029	0.10	UJ	HTQ	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	MBK	0.2	U	MBK
Field Blank	YVD-FB2-161213	12/13/2016	FB	K1615045	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	MBK	0.2	U	-
Field Blank	YVD-FB3-161214	12/14/2016	FB	K1615083	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	MBK	**0.35**	-	-
Field Blank	YVD-FB4-161215	12/15/2016	FB	K1615126	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	MBK	0.2	U	-
Field Blank	YVD-FB5-161216	12/16/2016	FB	K1615174	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	MBK	0.2	U	-
Field Blank	YVD-030617-01	3/6/2017	FB	K1702228	0.10	U	-	**0.2**	J	-	-	-	-	0.01	U	-	-	-	-	-	-	-	**0.08**	J	-	**0.04**	J	-	0.2	U	-
Field Blank	YVD-030717-06	3/7/2017	FB	K1702324	0.10	UJ	HTQ	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	-	0.2	U	-
Field Blank	YVD-030817-11	3/8/2017	FB	K1702324	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	-	0.03	J	-
Field Blank	YVD-030917-17	3/9/2017	FB	K1702404	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	-	0.2	U	-
Field Blank	YVD-031017-26	3/10/2017	FB	K1702448	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	-	0.26	-	-
Field Blank	YVD-031317-30	3/13/2017	FB	K1702489	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	-	0.2	U	-
Field Blank	YVD-060417-01	6/4/2017	FB	K1705702	21	U	-	**0.7**	-	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.021	U	-	**0.11**	J	-	5.3	U	-
Field Blank	YVD-060517-07	6/5/2017	FB	K1705702	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	**0.06**	J	-	**0.11**	J	-	**0.25**	-	-
Field Blank	YVD-060617-17	6/6/2017	FB	K1705754	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	-	0.2	U	-
Field Blank	YVD-060717-28	6/7/2017	FB	K1705833	0.10	U	-	0.5	U	-	-	-	-	0.01	U	-	-	-	-	-	-	-	0.21	U	-	**0.02**	J	-	0.2	U	-
Field Blank	YVD-092517-01	9/25/2017	FB	K1710274	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	0.21	U	MBK	0.21	U	MBK	0.20	U	-
Field Blank	YVD-092617-16	9/26/2017	FB	K1710333	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	**0.09**	J	-	0.21	U	MBK	**0.86**	-	-
Field Blank	YVD-120417-01	12/4/2017	FB	K1713026	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	-	0.20	U	-
Field Blank	YVD-120517-32	12/5/2017	FB	K1713091	0.10	UJ	HTQ	0.5	UJ	MSD	-	-	-	0.010	U	-	-	-	-	-	-	-	0.21	U	-	**0.07**	J	-	**0.71**	-	-
Field Blank	YVD-120617-25	12/6/2017	FB	K1713157	0.10	U	-	0.5	U	-	-	-	-	0.010	U	-	-	-	-	-	-	-	0.21	U	-	0.21	U	MBK	0.20	U	-
Field Blank	YVD-031818-01	3/18/2018	FB	870610	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-031918-10	3/19/2018	FB	870634	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-060318-01	6/3/2018	FB	874568	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-060418-12	6/4/2018	FB	874568	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-060518-26	6/5/2018	FB	874860	0.05	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-061218-33	6/12/2018	FB	875438	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-090918-01	9/9/2018	FB	880601	0.05	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-121018-01	12/10/2018	FB	884857	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-121118-12	12/11/2018	FB	884939	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-031719-01	3/17/2019	FB	988239	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-031819-11	3/18/2019	FB	988273	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-032019-20	3/20/2019	FB	988477	0.05	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-060219-01	6/2/2019	FB	991939	0.05	U	-	-	R	MSD	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	**0.46**	-	-
Field Blank	YVD-060319-13	6/3/2019	FB	992053	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	**0.34**	-	-
Field Blank	YVD-060419-26	6/4/2019	FB	992242	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	**0.13**	-	-
Field Blank	YVD-090919-01	9/9/2019	FB	998357	0.05	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-090919-03	9/9/2019	FB	998357	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-

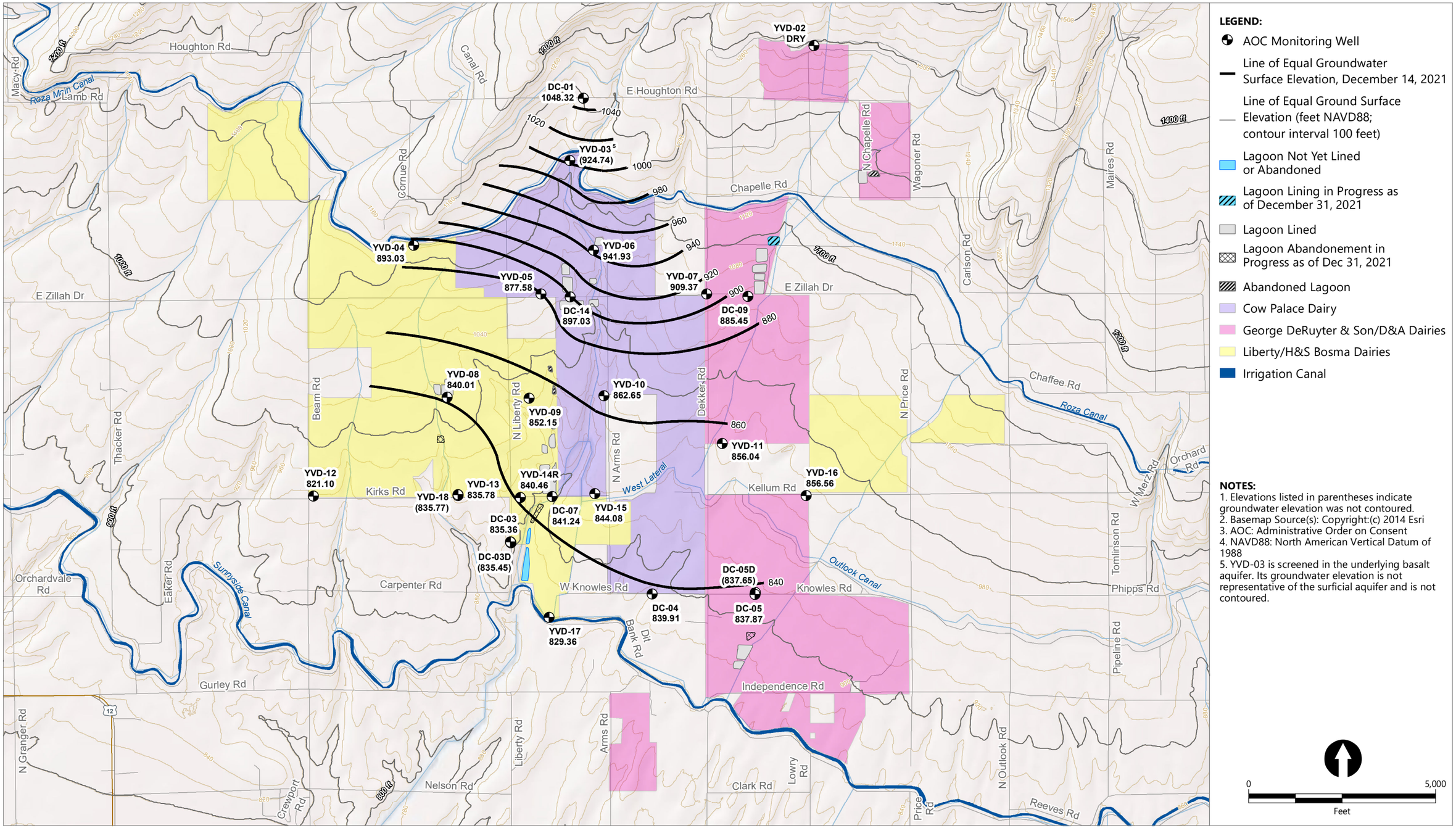
Table 8
Historical Groundwater Analytical Results

Analyte					Nitrite (as N)			Total Kjeldahl Nitrogen			Phosphorus			Phosphorus			Phosphorus			Phosphorus			Potassium			Sodium			Sulfate		
Analytical Method					EPA 300.0			EPA 351.2			EPA 365.1			EPA 365.3			EPA 365.4			SM 4500 P-E			EPA 200.7			EPA 200.7			EPA 300.0		
Well ID	Sample Name	Sample Date	Sample Type	Sample Group	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code	Result (mg/L)	Qualifier	Validation Code
Field Blank	YVD-091019-15	9/10/2019	FB	998438	0.05	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-091019-17	9/10/2019	FB	998438	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-120919-01	12/9/2019	FB	902276	0.05	U	-	0.5	UJ	MSD	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-120919-09	12/9/2019	FB	902276	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-121019-16	12/10/2019	FB	902321	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-121019-18	12/10/2019	FB	902321	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-033020-01	3/30/2020	FB	006241	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-033020-03	3/30/2020	FB	006241	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-033120-13	3/31/2020	FB	006260	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-033120-15	3/31/2020	FB	006260	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-060820-01	6/8/2020	FB	009144	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-060820-02	6/8/2020	FB	009144	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-060920-11	6/9/2020	FB	009269	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-060920-13	6/9/2020	FB	009269	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-061020-29	6/10/2020	FB	009361	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-061020-28	6/10/2020	FB	009361	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-092020-01	9/20/2020	FB	013864	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-092020-02	9/20/2020	FB	013864	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-092120-10	9/21/2020	FB	013896	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-092120-12	9/21/2020	FB	013896	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-120720-01	12/7/2020	FB	017035	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-120720-03	12/7/2020	FB	017035	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-120820-16	12/8/2020	FB	017137	0.05	U	-	0.5	U	-	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-120820-18	12/8/2020	FB	017137	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-030121-01	3/1/2021	FB	119931	0.05	U	-	1.1	J	MS	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-030121-03	3/1/2021	FB	119931	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-030221-11	3/2/2021	FB	120034	0.05	U	-	0.8	J	MS	-	-	-	-	-	-	-	-	-	0.07	U	-	0.62	U	-	0.7	U	-	0.1	U	-
Field Blank	YVD-030221-13	3/2/2021	FB	120034	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-
Field Blank	YVD-060621-01	6/6/2021	FB	124053	0.050	U	-	0.50	U	-	-	-	-	-	-	-	-	-	-	0.070	U	-	0.62	U	-	0.70	U	-	0.10	U	-
Field Blank	YVD-060621-02	6/6/2021	FB	124053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Blank	YVD-060721-11	6/7/2021	FB	124105	0.050	U	--	0.8	J	MS,RPD	-	-	-	-	-	-	-	-	-	0.070	U	-	0.62	U	-	0.70	U	-	0.10	U	-
Field Blank	YVD-060721-12	6/7/2021	FB	124105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Blank	YVD-060821-20	6/8/2021	FB	124212	0.050	U	--	0.50	UJ	MS	-	-	-	-	-	-	-	-	-	0.070	U	-	0.62	U	-	0.70	U	-	0.10	U	-
Field Blank	YVD-060821-21	6/8/2021	FB	124212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Blank	YVD-121421-01	12/14/2021	FB	K2114499																											
Field Blank	YVD-121521-13	12/15/2021	FB	K2114550																											
Blank Check	WW-1	4/25/2016	BC	59032861	40	U	-	**1.4**	-	-	-	-	-	0.25	U	-	-	-	-	-	-	-	**190**	-	-	**400**	-	-	100	U	-
Blank Check	DW-1	4/25/2016	BC	59032861	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-
Blank Check	DI-1	4/25/2016	BC	59032861	0.2	U	-	0.25	U	-	-	-	-	0.25	U	-	-	-	-	-	-	-	1	U	-	0.5	U	-	0.5	U	-

Table 8
Historical Groundwater Analytical Results

Notes:
Bold: detected result
- : not applicable
(as N): reported as nitrogen
(as CaCO3): reported as calcium carbonate
BC: blank check
DUP: Laboratory duplicate relative percent difference was outside acceptance limits.
EB: equipment blank
EPA: U.S. Environmental Protection Agency
ERL: elevated reporting limit
FB: field blank
FBK: field blank contamination
FD: field duplicate
FDP: Field duplicate relative percent difference exceeded acceptance limits.
HTQ: Analysis completed outside of the designated holding time.
J: The compound was positively identified; however, the associated numerical value is an estimated concentration.
J-: The result is an estimated quantity, but the result may be biased low.
J+: The result is an estimated quantity, but the result may be biased high.
MBK: method blank contamination
mg/L: milligrams per liter
MSD: The matrix spike/matrix spike duplicate percent recoveries were outside target limits.
N: normal sample
NR: Sample did not meet collection criteria; not a representative sample.
NS: Not sampled
PRS: Incorrect sample preservation.
R: The sample results are rejected as unusable. The compound may or may not be present in the sample.
RPD: Relative percent difference was outside acceptance limits.
SM: Standard Method
U: The compound was analyzed for but not detected. The associated value is the compound reporting limit, or the compound is considered non-detect at the listed value due to associated blank contamination.
UJ: The compound was not detected above the reported sample reporting limit; however, the reporting limit is approximate and may or may not represent the actual limit of quantitation.

Figures



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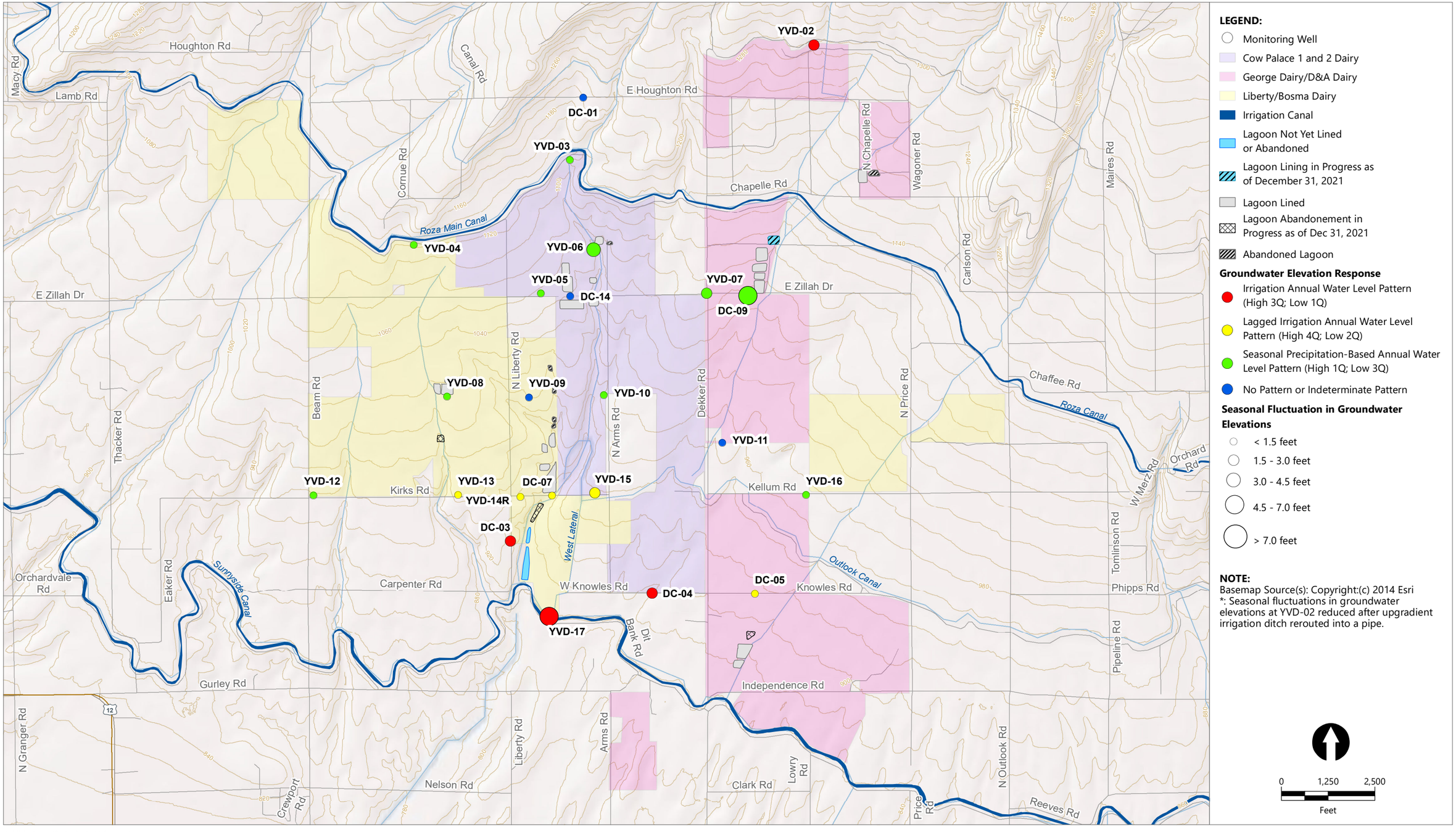
ANCHOR QEA

Figure 1
Surficial Aquifer Groundwater Elevation Contour Map Fourth Quarter 2021
Groundwater Monitoring Data Report – Fourth Quarter 2021
Yakima Valley Dairies



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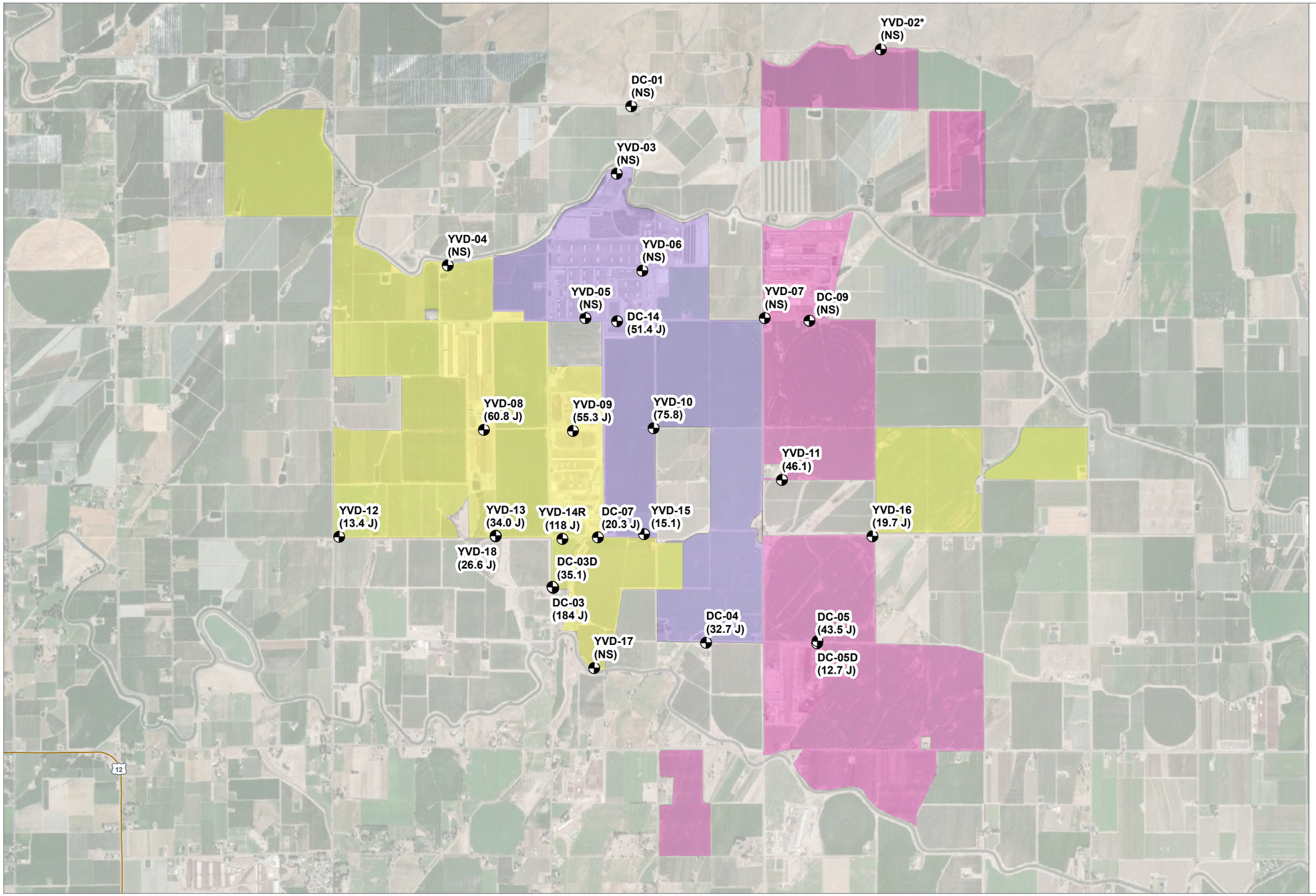
ANCHOR QEA

Figure 2
Seasonal Groundwater Elevation Patterns
Groundwater Monitoring Data Report – Fourth Quarter 2021
Yakima Valley Dairies



LEGEND:

- Monitoring Well
- Cow Palace Dairy
- George DeRuyter & Son/D&A Dairies
- Liberty/H&S Bosma Dairies

NOTES:

1. All concentrations are in milligrams per liter (mg/L).
2. AOC monitoring wells sampled on December 14 to December 15, 2021.
3. Aerial Photo Source: Esri (2017).
4. NS: Not Sampled
5. *: Well dry and could not be sampled
6. J: The compound was positively identified; however the associated numerical value is an estimated concentration.

0 2,000
Feet

Publish Date: 2022/01/25, 8:41 AM | User: alesueur
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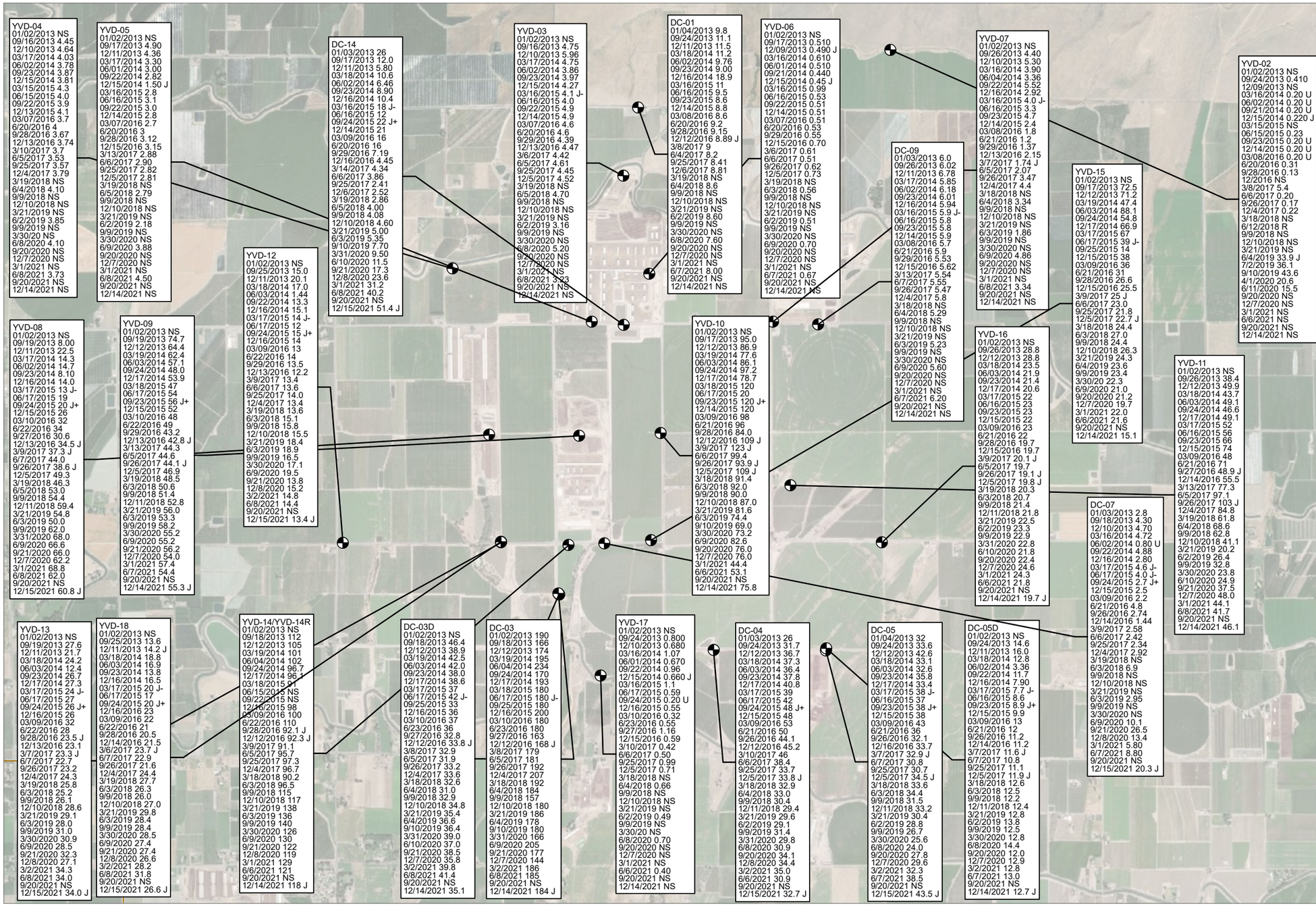
ANCHOR QEA

Figure 3
Nitrate Concentrations in Groundwater Fourth Quarter 2021
Fourth Quarter 2021 Groundwater Monitoring Data Report
Yakima Valley Dairies



LEGEND:

Monitoring Well

NOTES:

1. All concentrations are in milligrams per liter (mg/L).
2. First Quarter 2013 samples collected by the U.S. Environmental Protection Agency.
3. Well YVD-14R replaced damaged well YVD-14 prior to Fourth Quarter 2015.
4. Qualifiers and notations:
NS: Not sampled.
U: The compound was analyzed for but not detected. The associated value is the compound reporting limit or the compound is considered non-detect at the listed value due to associated blank contamination.
UJ: The compound was not detected above the reported sample reporting limit; however, the reported limit is approximate and may or may not represent the actual limit of quantitation.
R: The sample results are rejected as unusable. The compound may or may not be present in the sample.
J: The compound was positively identified; however, the associated numerical value is an estimated concentration.
J-: The result is an estimated quantity, but the result may be biased low.
J+: The result is an estimated quantity, but the result may be biased high.
5. Aerial Photo Source: Esri (2017).

0 2,000
Feet

Publish Date: 2022/01/18, 11:43 AM | User: alesueur
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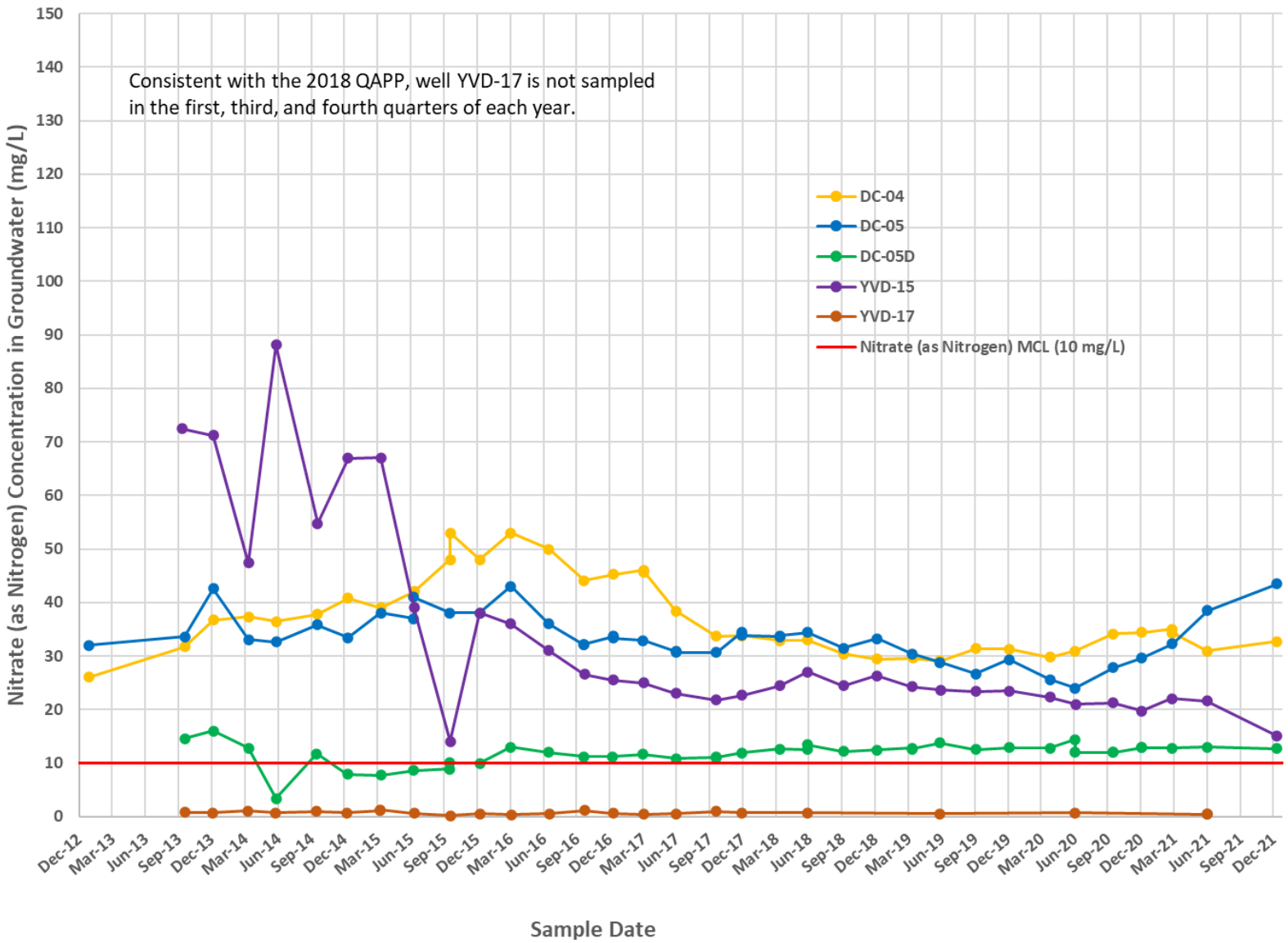
Figure 4
Historical Nitrate Concentrations in Groundwater
Fourth Quarter 2021 Groundwater Monitoring Data Report
Yakima Valley Dairies

DRAFT



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ANCHOR QEA

Figure 5
Nitrate Concentrations – East Downgradient Wells
Fourth Quarter 2021 Groundwater Monitoring Data Report
Yakima Valley Dairies

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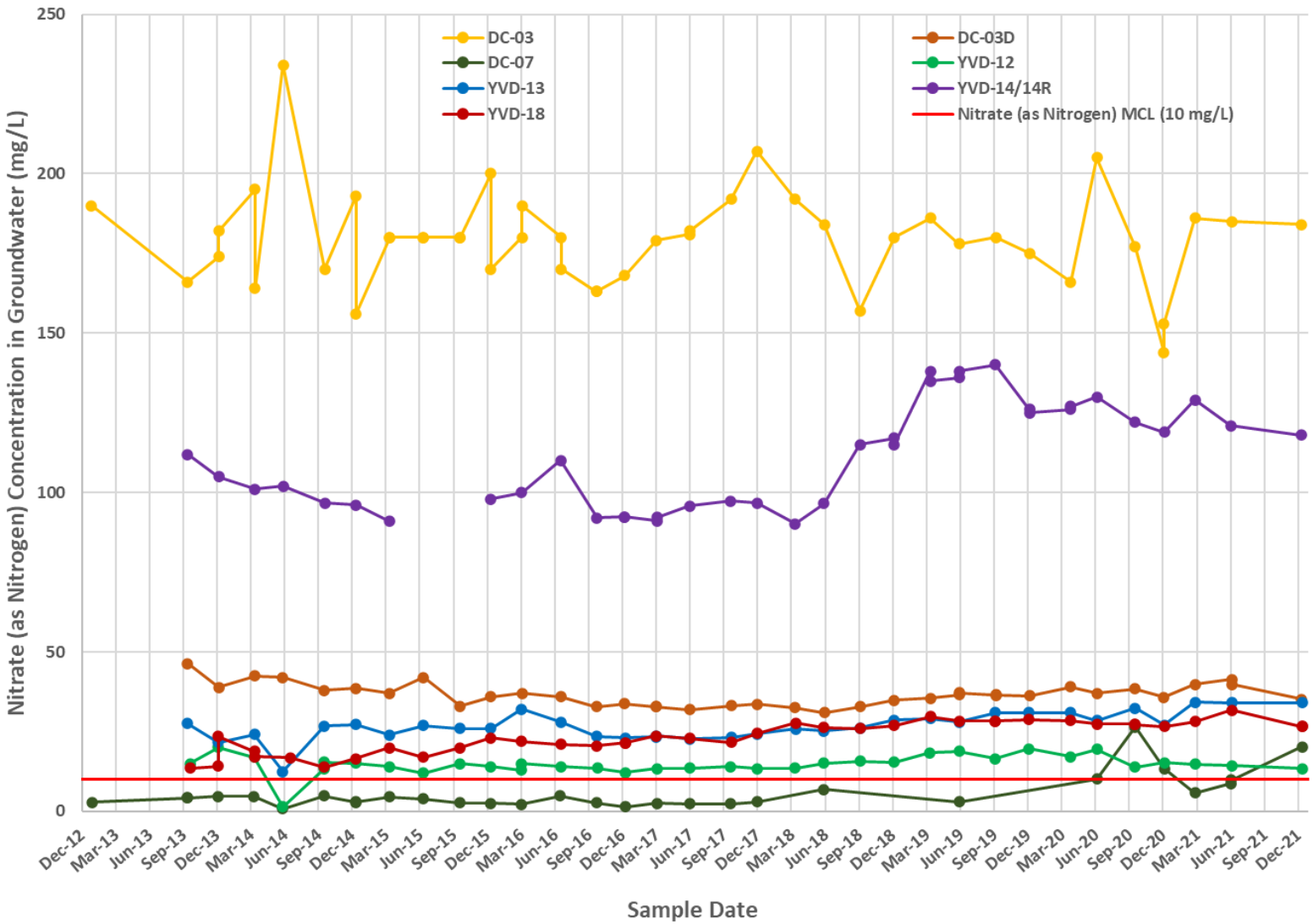

Note: In December 2015, YVD-14R was installed approximately 20 feet to the west of YVD-14, which was decommissioned. Beginning in Third Quarter 2020, quarterly sampling was resumed at well DC-07 due to elevated nitrate concentrations detected in Second Quarter 2020.

