

April 28, 2021

Charles M. Tebbutt, P.C.
Law Offices of Charles M. Tebbutt, P.C.
941 Lawrence Street
Eugene, Oregon 97401

Re: First Quarter 2021 Yakima Valley Dairies Consent Decree Groundwater Monitoring Data
Transmittal

This transmittal contains the results of groundwater monitoring activities conducted pursuant to the requirements of the 2015 Consent Decrees (CDs) executed by the following: 1) Cow Palace Dairy, LLC; 2) D&A Dairy, LLC (also known as D & 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 (collectively the Dairies) and the Community Association for Restoration of the Environment, Inc. (CARE).

Groundwater monitoring for the 14 CD wells was conducted in parallel with the First Quarter 2021 monitoring event for wells monitored under the separate Administrative Order on Consent (AOC) executed between the U.S. Environmental Protection Agency (EPA) and the Dairies. Information regarding the First Quarter 2021 groundwater sampling results at the AOC wells was reported in the *First Quarter 2021 Groundwater Monitoring Data Report* submitted to EPA on February 5, 2021 (Anchor QEA 2021).

Reference

Anchor QEA (Anchor QEA, LLC), 2021. *First Quarter 2021 Groundwater Monitoring Data Report*.
Yakima Valley Dairies, SDWA 10-2013-0080. April 28, 2021.

Accompanying Materials

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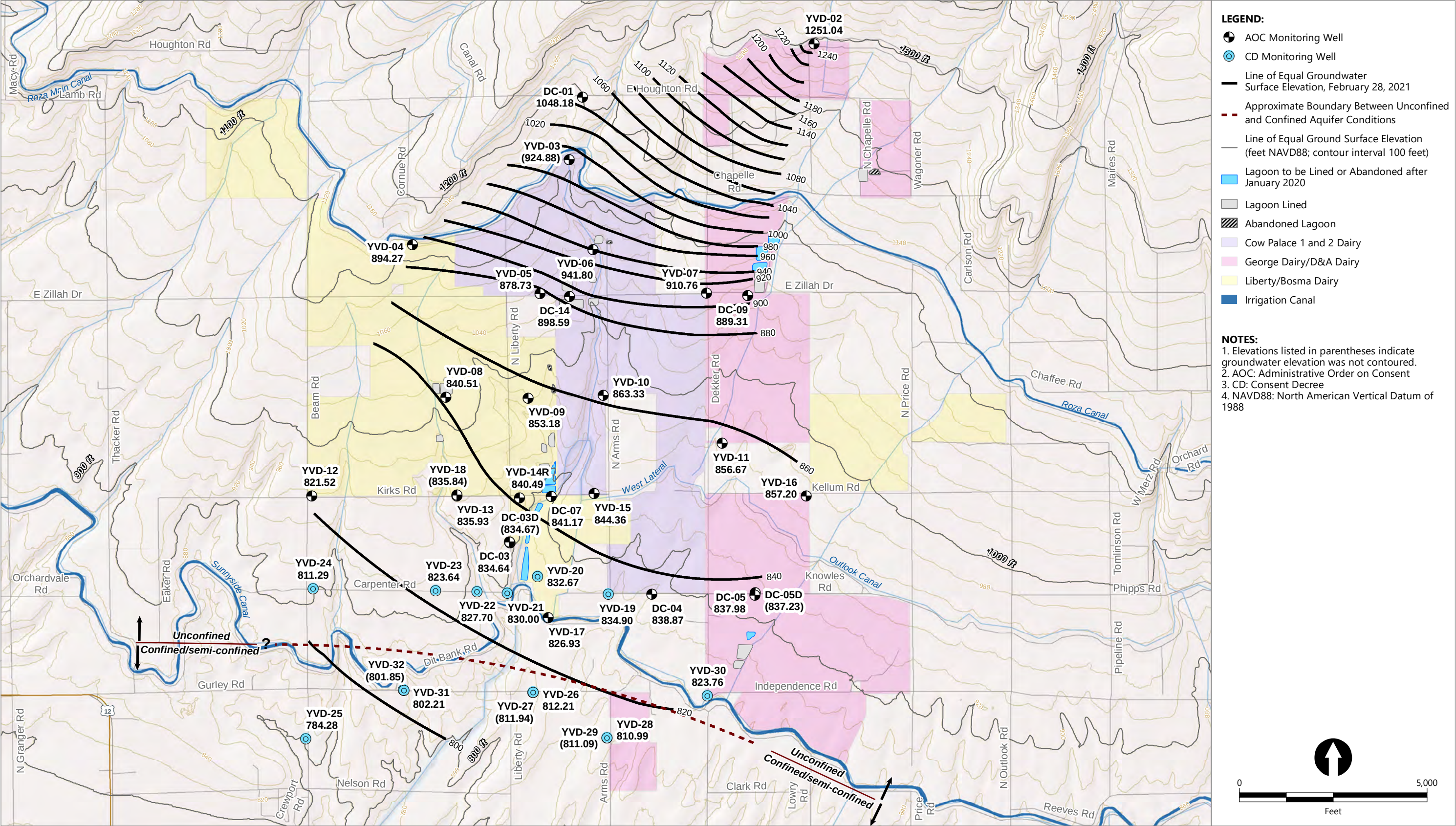
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Attachments

- Attachment A First Quarter 2021 Field Forms
- Attachment B First Quarter 2021 Analytical Laboratory Reports

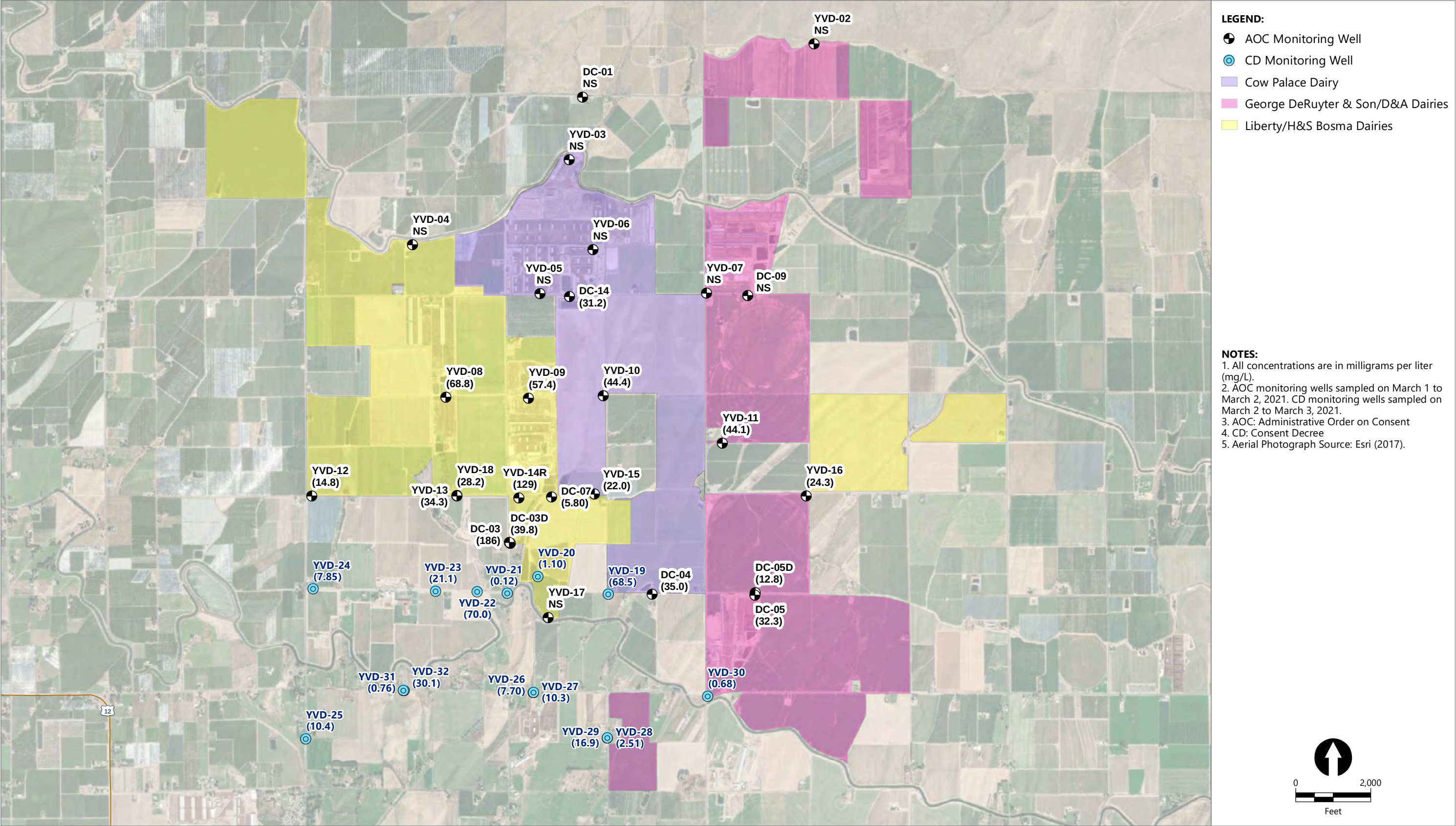
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Figure 1
Surficial Aquifer Groundwater Elevation Contour Map First Quarter 2021
First Quarter 2021 Yakima Valley Dairies Consent Decree Groundwater Monitoring Data Transmittal
Yakima Valley Dairies



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Figure 2
Nitrate Concentrations in Groundwater First Quarter 2021
First Quarter 2021 Yakima Valley Dairies Consent Decree Groundwater Monitoring Data Transmittal
Yakima Valley Dairies