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ANCHOR QEA

Figure 6

Nitrate Concentrations – West Downgradient Wells

Fourth Quarter 2021 Groundwater Monitoring Data Report
Yakima Valley Dairies

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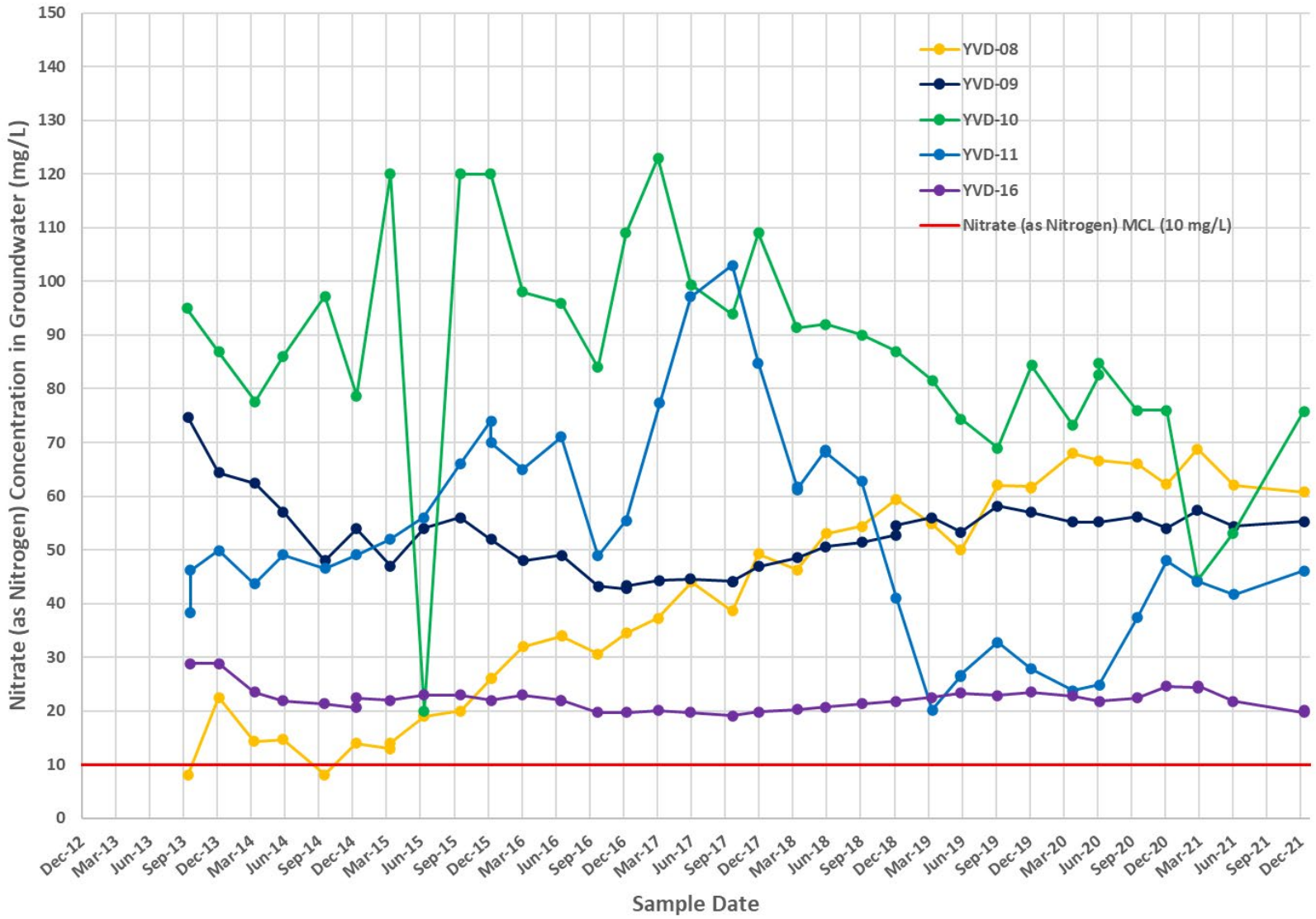

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ANCHOR QEA

Figure 7
Nitrate Concentrations – Central Downgradient Wells
Fourth Quarter 2021 Groundwater Monitoring Data Report
Yakima Valley Dairies

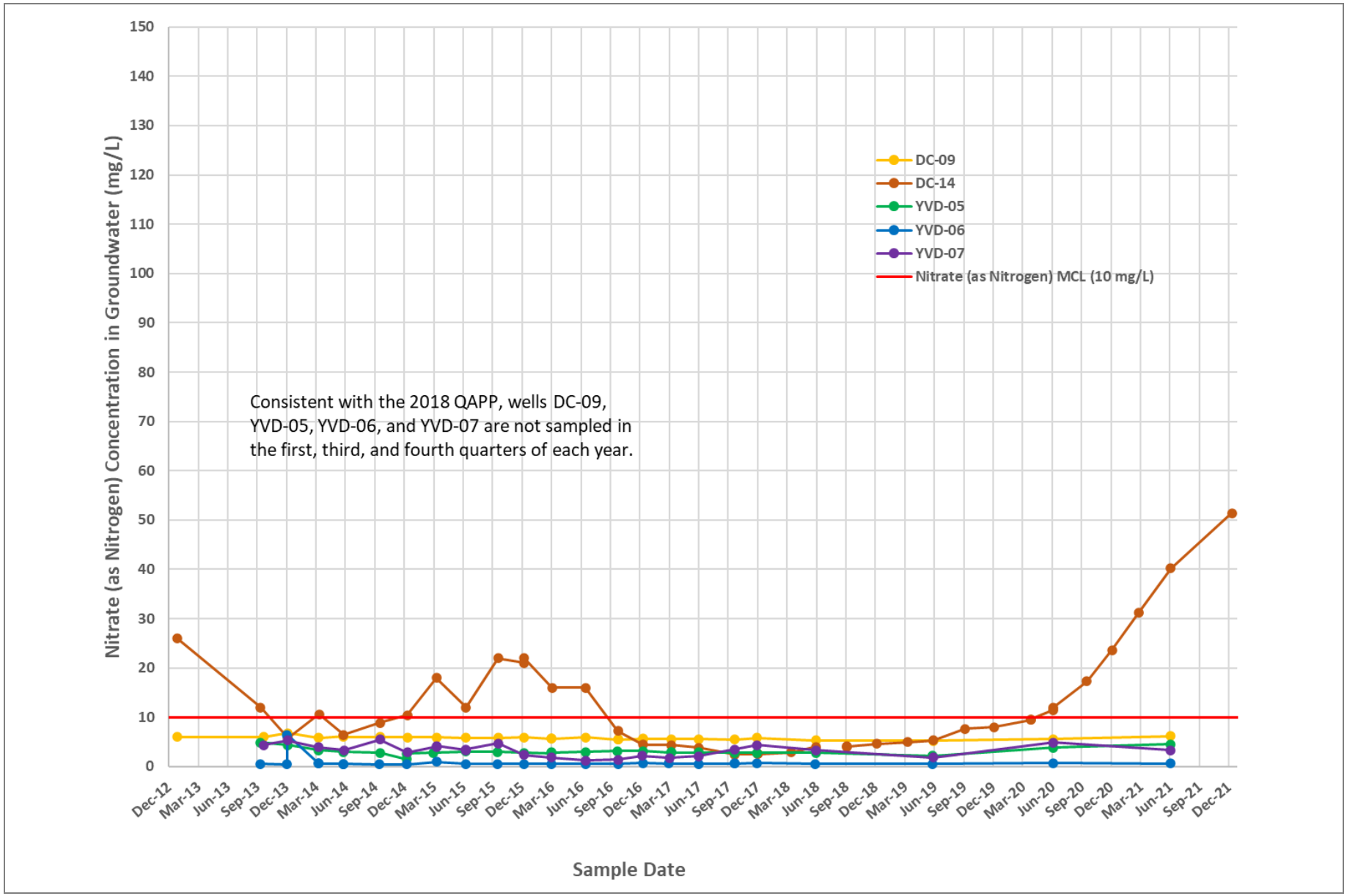

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Figure 8
Nitrate Concentrations – Northern Downgradient Wells
Fourth Quarter 2021 Groundwater Monitoring Data Report
Yakima Valley Dairies

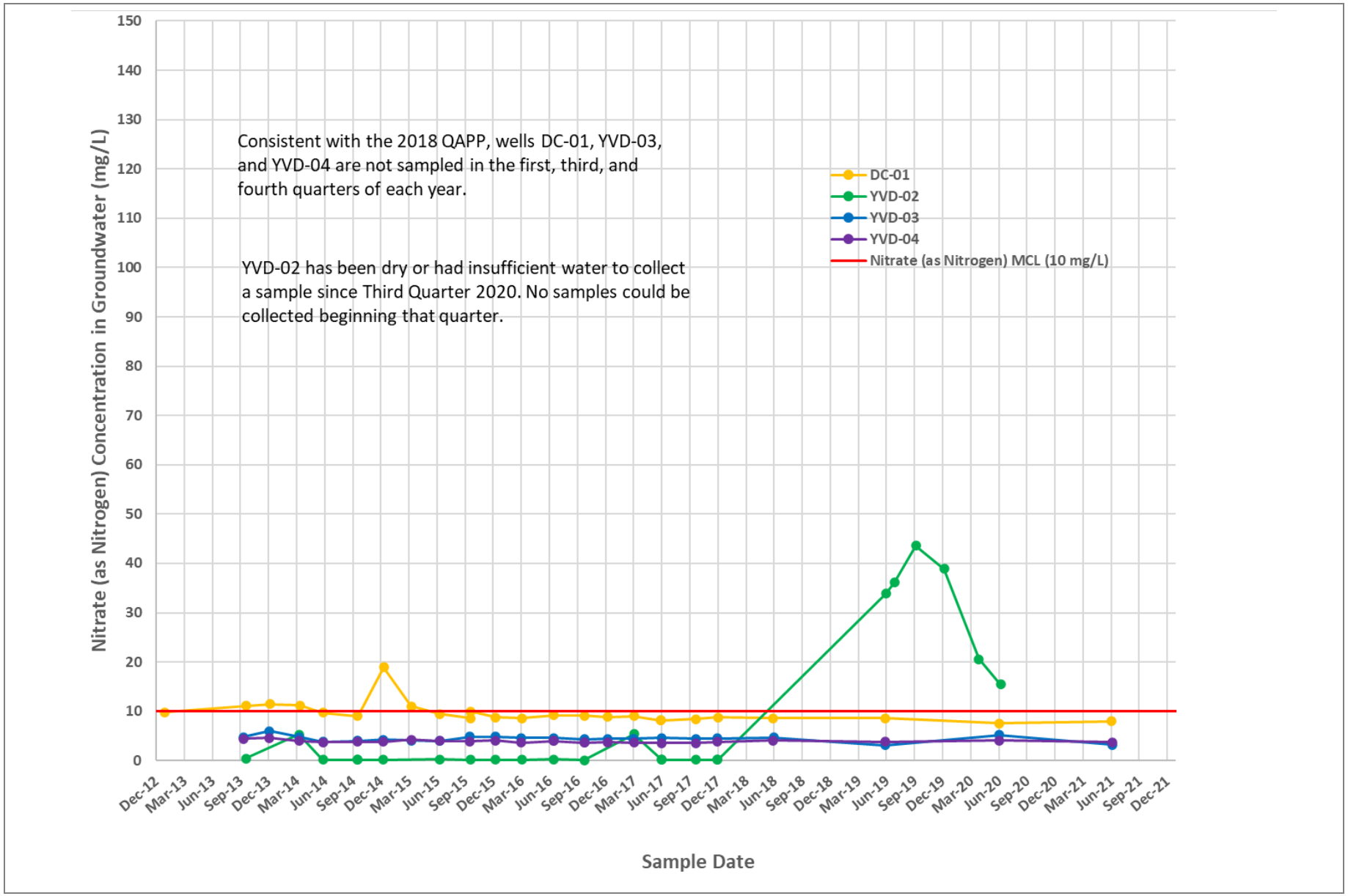

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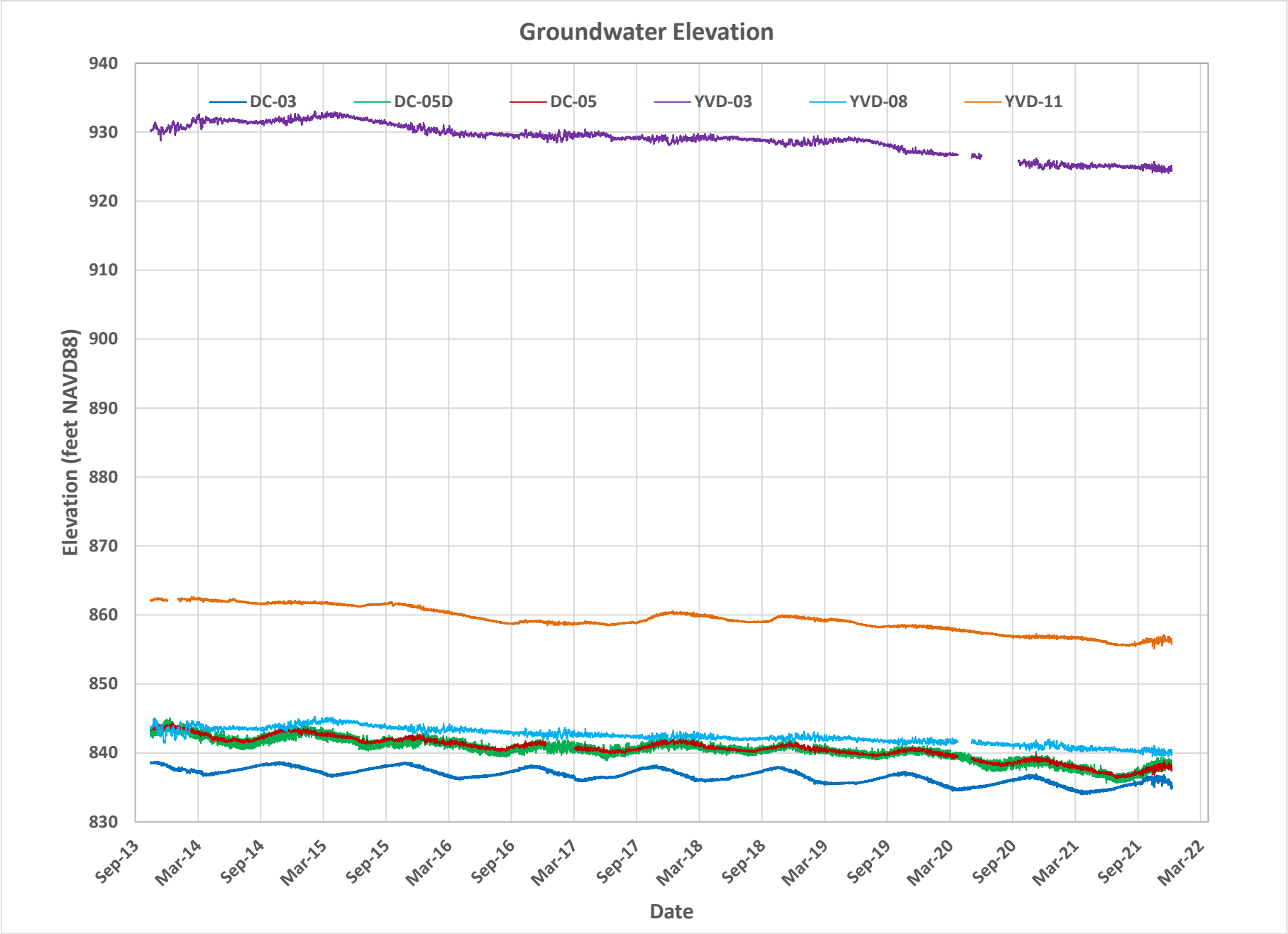
Figure 9
Nitrate Concentrations – Upgradient Wells
Fourth Quarter 2021 Groundwater Monitoring Data Report
Yakima Valley Dairies

Appendix A
Groundwater Hydrographs


Groundwater Elevation
DC-03
DC-05D
DC-05
YVD-03
YVD-08
YVD-11
Elevation (feet NAVD88)
940
930
920
910
900
890
880
870
860
850
840
830
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
Mar-18
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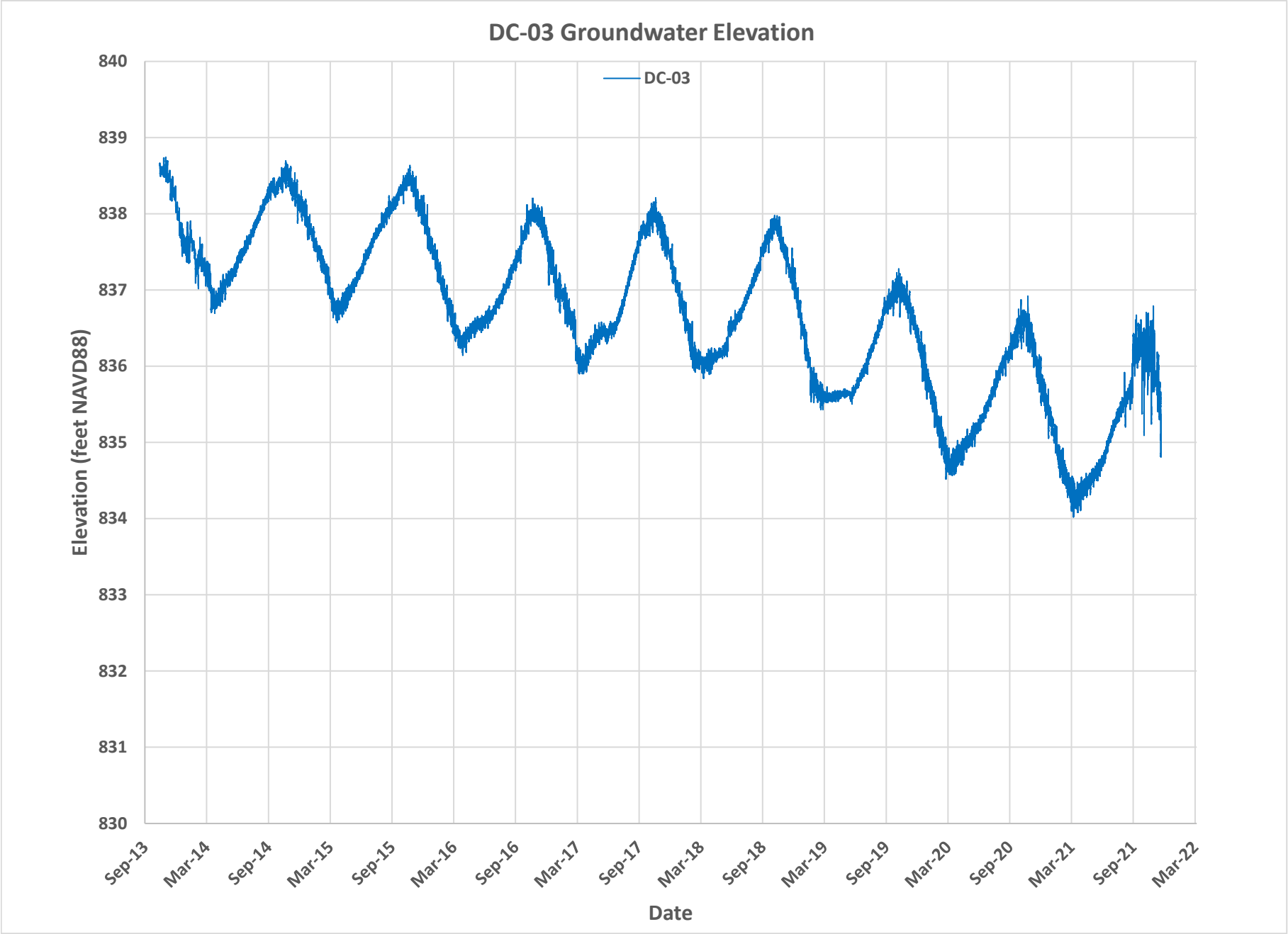
Mar-19
Sep-19
Mar-20
Sep-20
Mar-21
Sep-21
Mar-22
Date


DC-03 Groundwater Elevation
DC-03
Elevation (feet NAVD88)
840
839
838
837
836
835
834
833
832
831
830
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
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Mar-18
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Sep-19
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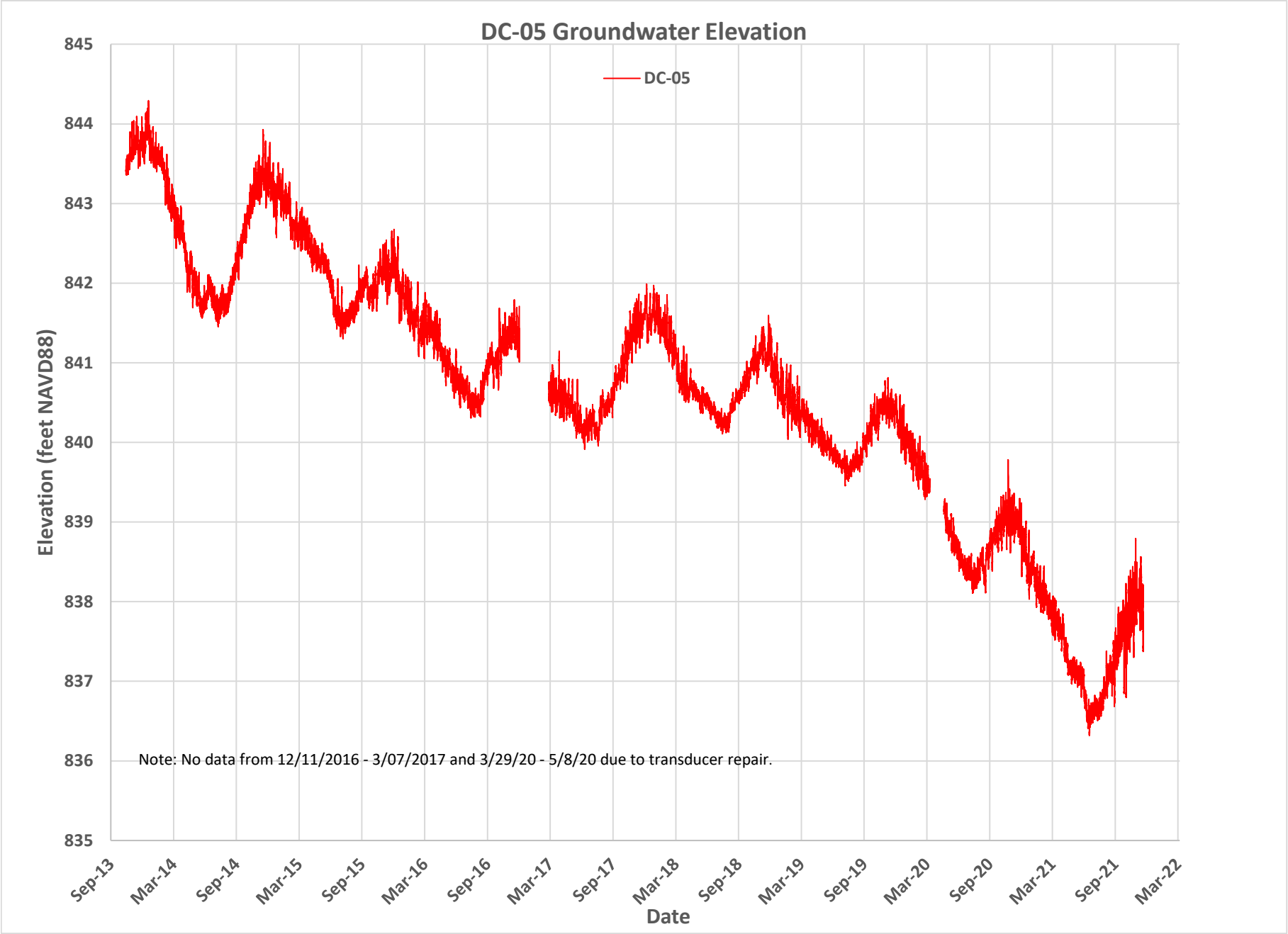
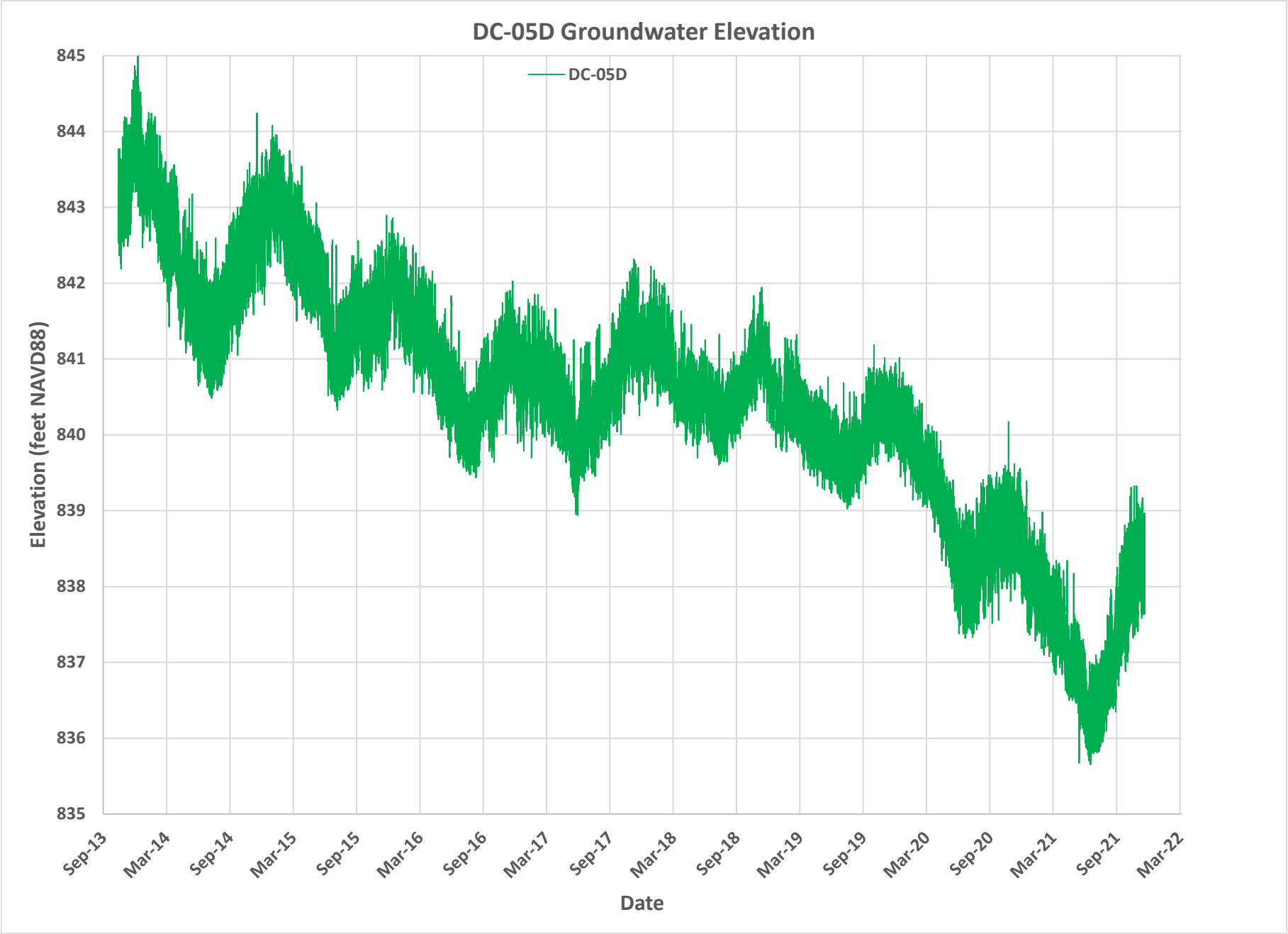
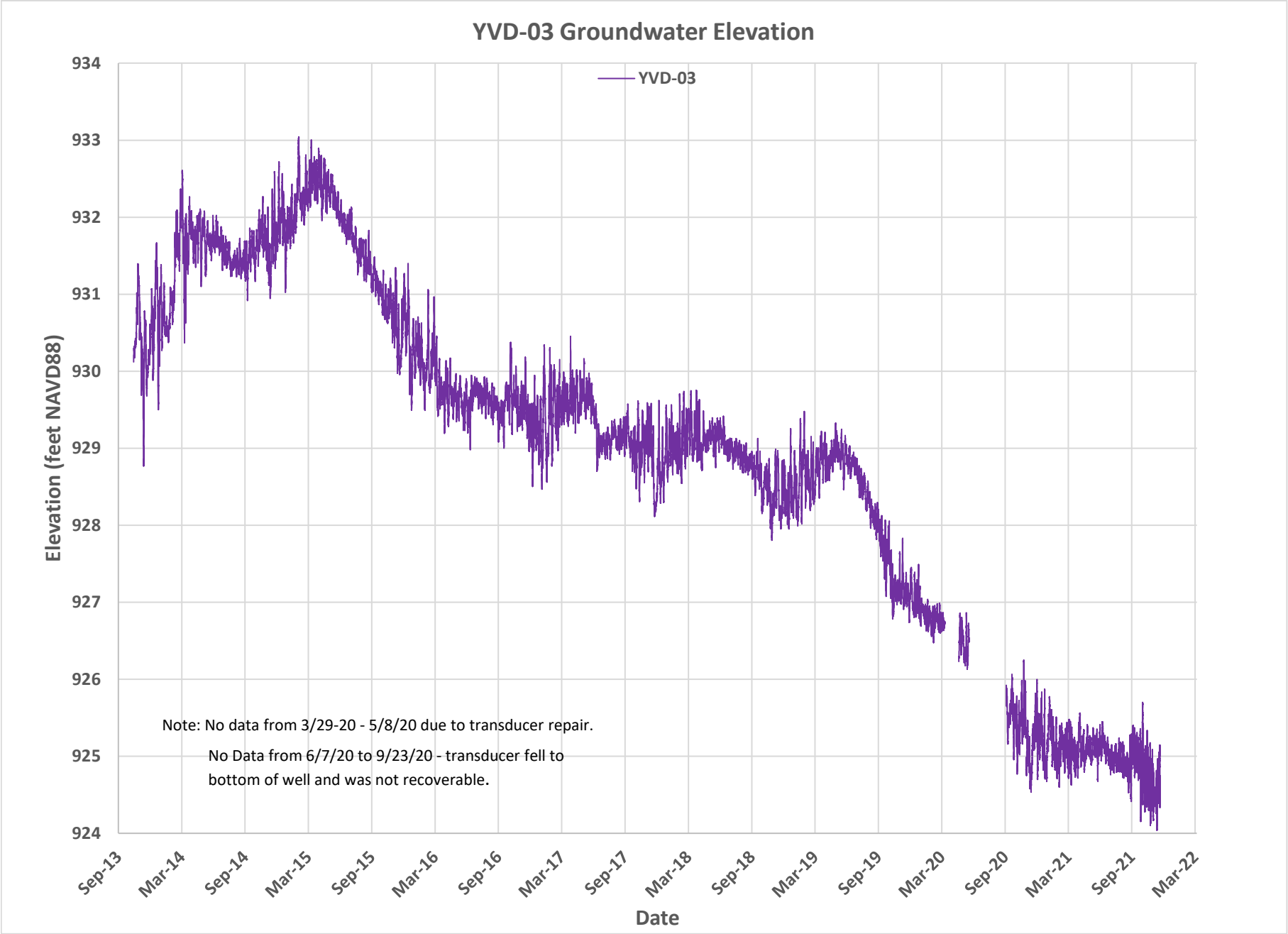
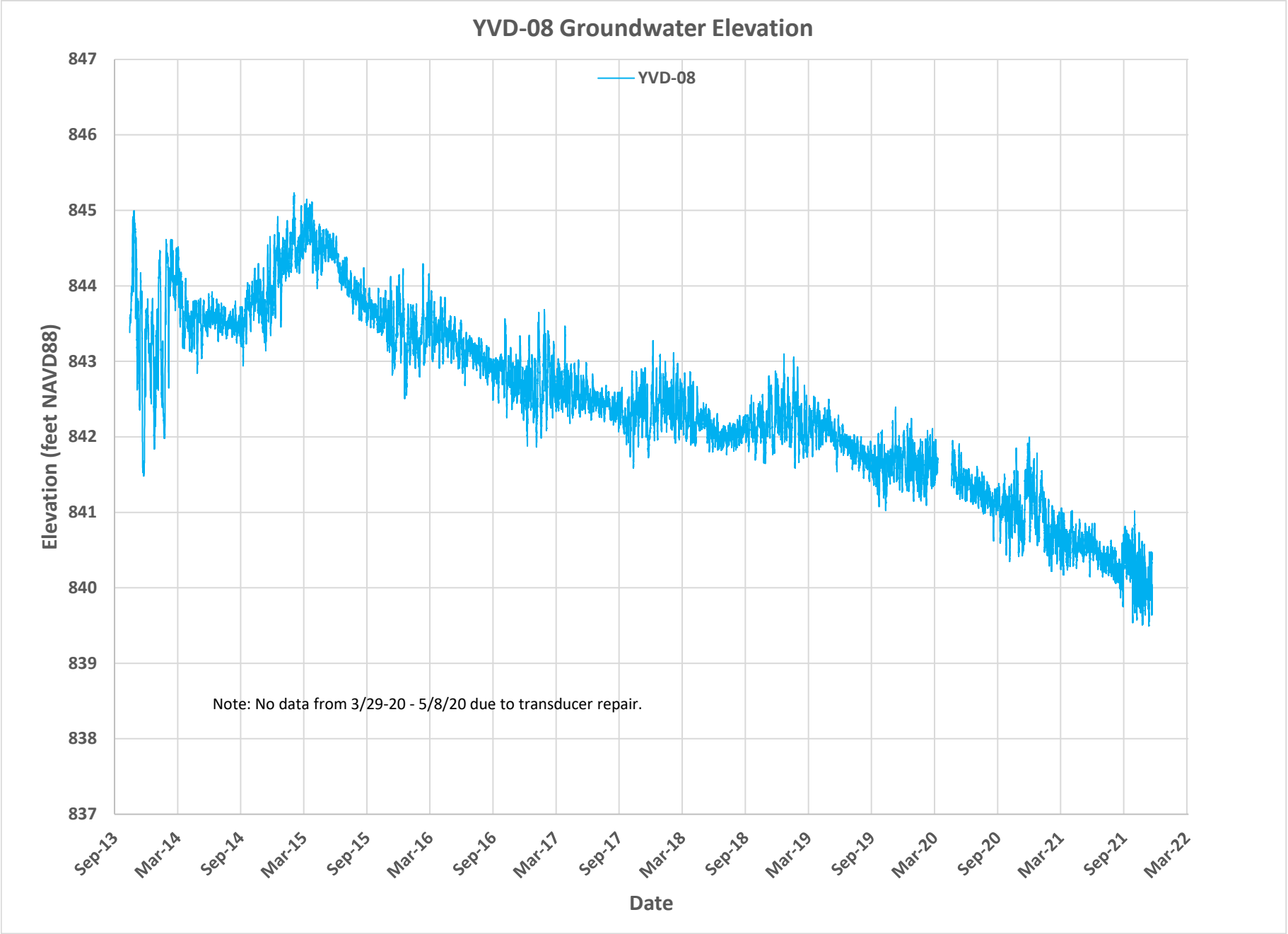
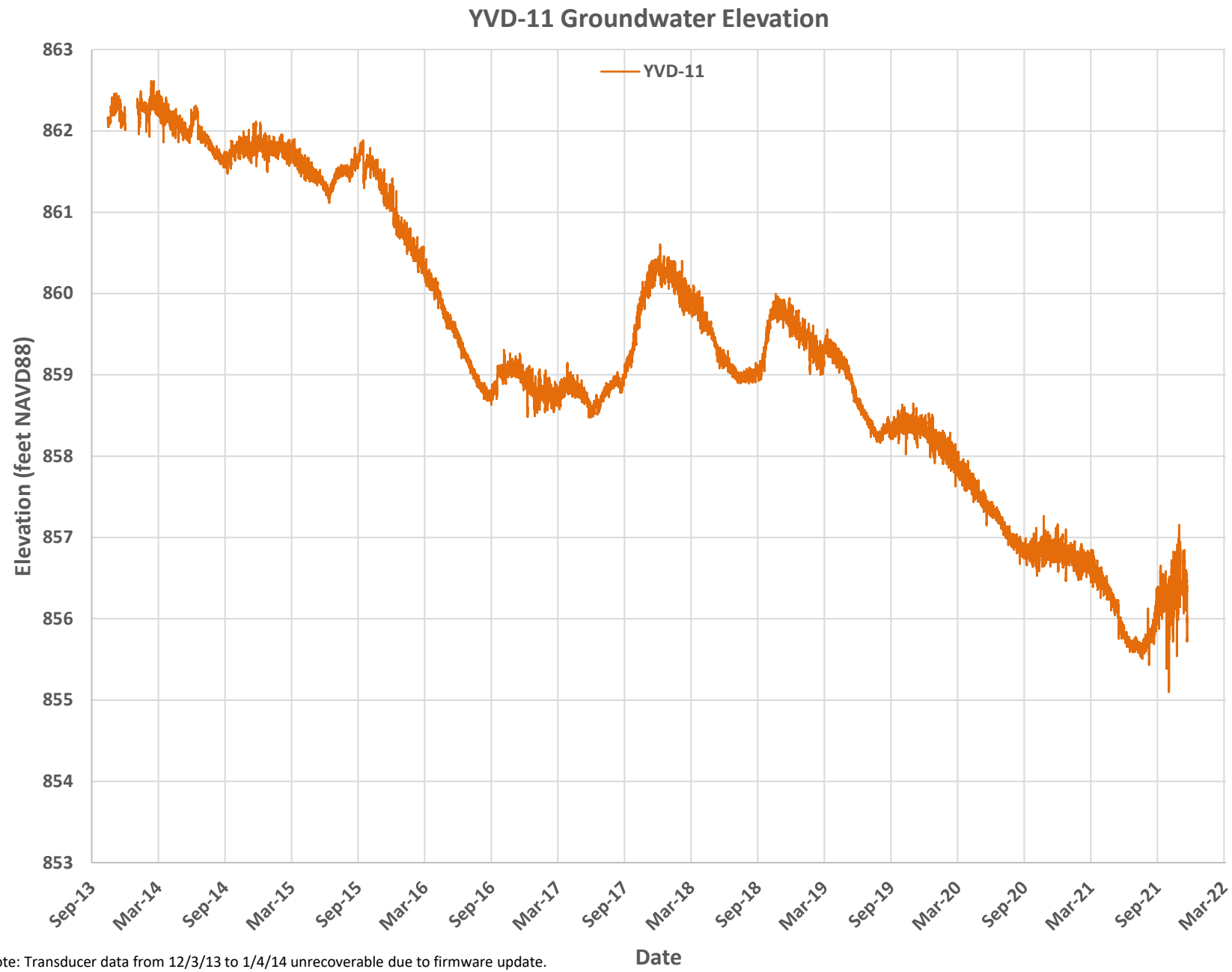
Sep-20
Mar-21
Sep-21
Mar-22
Date


DC-05 Groundwater Elevation
DC-05
Elevation (feet NAVD88)
845
844
843
842
841
840
839
838
837
836
835
Note: No data from 12/11/2016 - 3/07/2017 and 3/29/20 - 5/8/20 due to transducer repair.
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
Mar-18
Sep-18
Mar-19
Sep-19
Mar-20
Sep-20
Mar-21
Sep-21
Mar-22
Date

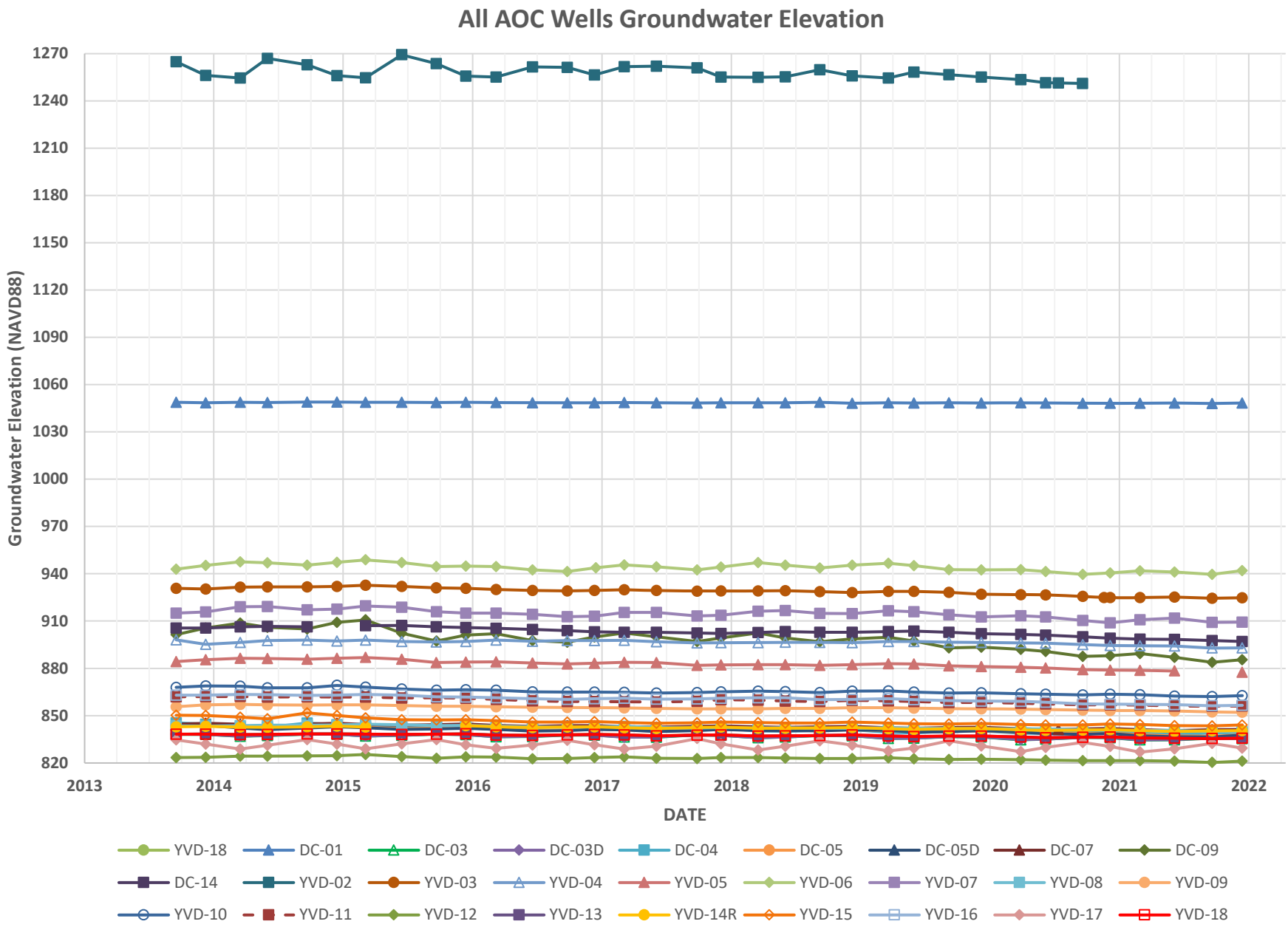

DC-05D Groundwater Elevation
DC-05D
Elevation (feet NAVD88)
845
844
843
842
841
840
839
838
837
836
835
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
Mar-18
Sep-18
Mar-19
Sep-19
Mar-20
Sep-20
Mar-21
Sep-21
Mar-22
Date

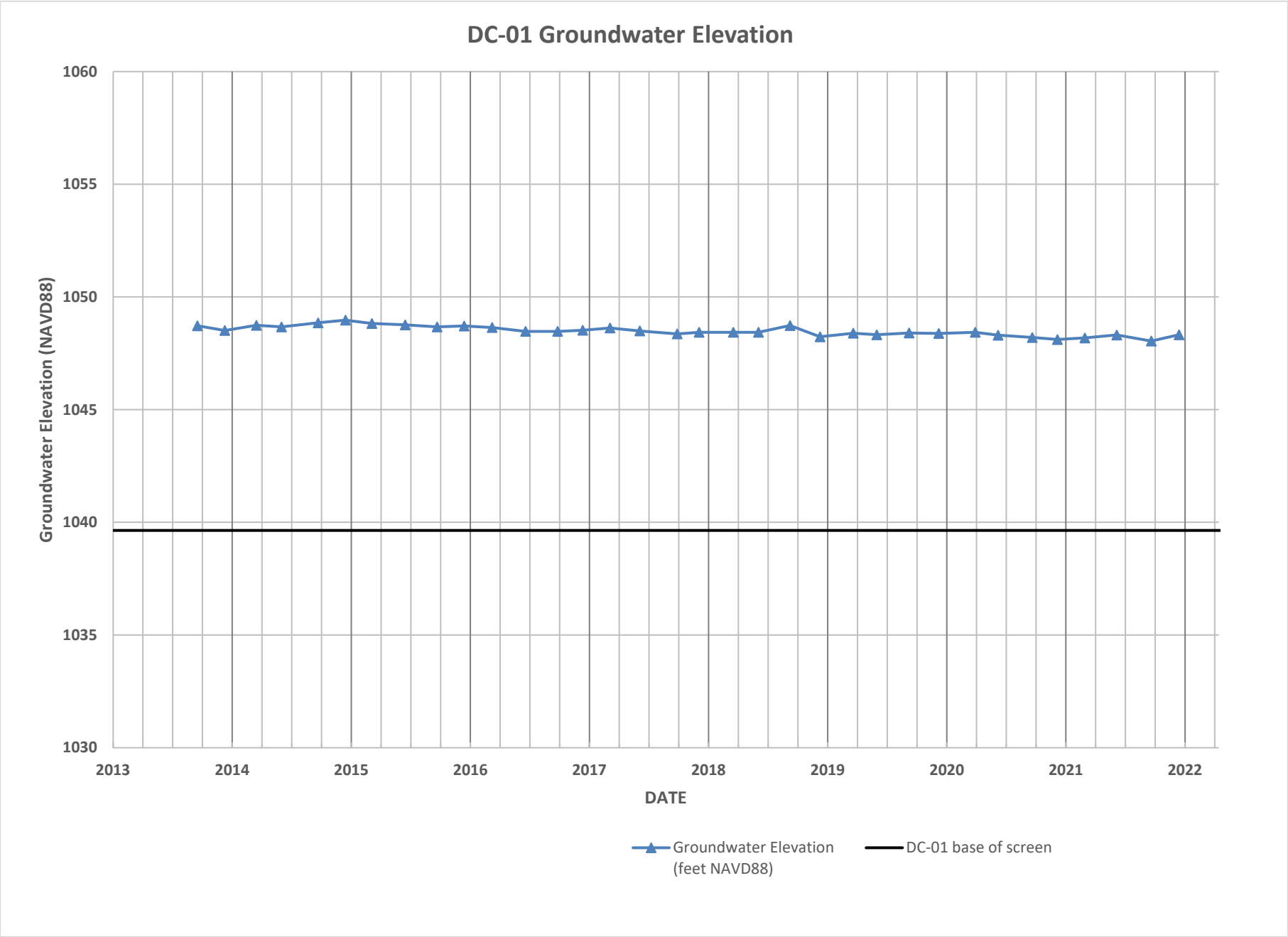

YVD-03 Groundwater Elevation
YVD-03
Elevation (feet NAVD88)
934
933
932
931
930
929
928
927
926
925
924
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
Mar-18
Sep-18
Mar-19
Sep-19
Mar-20
Sep-20
Mar-21
Sep-21
Mar-22
Date
Note: No data from 3/29-20 - 5/8/20 due to transducer repair.
No Data from 6/7/20 to 9/23/20 - transducer fell to
bottom of well and was not recoverable.

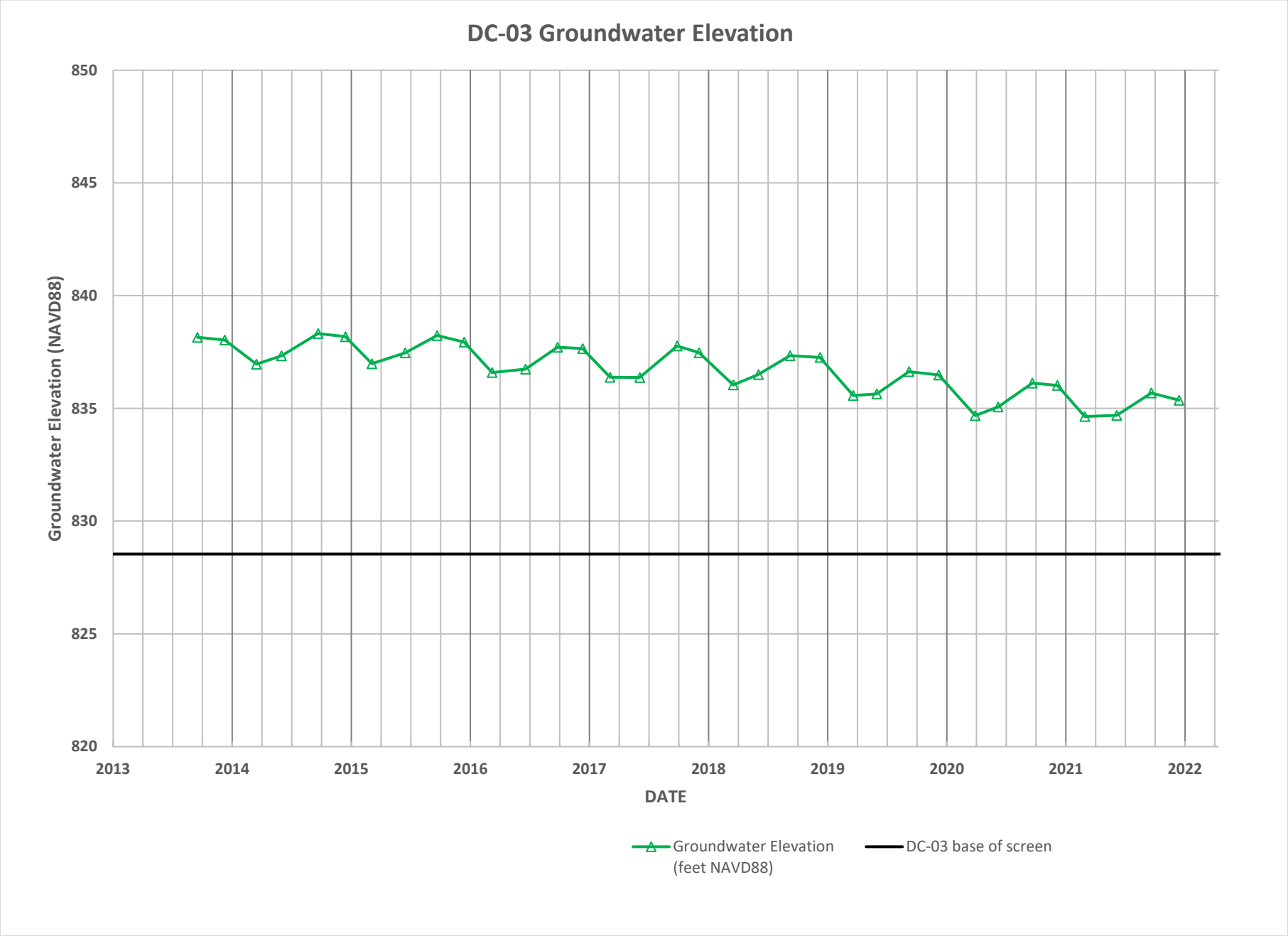

YVD-08 Groundwater Elevation
YVD-08
Elevation (feet NAVD88)
847
846
845
844
843
842
841
840
839
838
837
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
Mar-18
Sep-18
Mar-19
Sep-19
Mar-20
Sep-20
Mar-21
Sep-21
Mar-22
Date
Note: No data from 3/29-20 - 5/8/20 due to transducer repair.

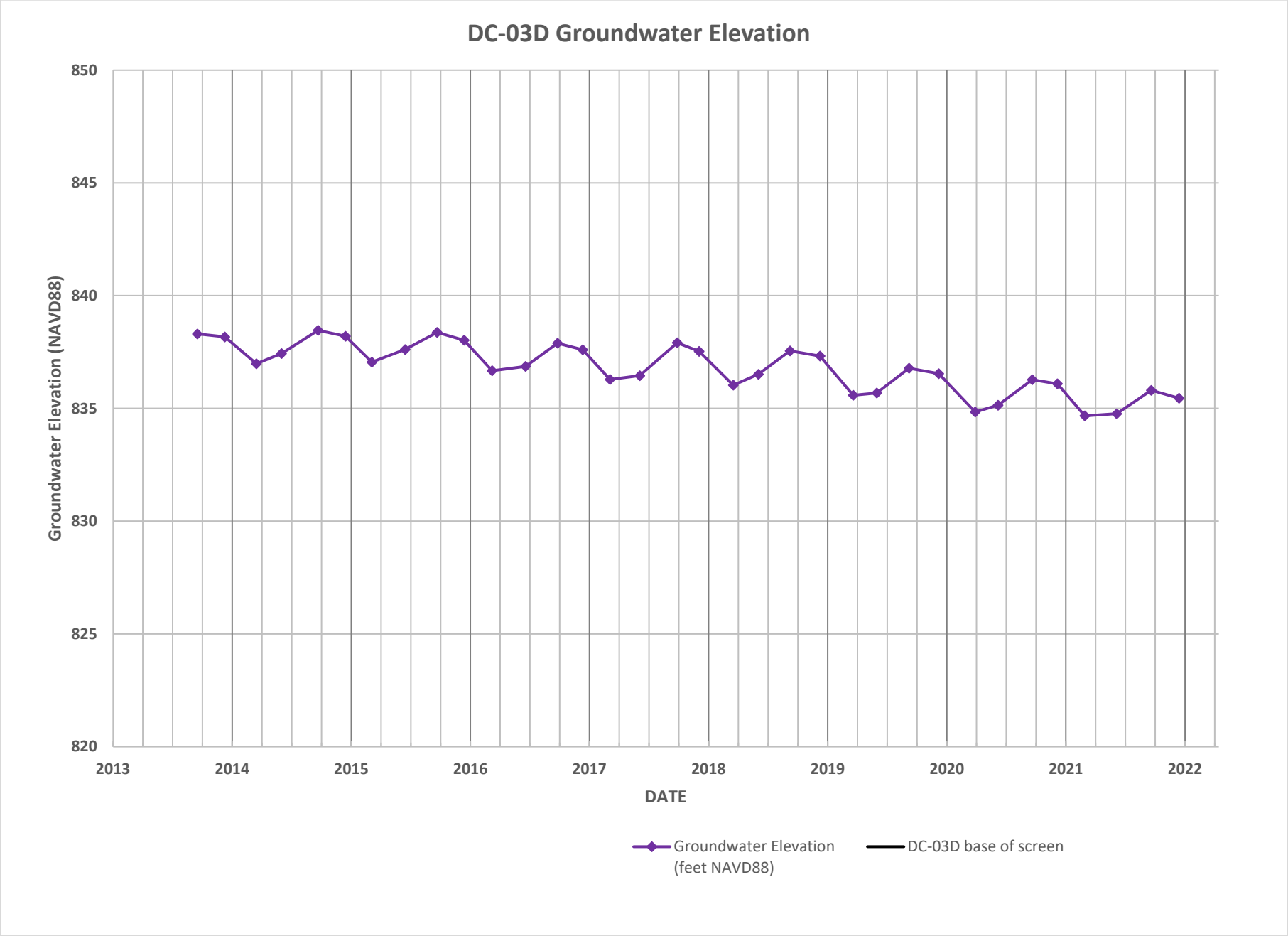


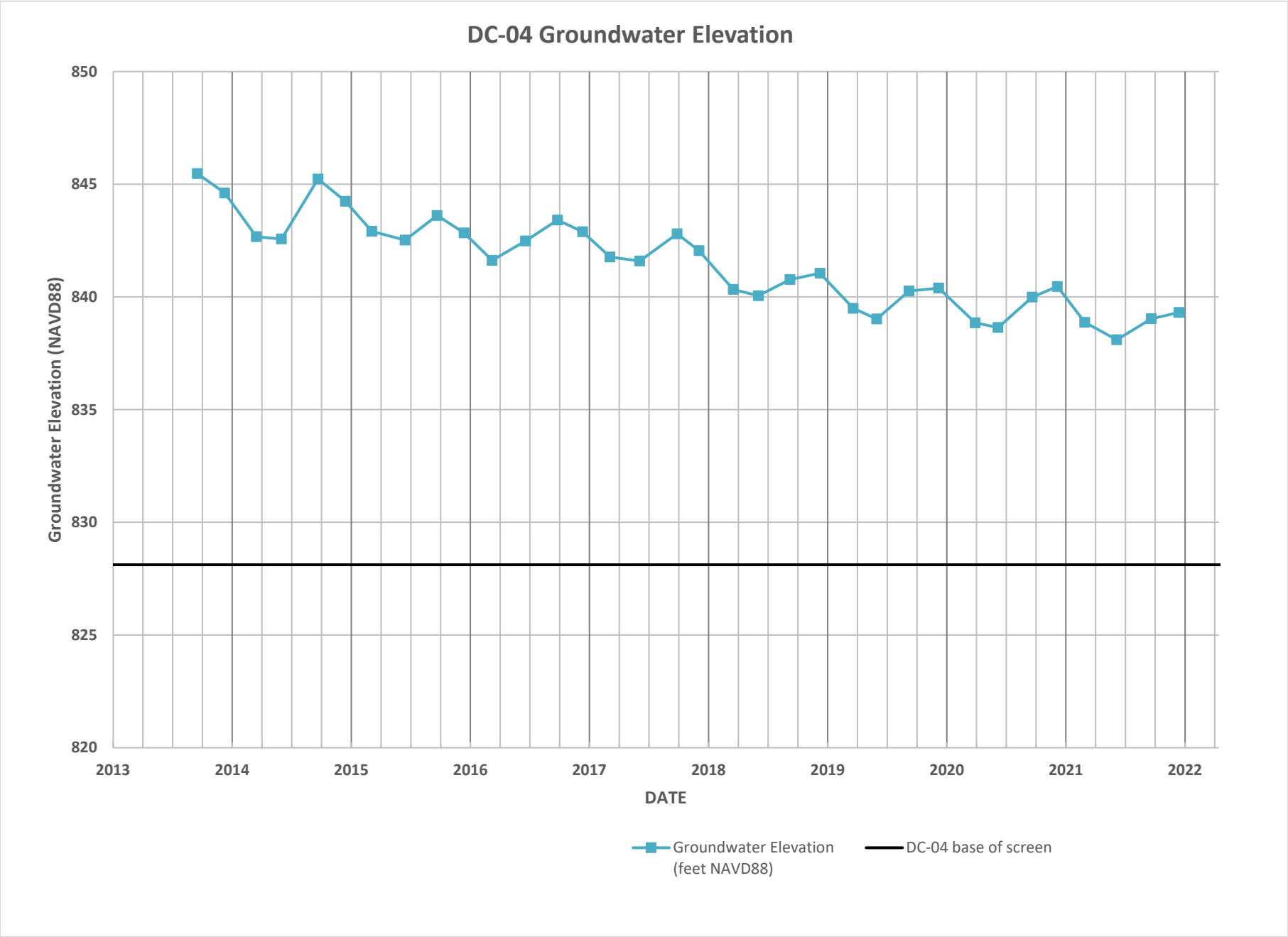
Note: Transducer data from 12/3/13 to 1/4/14 unrecoverable due to firmware update.