Tables

Table 1
Monitoring Well Construction Details – Consent Decree Wells

Well ID	Installation Date	Coordinates		Coordinates WA State Plane NAD83		Screened Zone (Surficial Aquifer)	Top of Well Casing Elevation (ft NAVD88)	Ground Surface Elevation (ft NAVD88)	Surface Completion	Boring Depth (ft bgs)	Casing and Screen Material	Screen Slot Size (inches)	Screen Length (ft)	Depth to Top of Screen (ft bgs)	Depth to Bottom of Screen (ft bgs)	Depth to Bottom of Well (ft bgs)	Elevation of Top of Screen (ft NAVD88)	Elevation of Base of Screen (ft NAVD88)	Elevation of Bottom of Well (ft NAVD88)
		Latitude	Longitude	Easting	Northing														
YVD-19	11/29/2016	46.38245	-120.13574	1732344.6624	382786.6144	Water Table	877.56	877.96	Flush	53.0	Schedule 40 PVC	0.020	20	29.8	49.8	50.1	848.2	828.2	827.9
YVD-20	11/22/2016	46.38378	-120.14316	1730467.7287	383261.7760	Water Table	875.21	875.74	Flush	60.0	Schedule 40 PVC	0.020	20	29.1	49.1	49.5	846.6	826.6	826.2
YVD-21	12/16/2016	46.38256	-120.14639	1729654.7004	382812.6485	Water Table	891.69	892.16	Flush	75.0	Schedule 40 PVC	0.020	20	54.7	74.7	75.0	837.5	817.5	817.2
YVD-22	12/15/2016	46.38269	-120.14959	1728849.0081	382858.1283	Water Table	883.08	883.42	Flush	75.0	Schedule 40 PVC	0.020	20	54.7	74.7	75.0	828.8	808.8	808.4
YVD-23	12/14/2016	46.38275	-120.15395	1727747.3827	382873.7076	Water Table	913.57	914.16	Flush	106.0	Schedule 40 PVC	0.020	20	85.7	105.7	106.0	828.5	808.5	808.2
YVD-24	12/12/2016	46.38295	-120.16691	1724476.9172	382934.9632	Water Table	902.01	902.62	Flush	105.0	Schedule 40 PVC	0.020	20	84.7	104.7	105.0	818.0	798.0	797.6
YVD-25	3/9/2017	46.37200	-120.16772	1724288.9448	378937.9731	Shallow Confined	798.73	799.14	Flush	86.0	Schedule 40 PVC	0.020	20	65.8	85.8	86.2	733.3	713.3	713.0
YVD-26	12/8/2016	46.37531	-120.14372	1730342.8703	380171.5594	Shallow Confined	831.95	832.39	Flush	67.0	Schedule 40 PVC	0.020	20	46.2	66.2	66.5	786.2	766.2	765.9
YVD-27	12/7/2016	46.37530	-120.14369	1730349.4341	380171.4506	Deep Confined	832.42	832.82	Flush	100.0	Schedule 40 PVC	0.020	10	87.0	97.0	97.4	745.8	735.8	735.5
YVD-28	12/2/2016	46.37196	-120.13591	1732317.5015	378960.1658	Shallow Confined	846.12	846.68	Flush	56.0	Schedule 40 PVC	0.020	20	35.4	55.4	55.8	811.3	791.3	790.9
YVD-29	3/5/2017	46.37197	-120.13591	1732317.2301	378964.8944	Deep Confined	846.04	846.45	Flush	80.0	Schedule 40 PVC	0.020	10	65.5	75.5	75.9	780.9	770.9	770.6
YVD-30	11/28/2016	46.37498	-120.12530	1734992.0753	380074.6701	Water Table	865.45	862.58	Stick-Up	55.0	Schedule 40 PVC	0.020	20	31.0	51.0	51.3	831.6	811.6	811.3
YVD-31	11/28/2017	46.37551	-120.15740	1726889.2460	380231.9800	Shallow Confined	848.55	848.63	Flush	105.0	Schedule 40 PVC	0.020	20	79.7	99.7	100.0	768.9	748.9	748.6
YVD-32	3/10/2018	46.37551	-120.15732	1726907.0000	380229.8000	Deep Confined	847.74	848.28	Flush	130.3	Schedule 40 PVC	0.020	10	120.0	130.0	130.3	728.3	718.3	718.0

Notes:

bgs: below ground surface

ft: feet

NAD83: North American Datum of 1983

NAVD88: North American Vertical Datum of 1988

PVC: polyvinyl chloride

WA: Washington

Table 2**Summary of Consent Decree Wells Groundwater Elevations – First Quarter 2021**

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-19	2/28/2021	877.56	42.66	834.90
YVD-20	2/28/2021	875.21	42.54	832.67
YVD-21	2/28/2021	891.69	61.69	830.00
YVD-22	2/28/2021	883.08	55.38	827.70
YVD-23	2/28/2021	913.57	89.93	823.64
YVD-24	2/28/2021	902.01	90.72	811.29
YVD-25	2/28/2021	798.73	14.45	784.28
YVD-26	2/28/2021	831.95	19.74	812.21
YVD-27	2/28/2021	832.42	20.48	811.94
YVD-28	2/28/2021	846.12	35.13	810.99
YVD-29	2/28/2021	846.04	34.95	811.09
YVD-30	2/28/2021	865.45	41.69	823.76
YVD-31	2/28/2021	848.55	46.34	802.21
YVD-32	2/28/2021	847.74	45.89	801.85

Notes:

BTOC: below top of casing

NAVD88: North American Vertical Datum of 1988

Table 3
Historical CD Wells Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-19	3/5/2017	877.56	40.78	836.78
YVD-19	6/4/2017	877.56	40.61	836.95
YVD-19	9/27/2017	877.56	38.78	838.78
YVD-19	12/3/2017	877.56	39.36	838.20
YVD-19	3/18/2018	877.56	41.08	836.48
YVD-19	6/3/2018	877.56	40.94	836.62
YVD-19	9/8/2018	877.56	39.65	837.91
YVD-19	12/9/2018	877.56	39.98	837.58
YVD-19	3/21/2019	877.56	41.87	835.69
YVD-19	6/1/2019	877.56	41.75	835.81
YVD-19	9/8/2019	877.56	40.15	837.41
YVD-19	12/8/2019	877.56	40.59	836.97
YVD-19	3/29/2020	877.56	42.48	835.08
YVD-19	6/7/2020	877.56	42.44	835.12
YVD-19	9/20/2020	877.56	40.58	836.98
YVD-19	12/6/2020	877.56	41.08	836.48
YVD-19	2/28/2021	877.56	42.66	834.90
YVD-20	3/5/2017	875.21	40.00	835.21
YVD-20	6/4/2017	875.21	38.13	837.08
YVD-20	9/27/2017	875.21	35.35	839.86
YVD-20	12/3/2017	875.21	37.65	837.56
YVD-20	3/18/2018	875.21	40.23	834.98
YVD-20	6/3/2018	875.21	38.33	836.88
YVD-20	9/8/2018	875.21	36.37	838.84
YVD-20	12/9/2018	875.21	38.93	836.28
YVD-20	3/21/2019	875.21	41.70	833.51
YVD-20	6/1/2019	875.21	39.59	835.62
YVD-20	9/8/2019	875.21	37.23	837.98
YVD-20	12/8/2019	875.21	39.16	836.05
YVD-20	3/29/2020	875.21	42.28	832.93
YVD-20	6/7/2020	875.21	39.94	835.27
YVD-20	9/20/2020	875.21	38.38	836.83
YVD-20	12/6/2020	875.21	39.58	835.63
YVD-20	2/28/2021	875.21	42.54	832.67
YVD-21	3/5/2017	891.69	60.25	831.44
YVD-21	6/4/2017	891.69	58.67	833.02
YVD-21	9/27/2017	891.69	55.85	835.84
YVD-21	12/3/2017	891.69	57.69	834.00

Table 3
Historical CD Wells Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-21	3/18/2018	891.69	60.48	831.21
YVD-21	6/3/2018	891.69	58.54	833.15
YVD-21	9/8/2018	891.69	56.33	835.36
YVD-21	12/9/2018	891.69	58.16	833.53
YVD-21	3/21/2019	891.69	60.99	830.70
YVD-21	6/1/2019	891.69	59.39	832.30
YVD-21	9/8/2019	891.69	56.75	834.94
YVD-21	12/8/2019	891.69	58.79	832.90
YVD-21	3/29/2020	891.69	61.23	830.46
YVD-21	6/7/2020	891.69	59.55	832.14
YVD-21	9/20/2020	891.69	57.29	834.40
YVD-21	12/6/2020	891.69	59.06	832.63
YVD-21	2/28/2021	891.69	61.69	830.00
YVD-22	3/5/2017	883.08	54.08	829.00
YVD-22	6/4/2017	883.08	53.77	829.31
YVD-22	9/27/2017	883.08	51.71	831.37
YVD-22	12/3/2017	883.08	52.18	830.90
YVD-22	3/18/2018	883.08	54.21	828.87
YVD-22	6/3/2018	883.08	53.80	829.28
YVD-22	9/8/2018	883.08	52.21	830.87
YVD-22	12/9/2018	883.08	52.55	830.53
YVD-22	3/21/2019	883.08	54.65	828.43
YVD-22	6/1/2019	883.08	54.43	828.65
YVD-22	9/8/2019	883.08	52.66	830.42
YVD-22	12/8/2019	883.08	53.13	829.95
YVD-22	3/29/2020	883.08	55.33	827.75
YVD-22	6/7/2020	883.08	54.86	828.22
YVD-22	9/20/2020	883.08	53.07	830.01
YVD-22	12/6/2020	883.08	53.55	829.53
YVD-22	2/28/2021	883.08	55.38	827.70
YVD-23	3/5/2017	913.57	88.28	825.29
YVD-23	6/4/2017	913.57	88.74	824.83
YVD-23	9/27/2017	913.57	87.38	826.19
YVD-23	12/3/2017	913.57	87.08	826.49
YVD-23	3/18/2018	913.57	88.69	824.88
YVD-23	6/3/2018	913.57	88.65	824.92
YVD-23	9/8/2018	913.57	87.72	825.85
YVD-23	12/9/2018	913.57	87.49	826.08

Table 3
Historical CD Wells Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-23	3/21/2019	913.57	88.91	824.66
YVD-23	6/1/2019	913.57	89.28	824.29
YVD-23	9/8/2019	913.57	88.15	825.42
YVD-23	12/8/2019	913.57	88.20	825.37
YVD-23	3/29/2020	913.57	89.70	823.87
YVD-23	6/7/2020	913.57	89.86	823.71
YVD-23	9/20/2020	913.57	88.69	824.88
YVD-23	12/6/2020	913.57	88.64	824.93
YVD-23	2/28/2021	913.57	89.93	823.64
YVD-24	3/5/2017	902.01	88.46	813.55
YVD-24	6/4/2017	902.01	89.51	812.50
YVD-24	9/27/2017	902.01	89.61	812.40
YVD-24	12/3/2017	902.01	87.99	814.02
YVD-24	3/18/2018	902.01	88.85	813.16
YVD-24	6/3/2018	902.01	89.24	812.77
YVD-24	9/8/2018	902.01	89.10	812.91
YVD-24	12/9/2018	902.01	88.57	813.44
YVD-24	3/21/2019	902.01	89.17	812.84
YVD-24	6/1/2019	902.01	89.90	812.11
YVD-24	9/8/2019	902.01	89.75	812.26
YVD-24	12/8/2019	902.01	89.57	812.44
YVD-24	3/29/2020	902.01	90.47	811.54
YVD-24	6/7/2020	902.01	91.07	810.94
YVD-24	9/20/2020	902.01	90.59	811.42
YVD-24	12/6/2020	902.01	90.19	811.82
YVD-24	2/28/2021	902.01	90.72	811.29
YVD-25	3/20/2017	798.73	12.31	786.42
YVD-25	6/4/2017	798.73	13.59	785.14
YVD-25	9/27/2017	798.73	11.53	787.20
YVD-25	12/3/2017	798.73	11.42	787.31
YVD-25	3/18/2018	798.73	13.20	785.53
YVD-25	6/3/2018	798.73	14.12	784.61
YVD-25	9/8/2018	798.73	13.11	785.62
YVD-25	12/9/2018	798.73	12.60	786.13
YVD-25	3/21/2019	798.73	13.15	785.58
YVD-25	6/2/2019	798.73	14.29	784.44
YVD-25	9/8/2019	798.73	13.36	785.37
YVD-25	12/8/2019	798.73	13.04	785.69

Table 3
Historical CD Wells Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-25	3/29/2020	798.73	14.97	783.76
YVD-25	6/7/2020	798.73	14.78	783.95
YVD-25	9/20/2020	798.73	13.34	785.39
YVD-25	12/6/2020	798.73	13.45	785.28
YVD-25	2/28/2021	798.73	14.45	784.28
YVD-26	3/5/2017	831.95	17.20	814.75
YVD-26	6/4/2017	831.95	18.40	813.55
YVD-26	9/27/2017	831.95	13.86	818.09
YVD-26	12/3/2017	831.95	15.72	816.23
YVD-26	3/18/2018	831.95	18.87	813.08
YVD-26	6/3/2018	831.95	18.05	813.90
YVD-26	9/8/2018	831.95	15.22	816.73
YVD-26	12/9/2018	831.95	16.52	815.43
YVD-26	3/21/2019	831.95	18.64	813.31
YVD-26	6/1/2019	831.95	18.46	813.49
YVD-26	9/8/2019	831.95	14.84	817.11
YVD-26	12/8/2019	831.95	16.79	815.16
YVD-26	3/29/2020	831.95	20.10	811.85
YVD-26	6/7/2020	831.95	17.54	814.41
YVD-26	9/20/2020	831.95	15.57	816.38
YVD-26	12/6/2020	831.95	16.94	815.01
YVD-26	2/28/2021	831.95	19.74	812.21
YVD-27	3/5/2017	832.42	17.99	814.43
YVD-27	6/4/2017	832.42	19.17	813.25
YVD-27	9/27/2017	832.42	14.61	817.81
YVD-27	12/3/2017	832.42	16.50	815.92
YVD-27	3/18/2018	832.42	19.61	812.81
YVD-27	6/3/2018	832.42	18.83	813.59
YVD-27	9/8/2018	832.42	15.98	816.44
YVD-27	12/9/2018	832.42	17.33	815.09
YVD-27	3/21/2019	832.42	19.38	813.04
YVD-27	6/1/2019	832.42	19.25	813.17
YVD-27	9/8/2019	832.42	15.59	816.83
YVD-27	12/8/2019	832.42	17.53	814.89
YVD-27	3/29/2020	832.42	20.82	811.60
YVD-27	6/7/2020	832.42	18.40	814.02
YVD-27	9/20/2020	832.42	16.35	816.07

Table 3
Historical CD Wells Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-27	12/6/2020	832.42	17.68	814.74
YVD-27	2/28/2021	832.42	20.48	811.94
YVD-28	3/5/2017	846.12	31.92	814.20
YVD-28	6/4/2017	846.12	32.96	813.16
YVD-28	9/27/2017	846.12	30.27	815.85
YVD-28	12/3/2017	846.12	31.34	814.78
YVD-28	3/18/2018	846.12	33.66	812.46
YVD-28	6/3/2018	846.12	33.77	812.35
YVD-28	9/8/2018	846.12	31.35	814.77
YVD-28	12/9/2018	846.12	32.19	813.93
YVD-28	3/21/2019	846.12	34.03	812.09
YVD-28	6/1/2019	846.12	34.05	812.07
YVD-28	9/8/2019	846.12	31.65	814.47
YVD-28	12/8/2019	846.12	32.80	813.32
YVD-28	3/29/2020	846.12	35.21	810.91
YVD-28	6/7/2020	846.12	34.13	811.99
YVD-28	9/20/2020	846.12	31.98	814.14
YVD-28	12/6/2020	846.12	33.13	812.99
YVD-28	2/28/2021	846.12	35.13	810.99
YVD-29	3/21/2017	846.04	32.05	813.99
YVD-29	6/4/2017	846.04	32.73	813.31
YVD-29	9/27/2017	846.04	30.03	816.01
YVD-29	12/3/2017	846.04	31.17	814.87
YVD-29	3/18/2018	846.04	33.55	812.49
YVD-29	6/3/2018	846.04	33.54	812.50
YVD-29	9/8/2018	846.04	31.11	814.93
YVD-29	12/9/2018	846.04	31.95	814.09
YVD-29	3/21/2019	846.04	33.87	812.17
YVD-29	6/1/2019	846.04	33.83	812.21
YVD-29	9/8/2019	846.04	31.42	814.62
YVD-29	12/8/2019	846.04	32.59	813.45
YVD-29	3/29/2020	846.04	35.02	811.02
YVD-29	6/7/2020	846.04	33.89	812.15
YVD-29	9/20/2020	846.04	31.73	814.31
YVD-29	12/6/2020	846.04	32.91	813.13
YVD-29	2/28/2021	846.04	34.95	811.09