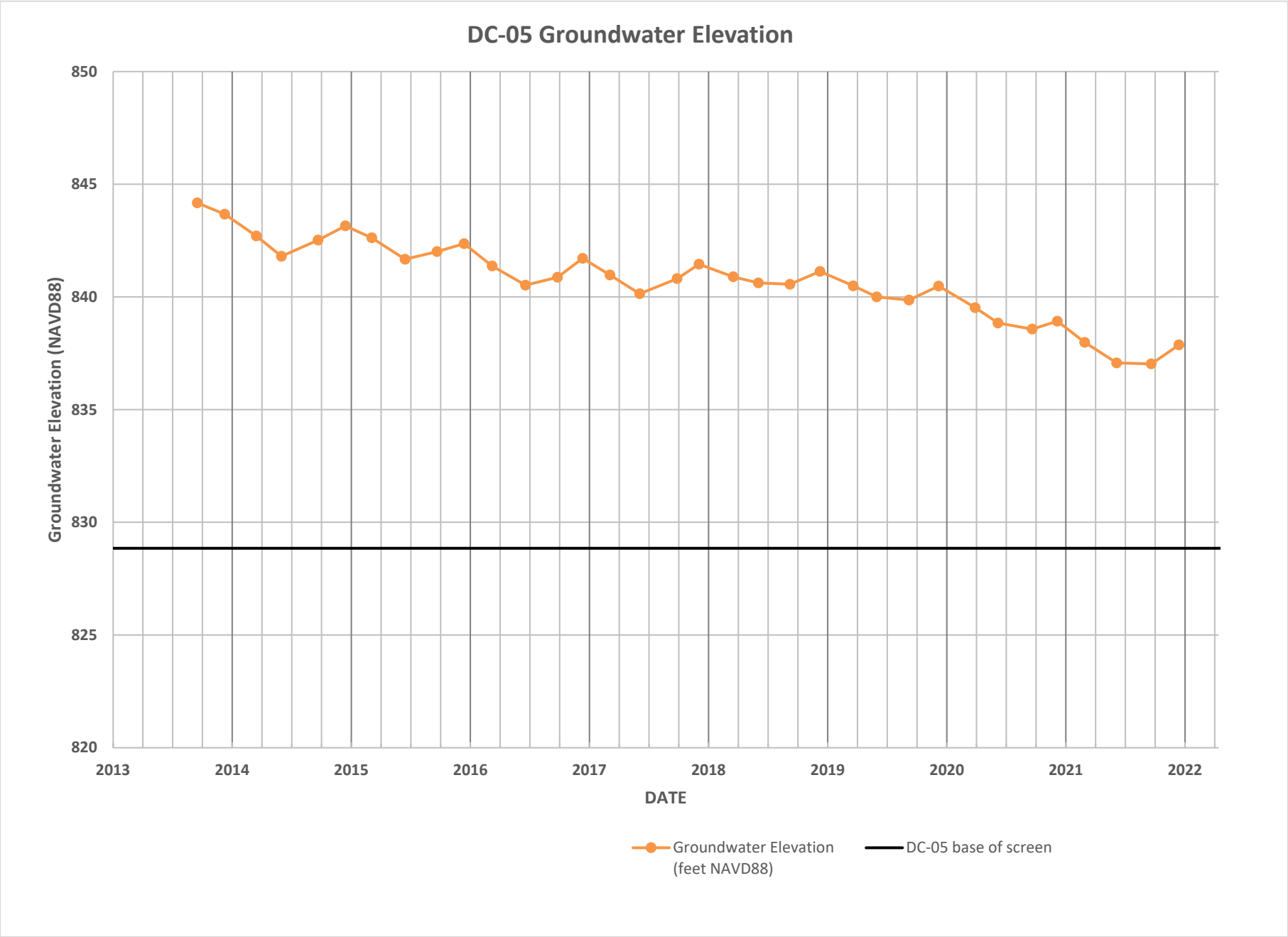

All AOC Wells Groundwater Elevation
Groundwater Elevation (NAVD88)
1270
1240
1210
1180
1150
1120
1090
1060
1030
1000
970
940
910
880
850
820
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
YVD-18
DC-01
DC-03
DC-03D
DC-04
DC-05
DC-05D
DC-07
DC-09
DC-14
YVD-02
YVD-03
YVD-04
YVD-05
YVD-06
YVD-07
YVD-08
YVD-09
YVD-10
YVD-11
YVD-12
YVD-13
YVD-14R
YVD-15
YVD-16
YVD-17
YVD-18

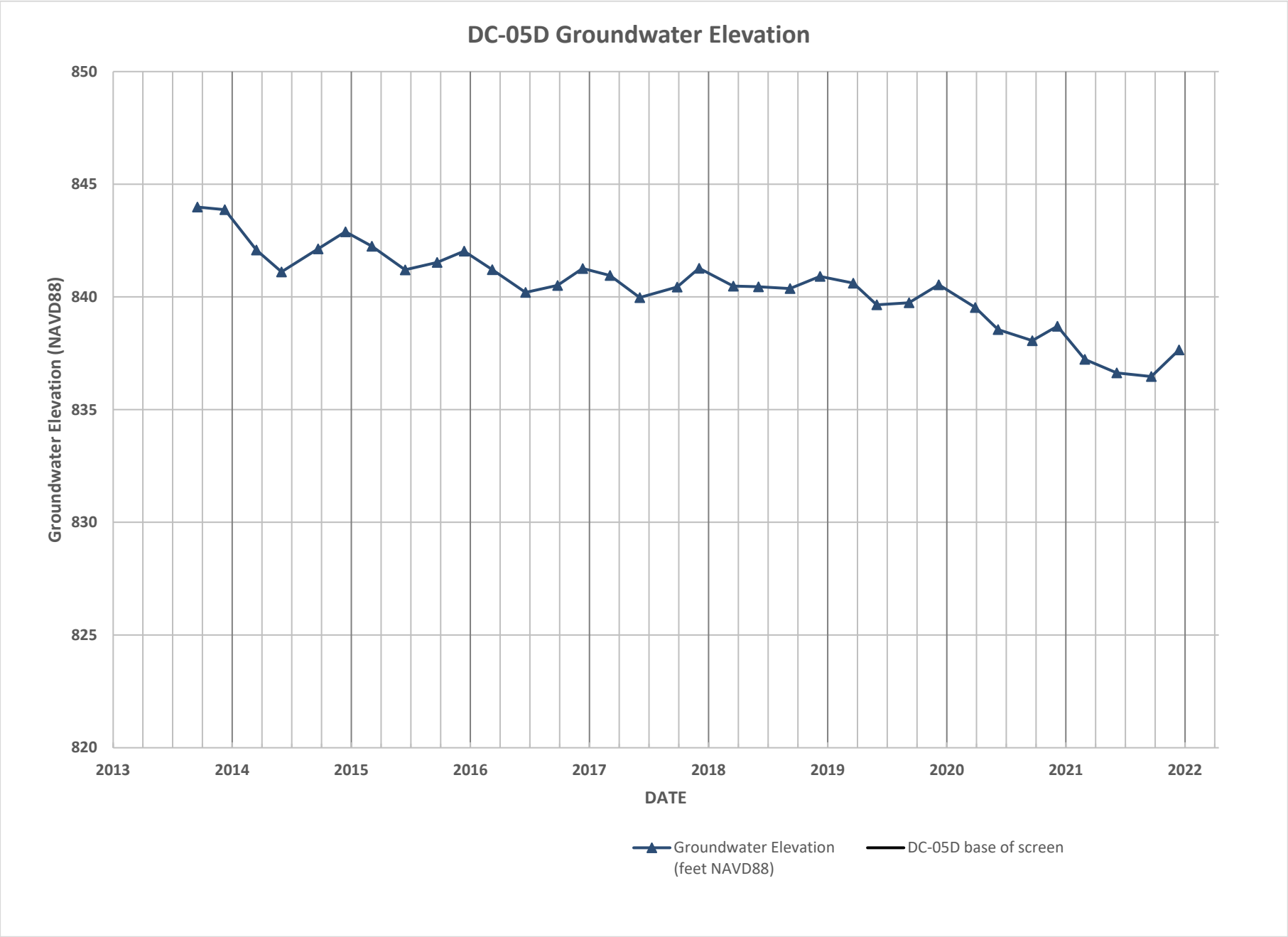

DC-01 Groundwater Elevation
Groundwater Elevation (NAVD88)
1060
1055
1050
1045
1040
1035
1030
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
DC-01 base of screen

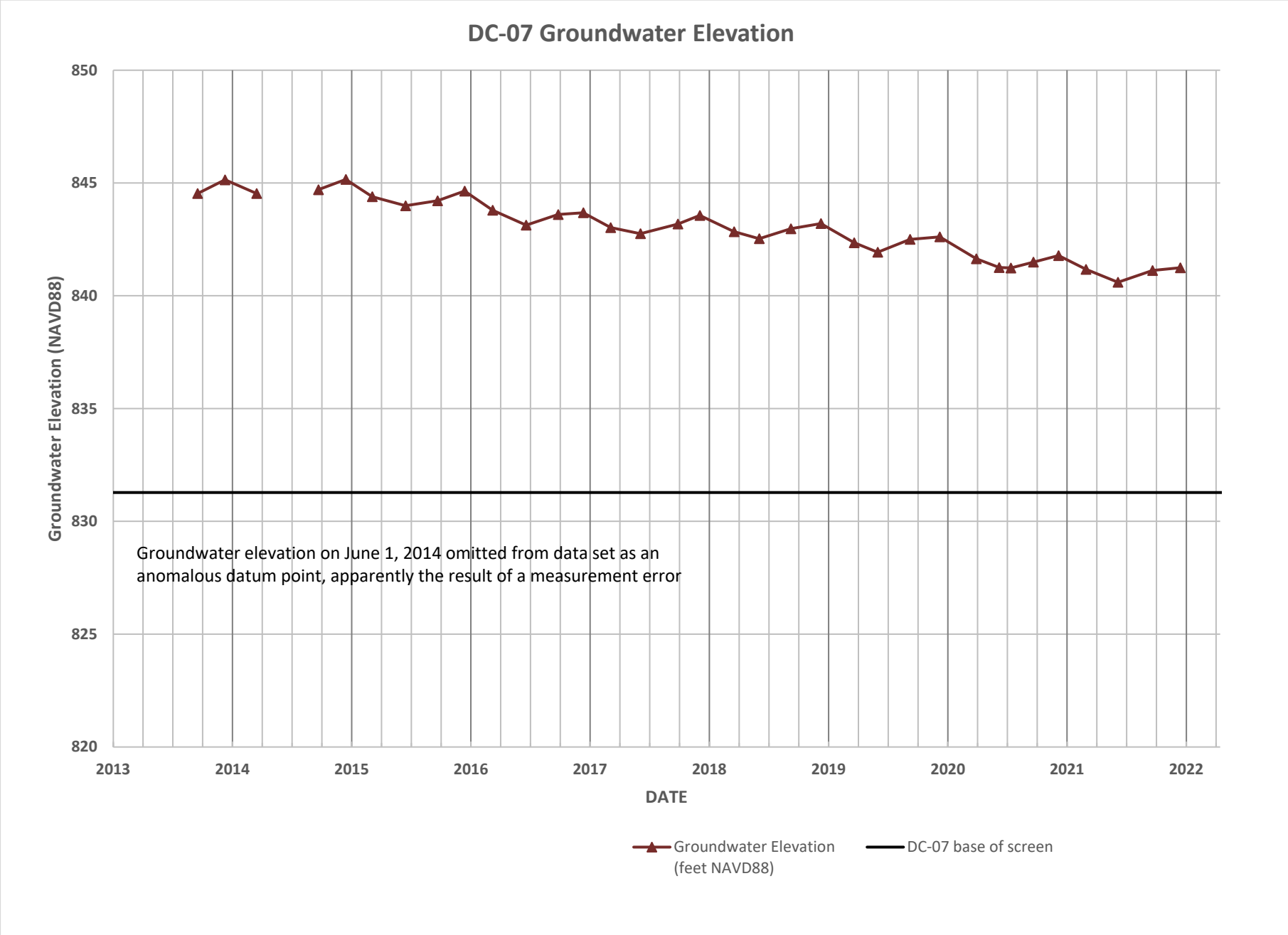

DC-03 Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
DC-03 base of screen

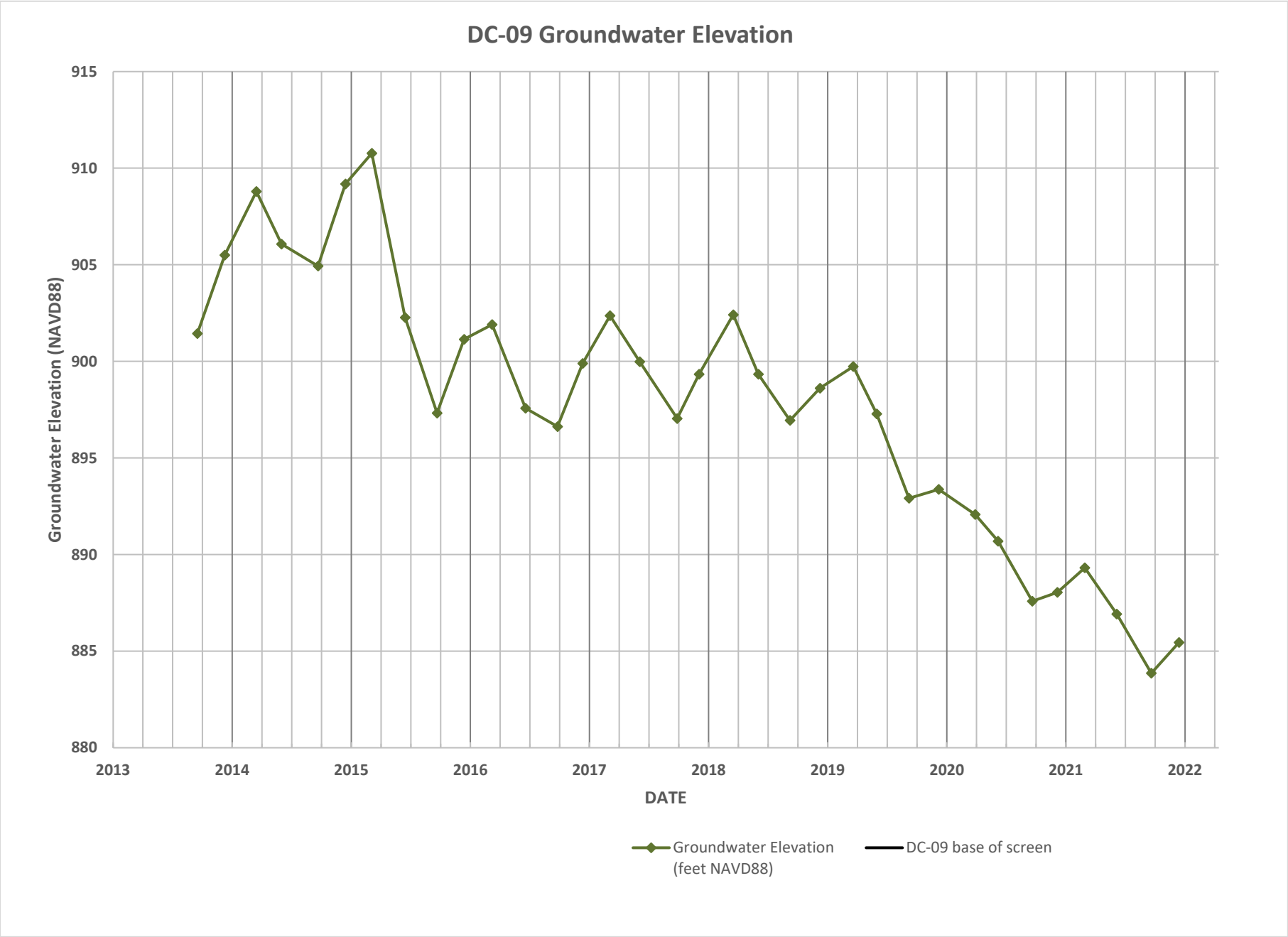

DC-03D Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
DC-03D base of screen

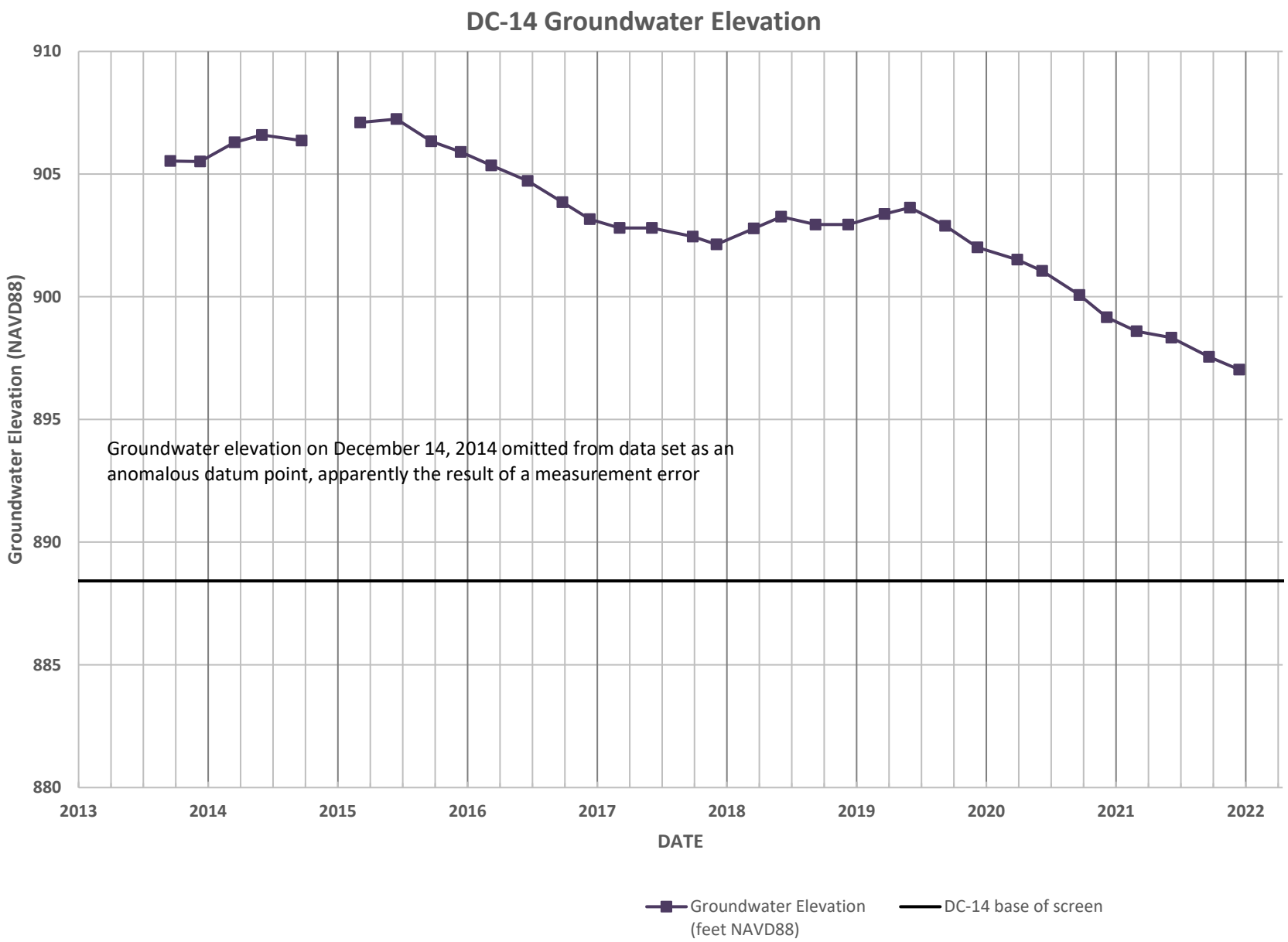

DC-04 Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
DC-04 base of screen

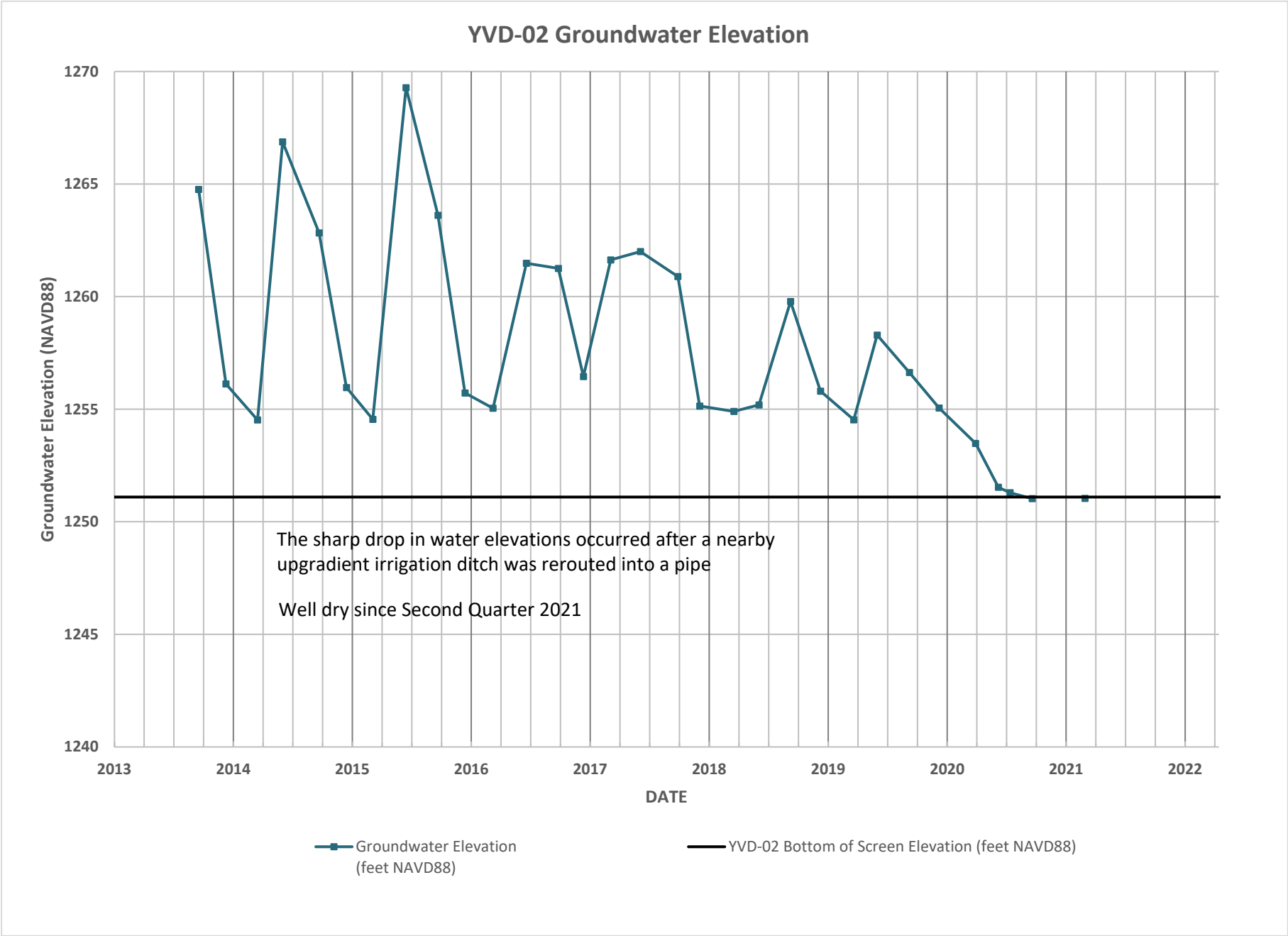

DC-05 Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
DC-05 base of screen

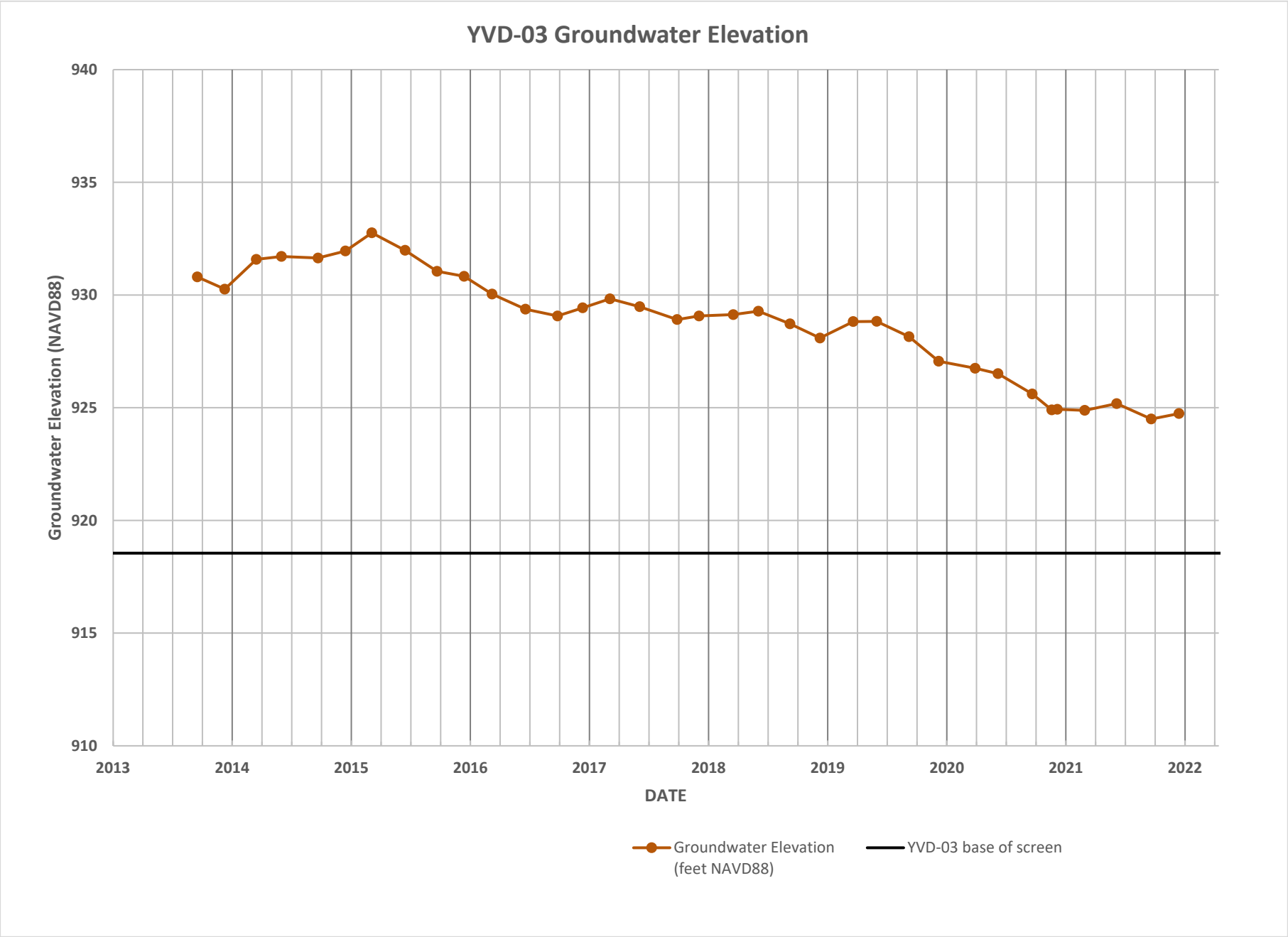

DC-05D Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
DC-05D base of screen

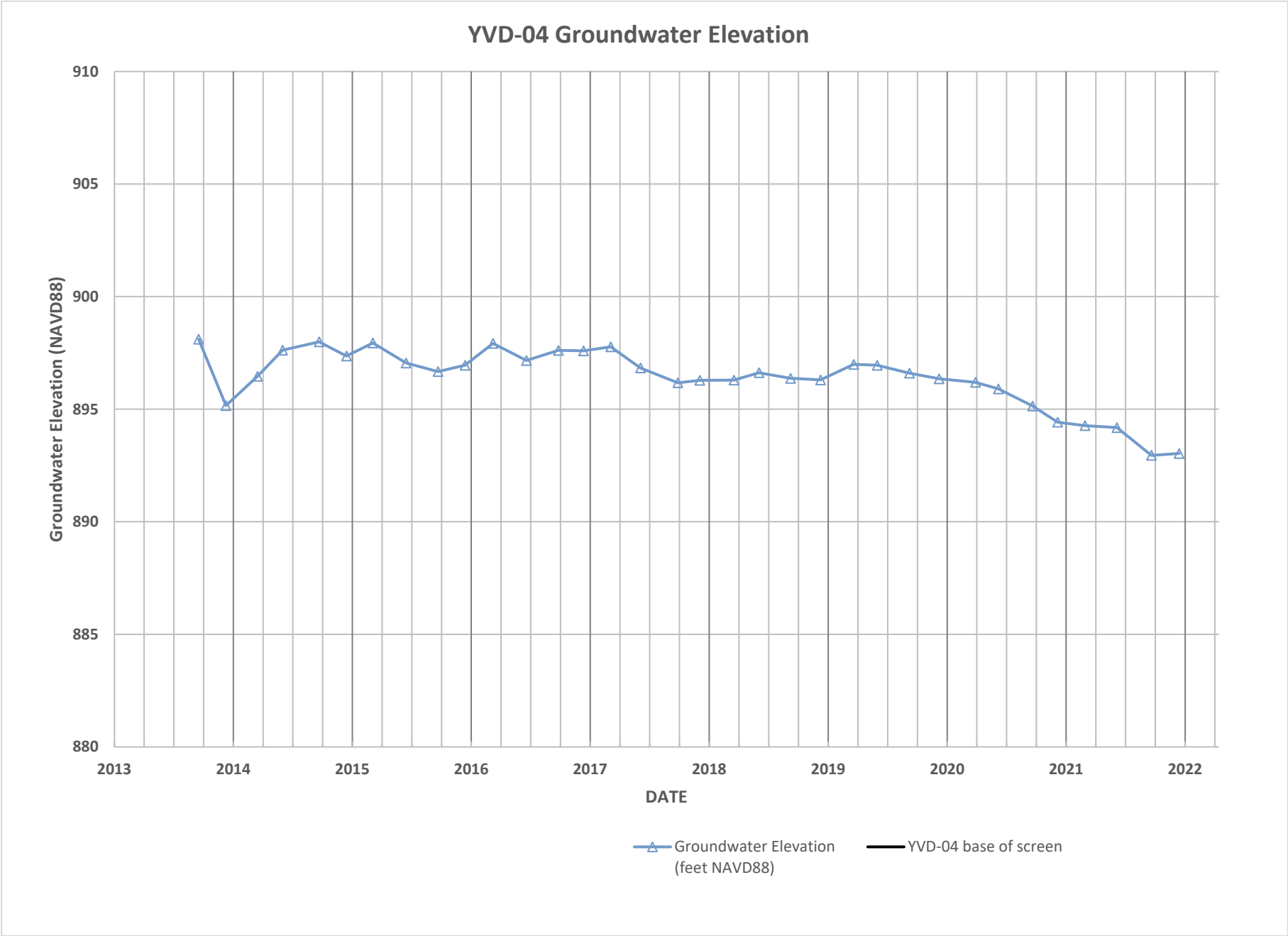

DC-07 Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater elevation on June 1, 2014 omitted from data set as an anomalous datum point, apparently the result of a measurement error
Groundwater Elevation (feet NAVD88)
DC-07 base of screen

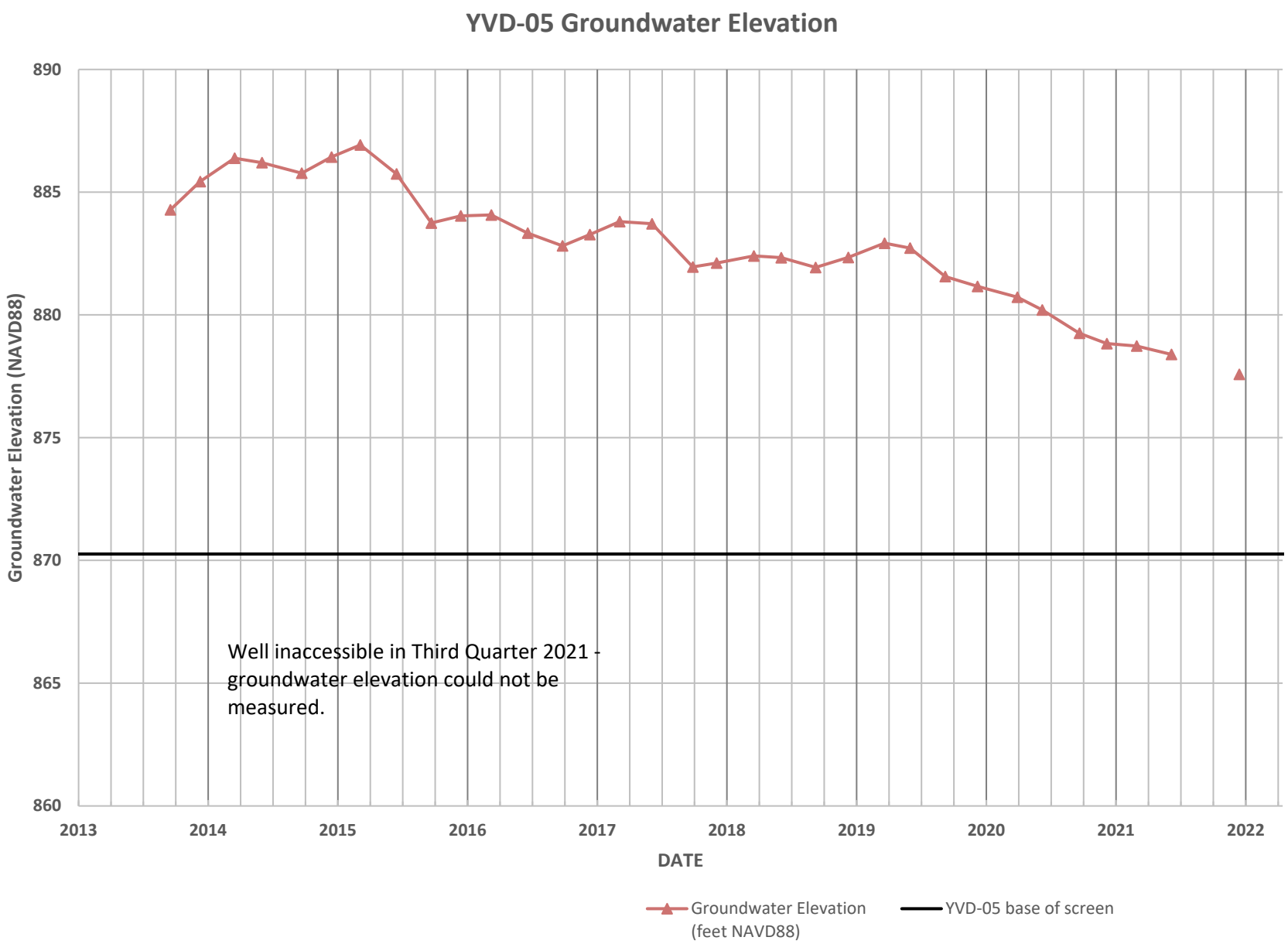

DC-09 Groundwater Elevation
915
910
905
900
895
890
885
880
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
DC-09 base of screen