Table 3
Historical CD Wells Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-30	3/5/2017	865.45	39.97	825.48
YVD-30	6/4/2017	865.45	35.72	829.73
YVD-30	9/27/2017	865.45	30.56	834.89
YVD-30	12/3/2017	865.45	35.08	830.37
YVD-30	3/18/2018	865.45	39.85	825.60
YVD-30	6/3/2018	865.45	35.52	829.93
YVD-30	9/8/2018	865.45	31.05	834.40
YVD-30	12/9/2018	865.45	35.92	829.53
YVD-30	3/21/2019	865.45	40.43	825.02
YVD-30	6/1/2019	865.45	36.14	829.31
YVD-30	9/8/2019	865.45	31.18	834.27
YVD-30	12/8/2019	865.45	36.47	828.98
YVD-30	3/29/2020	865.45	41.25	824.20
YVD-30	6/7/2020	865.45	37.03	828.42
YVD-30	9/20/2020	865.45	32.43	833.02
YVD-30	12/6/2020	865.45	37.28	828.17
YVD-30	2/28/2021	865.45	41.69	823.76
YVD-31	12/3/2017	848.55	42.77	805.78
YVD-31	3/18/2018	848.55	45.05	803.50
YVD-31	6/3/2018	848.55	45.22	803.33
YVD-31	9/8/2018	848.55	43.64	804.91
YVD-31	12/9/2018	848.55	43.74	804.81
YVD-31	3/21/2019	848.55	45.13	803.42
YVD-31	6/1/2019	848.55	45.49	803.06
YVD-31	9/8/2019	848.55	43.86	804.69
YVD-31	12/8/2019	848.55	44.00	804.55
YVD-31	3/29/2020	848.55	46.45	802.10
YVD-31	6/7/2020	848.55	46.20	802.35
YVD-31	9/20/2020	848.55	44.08	804.47
YVD-31	12/6/2020	848.55	44.63	803.92
YVD-31	2/28/2021	848.55	46.34	802.21
YVD-32	3/18/2018	848.28	44.61	803.67
YVD-32	6/3/2018	848.28	44.79	803.49
YVD-32	9/8/2018	848.28	43.30	804.98
YVD-32	12/9/2018	848.28	43.39	804.89
YVD-32	3/21/2019	848.28	44.69	803.59
YVD-32	6/1/2019	848.28	45.10	803.18
YVD-32	9/8/2019	847.74	43.53	804.21

Table 3
Historical CD Wells Groundwater Elevations

Well ID	Date of Measurement	Reference Point Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
YVD-32	12/8/2019	847.74	43.71	804.03
YVD-32	3/29/2020	847.74	46.01	801.73
YVD-32	6/7/2020	847.74	45.73	802.01
YVD-32	9/20/2020	847.74	43.75	803.99
YVD-32	12/6/2020	847.74	44.30	803.44
YVD-32	2/28/2021	847.74	45.89	801.85

Notes:

BTOC: below top of casing

NAVD88: North American Vertical Datum of 1988

Table 4**Consent Decree Wells Groundwater Field Parameter Measurements – First Quarter 2021**

Well ID	Sample 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)
YVD-19	3/2/2021	Dedicated	20	2.0	15.1	4.84	1707	6.38	8.0	3.97
YVD-20	3/2/2021	Dedicated	18	2.4	14.4	1.13	326.7	7.39	-21.3	0.93
YVD-21	3/2/2021	Dedicated	15	4.3	15.2	9.12	173.7	7.28	-15.3	0.80
YVD-22	3/2/2021	Dedicated	15	3.1	13.4	2.53	1803	7.05	186.1	3.74
YVD-23	3/2/2021	Dedicated	15	2.1	14.1	7.23	1048	7.43	166.5	2.57
YVD-24	3/3/2021	Dedicated	15	2.3	14.1	6.99	821	7.56	176.5	1.55
YVD-25	3/3/2021	Dedicated	15	3.2	13.2	0.11	798	7.55	175.7	1.38
YVD-26	3/3/2021	Dedicated	15	3.3	12.4	3.54	743	7.25	145.9	1.79
YVD-27	3/3/2021	Dedicated	15	3.7	12.9	2.60	507.2	7.26	124.9	0.70
YVD-28	3/3/2021	Dedicated	15	4.6	14.1	0.50	551.2	7.67	87.5	1.22
YVD-29	3/3/2021	Dedicated	15	6.2	14.1	0.96	630.1	7.49	42.2	0.62
YVD-30	3/3/2021	Dedicated	17	4.4	15.2	6.46	251.1	6.07	7.0	1.00
YVD-31	3/3/2021	Dedicated	18	3.3	13.2	2.83	245.1	7.84	139.9	1.51
YVD-32	3/3/2021	Dedicated	15	4.3	13.8	6.50	916	7.35	116.6	0.60

Notes:

°C: degrees Celsius

µS/cm: microsiemens per centimeter

mg/L: milligrams per liter

mV: millivolt

NTU: nephelometric turbidity unit

Table 5**Consent Decree Wells Vertical Gradients at Shallow/Deep Well Pairs – First Quarter 2021**

Well ID	Midpoint Screen Elevation (feet NAVD88)	Midpoint Screen Elevation Difference (feet)	Groundwater Elevation February 28, 2021 (feet NAVD88)	Vertical Gradient (feet/feet)	Flow Direction
YVD-26	776.2	35.4	812.21	0.0076	Downward
YVD-27	740.8		811.94		
YVD-28	801.3	25.4	810.99	-0.0039	Upward
YVD-29	775.9		811.09		
YVD-31	758.9	35.6	802.21	0.0101	Downward
YVD-32	723.3		801.85		