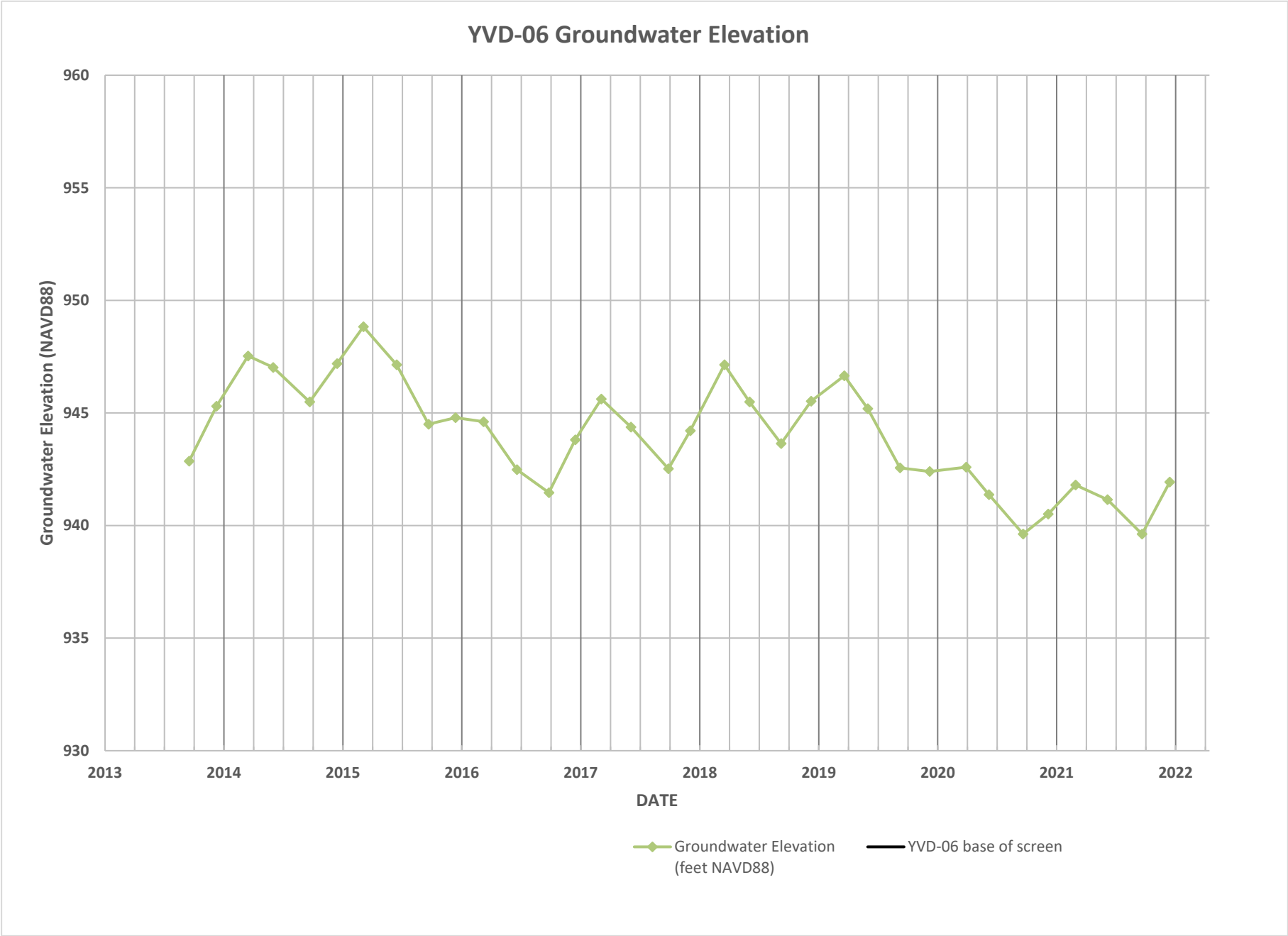

DC-14 Groundwater Elevation
910
905
900
895
890
885
880
Groundwater Elevation (NAVD88)
Groundwater elevation on December 14, 2014 omitted from data set as an anomalous datum point, apparently the result of a measurement error
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
DC-14 base of screen

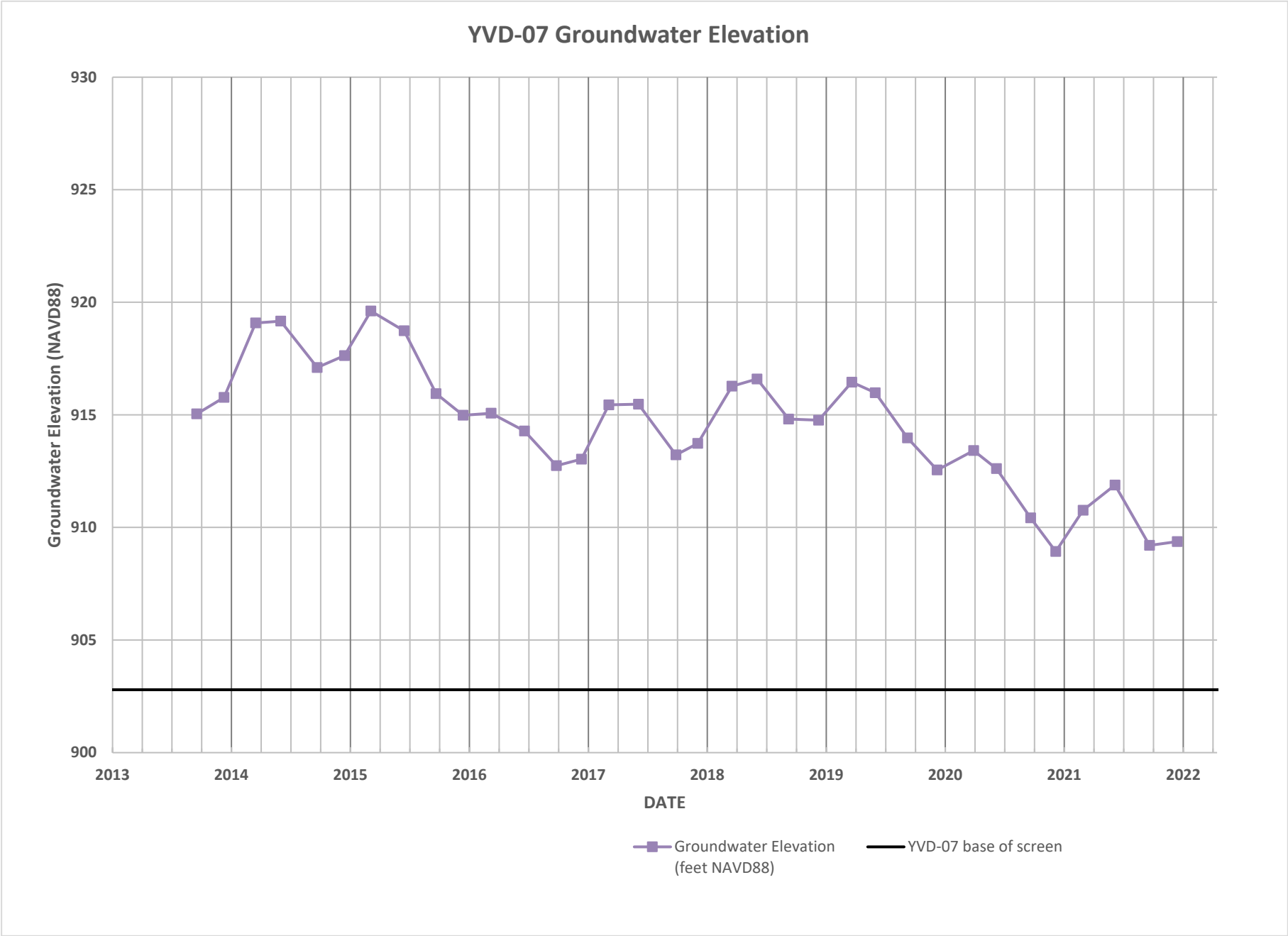

YVD-02 Groundwater Elevation
1270
1265
1260
1255
1250
1245
1240
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
The sharp drop in water elevations occurred after a nearby upgradient irrigation ditch was rerouted into a pipe
Well dry since Second Quarter 2021
Groundwater Elevation (feet NAVD88)
YVD-02 Bottom of Screen Elevation (feet NAVD88)

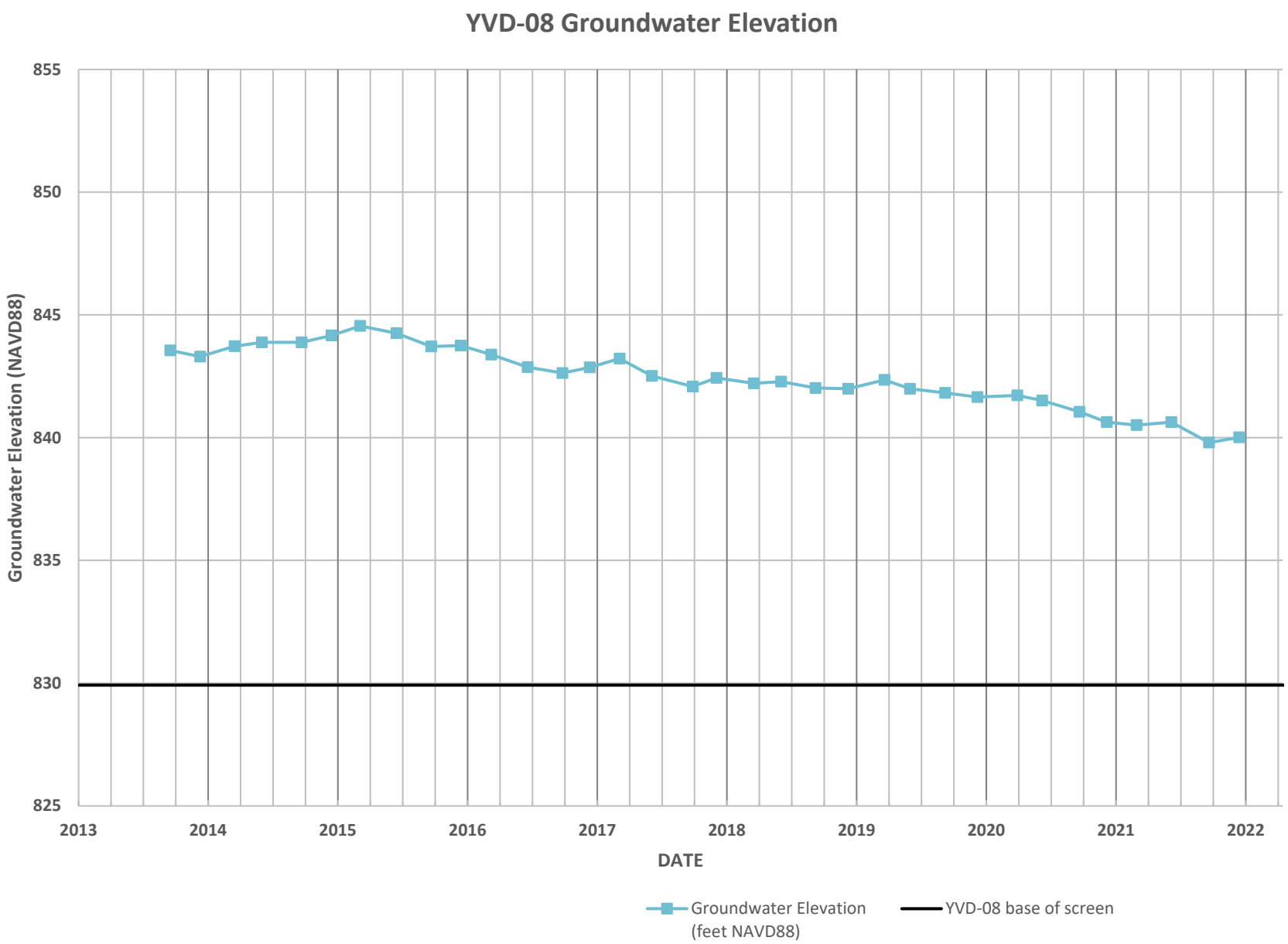

YVD-03 Groundwater Elevation
940
935
930
925
920
915
910
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-03 base of screen

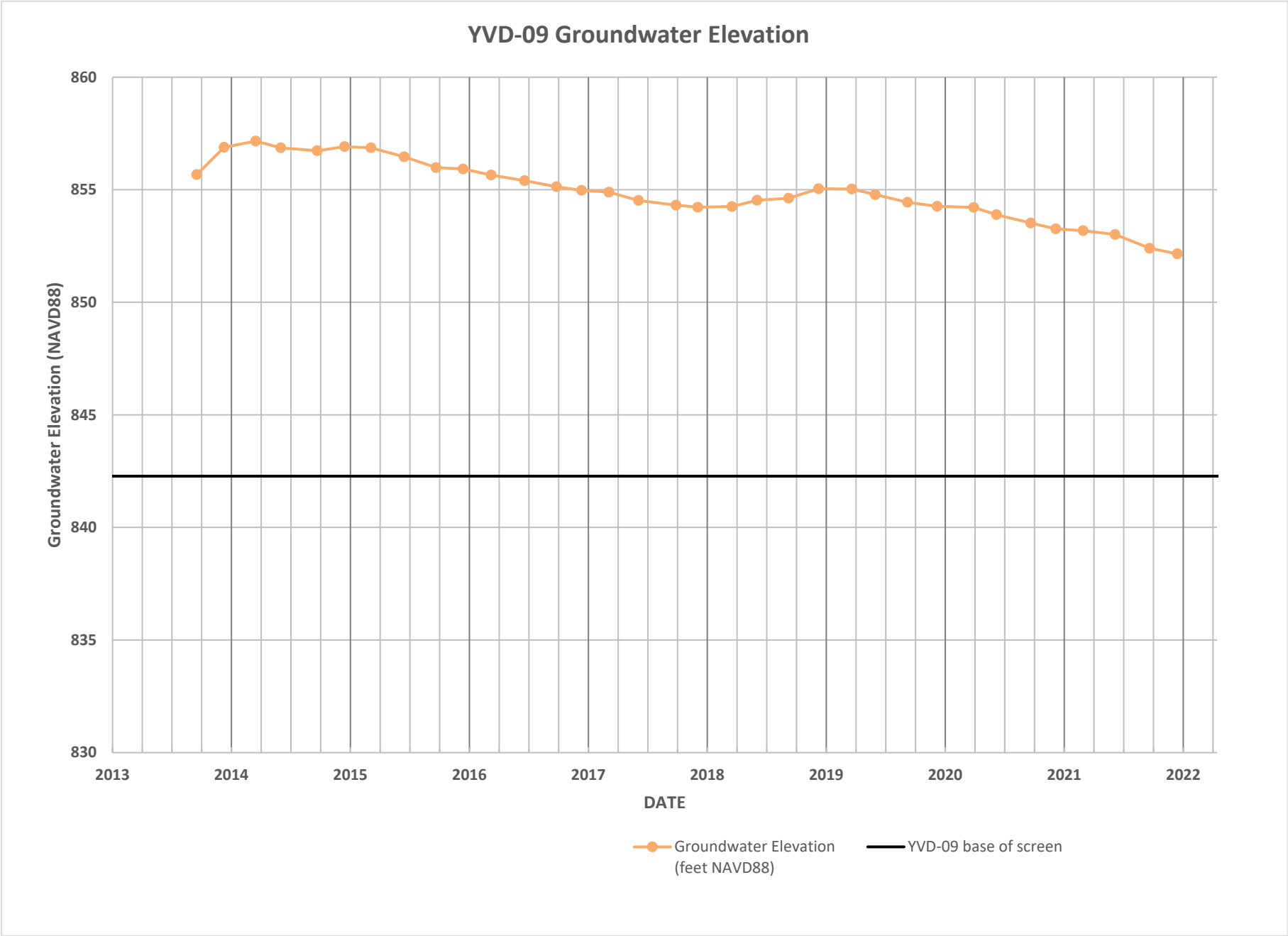

YVD-04 Groundwater Elevation
910
905
900
895
890
885
880
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-04 base of screen

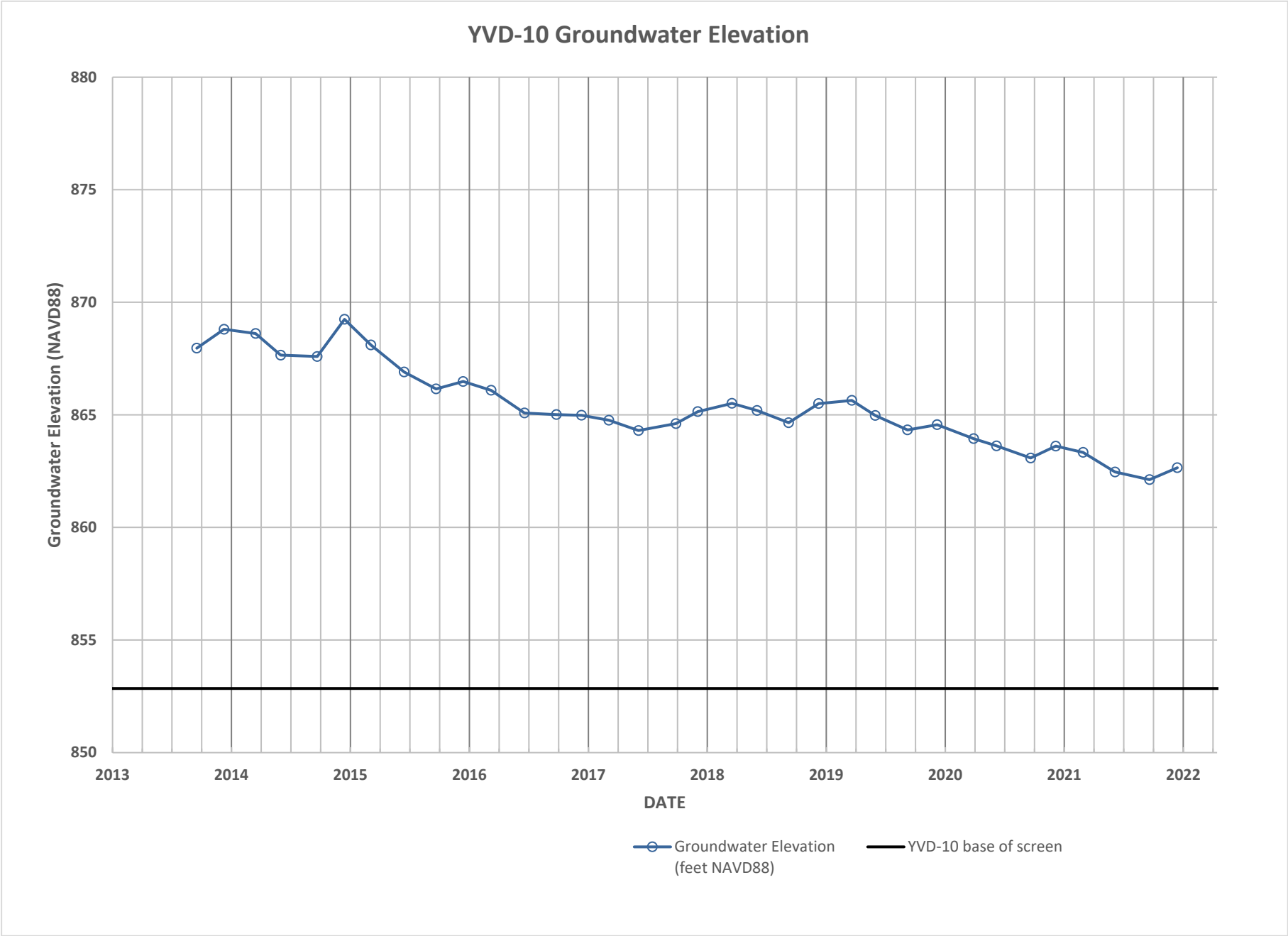

YVD-05 Groundwater Elevation
890
885
880
875
870
865
860
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Well inaccessible in Third Quarter 2021 - groundwater elevation could not be measured.
Groundwater Elevation (feet NAVD88)
YVD-05 base of screen

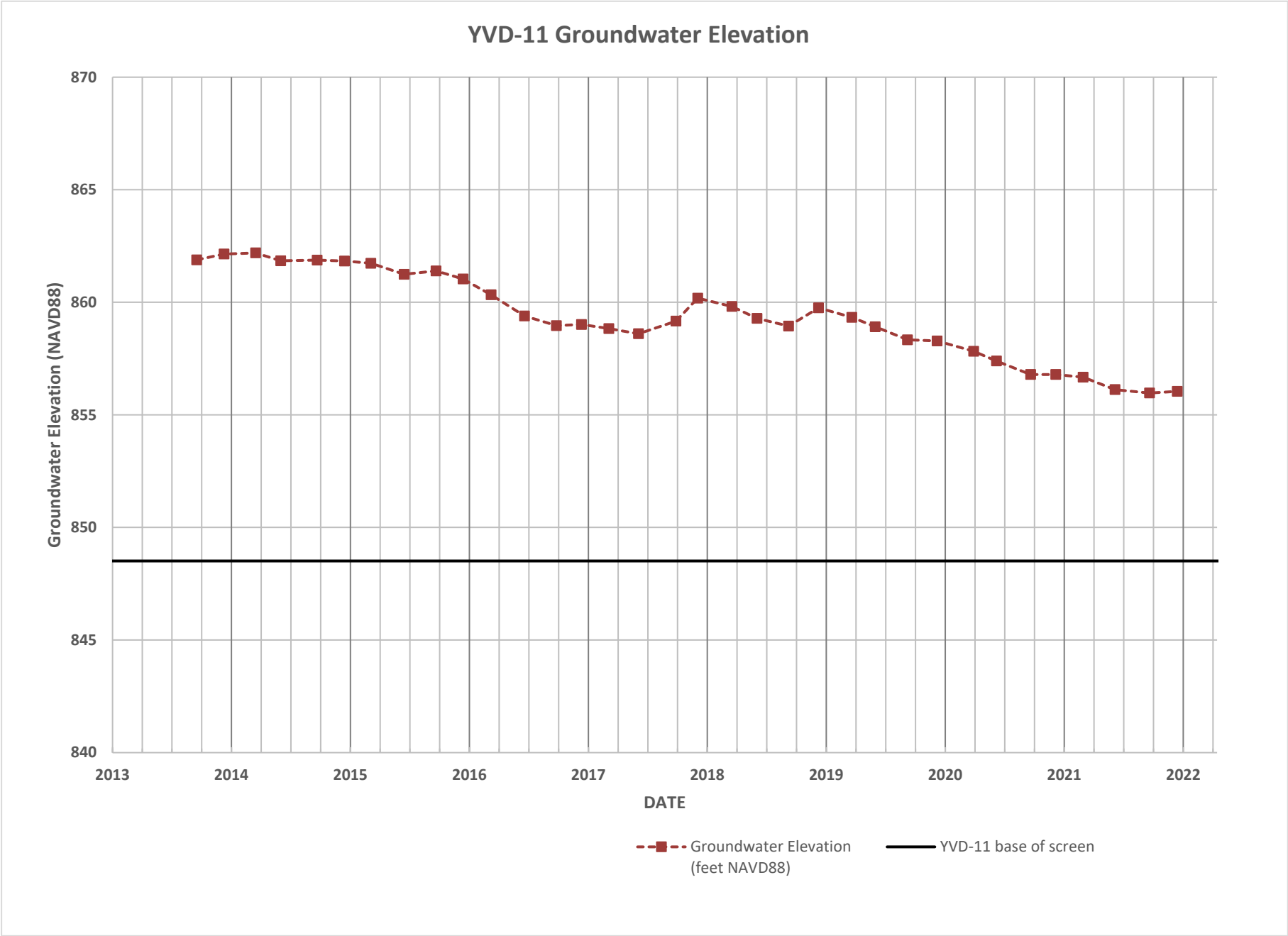

YVD-06 Groundwater Elevation
960
955
950
945
940
935
930
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-06 base of screen

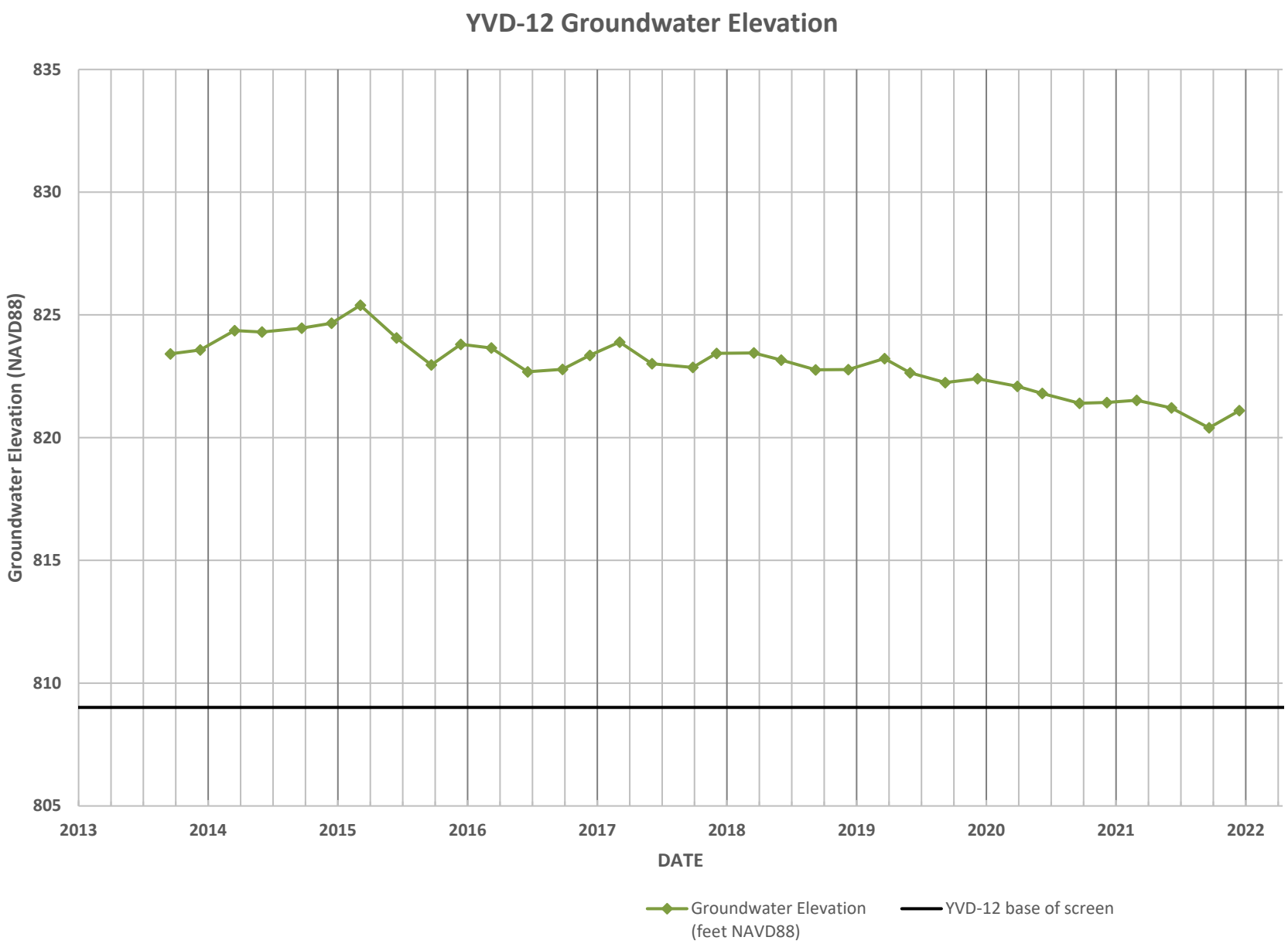

YVD-07 Groundwater Elevation
930
925
920
915
910
905
900
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-07 base of screen

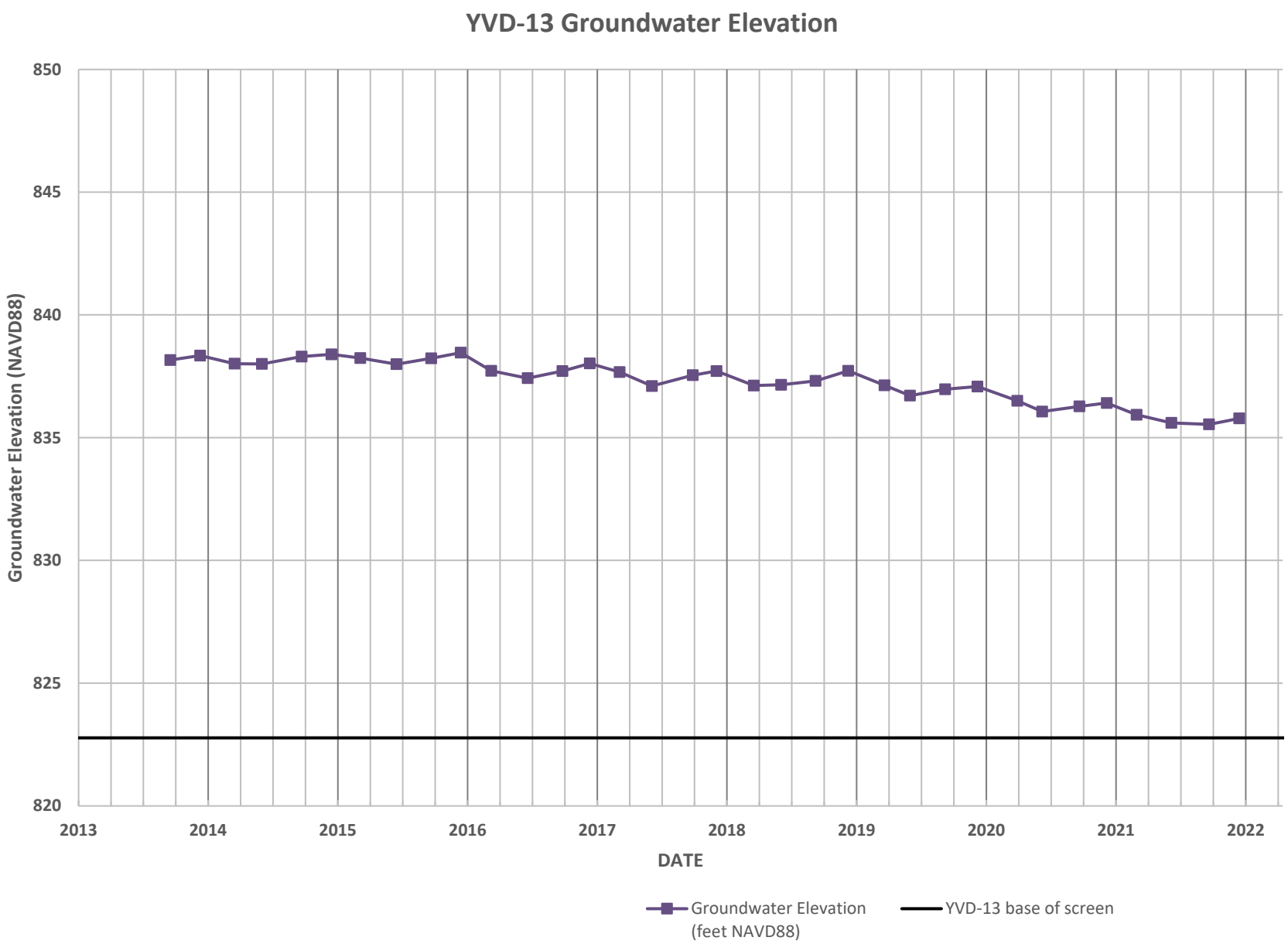

YVD-08 Groundwater Elevation
855
850
845
840
835
830
825
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-08 base of screen

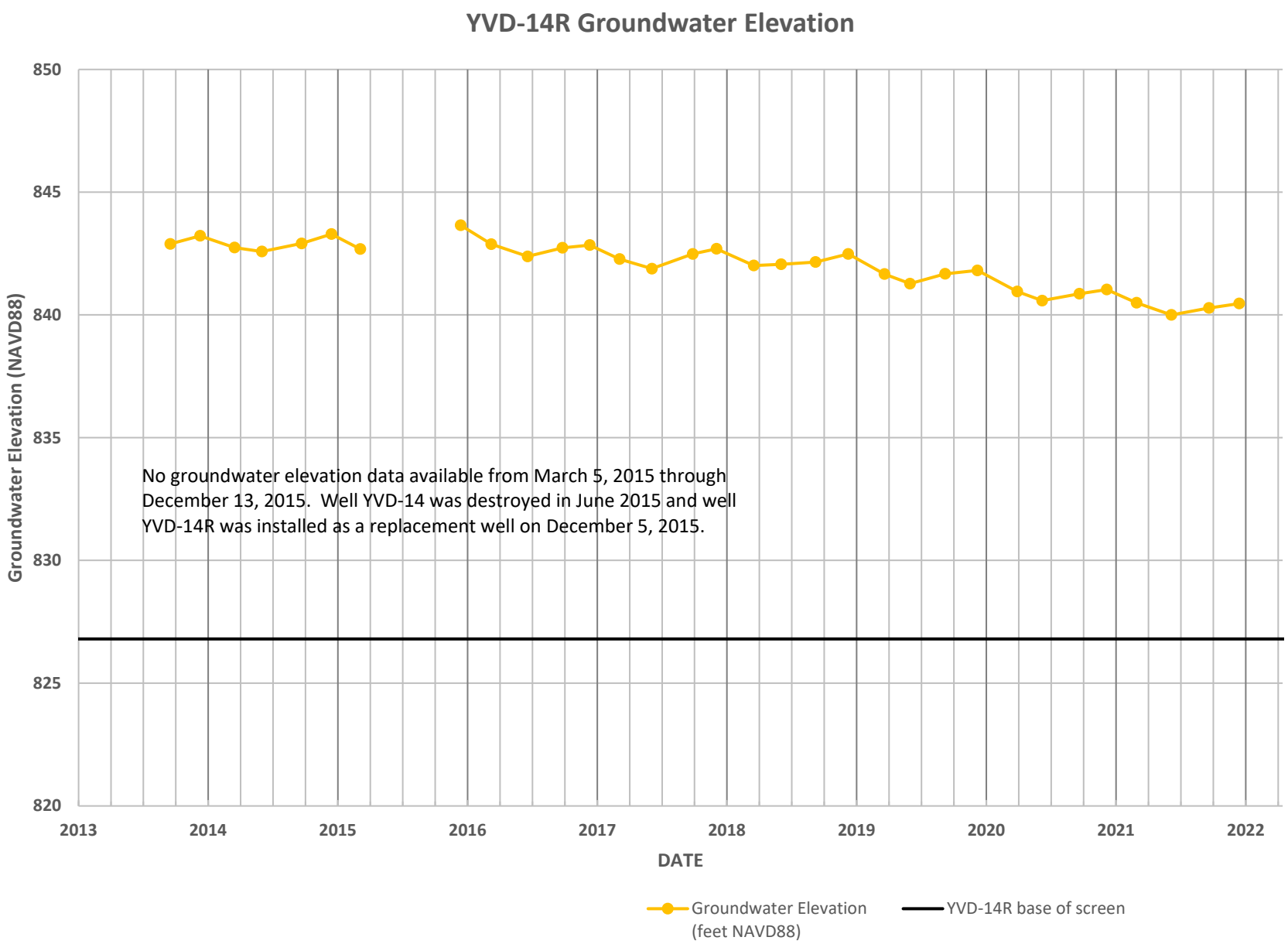

YVD-09 Groundwater Elevation
860
855
850
845
840
835
830
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-09 base of screen

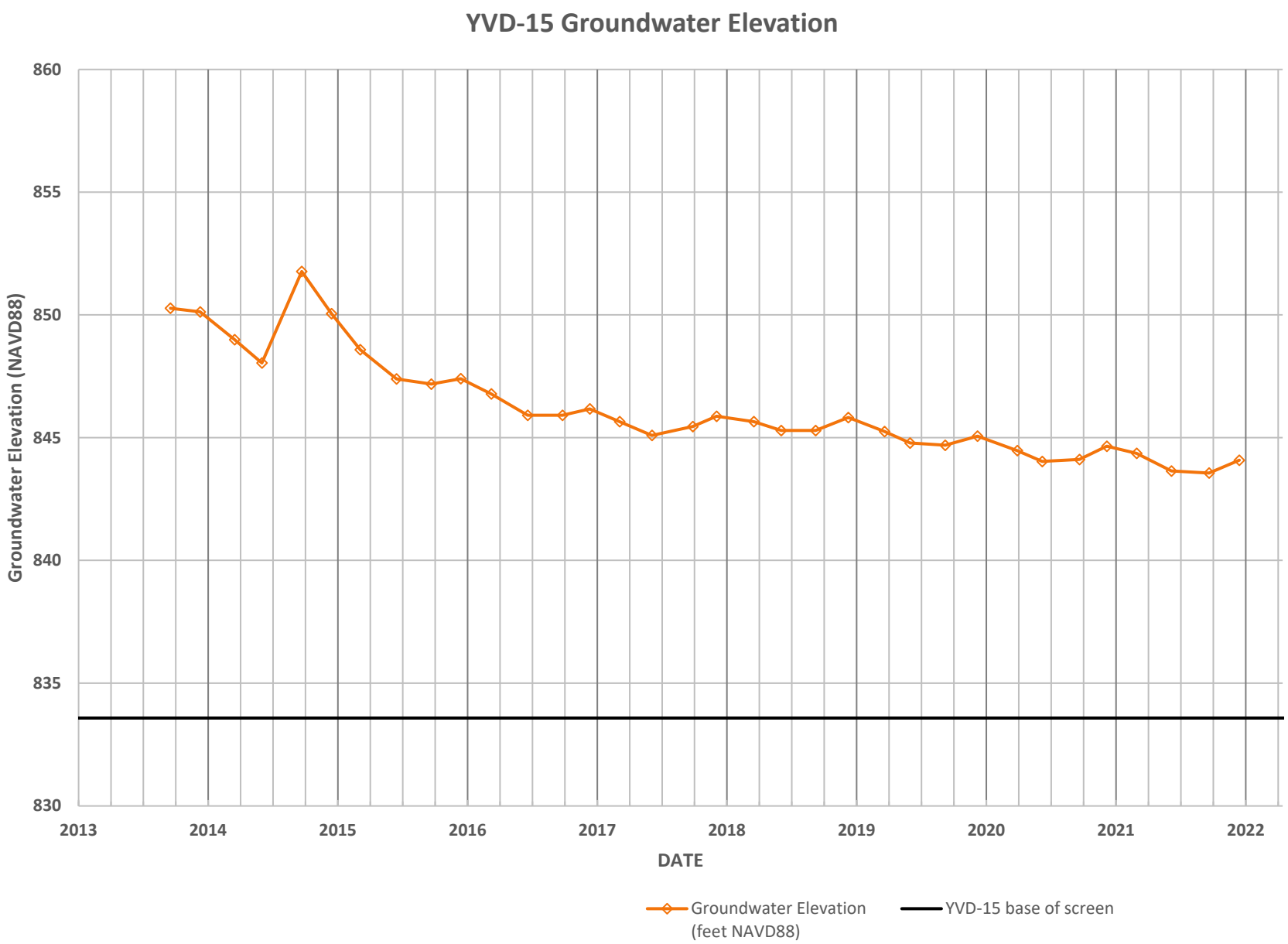

YVD-10 Groundwater Elevation
880
875
870
865
860
855
850
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-10 base of screen

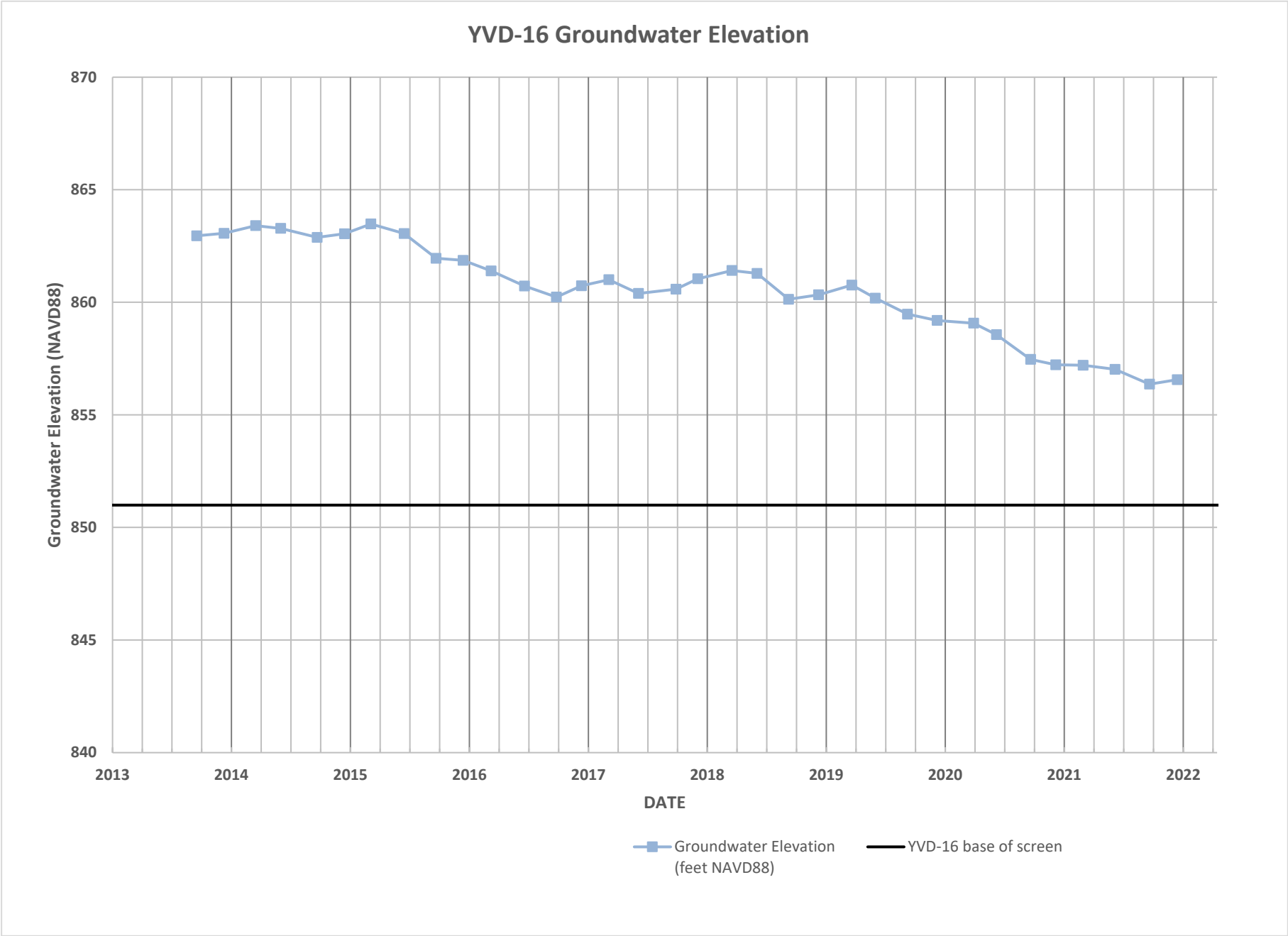

YVD-11 Groundwater Elevation
870
865
860
855
850
845
840
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-11 base of screen

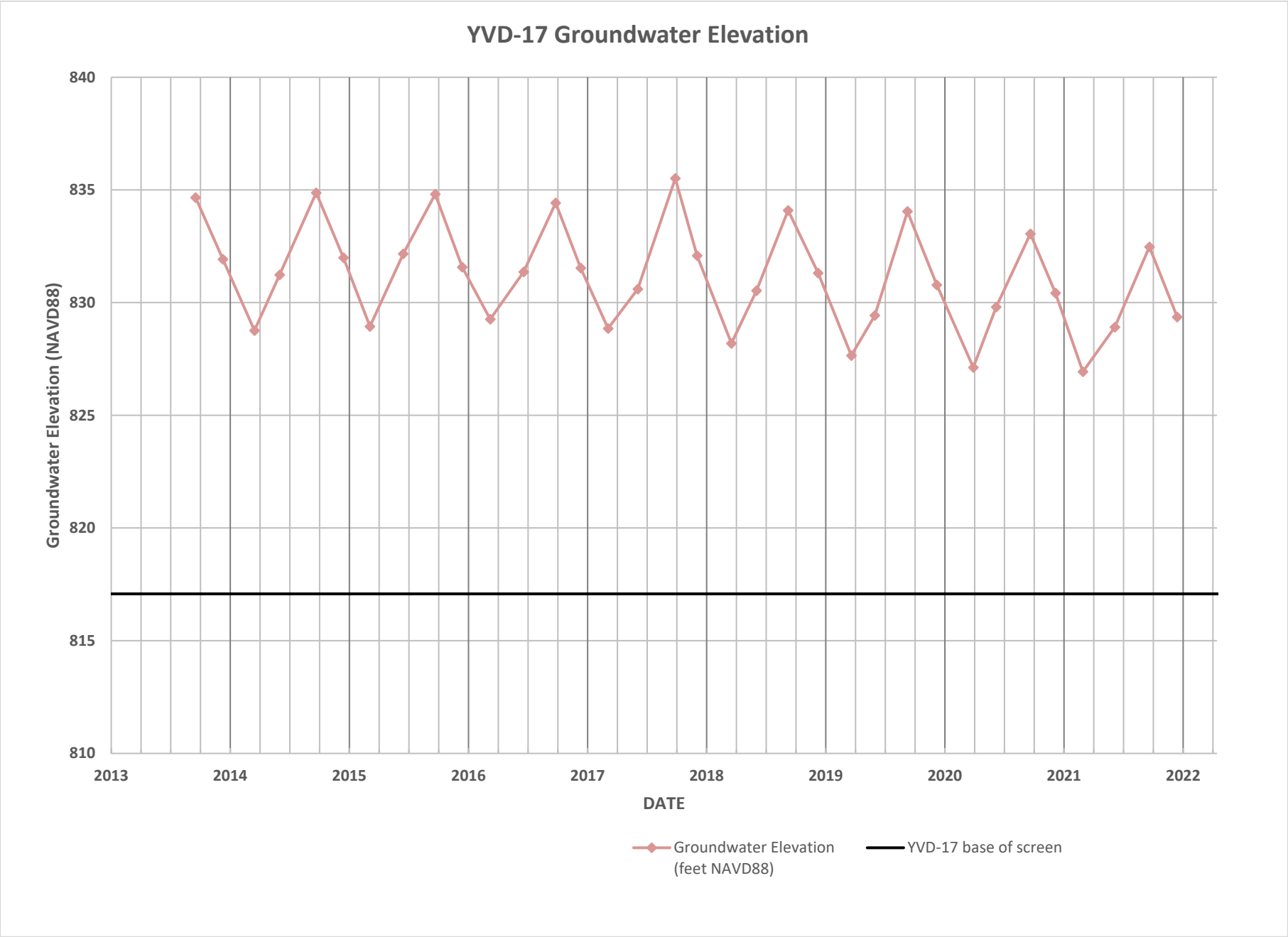

YVD-12 Groundwater Elevation
835
830
825
820
815
810
805
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-12 base of screen

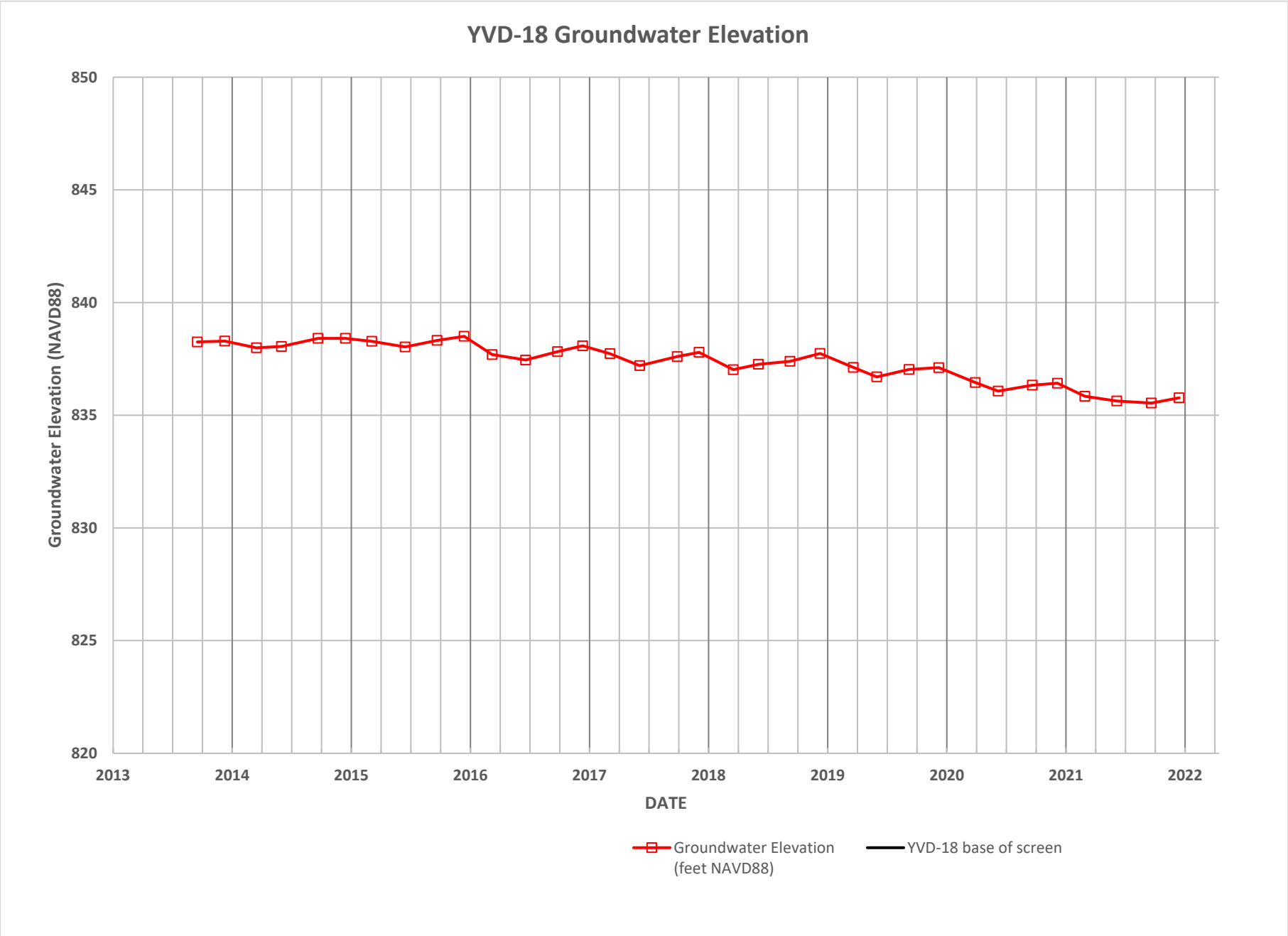

YVD-13 Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-13 base of screen

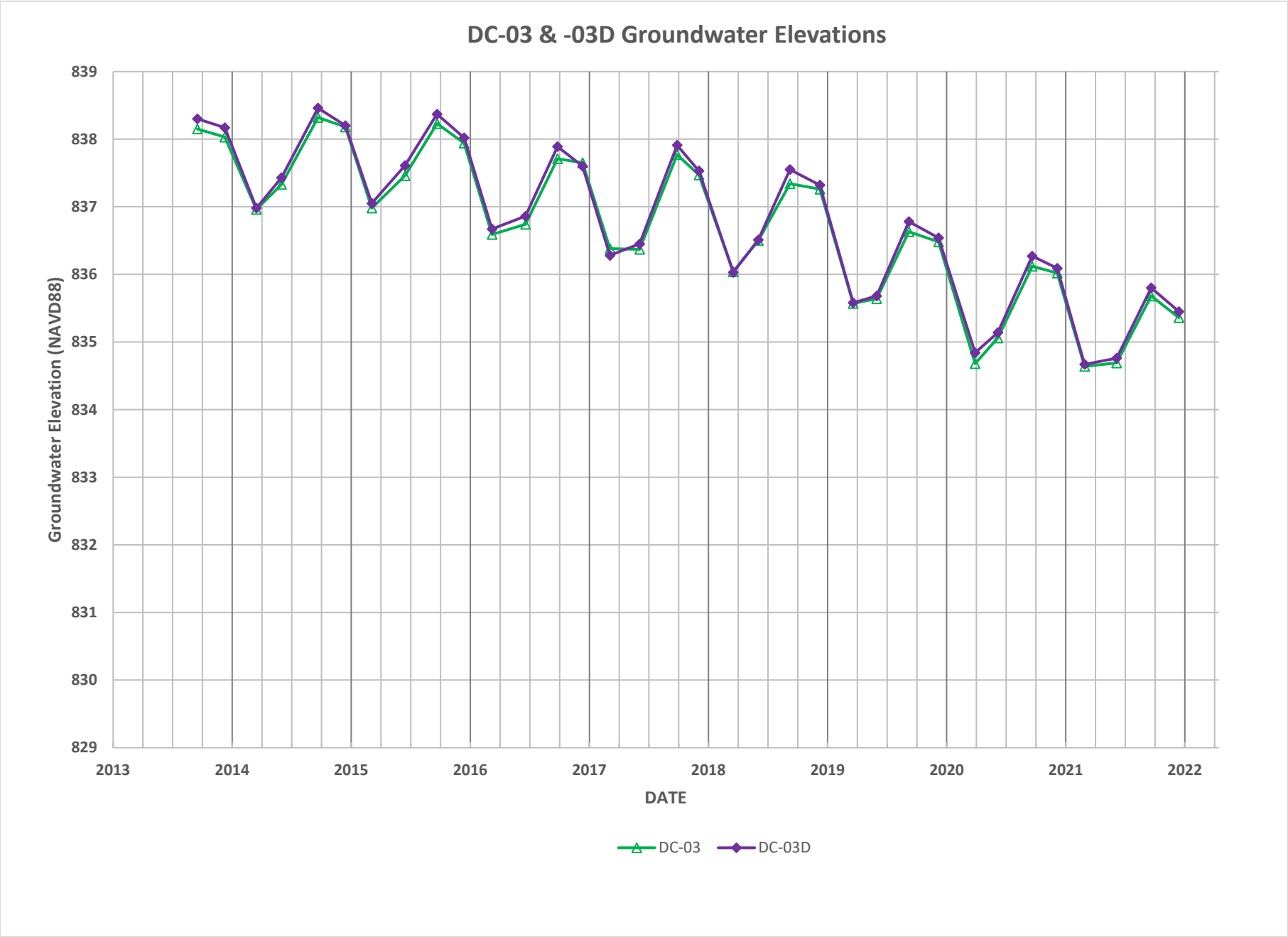

YVD-14R Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
No groundwater elevation data available from March 5, 2015 through December 13, 2015. Well YVD-14 was destroyed in June 2015 and well YVD-14R was installed as a replacement well on December 5, 2015.
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-14R base of screen

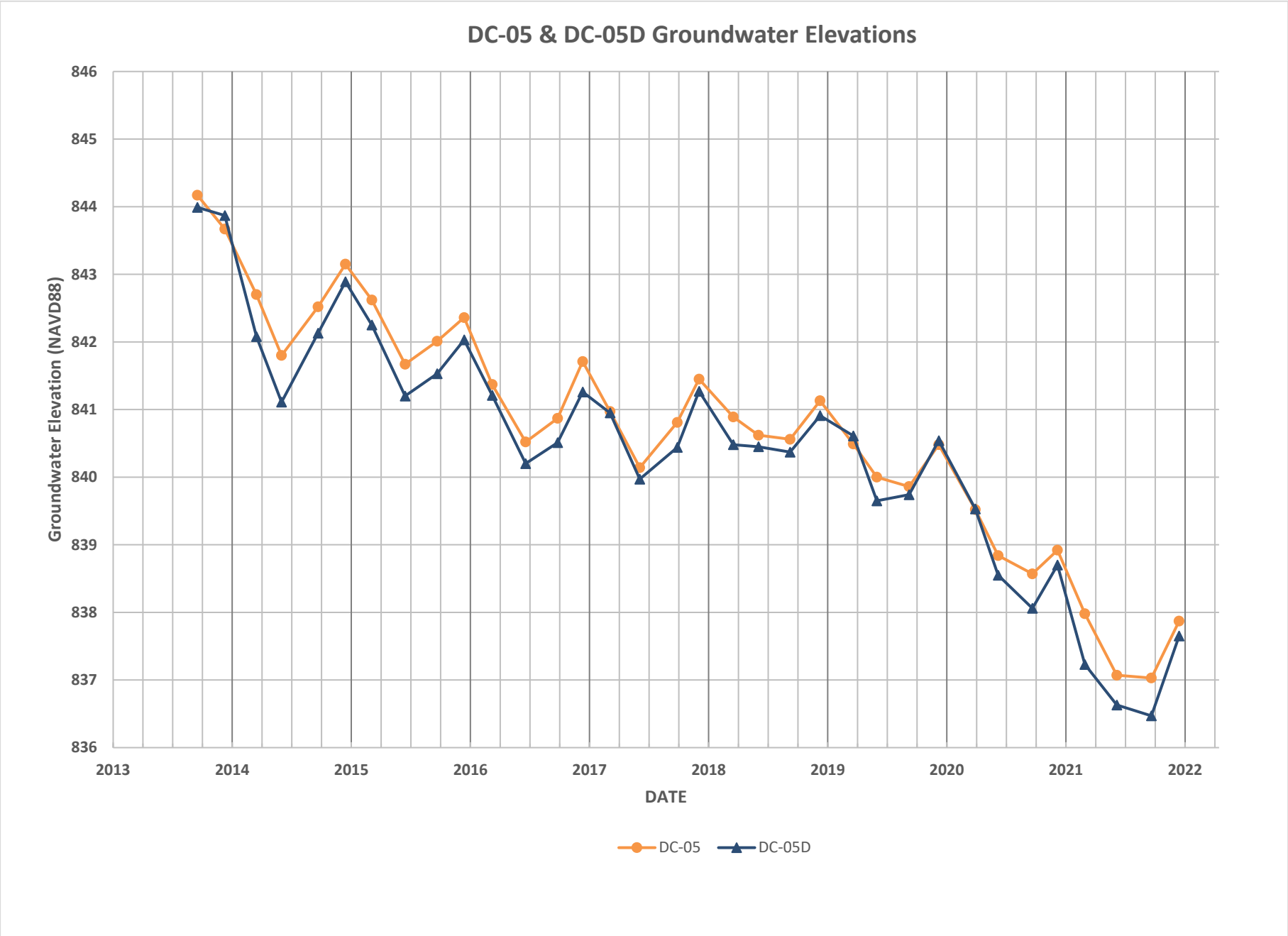

YVD-15 Groundwater Elevation
860
855
850
845
840
835
830
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-15 base of screen

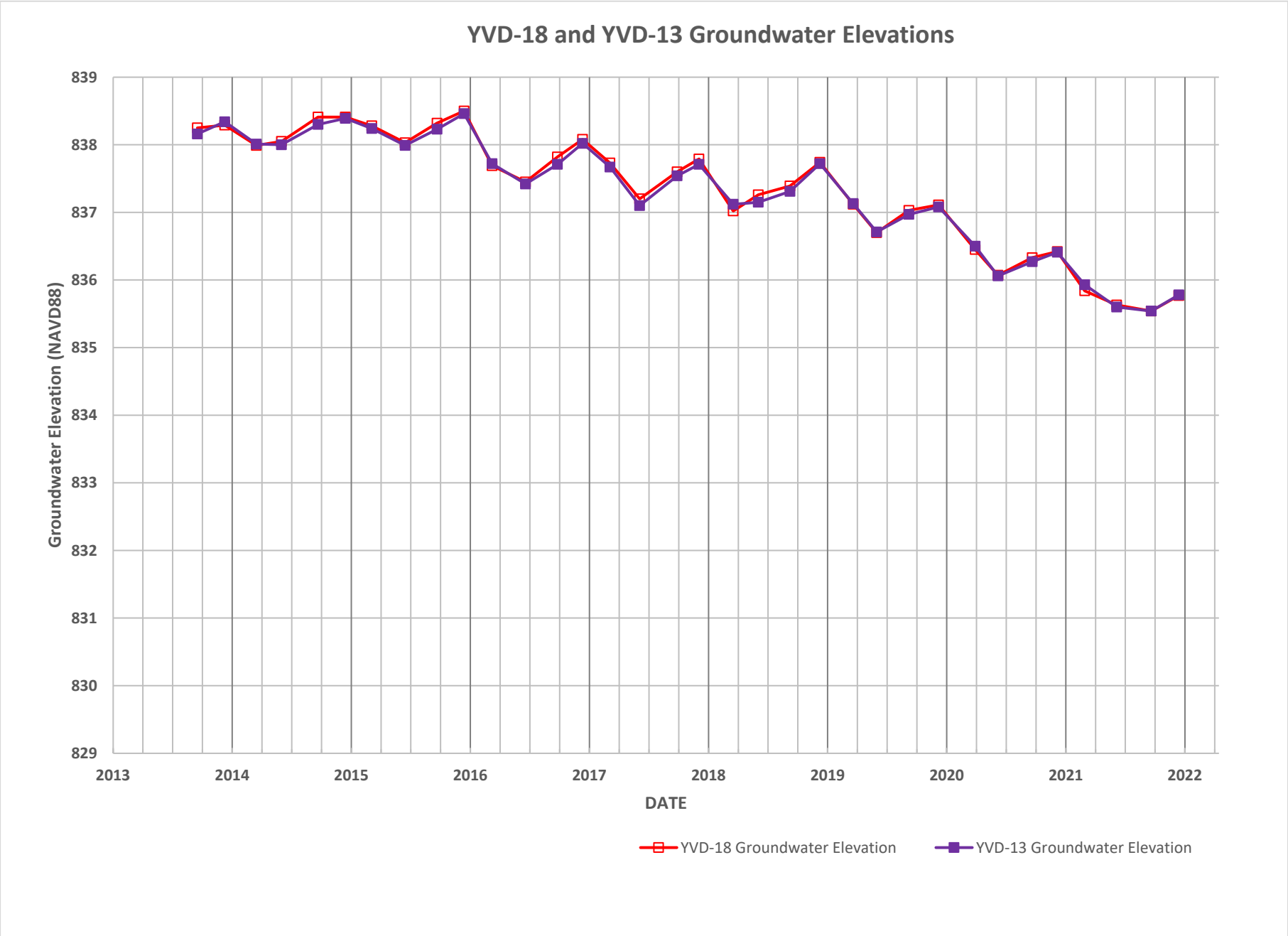

YVD-16 Groundwater Elevation
870
865
860
855
850
845
840
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-16 base of screen


YVD-17 Groundwater Elevation
840
835
830
825
820
815
810
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-17 base of screen


YVD-18 Groundwater Elevation
850
845
840
835
830
825
820
Groundwater Elevation (NAVD88)
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
Groundwater Elevation (feet NAVD88)
YVD-18 base of screen


DC-03 & -03D Groundwater Elevations
Groundwater Elevation (NAVD88)
839
838
837
836
835
834
833
832
831
830
829
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
DC-03
DC-03D


DC-05 & DC-05D Groundwater Elevations
Groundwater Elevation (NAVD88)
846
845
844
843
842
841
840
839
838
837
836
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
DC-05
DC-05D


YVD-18 and YVD-13 Groundwater Elevations
Groundwater Elevation (NAVD88)
839
838
837
836
835
834
833
832
831
830
829
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
DATE
YVD-18 Groundwater Elevation
YVD-13 Groundwater Elevation

Appendix B
Owner Certifications

Cow Palace Certification

I certify under the penalty of law that this document and all attachments were prepared by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based on my inquiry of any and all persons directly responsible for gathering and analyzing the information obtained, I certify that the information contained in or accompanying this submittal is, to the best of my knowledge and belief, true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Cow Palace, LLC

Signature	
Name	Adam Dolsen
Title	Member
Date	2-14-22

George DeRuyter & Son Dairy, LLC, D&A Dairy, LLC, and George & Margaret, LLC, Certification

I certify under the penalty of law that this document and all attachments were prepared by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based on my inquiry of any and all persons directly responsible for gathering and analyzing the information obtained, I certify that the information contained in or accompanying this submittal is, to the best of my knowledge and belief, true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

George DeRuyter & Son Dairy, LLC, D&A Dairy, LLC (also known as D and A Dairy L.L.C.), and George & Margaret, LLC

Signature	
Name	Dan DeRuyter
Title	Member
Date	2/14/22

Liberty Dairy Certification

I certify under the penalty of law that this document and all attachments were prepared by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based on my inquiry of any and all persons directly responsible for gathering and analyzing the information obtained, I certify that the information contained in or accompanying this submittal is, to the best of my knowledge and belief, true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Liberty Dairy, LLC (and its associated dairy facility H&S Bosma Dairy)

Signature	
Name	Henry Bosma
Title	Partner
Date	2-14-22

Appendix C
Groundwater Sampling Records

Yakima Dairies
TASK SHEET
Quarterly Monitoring Event
Quarter 1 2 3 (4)
Year _2021 __

Location ID	Depth to Bottom (feet btoc)	Date	Sample ID	Sample Time	Comments
YVD-02	38.4	———	NA - well dry	———	well dry
YVD-08	185.0	12/15/21	YVD-121521-20	1130	
YVD-09	124.8	12/14/21	YVD-121421-09	13:05	
YVD-10	105.6	12/14/21	YVD-121421-06	11:10	
YVD-11	119.3	12/14/21	YVD-121421-05	1035	
YVD-12	153.8	12/15/21	YVD-121521-18	1020	
YVD-13	143.5	12/15/21	YVD-121521-16	0935	
YVD-14R	95.4	12/14/21	YVD-121421-08	1220	
YVD-15	107.6	12/14/21	YVD-121421-07	1145	
YVD-16	125.0	12/14/21	YVD-121421-02	0900	
YVD-18	182.2	12/15/21	YVD-121521-12	0900	
DC-03	84.2	12/14/21	YVD-121421-11	1420	
DC-03D	118.5	12/14/21	YVD-121421-10	1350	
DC-04	49.4	12/15/21	YVD-121521-21	~~1030~~ 1150	
DC-05	85.3	12/15/21	YVD-121521-15	0900	
DC-05D	128.9	12/14/21	YVD-121421-04	0950	
DC-07	60.7	12/15/21	YVD-121521-17	1030	
DC-14	150.4	12/15/21	YVD-121521-19	1110	~~MS/MSD~~
QA/QC Samples					
DUP	--	12/14/21	YVD-121421-03	0905	MW-16
DUP	--	12/15/21	YVD-121521-14	0905	MW-18
Field blank	--	12/14/21	YVD-121421-01	0830	
Field blank	--	12/15/21	YVD-121521-13	0840	
Field blank	--				
Field blank	--				

Notes:
Flush-mount Well
btoc = below top of casing

Water Level Survey
Yakima Valley Dairies - AOC Wells

Anchor QEA, LLC
Personnel: James Melton
Weather: 25° – 42° F

Site: Yakima Dairies - AOC Wells
Project No. 210996-01.01 task 05
Water Level Meter # 2137115

Date: 12/14/21
Quarter (circle) 1 2 3 4

Location ID	Top of Casing Elevation (ft NAVD88)	Time (2400)	DTW (feet btoc or Top of Well Cap)	Correction Factor (feet)	Corrected DTW (feet)	Total Depth (feet TOC)	Comments
Monitoring Wells							
YVD-02	1288.97	1233	37.94	-0.11	37.83	38.3	corrected DTW > 37.87 ft = Well Dry
YVD-03	1120.68	1129	196.11	-0.17	195.94	202.7	transducer BRUCE OFF WHEN RETURNING TO WELL
YVD-04	1118.66	1114	225.79	-0.16	225.63	247.8	
YVD-05	1051.78	1156	174.35	-0.15	174.20	184.7	
YVD-06	1053.51	1206	111.70	-0.12	111.58	168.7	
YVD-07	1073.03	1253	163.81	-0.15	163.66	170.7	
YVD-08	1014.38	1324	174.52	-0.15	174.37	185.0	transducer plus baro
YVD-09	966.81	1233	114.79	-0.13	114.66	124.8	
YVD-10	958.00	1002	95.49	-0.14	95.35	105.6	
YVD-11	967.91	0928	112.00	-0.13	111.87	119.3	transducer
YVD-12	961.91	1104	140.96	-0.15	140.81	153.8	
YVD-13	965.59	1056	129.97	-0.16	129.81	143.5	
YVD-14R	921.41	1022	81.10	-0.15	80.95	95.4	
YVD-15	940.61	1007	96.67	-0.14	96.53	107.6	
YVD-16	975.90	0807	119.48	-0.14	119.34	125.0	
YVD-17	866.73	0954	37.52	-0.15	37.37	50.1	
YVD-18	965.74	1059	130.12	-0.15	129.97	182.2	
DC-01	1199.17	1244	151.00	-0.15	150.85	159.2	
DC-03	910.58	1028	75.36	-0.14	75.22	84.2	transducer
DC-03D	911.33	1042	75.98	-0.10	75.88	118.5	
DC-04	877.22	0946	38.05	-0.14	37.91	49.4	
DC-05	911.95	0858	74.22	-0.14	74.08	85.3	transducer
DC-05D	915.91	0828	78.40	-0.14	78.26	128.9	transducer
DC-07	889.29	1015	48.19	-0.14	48.05	60.7	
DC-09	1048.60	1300	163.28	-0.13	163.15	195.1	
DC-14	1036.61	1217	139.73	-0.15	139.58	150.4	
Canals							

Notes:
Flush-mount well
btoc = below top of casing
NAVD88 = North AmericanVertical Datum of 1988

Transducer Download and Calibration Form
Yakima Valley Dairies - AOC Wells

Anchor QEA, LLC
Personnel: James Morgan
Weather: 25°-40°F Mostly Sunny

Site: Yakima Valley Dairies Dates: ~~12/13/21~~ Jan 12/14/21
Project No. 200996-01.01 task 05 Quarter (circle) 1 2 3 4
Water Level Meter 2-137115

Location ID	Top of Casing Elevation (ft NAVD88)	Total Depth (feet btoc)	Transducer Serial Number	Date	DTW Time before removing transducer (2400)	DTW before removing transducer (feet btoc)	Correction Factor (feet)	Corrected DTW (feet)	Groundwater Elevation (ft NAVD88)	Transducer Download Time (2400)	DTW Time after replacing transducer (2400)	DTW after replacing transducer (feet btoc)	Correction Factor (feet)	Corrected DTW (feet)	Groundwater Elevation (ft NAVD88)	Transducer Battery %	Comments
YVD-03	1120.68	202.7	0102025611	12/15/21	1129	196.11	-0.17	195.94	924.74	1135	1145	196.11	-0.17	195.94	924.74	100	BROKE DURING RE-ENTRY
YVD-08	1014.38	185.0	0102025695	12/14/21	1324	174.52	-0.15	174.37	840.01	1334	1330	174.52	-0.15	174.37	840.01	100	BROKE DURING RE-ENTRY ✓
YVD-11	967.91	119.3	0102025608	12/14/21	0928	112.00	-0.13	111.87	856.04	1552	12/15 0945	112.01	-0.13	111.88	856.03	100	☆
DC-03	910.58	84.2	0102103226	12/14/21	1038	75.36	-0.14	75.22	835.36 ~~835.22~~	1033	1047	75.35	-0.14	75.21	835.37	100	
DC-05	911.95	85.3	0102025609	12/14/21	0858	74.22	-0.14	74.08	837.87	1556	12/15 0915	74.28	-0.14	74.14	837.81	100	☆
DC-05D	915.91	128.9	0102025753	12/14/21	0828	78.40	-0.14	78.26	837.65	1559	12/15 0930	78.76	-0.14	78.62	837.29	100	☆
Barometric Transducer (YVD-08)	---	---	0102025824	12/14/21	---	---	---	---	---	1336	---	---	---	---	---	100	

Notes:
Flush-mount well
DTW = Depth to Water
btoc = below top of casing

☆ = CONNECTED AT HOTEL & DOWNLOADED. COLD TEMPERATURES MAY HAVE BEEN REASON WOULD NOT CONNECT IN FIELD

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 SW Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID** FIELD BLANK

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-01

DUP ID:

Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind						

TEMPERATURE: 26 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
/ /	:						X 1	
/ /	:						X 3	

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Submersible Pump (B) Peristaltic Pump (C) Bladder Pump (D) Waterra inertial pump (E) Dedicated Pneumatic Pump (F) Other pour

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used] √
Yellow Poly	12/14/21	08:30	F (1)	4	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	12/14/21	:	F	1	125 ml **250 ml** 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): ~~4~~ 2 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) NO3 + NO2
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA

Purge Start Time: NA

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1											
2											
3											
4											
5											
6											
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18											

[Select A-G] [Cumulative Totals]

MW 12/14/21

Comments:

Sample collect by pouring laboratory-provided deionized water into sample containers from a height of one foot.

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ S. ~~Norwood/ A. Evans~~ M Wilson (PRINTED NAME) [signature] (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** YVD-16

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-02

DUP ID: YVD-121421-03 Time: 0905

WIND FROM: N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY

WEATHER: SUNNY | PRTLY CLDY | CLOUDY | RAIN | No Wind **TEMPERATURE:** 26 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
12/14/21	08:08	~~119.48~~	-0.14	119.41	125.0	5.59	X 1	0.97
/ /	:	119.55	-0.14				X 3	2.91

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/14/21	09:00	A	1	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	12/14/21	:		1	125 ml **250 ml** 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): 4 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) (NO_3+NO_2)
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 0838 Pump stop time: Pump inlet depth: 122.0 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	119.82	—	—	—	—	—	—	—
2		3	[illegible]	119.92	12.4	8.87	851	7.57	—(1)	109	sl cloudy, lt [illegible]
3		6	1.1	119.93	12.7	8.66	864	7.54	—	99.1	↓
4		9	1.8	119.93	11.9	8.75	888	7.53	—	80.0	↓
5	↓	12	2.5	↓	12.4	8.81	881	7.52	—	71.3	↓
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											

[Select A-G] [Cumulative Totals]

MW 12/14/21

Comments: (1) ORP Meter not functioning

PSI setting = 70 psi; refill/discharge ratio = 10/5

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/~~S. Norwood~~ MWilson [signature]
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** DC-05D

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-04

DUP ID: Time:

WIND FROM: N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY

WEATHER: SUNNY | PRTLY CLDY | CLOUDY | RAIN | No Wind **TEMPERATURE:** 32 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
12/14/21	09:33	78.28	-0.14	78.14	128.9	50.76	X 1	8.83
/ /	:		-0.14				X 3	26.49

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/14/21	09:50	A	2	125 ml 250 ml 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml 250 ml 500 ml	HNO_3	YES	NO	---	
White Poly	/	:	√	1	125 ml 250 ml 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): 4 (2) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) NO3+NO2
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 09:35 Pump stop time: Pump inlet depth: 125.9 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	78.69	—	—	—	—	(1) —	—	—
2		3	1.0	78.89	13.5	7.73	692	7.78	—	7.65	clear, colorless
3		6	1.7	78.93	13.3	7.85	691	7.75	—	3.07	
4		9	2.3	78.93	13.1	7.74	692	7.74	—	2.76	
5		12	2.8	78.93	12.9	7.77	692	7.73	—	3.35	
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											

[Select A-G] [Cumulative Totals]

MW 12/14/21

Comments:

PSI setting = 60 psi; refill/discharge ratio = 10/5 (1) ORP probe not functioning

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~/ MWilson (PRINTED NAME) Martha Wilson (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** YVD-11

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-05

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	31 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/14/21	10:11	112.05	-0.13	111.92	119.3	7.38	X 1	1.28
/ /	:		-0.13				X 3	3.84

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/14/21	10:35	A (1)	1	125 ml 250 ml 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml 250 ml 500 ml	HNO_3	YES	NO	---	
White Poly	/	:		1	125 ml 250 ml 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): 3 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) NO3-NO2
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1013 Pump stop time: Pump inlet depth: 116.3 ft **btoc**

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	112.46	—	—	—	—	—	—	—
2		3	0.3	112.53	11.1	7.20	1211	7.20	— (1)	7.10	clear, colorless
3		6	0.6	112.56	11.2	7.04	1293	7.16	—	5.45	
4		9	0.9	112.57	11.3	6.86	1316	7.15	—	4.64	
5		12	1.2	112.57	11.3	6.92	1326	7.15	—	5.58	
6		15	1.5	112.57	11.4	6.92	1327	7.14	—	4.95	
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											

[Select A-G] [Cumulative Totals]

MW 12/14/21

Comments:

PSI setting = 60 psi; refill/discharge ratio = 10/5 (1) ORP probe defective

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~ MWilson (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** ~~YVD-15~~ YVD-10

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-D6

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	37 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/14/21	10:52	95.52	-0.14	95.38	~~107.6~~ 105.6	10.22	X 1	1.78
/ /	:		-0.14				X 3	5.34

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used] √
Yellow Poly	12/14/21	11:10	A (1)	1	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/	:		1	125 ml **250 ml** 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): 4 (2) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) (NO3 + NO2)
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 10:56 Pump stop time: Pump inlet depth: 104.6 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	95.93	—	—	—	—	(1) —	—	—
2		3	0.9	95.95	12.6	7.73	2134	6.96	—	4.72	Clear colorless
3		6	1.3		12.6	7.52	2155	6.95	—	2.63	
4		9	2.5		12.6	7.26	2150	6.95	—	2.15	
5		12	3.3		12.6	7.22	2150	6.94	—	2.57	
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[Select A-G] [Cumulative Totals]

MW 12/14/21

Comments:

PSI setting = 70 psi; refill/discharge ratio = 10/5 (1) ORP probe defective

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ S. Norwood/ MWilson (PRINTED NAME) Melton Wilson (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** ~~YVD-10~~ YVD-15

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-07

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	38 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
12/14/21	11:26	96.71	-0.14	96.57	~~105.6~~ 107.6	11.03	X 1	1.92
/ /	:		-0.14				X 3	5.76

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/14/21	11:45	A (1)	~~2~~	125 ml 250 ml 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml 250 ml 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		(1)	125 ml 250 ml 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): ~~4~~ (2) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) (NO_3+ NO_2)
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1129 Pump stop time: Pump inlet depth: 102.6 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	97.09	—	—	—	—	(1) —	—	—
2		3	0.6	97.09	12.1	7.60	944	7.41	—	2.77	clear, colorless
3		6	1.1		12.3	7.37	955	7.37	—	1.62	
4		9	1.7		12.4	7.28	952	7.35	—	2.02	
5		12	2.3		12.5	7.18	951	7.34	—	1.42	
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[Select A-G] [Cumulative Totals]

MW 12/14/21

Comments:

PSI setting = 60 psi; refill/discharge ratio = 10/5 (1) ORP ~~meter~~ probe not functioning

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~ / M Wilson (PRINTED NAME) Martha Wilson (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** YVD-14R
SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-08
DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	39 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/14/21	11 59	81.12	-0.15	80.97	95.4	14.43	X 1	2.51
/ /	:		-0.15				X 3	7.53

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/14/21	12:20	A (1)	~~2~~	125 ml 250 ml 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml 250 ml 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		(1)	125 ml 250 ml 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): ~~4~~ 3 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) $NO_3 + NO_2$
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1203 Pump stop time: Pump inlet depth: 92.4 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	81.42	—	—	—	—	—	—	—
2		3	1.0		13.8	1.33	2259	6.84	(1) —	1.28	clear, colorless
3		6	2.0		13.8	1.21	2259	6.84	—	1.00	
4		9	3.0		13.9	0.99	2257	6.83	—	1.31	
5		12	4.0		13.9	0.95	2257	6.83	—	1.16	
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[Select A-G] [Cumulative Totals]

MW 12/14/21

Comments:
PSI setting = 60 psi; refill/discharge ratio = 10/5 (1) ORP probe not functioning
ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~ / MWilson (PRINTED NAME) Matt Wilson (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** YVD-09

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-09

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	40 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/14/21	12:35	114.79	-0.13	114.66	124.8	10.14	X 1	1.76
/ /	:		-0.13				X 3	5.28

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/14/21	13:05	A (1)		125 ml 250 ml 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml 250 ml 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		(1)	125 ml 250 ml 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): (2) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) (NO2+NO3)
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) (Nitrate as N (300.0)) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1246 Pump stop time: Pump inlet depth:121.8 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	115.29	—	—	—	—	(1) —	—	—
2	↓	3	0.6	↓	14.2	7.69	1290	7.46		1.43	clear, colorless
3		6	1.0	↓	14.3	6.91	1344	7.35	—	1.75	↓ ↓
4		9	1.8	↓	14.3	6.66	1357	7.33	—	1.64	↓ ↓
5		12	2.4	↓	14.3	6.64	1357	7.33	—	1.63	↓ ↓
6	↓	15	3.0	↓	14.4	6.39	1360	7.33	—	1.27	↓ ↓
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[Select A-G] [Cumulative Totals]

MW 12/14/21

Comments:

(1) ORP probe defective

PSI setting = 70 psi; refill/discharge ratio = 10/5

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ S. Norwood / MWilson (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** DC-03D

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-10

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	40 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
12/14/21	13:47	75.97	-0.10	75.87	118.5	42.63	X 1	7.42
/ /	:		-0.10				X 3	22.26

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used] √
Yellow Poly	12/14/21	13:50	A (1)	2	125 ml 250 ml 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml 250 ml 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		(1)	125 ml 250 ml 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): 4 (2) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) $NO_3 + NO_2$
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1330 Pump stop time: Pump inlet depth: 115.5 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	76.41	—	—	—	—	—	—	—
2		3	0.8	76.41	13.3	2.75	1233	7.02	(1) —	2.92	clear, colorless
3		6	1.7		13.3	1.67	1255	7.02	—	2.07	
4		9	2.4		13.5	1.58	1256	7.03	—	1.30	
5		12	3.2		13.5	1.44	1262	7.01	—	1.16	
6		15	3.9		13.5	1.30	1265	7.05	—	1.59	
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[Select A-G] [Cumulative Totals]

AW 12/14/21

Comments:
PSI setting = 70 psi; refill/discharge ratio = 9/6 (1) ORP probe defective
ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ S. ~~Norwood~~ / MADISON (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** DC-03

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121421-11

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	40 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/14/21	13:58	75.31	-0.14	75.17	84.2	9.03	X 1	1.57
/ /	:		-0.14				X 3	4.71

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/14/21	14:20	A (1)	1	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		1	125 ml **250 ml** 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): 3 (2) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) $NO_3 + NO_2$
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1403 Pump stop time: Pump inlet depth: 81.2 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	78.18	—	—	—	—	—	—	—
2		3	0.8	78.00	12.9	8.72	2361	7.09	(1) —	7.96	clear, colorless
3		6	1.6	78.00	12.9	8.76	2359	7.13	—	5.13	
4		9	2.4		12.8	8.96	2360	7.13	—	6.56	
5		12	3.2		12.8	8.82	2364	7.12	—	3.26	
6		15	4.0		12.9	8.72	2365	7.11	—	2.43	
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[Select A-G] [Cumulative Totals]

12/14/21

Comments:
PSI setting = 50 psi; refill/discharge ratio = 10/5 (1) ORP probe defective
ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ S. Norwood / M. Wilson (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** YVD-18

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121521-12

DUP ID: YVD-121521-14 Time: 0905

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	32 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/15/21	08:33	130.12	-0.15	129.97	182.2	52.23	X 1	8.09
/ /	:		-0.15				X 3	27.26

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/15/21	09:00	A	1	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		1	125 ml **250 ml** 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): 2 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E)
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

NO_3 + NO_2

WATER QUALITY DATA Purge Start Time: 0838 Pump stop time: 0907 Pump inlet depth: 179.2 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	130.12							JM 12/15/21
2	A	3	0.6	130.11	12.7	9.10	1013	6.69	138.5	2.69	clear, colorless
3	A	6	1.2	130.10	12.9	9.36	1034	6.86	125.1	2.07	" "
4	A	9	1.8	130.11	13.0	8.62	1034	7.02	116.1	1.26	" "
5	A	12	2.4	130.12	12.9	8.47	1032	7.13	111.7	1.19	" "
6	A	15	3.0	130.11	13.2	8.18	1025	7.22	108.6	1.12	" "
7	A	18	3.6	130.11	13.1	8.22	1019	7.28	106.6	1.21	" "
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[Select A-G] [Cumulative Totals]

JM 12/15/21

Comments:

PSI setting = 100 psi; refill/discharge ratio = 10/7

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** Field Blank

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD-121521-13

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	**TEMPERATURE:**	32 °F				

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
/ /	:						X 1	
/ /	:						X 3	

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Submersible Pump (B) Peristaltic Pump (C) Bladder Pump (D) Waterra inertial pump (E) Dedicated Pneumatic Pump (F) Other Pour

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used] √
Yellow Poly	12/15/21	08:40	F (1)	~~2~~	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		(1)	125 ml **250 ml** 500 ml	None	YES	NO	---	✓
Total Bottles (include duplicate count):				~~4~~ (2)		**MS & MSD** (circle if collected)				

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) $NO_3 + NO_2$
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: Pump stop time:

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1											
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	[Select A-G]		[Cumulative Totals]								

Comments:

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ S. ~~Norwood~~ /M Dolson (PRINTED NAME) [signature] (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** DC-05

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- ~~5~~ 121521-15

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	32 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/15/21	08:44	74.28	-0.14	74.14	85.3	11.16	X 1	1.94
/ /	:		-0.14				X 3	5.82

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/15/21	09:00	A (1)	2	125 ml 250 ml 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml 250 ml 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		(1)	125 ml 250 ml 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): ~~1~~ (2) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) (NH3 + NO2)
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 0846 Pump stop time: Pump inlet depth: 82.3 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (uS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	76.85	—	—	—	—	— (1)	—	—
2		3	0.7	76.87	12.1	7.50	1126	7.23	+319.5	2.17	clear, colorless
3		6	1.4	↓	12.2	7.59	1147	7.23	—	2.23	↓ ↓
4		9	2.1	↓	12.3	7.58	1147	7.23	—	1.37	↓ ↓
5	↓	12	2.8	↓	12.2	7.55	1148	7.22	—	2.16	↓ ↓
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[Select A-G] [Cumulative Totals]

MW 12/15/21

Comments:

PSI setting = 50 psi; refill/discharge ratio = 10/5 (1) ORP probe defective

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~ / MWilson (PRINTED NAME) (SIGNATURE)

12

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** YVD-13

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121521-16

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	TEMPERATURE:	32 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/15/21	09:13	129.93	-0.16	129.77	143.5	13.73	X 1	2.39
—	—	—	-0.16	—	—	—	X 3	7.17

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used] √
Yellow Poly	12/15/21	09:35	A	1	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:	↓	1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:	↓	1	125 ml **250 ml** 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): 2 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) NO3, T NO2
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 0914 Pump stop time: 0935 Pump inlet depth: 140.5 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal) (L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	129.93	—	—	—	—	—	—	JMM 12/15/21
2	A	3	0.8	129.95	12.8	7.69	1210	7.42	108.8	3.41	CLEAR, SLIGHT
3	A	6	1.6	129.96	13.1	7.31	1225	7.44	107.7	2.95	" "
4	A	9	2.4	129.96	13.2	7.39	1228	7.48	107.1	2.92	" "
5	A	12	3.2	129.97	13.2	7.33	1229	7.49	106.8	1.86	" "
6	A	15	4.0	129.96	13.2	7.29	1229	7.50	106.6	1.72	" "
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[Select A-G] [Cumulative Totals]

JMM 12/15/21

Comments:

PSI setting = 90 psi; refill/discharge ratio = 10/7

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/~~S. Norwood~~ (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** ~~DC-04~~ DC-07

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121521-17

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	**TEMPERATURE:**	34 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/15/21	10:16	48.19	-0.14	48.05	~~49.4~~ 60.7	12.51	X 1	2.18
/ /	:		-0.14				X 3	6.54

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/15/21	10:30	A (1)	~~2~~	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		(1)	125 ml **250 ml** 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): ~~4~~ (3) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) $NO_3 + NO_2$
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1019 Pump stop time: Pump inlet depth: 46.4 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	50.71	—	—	—	—	—	—	—
2		3	1.0	50.71	13.9	0.22	1157	6.78	(1) —	1.45	clear, colorless
3		6	2.0	50.71	13.9	0.19	1155	6.78	—	1.46	↓ ↓
4		9	3.0	↓	14.0	0.18	1151	6.76	—	0.87	↓ ↓
5		12	4.0	↓	14.0	0.18	1139	6.73	—	4.61	↓ ↓
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[Select A-G] [Cumulative Totals]

~~MW 12/15/21~~

Comments:
PSI setting = 40 psi; refill/discharge ratio = 10/5 (1) ORP probe defective
ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~ / M Wilson (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** YVD-12

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121521-18

DUP ID: _____ Time: _____

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	**TEMPERATURE:**	31 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/15/21	09:53	141.08	-0.15	140.93	153.8	12.87	X 1	2.24
/ /	:		-0.15				X 3	6.72

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/15/21	10:20	A	1	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/	:		1	125 ml **250 ml** 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): ~~3~~ 2 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) NO_3 + NO_2
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 0957 Pump stop time: 1021 Pump inlet depth: 150.8 ft **btoc**

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	141.08							JM 12/15/21
2	A	3	0.6	141.09	13.5	7.95	1047	7.65	102.9	1.81	clear, colorless
3	A	6	1.2	141.10	13.9	7.35	1080	7.57	102.2	1.59	" "
4	A	9	1.5	141.10	14.0	7.15	1088	7.53	102.2	1.45	" "
5	A	12	2.4	141.10	14.0	7.10	1089	7.53	102.4	1.56	" "
6	A	15	3.0	141.10	14.0	7.07	1087	7.52	102.6	1.27	" "
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10						JM 12/15/21					
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[Select A-G] [Cumulative Totals]

Comments:

PSI setting = 95 psi; refill/discharge ratio = 9/6

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~ (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** DC-14

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121521-19

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	**TEMPERATURE:**	34 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
12/15/21	10:50	139.76	-0.15	139.61	150.4	10.79	X 1	1.88
/ /	:		-0.15				X 3	5.64

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/15/21	11:10	A (1)	2	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/ /			1	125 ml **250 ml** 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): 4 (2) **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) NO_3 + NO_2
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1055 Pump stop time: Pump inlet depth: 147.4 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	142.76	—	—	—	—	—	—	—
2		3	0.7	142.31	14.0	2.37	1659	6.70	(1) —	4.66	clear, colorless
3		6	1.4		13.9	1.67	1704	6.69	—	1.86	
4		9	1.8		14.1	1.57	1697	6.70	—	1.83	
5		12	2.3		14.0	1.58	1692	6.71	—	0.93	
6		15	2.8		14.0	1.55	1679	6.70		0.94	
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[Select A-G] [Cumulative Totals]

AW 12/15/21

Comments:

PSI setting = 100 psi; refill/discharge ratio = 9/6

(1) ORP probe defective

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~ /MWilson (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 S Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** YVD-08

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD-121521-20

DUP ID: _____ Time: _____

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	**TEMPERATURE:**	33 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/15/21	10:46	174.68	-0.15	174.53	185.0	10.47	X 1	1.82
/ /	:		-0.15				X 3	5.47

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used] √
Yellow Poly	12/15/21	11:30	A	1	125 ml 250 ml 500 ml	H_2SO_4	YES	NO	---	✓
Red Poly-total	/ /	:		1	125 ml 250 ml 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		1	125 ml 250 ml 500 ml	None	YES	NO	---	✓

Total Bottles (include duplicate count): ~~4~~ 2 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) NO3 + NO2
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1050 Pump stop time: 1132 Pump inlet depth: 182.0 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal) (to)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	174.68							JM 12/15/21
2	A	3	0.7	174.76	13.5	7.04	1487	7.56	121.0	57.1	cloudy/yellowish
3	A	6	1.4	174.75	13.6	6.28	1524	7.44	120.1	58.9	" "
4	A	9	2.1	174.75	13.7	6.05	1540	7.38	119.6	42.0	" "
5	A	12	2.8	174.75	13.9	6.10	1542	7.36	119.0	33.8	slightly misty
6	A	15	3.4	174.74	14.0	6.09	1545	7.34	118.5	37.1	" "
7	A	18	4.0	174.74	14.0	6.03	1543	7.33	118.2	36.3	" "
8	A	21	4.6	174.75	14.0	6.12	1543	7.32	118.0	36.2	" "
9	A	24	5.2	174.74	14.0	6.12	1542	7.32	117.9	23.0	clear, colorless
10	A	27	5.8	174.74	14.1	6.04	1543	7.32	117.7	16.8	" "
11	A	30	6.4	174.75	13.9	6.13	1542	7.32	117.7	14.6	" "
12	A	33	7.0	174.75	13.9	6.19	1541	7.33	117.7	15.6	" "
13											
14											
15											
16											
17											
18											

[Select A-G] [Cumulative Totals]

JM 12/15/21

Comments:

PSI setting = 120 psi; refill/discharge ratio = 9/9

ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: ~~J. Melton/ S. Norwood~~ (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR QEA
6720 SW Macadam Ave, Suite 125, Portland, OR 97219
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring - AOC Wells **WELL ID:** ~~DC-07~~ DC-04

SITE ADDRESS: Outlook, WA **BLIND ID:** YVD- 121521-21

DUP ID: Time:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	PRTLY CLDY	CLOUDY	RAIN	No Wind	**TEMPERATURE:**	35 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DTW (feet btoc)	Correction Factor	Corrected DTW	DTB (ft btoc)	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/15/21	11:28	38.07	-0.14	37.93	~~60.7~~ 49.4	11.47	X 1	2.00
/ /	:		-0.14				X 3	6.00

Gal/ft = (dia./2)^2 x 0.163	1" = 0.041	2" = 0.174	6" = 1.469	8" = 2.611	10" = 4.080

§ METHODS: (A) Dedicated Bladder Pump (B) Portable Bladder Pump (C) Peristaltic Pump (D) Waterra inertial pump (E) Bailer (F) Other_____

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Method §	#	Volume	Preservative [circle]	Ice	Filter	pH	[√ if used]
Yellow Poly	12/15/21	11:50	A (1)	~~1~~	125 ml **250 ml** 500 ml	H_2SO_4	YES	NO	---	√
Red Poly-total	/ /	:		1	125 ml **250 ml** 500 ml	HNO_3	YES	NO	---	
White Poly	/ /	:		(1)	125 ml **250 ml** 500 ml	None	YES	NO	---	√

Total Bottles (include duplicate count): ~~1~~ 2 **MS & MSD** (circle if collected)

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
YELLOW - Poly	Ammonia (SM 4500-NH3 G) TKN (351.2) Total Phosphorus (SM 4500-P E) $NO_3 + NO_2$
RED TOTAL - Poly	Total Metals (Na, Mg, K, Ca (200.7))
WHITE - Poly	Ions (SO4, Cl, F (300.0)) Alkalinity (total and bicarbonate (SM2320B)) Nitrate as N (300.0) Nitrite as N (300.0)

WATER QUALITY DATA Purge Start Time: 1131 Pump stop time: Pump inlet depth: 57.7 ft btoc

Meas.	Method §	Time (24hr or elapsed)	Purged (gal)(L)	DTW (ft)	Temp (°C)	DO (mg/l)	Spec Cond (µS/cm)	pH (Standard Units)	ORP (mV)	Turbidity (NTU)	Water clarity/color
1	A	0	0	40.60	—	—	—	—	—	—	—
2		3	0.8	40.71	13.4	8.42	1256	7.05	(1) —	0.97	clear, colorless
3		6	2.3	40.73	13.5	8.54	1283	7.04	—	1.09	↓ ↓
4		9	3.4	40.71	13.5	8.46	1283	7.04	—	0.99	↓ ↓
5		12	4.4	↓	13.5	8.52	1281	7.04	—	1.25	↓ ↓
6	↓	15	5.4	↓	13.4	8.38	1279	7.04	—	1.09	↓ ↓
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											

[Select A-G] [Cumulative Totals]

12/15/21 MW

Comments:
PSI setting = 40 psi; refill/discharge ratio = 10/5 (1) ORP Probe defective
ft btoc = feet below top of casing DTW = depth to water DTB = depth to bottom

SAMPLER: J. Melton/ ~~S. Norwood~~ /MWilson (PRINTED NAME) Matthew Wilson (SIGNATURE)

ANCHOR QEA

DATE: 12/15/21

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring-AOC Wells

PROJECT NO: 210996-01.01 task 05

DAILY SAFETY BRIEFING

PERSON CONDUCTING MEETING: _____

HEALTH & SAFETY OFFICER: Tim Shaner

PROJECT MANAGER: Mark Larsen

TOPICS COVERED:

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/MSDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☒ Vehicle Safety and Driving/Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Other:
- ☐ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☒ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking

WEATHER CONDITIONS: cold (~30-37)

DAILY WORK SCOPE: Sample wells

SITE-SPECIFIC HAZARDS: traffic, cold

SAFETY COMMENTS: _____

ATTENDEES

PRINTED NAME	SIGNATURE
Matt Wilson	[signature]
James Merton	[signature]

ANCHOR QEA

DATE: 12/14/21

PROJECT NAME: Yakima Valley Dairies Groundwater Monitoring-AOC Wells

PROJECT NO: 200996-01.01 task 05

DAILY SAFETY BRIEFING

PERSON CONDUCTING MEETING: Matt Wilson

HEALTH & SAFETY OFFICER: Tim Shaner

PROJECT MANAGER: Mark Larsen

TOPICS COVERED:

- [ ] Emergency Procedures and Evacuation Route
- [x] Directions to Hospital
- [ ] HASP Review and Location
- [ ] Safety Equipment Location
- [ ] Proper Safety Equipment Use
- [ ] Employee Right-to-Know/MSDS Location
- [ ] Fire Extinguisher Location
- [ ] Eye Wash Station Location
- [x] Buddy System
- [x] Self and Coworker Monitoring
- [ ] Lines of Authority
- [x] Communication
- [ ] Site Security
- [ ] Vessel Safety Protocols
- [ ] Work Zones
- [x] Vehicle Safety and Driving/Road Conditions
- [ ] Equipment Safety and Operation
- [ ] Proper Use of PPE
- [ ] Decontamination Procedures
- [ ] Other:
- [ ] Lifting Techniques
- [x] Slips, Trips, and Falls
- [ ] Hazard Exposure Routes
- [x] Heat and Cold Stress
- [ ] Overhead and Underfoot Hazards
- [ ] Chemical Hazards
- [ ] Flammable Hazards
- [ ] Biological Hazards
- [ ] Eating/Drinking/Smoking

WEATHER CONDITIONS: cold in a.m 30-40 °F

DAILY WORK SCOPE: Measure depths to water and sample wells

SITE-SPECIFIC HAZARDS: traffic, ice

SAFETY COMMENTS: NA

ATTENDEES

PRINTED NAME	SIGNATURE
Matt Wilson	[illegible]
James Meier	[illegible]

Calibration Log
Yakima Valley Dairies Groundwater Monitoring - AOC Wells
Year _____
Quarter 1st 2nd 3rd 4th

Probe #: #2

	Initial	Final	Temp	Baro Pressure
Date: 12/13/21				
SC ~~1413~~ 1000 µS/cm	1003	—	19.4	---
pH 7.0	7.05	7.02	19.4	---
pH 4.01	4.01	4.00	19.4	---
~~pH 10.0~~ DO mg/L	8.39	8.80	19.9	---
DO % Saturation	92.0	96.5	---	732.9
ORP mV	240.3	239.4	19.3	---
Date: 12/15/21				
SC ~~1413~~ 1000 µS/cm	1007	1000	20.1	---
pH 7.0	7.02	7.02	20.2	---
pH 4.01	3.99	4.00	20.2	---
~~pH 10.0~~ DO mg/L	9.40	8.88	19.7	---
DO % Saturation	102.8	97.1	---	737.9
ORP mV	236.4	238.4	20.2	---
Date:				
SC 1413 µS/cm				---
pH 7.0				---
pH 4.01				---
pH 10.0				---
DO % Saturation			---	
ORP mV				---
Date:				
SC 1413 µS/cm				---
pH 7.0				---
pH 4.01				---
pH 10.0				---
DO % Saturation			---	
ORP mV				---

Probe #: 1

	Initial	Final	Temp	Baro Pressure
Date:				
SC 1413 µS/cm				---
pH 7.0				---
pH 4.01				---
pH 10.0				---
DO % Saturation			---	
ORP mV				---
Date: 12/15/21				
SC 1413 µS/cm	1377	1414	19.6	---
pH 7.0	6.97	7.02	19.5	---
pH 4.01	3.89	4.00	19.5	---
pH 10.0	—	—	—	---
DO % Saturation	95.5	96.6	---	739.8
ORP mV	211.5	239.1	19.5	---
Date:				
SC 1413 µS/cm				---
pH 7.0				---
pH 4.01				---
pH 10.0				---
DO % Saturation			---	
ORP mV				---
Date:				
SC 1413 µS/cm				---
pH 7.0				---
pH 4.01				---
pH 10.0				---
DO % Saturation			---	
ORP mV				---

Comments:
SC = Specific Conductance
DO = Dissolved Oxygen
ORP = Oxidation/Reduction Potential
µS/cm = microSiemens per centimeter
mV = millivolts

Appendix D
Data Validation Report

1201 3rd Avenue, Suite 2600
Seattle, Washington 98101
206.287.9130

Data Validation Report – EPA Stage 2A

January 13, 2022

Project: Yakima Valley Dairies

Project Number: 210996-01.01

Validation ID: AQ-2022-000007

This report summarizes the review of analytical results for 17 water samples, two field duplicate samples, and two field blank samples collected on December 14 and 15, 2021. The samples were collected by Anchor QEA, LLC, and submitted to ALS Environmental (ALS), in Kelso, Washington. The samples were analyzed Nitrate by U.S. Environmental Protection Agency (EPA) Method 300.0

ALS sample data groups (SDGs) K2114499 and K2114550 were reviewed in this report. Sample IDs, matrices, and analyses are presented in Table 1.

Table 1
Sample IDs, Matrices, and Analyses

Location ID	Sample ID	Lab Sample ID	Matrix	Analyses
FB	YVD-121421-01	K2114499-001	Water	Nitrate
YVD-16	YVD-121421-02	K2114499-002	Water	Nitrate
YVD-16 (FD)	YVD-121421-03	K2114499-003	Water	Nitrate
DC-05D	YVD-121421-04	K2114499-004	Water	Nitrate
YVD-11	YVD-121421-05	K2114499-005	Water	Nitrate
YVD-10	YVD-121421-06	K2114499-006	Water	Nitrate
YVD-15	YVD-121421-07	K2114499-007	Water	Nitrate
YVD-14R	YVD-121421-08	K2114499-008	Water	Nitrate
YVD-09	YVD-121421-09	K2114499-009	Water	Nitrate
DC-03D	YVD-121421-10	K2114499-010	Water	Nitrate
DC-03	YVD-121421-11	K2114499-011	Water	Nitrate
YVD-18	YVD-121521-12	K2114550-001	Water	Nitrate
FB	YVD-121521-13	K2114550-002	Water	Nitrate
YVD-18 (FD)	YVD-121521-14	K2114550-003	Water	Nitrate

Location ID	Sample ID	Lab Sample ID	Matrix	Analyses
DC-05	YVD-121521-15	K2114550-004	Water	Nitrate
YVD-13	YVD-121521-16	K2114550-005	Water	Nitrate
DC-07	YVD-121521-17	K2114550-006	Water	Nitrate
YVD-12	YVD-121521-18	K2114550-007	Water	Nitrate
DC-14	YVD-121521-19	K2114550-008	Water	Nitrate
YVD-08	YVD-121521-20	K2114550-009	Water	Nitrate
DC-04	YVD-121521-21	K2114550-010	Water	Nitrate

Notes:
FB: field blank
FD: field duplicate

Data Validation and Qualifications

The following comments refer to the laboratory's performance in meeting the quality assurance/quality control guidelines outlined in the analytical procedures. Laboratory results were reviewed using the laboratory control limits and the following guidelines:

- *Groundwater Monitoring Quality Assurance Project Plan, Addendum No. 1* (Anchor QEA 2016)
- *Groundwater Monitoring Quality Assurance Project Plan, Update No. 2* (Anchor QEA 2018)
- *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods* (EPA 1986)
- *National Functional Guidelines for Inorganic Superfund Data Review* (EPA 2020b)

Unless noted in this report, laboratory results for the samples listed in Table 1 were within quality control criteria.

Field Documentation

Field documentation was checked for completeness and accuracy. The chain-of-custody forms were signed by ALS at the time of sample receipt. Samples were received in good condition and within the recommended temperature range.

Holding Times and Sample Preservation

Samples were appropriately preserved and analyzed within holding times for all but 15 samples. Associated results were qualified "UJ" or "J" to indicate they may be biased.

Laboratory Method Blanks

Laboratory method blanks were analyzed at the required frequencies. All method blanks were free of target analytes.

Quality Control

Field Blanks

Two field blanks were collected in association with these sample sets and results were non-detect.

Field Duplicates

Two field duplicates were collected in association with these sample sets. Detected results are summarized in Table 2.

Result values less than five times the reporting limit (RL) may have exaggerated relative percent difference (RPD) values; therefore, if the sample or field duplicate result was less than five times the RL, the sample result was evaluated by the difference between them using the RL as the control limit. All RPD and/or difference values were within control limits for both duplicate sets.

Table 2
Field Duplicate Summary

Analyte	**YVD-121421-02**	**YVD-121421-03**	RPD
Nitrate	19.7 mg/L	20.1 mg/L	2%

Analyte	**YVD-121521-12**	**YVD-121521-14**	**RPD**
Nitrate	26.6 mg/L	26.7 mg/L	0%

Notes:
mg/L: milligrams per liter

Laboratory Control Samples

Laboratory control samples were analyzed at the required frequencies, and all analyses resulted in recovery values within project-required control limits.

Matrix Spike and Matrix Spike Duplicate Samples

Matrix spike (MS) samples and matrix spike duplicate (MSD) samples were analyzed at a frequency of one per 20 field samples analyzed. MS/MSD analyses conducted on non-project samples were not included in this evaluation. No data were qualified when sample concentrations were greater than four times the spike concentrations. The MS and MSD performed on sample YVD-121421-02 (YVD-16) recovered above the control limit. and MS/MSD. Associated batch sample results were qualified "J" to indicate a high bias.

Laboratory Duplicates

Laboratory duplicates were analyzed at the required frequencies and the duplicate RPDs were within project control limits. Laboratory duplicates analyzed on non-project samples were not included in this evaluation.

Method Reporting Limits

RLs were acceptable as reported. All values below detection were reported using the laboratory RLs. Values were reported as undiluted, or when reported as diluted, the RL accurately reflects the dilution factor.

Overall Assessment

As was determined by this evaluation, the laboratory followed the specified analytical methods, and all requested sample analyses were completed. Accuracy was acceptable as demonstrated by the laboratory control sample and MS/MSD recovery values, with the exceptions noted above. Precision was acceptable as demonstrated by the field duplicates and MS/MSD RPD values or difference values, with the exceptions noted above. All data are acceptable as reported or as qualified. Qualified data are summarized in Table 3. Project completeness was 100%.

Data Qualifier Definitions

UJ Indicates the compound or analyte was analyzed for but not detected and the specified limit reported is estimated
J Indicates an estimated value

Table 3
Data Qualification Summary

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
YVD-121421-02	Conventionals	Nitrate as nitrogen	19.7 mg/L	19.7J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121421-04	Conventionals	Nitrate as nitrogen	12.7 mg/L	12.7J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121421-08	Conventionals	Nitrate as nitrogen	118 mg/L	118J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121421-09	Conventionals	Nitrate as nitrogen	55.3 mg/L	55.3J mg/L	Hold time exceedance, MS/MSD %R above CL

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
YVD-121421-11	Conventionals	Nitrate as nitrogen	184 mg/L	184J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-12	Conventionals	Nitrate as nitrogen	26.6 mg/L	26.6J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-13	Conventionals	Nitrate as nitrogen	0.1U mg/L	0.1UJ mg/L	Hold time exceedance
YVD-121521-14	Conventionals	Nitrate as nitrogen	26.7 mg/L	26.7J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-15	Conventionals	Nitrate as nitrogen	43.5 mg/L	43.5J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-16	Conventionals	Nitrate as nitrogen	34 mg/L	34J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-17	Conventionals	Nitrate as nitrogen	20.3 mg/L	20.3J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-18	Conventionals	Nitrate as nitrogen	13.4 mg/L	13.4J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-19	Conventionals	Nitrate as nitrogen	51.4 mg/L	51.4J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-20	Conventionals	Nitrate as nitrogen	60.8 mg/L	60.8J mg/L	Hold time exceedance, MS/MSD %R above CL
YVD-121521-21	Conventionals	Nitrate as nitrogen	32.7 mg/L	32.7J mg/L	Hold time exceedance, MS/MSD %R above CL

Notes:
%R: percent recovery
CL: control limit

References

Anchor QEA (Anchor QEA, LLC), 2016. *Groundwater Monitoring Quality Assurance Project Plan, Addendum No. 1*. Prepared for Yakima Valley Dairies. November 2016.

Anchor QEA, 2018. *Groundwater Monitoring Quality Assurance Project Plan, Update No. 2*. Prepared for Yakima Valley Dairies. March 2018.

EPA (U.S. Environmental Protection Agency), 1986. *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*. Third Edition. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA-530/SW-846. September 1986.

USEPA, 2020b. National Functional Guidelines for Inorganic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. EPA-542-R-20-006. November 2020.

Appendix E
Analytical Laboratory Reports

December 22, 2021 Service Request No:K2114499

Matt Wilson
Anchor QEA, LLC
6720 S. Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Yakima Valley Dairies Groundwater Monitoring-AOC

Dear Matt,

Enclosed are the results of the sample(s) submitted to our laboratory December 15, 2021
For your reference, these analyses have been assigned our service request number **K2114499.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

ALS Environmental

Client: Anchor QEA, LLC
Service Request: K2114499
Project: Yakima Valley Dairies Groundwater Monitoring-AOC
Date Received: 12/15/2021
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Eleven water samples were received for analysis at ALS Environmental on 12/15/2021. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

Method 300.0, 12/17/2021: The analysis of a number of samples in this delivery group for Nitrate as Nitrogen was initially performed within the recommended holding time. Reanalysis at a dilution was required. The reanalysis was performed 1 day past the recommended holding time. The results from the second analysis were reported.

Method 300.0, 12/17/2021: The matrix spike recoveries of Nitrate as Nitrogen for sample YVD-121421-02 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. The matrix spike outliers suggested a potential high bias in this matrix. No further corrective action was appropriate.

Approved by Noe D. Ocampo Date 12/22/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: YVD-121421-02			Lab ID: K2114499-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	19.7		0.2	1.0	mg/L	300.0

CLIENT ID: YVD-121421-03			Lab ID: K2114499-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	20.1		0.4	2.5	mg/L	300.0

CLIENT ID: YVD-121421-04			Lab ID: K2114499-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	12.7		0.07	0.50	mg/L	300.0

CLIENT ID: YVD-121421-05			Lab ID: K2114499-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	46.1		0.2	1.0	mg/L	300.0

CLIENT ID: YVD-121421-06			Lab ID: K2114499-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	75.8		0.4	2.5	mg/L	300.0

CLIENT ID: YVD-121421-07			Lab ID: K2114499-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	15.1		0.4	2.5	mg/L	300.0

CLIENT ID: YVD-121421-08			Lab ID: K2114499-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	118		0.7	5.0	mg/L	300.0

CLIENT ID: YVD-121421-09			Lab ID: K2114499-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	55.3		0.3	2.0	mg/L	300.0

CLIENT ID: YVD-121421-10			Lab ID: K2114499-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	35.1		0.4	2.5	mg/L	300.0

CLIENT ID: YVD-121421-11			Lab ID: K2114499-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	184		0.7	5.0	mg/L	300.0

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

K2114499-001	YVD-121421-01	12/14/2021	0830
K2114499-002	YVD-121421-02	12/14/2021	0900
K2114499-003	YVD-121421-03	12/14/2021	0905
K2114499-004	YVD-121421-04	12/14/2021	0950
K2114499-005	YVD-121421-05	12/14/2021	1035
K2114499-006	YVD-121421-06	12/14/2021	1110
K2114499-007	YVD-121421-07	12/14/2021	1145
K2114499-008	YVD-121421-08	12/14/2021	1220
K2114499-009	YVD-121421-09	12/14/2021	1305
K2114499-010	YVD-121421-10	12/14/2021	1350
K2114499-011	YVD-121421-11	12/14/2021	1420

KZ114499

Chain of Custody

LABORATORY NAME:	ALS Kelso
LABORATORY ADDRESS:	1317 S 13th Ave Kelso WA 98626
LABORATORY PHONE:	360-577-7222

Work Order No.:

Project Manager:	Matt Wilson		
Client Name:	Anchor QEA, LLC		
Address:	6720 S Macadam Ave., Suite 125		
City, State ZIP:	Portland, OR 97219		
Email:	mwilson@anchorqea.com	**Phone:**	503-347-8511
Project Name:	Yakima Valley Dairies Groundwater Monitoring - AOC Wells		
Project Number:	210996-01.01 task 05		
P.O. Number:	YVD AOC GW 4Q2021		
Sampler's Name:	M. Wilson/ ~~S. Norwood~~ J Melton		

Bill to:	Cindy Fields
Company:	Anchor QEA, LLC
Email:	labdata@anchorqea.com

TAT

- ☐ Routine
- ☐ Same Day ***
- ☐ Next Day ***
- ☐ 5 Day
- ☐ 7 Day
- ☒ 14 Day

*** Please call for availability

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:

REQUESTED ANALYSIS

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of containers	Nitrate Method 300.0	$NO_3 + NO_2 \rightarrow N$ (Archive)					May Require Dilution Cl	NO3	SO4	Comments
YVD-121421-01	W	12/14/21	0830		2	X	X						X		48-hour hold time
YVD-121421-02			0900		2								X		
YVD-121421-03			0905		2								X		Archive all
YVD-121421-04			0950		2								X		$NO_3 + NO_2 \rightarrow N$
YVD-121421-05			1035		2								X		samples!
YVD-121421-06			1110		2								X		
YVD-121421-07			1145		2								X		
YVD-121421-08			1220		2								X		
YVD-121421-09			1305		2								X		
YVD-121421-10			1350		2								X		
YVD-121421-11			1420		2								X		

Comments: Nitrate - 48 hour hold time

Email Sample Receipt Forms with a copy of the COC, reports and invoices to labdata@anchorqea.com

RELINQUISHED BY			RECEIVED BY		
Print Name	Signature	Date/Time	Print Name	Signature	Date/Time
			M. Mulligan	M. Mulligan	12/15/21 1440

Revised : 11/22/2021

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K21 14499

Received: 12/15/21 Opened: 12/15/21 By: JH Unloaded: 12/15/21 By: JH

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column below:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
✓	1.7	1201					

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

SHORT HOLD TIME

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC
Project: Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05
Service Request: K2114499

Sample Name: YVD-121421-01
Lab Code: K2114499-001
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-02
Lab Code: K2114499-002
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-02
Lab Code: K2114499-002.R01
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-03
Lab Code: K2114499-003
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-04
Lab Code: K2114499-004
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Client: Anchor QEA, LLC
Project: Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05
Service Request: K2114499

Sample Name: YVD-121421-04
Lab Code: K2114499-004.R01
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-05
Lab Code: K2114499-005
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-06
Lab Code: K2114499-006
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-07
Lab Code: K2114499-007
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-08
Lab Code: K2114499-008
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Client: Anchor QEA, LLC
Project: Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05
Service Request: K2114499

Sample Name: YVD-121421-08
Lab Code: K2114499-008.R01
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-09
Lab Code: K2114499-009
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-09
Lab Code: K2114499-009.R01
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-10
Lab Code: K2114499-010
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121421-11
Lab Code: K2114499-011
Sample Matrix: Water
Date Collected: 12/14/21
Date Received: 12/15/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05		

Sample Name:	YVD-121421-11	**Date Collected:**	12/14/21
Lab Code:	K2114499-011.R01	**Date Received:**	12/15/21
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 08:30
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-01	**Basis:**	NA
Lab Code:	K2114499-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	0.02	2	12/15/21 19:02	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 09:00
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-02	**Basis:**	NA
Lab Code:	K2114499-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**19.7**	mg/L	1.0	0.2	20	12/17/21 12:52	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 09:05
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-03	**Basis:**	NA
Lab Code:	K2114499-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**20.1**	mg/L	2.5	0.4	50	12/15/21 20:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 09:50
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-04	**Basis:**	NA
Lab Code:	K2114499-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**12.7**	mg/L	0.50	0.07	10	12/17/21 13:04	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 10:35
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-05	**Basis:**	NA
Lab Code:	K2114499-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**46.1**	mg/L	1.0	0.2	20	12/15/21 21:10	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 11:10
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-06	**Basis:**	NA
Lab Code:	K2114499-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**75.8**	mg/L	2.5	0.4	50	12/15/21 21:34	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 11:45
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-07	**Basis:**	NA
Lab Code:	K2114499-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**15.1**	mg/L	2.5	0.4	50	12/15/21 21:57	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 12:20
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-08	**Basis:**	NA
Lab Code:	K2114499-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**118**	mg/L	5.0	0.7	100	12/17/21 13:16	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 13:05
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-09	**Basis:**	NA
Lab Code:	K2114499-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**55.3**	mg/L	2.0	0.3	40	12/17/21 13:27	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 13:50
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-10	**Basis:**	NA
Lab Code:	K2114499-010		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**35.1**	mg/L	2.5	0.4	50	12/15/21 23:18	

ALS Group USA, Corp.
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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21 14:20
Sample Matrix:	Water	**Date Received:**	12/15/21 11:40
Sample Name:	YVD-121421-11	**Basis:**	NA
Lab Code:	K2114499-011		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**184**	mg/L	5.0	0.7	100	12/17/21 13:39	*

QC Summary Forms

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1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
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General Chemistry

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2114499-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	0.007	1	12/15/21 16:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2114499-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	0.007	1	12/16/21 02:48	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2114499-MB3		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	0.007	1	12/16/21 19:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2114499-MB4		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	0.007	1	12/17/21 06:00	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21
Sample Matrix:	Water	**Date Received:**	12/15/21
		Date Analyzed:	12/15/21
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	YVD-121421-02	**Units:**	mg/L
Lab Code:	K2114499-002	**Basis:**	NA
Analysis Method:	300.0		
Prep Method:	None		

		Matrix Spike K2114499-002MS			**Duplicate Matrix Spike** K2114499-002DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	19.7	31.4	8.00	146 *	31.1	8.00	143 *	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Collected:**	12/14/21
Sample Matrix:	Water	**Date Received:**	12/15/21
		Date Analyzed:	12/15/21

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	YVD-121421-02	**Units:**	mg/L
Lab Code:	K2114499-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample K2114499-002DUP Result	Average	RPD	RPD Limit
Nitrate as Nitrogen	300.0	0.10	0.02	19.7	23.7	21.7	18	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Analyzed:**	12/15/21
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	749257

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2114499-LCS1	2.33	2.50	93	90-110

ALS Group USA, Corp.
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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Analyzed:**	12/16/21
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	749257

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2114499-LCS2	2.43	2.50	97	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Analyzed:**	12/16/21
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	749433

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2114499-LCS3	2.34	2.50	93	90-110

ALS Group USA, Corp.
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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114499
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 task 05	**Date Analyzed:**	12/17/21
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	749433

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2114499-LCS4	2.35	2.50	94	90-110

December 23, 2021 Service Request No:K2114550

Cindy Fields
Anchor QEA, LLC
1201 Third Avenue
Suite 2600
Seattle, WA 98101

Laboratory Results for: Yakima Valley Dairies Groundwater Monitoring-AOC

Dear Cindy,

Enclosed are the results of the sample(s) submitted to our laboratory December 16, 2021
For your reference, these analyses have been assigned our service request number **K2114550.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

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Narrative Documents

ALS Environmental—Kelso Laboratory
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Client: Anchor QEA, LLC
Project: Yakima Valley Dairies Groundwater Monitoring-AOC
Sample Matrix: Water
Service Request: K2114550
Date Received: 12/16/2021

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Ten water samples were received for analysis at ALS Environmental on 12/16/2021. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

Method 300.0, 12/17/2021: The analysis of samples in this delivery group for Nitrate as Nitrogen was initially performed within the recommended holding time. Reanalysis past hold was required due to a failing Continuing Calibration Verification (CCV) and the need to analyze most of the samples with larger dilutions. The data was flagged to indicate the holding time violation.

Approved by _____ Date 12/23/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: YVD-121521-12			Lab ID: K2114550-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	26.6		0.2	1.0	mg/L	300.0

CLIENT ID: YVD-121521-14			Lab ID: K2114550-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	26.7		0.2	1.0	mg/L	300.0

CLIENT ID: YVD-121521-15			Lab ID: K2114550-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	43.5		0.3	2.0	mg/L	300.0

CLIENT ID: YVD-121521-16			Lab ID: K2114550-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	34.0		0.2	1.0	mg/L	300.0

CLIENT ID: YVD-121521-17			Lab ID: K2114550-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	20.3		0.07	0.50	mg/L	300.0

CLIENT ID: YVD-121521-18			Lab ID: K2114550-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	13.4		0.07	0.50	mg/L	300.0

CLIENT ID: YVD-121521-19			Lab ID: K2114550-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	51.4		0.3	2.0	mg/L	300.0

CLIENT ID: YVD-121521-20			Lab ID: K2114550-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	60.8		0.3	2.0	mg/L	300.0

CLIENT ID: YVD-121521-21			Lab ID: K2114550-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Nitrate as Nitrogen	32.7		0.2	1.0	mg/L	300.0

Sample Receipt Information

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www.alsglobal.com

SAMPLE CROSS-REFERENCE

K2114550-001	YVD-121521-12	12/15/2021	0900
K2114550-002	YVD-121521-13	12/15/2021	0840
K2114550-003	YVD-121521-14	12/15/2021	0905
K2114550-004	YVD-121521-15	12/15/2021	0900
K2114550-005	YVD-121521-16	12/15/2021	0935
K2114550-006	YVD-121521-17	12/15/2021	1030
K2114550-007	YVD-121521-18	12/15/2021	1020
K2114550-008	YVD-121521-19	12/15/2021	1110
K2114550-009	YVD-121521-20	12/15/2021	1130
K2114550-010	YVD-121521-21	12/15/2021	1150

Chain of Custody

LABORATORY NAME:	ALS Kelso
LABORATORY ADDRESS:	1317 S 13th Ave Kelso WA 98626
LABORATORY PHONE:	360-577-7222

Work Order No.: K2114550

Project Manager:	Matt Wilson		
Client Name:	Anchor QEA, LLC		
Address:	6720 S Macadam Ave., Suite 125		
City, State ZIP:	Portland, OR 97219		
Email:	mwilson@anchorqea.com	**Phone:**	503-347-8511
Project Name:	Yakima Valley Dairies Groundwater Monitoring - AOC Wells		
Project Number:	210996-01.01 task 05		
P.O. Number:	YVD AOC 4Q2021 GW Monitoring		
Sampler's Name:	M. Wilson/ ~~S. Norwood~~ J Melton		

Bill to:	Cindy Fields
Company:	Anchor QEA, LLC
Email:	labdata@anchorqea.com

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:

REQUESTED ANALYSIS

TAT
- ☐ Routine
- ☐ Same Day ***
- ☐ Next Day ***
- ☐ 5 Day
- ☐ 7 Day
- ☒ 14 Day

*** Please call for availability

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of containers	Nitrate Method 300.0	$NO_3+NO_2 \rightarrow N$ (Archive)					May Require Dilution Cl	NO3	SO4	Comments
YVD-121521-12	W	12/15/21	0900		2	X	X								48-hour hold time
YVD-121521-13	↓	↓	0840		2	↓	↓								
YVD-121521-14	↓	↓	0905		2	↓	↓								
YVD-121521-15	↓	↓	0900		2	↓	↓								
YVD-121521-16	↓	↓	0935		2	↓	↓								
YVD-121521-17	↓	↓	1030		2	↓	↓								
YVD-121521-18	↓	↓	1020		2	↓	↓								
YVD-121521-19	↓	↓	1110		2	↓	↓								
YVD-121521-20	↓	↓	1130		2	↓	↓								
YVD-121521-21	↓	↓	1150		2	↓	↓								

Comments: Nitrate - 48 hour hold time

Email Sample Receipt Forms with a copy of the COC, reports and invoices to labdata@anchorqea.com

RELINQUISHED BY			RECEIVED BY		
Print Name	Signature	Date/Time	Print Name	Signature	Date/Time
Matt Wilson	[signature]	12/16/21 ~~[illegible]~~ 0835	KMC-ALS	K Monroe	12/16/21 ~~0835~~ 0945

REC: ZH 12/16/21 1000

Revised: 9/17/2021

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K21 14550

Received: 12/16/21 Opened: 12/16/21 By: [illegible] Unloaded: 12/16/21 By: [illegible]

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column below:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
2.0	—	IR07					

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

SHORT HOLD TIME

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC
Project: Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05
Service Request: K2114550

Sample Name: YVD-121521-12
Lab Code: K2114550-001
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121521-13
Lab Code: K2114550-002
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121521-13
Lab Code: K2114550-002.R01
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121521-14
Lab Code: K2114550-003
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121521-15
Lab Code: K2114550-004
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Client: Anchor QEA, LLC
Project: Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05
Service Request: K2114550

Sample Name: YVD-121521-16
Lab Code: K2114550-005
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121521-17
Lab Code: K2114550-006
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121521-18
Lab Code: K2114550-007
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121521-19
Lab Code: K2114550-008
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Name: YVD-121521-20
Lab Code: K2114550-009
Sample Matrix: Water
Date Collected: 12/15/21
Date Received: 12/16/21

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

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Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05		

Sample Name:	YVD-121521-21	**Date Collected:**	12/15/21
Lab Code:	K2114550-010	**Date Received:**	12/16/21
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KABROWN

Sample Results

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General Chemistry

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 09:00
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-12	**Basis:**	NA
Lab Code:	K2114550-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**26.6**	mg/L	1.0	0.2	20	12/17/21 09:50	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 08:40
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-13	**Basis:**	NA
Lab Code:	K2114550-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	0.02	2	12/17/21 18:18	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 09:05
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-14	**Basis:**	NA
Lab Code:	K2114550-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**26.7**	mg/L	1.0	0.2	20	12/17/21 10:03	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 09:00
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-15	**Basis:**	NA
Lab Code:	K2114550-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**43.5**	mg/L	2.0	0.3	40	12/17/21 10:15	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 09:35
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-16	**Basis:**	NA
Lab Code:	K2114550-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**34.0**	mg/L	1.0	0.2	20	12/17/21 10:27	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 10:30
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-17	**Basis:**	NA
Lab Code:	K2114550-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**20.3**	mg/L	0.50	0.07	10	12/17/21 10:40	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 10:20
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-18	**Basis:**	NA
Lab Code:	K2114550-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**13.4**	mg/L	0.50	0.07	10	12/17/21 11:28	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 11:10
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-19	**Basis:**	NA
Lab Code:	K2114550-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**51.4**	mg/L	2.0	0.3	40	12/17/21 11:40	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 11:30
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-20	**Basis:**	NA
Lab Code:	K2114550-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**60.8**	mg/L	2.0	0.3	40	12/17/21 12:15	*

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21 11:50
		Date Received:	12/16/21 09:45
Sample Matrix:	Water		
Sample Name:	YVD-121521-21	**Basis:**	NA
Lab Code:	K2114550-010		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**32.7**	mg/L	1.0	0.2	20	12/17/21 12:27	*

QC Summary Forms

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2114550-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	0.007	1	12/16/21 19:08	

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2114550-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	0.007	1	12/17/21 06:00	

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2114550-MB3		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.050	0.007	1	12/17/21 16:35	

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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21
Sample Matrix:	Water	**Date Received:**	12/16/21
		Date Analyzed:	12/17/21
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	YVD-121521-17	**Units:**	mg/L
Lab Code:	K2114550-006	**Basis:**	NA
Analysis Method:	300.0		
Prep Method:	None		

		Matrix Spike K2114550-006MS			**Duplicate Matrix Spike** K2114550-006DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	20.3	60.1	40.0	100	60.8	40.0	101	90-110	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Collected:**	12/15/21
Sample Matrix:	Water	**Date Received:**	12/16/21
		Date Analyzed:	12/17/21

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	YVD-121521-17	**Units:**	mg/L
Lab Code:	K2114550-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample K2114550-006DUP Result	Average	RPD	RPD Limit
Nitrate as Nitrogen	300.0	0.50	0.07	20.3	20.7	20.5	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Analyzed:**	12/16/21
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	749433

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2114550-LCS1	2.34	2.50	93	90-110

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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Analyzed:**	12/17/21
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	749433

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2114550-LCS2	2.35	2.50	94	90-110

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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2114550
Project:	Yakima Valley Dairies Groundwater Monitoring-AOC/210996-01.01 Task 05	**Date Analyzed:**	12/17/21
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	749549

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2114550-LCS3	2.34	2.50	94	90-110