Note:

NAVD88: North American Vertical Datum of 1988

Table 6
Consent Decree Wells Groundwater Sampling Analytical Results – First Quarter 2021

Analyte				Calcium		Magnesium		Potassium		Sodium		Chloride		Fluoride		Nitrate (as N)		Nitrite (as N)		Sulfate		Ammonia (as N)		Total Kjeldahl Nitrogen		Phosphorus		Alkalinity, Bicarbonate (as CaCO ₃)		Alkalinity, Total (as CaCO ₃)	
Analytical Method				EPA 200.7		EPA 200.7		EPA 200.7		EPA 200.7		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		SM 4500 NH3-G		EPA 351.2		SM 4500-P E		SM 2320B		SM 2320B	
Well ID	Sample ID	Sample Date	Sample Group	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier
YVD-19	CD-030221-07	3/2/2021	120039	162	--	46.05	--	2.68	--	140	--	45.6	--	0.34	--	68.5	--	0.050	U	117	--	0.070	U	5.0	U	0.070	U	504	--	504	--
YVD-20	CD-030221-05	3/2/2021	120039	33.0	--	9.050	--	0.62	U	25.0	--	3.84	--	0.27	--	1.10	--	0.050	U	15.6	--	0.070	U	0.7	--	0.13	--	149	--	149	--
YVD-21	CD-030221-09	3/2/2021	120039	20.6	--	5.750	--	0.62	U	6.35	--	3.09	--	0.12	--	0.12	--	0.050	U	4.20	--	0.070	U	1.1	--	0.070	U	81.6	--	81.6	--
YVD-22	CD-030221-02	3/2/2021	120039	195	--	49.45	--	2.18	--	110	--	85.7	--	0.20	--	70.0	--	0.050	U	111	--	0.070	U	5.0	U	0.070	U	498	--	498	--
YVD-23	CD-030221-04	3/2/2021	120039	116	--	33.50	--	2.80	--	47.6	--	63.2	--	0.25	--	21.1	--	0.050	U	182	--	0.070	U	5.0	U	0.070	U	208	--	208	--
YVD-23	CD-030221-06	3/2/2021	120039	116	--	33.80	--	2.80	--	48.0	--	63.0	--	0.25	--	21.2	--	0.050	U	183	--	0.070	U	5.0	U	0.070	U	206	--	206	--
YVD-24	CD-030321-20	3/3/2021	120106	90.0	--	31.05	--	1.48	--	35.6	--	38.2	--	0.31	--	7.85	--	0.050	U	95.0	--	0.070	U	0.5	U	0.070	U	260	--	260	--
YVD-25	CD-030321-19	3/3/2021	120106	65.5	--	33.85	--	0.70	--	56.0	--	15.2	--	0.46	--	10.4	--	0.050	U	41.1	--	0.070	U	0.5	U	0.070	U	334	--	334	--
YVD-26	CD-030321-11	3/3/2021	120106	74.5	--	31.15	--	0.62	U	27.2	--	22.1	--	0.53	--	7.70	--	0.050	U	21.7	--	0.070	U	0.5	U	0.070	U	310	--	310	--
YVD-27	CD-030321-12	3/3/2021	120106	48.1	--	17.20	--	1.20	--	36.2	--	14.2	--	0.60	--	10.3	--	0.050	U	26.7	--	0.070	U	0.5	U	0.070	U	183	--	183	--
YVD-28	CD-030321-16	3/3/2021	120106	73.0	--	20.40	--	7.50	--	12.4	--	5.67	--	0.10	U	2.51	--	0.050	U	32.0	--	0.070	U	0.5	U	0.070	U	260	--	260	--
YVD-29	CD-030321-17	3/3/2021	120106	74.0	--	24.15	--	3.80	--	18.6	--	17.0	--	0.10	--	16.9	--	0.050	U	23.9	--	0.070	U	0.5	U	0.070	U	226	--	226	--
YVD-30	CD-030321-18	3/3/2021	120106	31.0	--	9.350	--	1.38	--	5.95	--	3.44	--	0.12	--	0.68	--	0.050	U	6.21	--	0.070	U	1.4	--	0.070	U	120	--	120	--
YVD-31	CD-030321-13	3/3/2021	120106	23.3	--	10.40	--	0.62	U	13.8	--	3.42	--	0.93	--	0.76	--	0.050	U	6.50	--	0.070	U	0.5	U	0.070	U	121	--	121	--
YVD-32	CD-030321-14	3/3/2021	120106	81.0	--	27.65	--	1.72	--	70.5	--	23.3	--	0.49	--	30.1	--	0.050	U	75.4	--	0.070	U	0.6	--	0.070	U	267	--	267	--
YVD-32	CD-030321-15	3/3/2021	120106	80.0	--	27.30	--	1.71	--	70.0	--	23.1	--	0.49	--	29.8	--	0.050	U	75.7	--	0.070	U	0.5	U	0.070	U	262	--	262	--

Notes:

Bold: detected value

--: not qualified

CaCO₃: calcium carbonate

EPA: U.S. Environmental Protection Agency Method

FD: field duplicate

mg/L: milligrams per liter

N: nitrogen

SM: Standard Method

U: not detected above the method detection limit

Table 7
Historical Consent Decree Wells Groundwater Sampling Analytical Results

Analyte				Calcium		Magnesium		Potassium		Sodium		Chloride		Fluoride		Nitrate (as N)		Nitrite (as N)		Sulfate		Ammonia (as N)		Total Kjeldahl Nitrogen		Phosphorus		Alkalinity, Bicarbonate (as CaCO ₃)		Alkalinity, Total (as CaCO ₃)		Ammonia (as N)		Phosphorus	
Analytical Method				EPA 200.7		EPA 200.7		EPA 200.7		EPA 200.7		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		SM 4500 NH3-G		EPA 351.2		SM 4500-P E		SM 2320B		SM 2320B		EPA 350.1		EPA 365.3	
Well ID	Sample ID	Sample Date	Sample Group	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier
YVD-19	CD-031517-11	3/15/2017	K1702583	187	--	55.3	--	2.91	--	144	--	80.2	--	0.35	--	94.5	--	0.05	J	90.7	--	--	--	0.5	U	--	--	452	--	452	--	0.050	U	0.035	--
YVD-19	CD-060717-09	6/7/2017	K1705832	186	--	55.3	--	2.97	--	142	--	78.6	--	0.37	--	95.4	--	0.10	U	111	--	--	--	0.5	U	--	--	435	--	435	--	0.050	U	0.090	--
YVD-19	CD-092717-08	9/27/2017	K1710382	189	--	52.8	--	2.93	--	137	--	70.9	--	0.35	--	89.7	--	0.10	U	109	--	--	--	0.5	U	--	--	434	--	434	--	0.595	--	0.016	--
YVD-19	CD-120617-06	12/6/2017	K1713145	165	--	50.0	--	2.75	--	125	--	61.0	--	0.35	--	81.1	--	0.10	U	87.3	--	--	--	0.5	U	--	--	436	--	436	--	0.026	J	0.031	--
YVD-19	CD-031918-03	3/19/2018	870717	190	--	53.50	--	3.12	--	143	--	73.3	--	0.31	--	98.8	--	0.05	U	102	--	0.12	--	0.5	U	0.07	U	465	--	465	--	--	--	--	--
YVD-19	CD-060518-03	6/5/2018	874862	186	--	56.50	--	3.22	--	156	--	72.7	--	0.32	--	104	--	0.05	U	106	--	1.00	--	0.5	U	0.07	U	482	--	482	--	--	--	--	--
YVD-19	CD-091018-11	9/10/2018	880652	200	--	57.50	--	3.24	--	156	--	71.0	--	0.32	--	114	--	0.05	U	123	--	0.07	U	0.5	U	0.07	U	493	--	493	--	--	--	--	--
YVD-19	CD-121118-03	12/11/2018	884998	180	--	50.50	--	3.38	--	152	--	61.2	--	0.30	--	97.2	--	0.05	U	118	--	0.07	U	0.5	U	0.07	U	470	--	470	--	--	--	--	--
YVD-19	CD-031819-04	3/18/2019	988274	191	--	54.00	--	3.14	--	150	--	69.0	--	0.33	--	99.5	--	0.05	U	117	--	0.07	U	0.5	U	0.07	U	508	--	508	--	--	--	--	--
YVD-19	CD-060419-04	6/4/2019	992243	184	--	53.50	--	3.02	--	156	--	65.9	--	0.1	U	85.2	--	0.05	U	125	--	0.07	U	0.5	U	0.07	U	508	--	508	--	--	--	--	--
YVD-19	CD-091019-03	9/10/2019	998440	184	--	53.00	--	3.02	--	148	--	55.8	--	0.31	--	94.0	--	0.05	U	123	--	0.07	U	0.5	U	0.07	U	530	--	530	--	--	--	--	--
YVD-19	CD-121019-05	12/10/2019	902326	158	--	45.90	--	3.13	--	141	--	48.0	--	0.30	--	80.4	--	0.05	U	120	--	0.07	U	0.5	U	0.07	U	490	--	490	--	--	--	--	--
YVD-19	CD-033120-05	3/31/2020	006262	158	--	45.75	--	2.74	--	139	--	46.0	--	0.31	--	71.2	--	0.05	U	114	--	0.07	U	0.5	U	0.07	U	485	--	485	--	--	--	--	--
YVD-19	CD-061120-17	6/11/2020	009424	162	--	46.15	--	3.27	--	142	--	45.6	--	0.31	--	73.2	--	0.05	U	129	--	0.07	U	0.5	U	0.07	U	504	--	504	--	--	--	--	--
YVD-19	CD-092220-14	9/22/2020	013976	168	--	48.05	--	2.93	--	150	--	48.3	--	0.10	U	68.5	--	0.5	U	125	--	0.07	U	0.5	U	0.07	U	498	--	498	--	--	--	--	--
YVD-19	CD-120820-05	12/8/2020	017141	159	--	45.50	--	3.01	--	144	--	44.8	--	0.26	--	69.0	--	0.05	U	122	--	0.07	U	2.5	U	0.07	U	492	--	492	--	--	--	--	--
YVD-19	CD-030221-07	3/2/2021	120039	162	--	46.05	--	2.68	--	140	--	45.6	--	0.34	--	68.5	--	0.05	U	117	--	0.07	U	5.0	U	0.07	U	504	--	504	--	--	--	--	--
YVD-20	CD-031517-13	3/15/2017	K1702583	62.1	--	16.7	--	0.53	--	28.8	--	21.0	--	0.32	--	3.94	--	0.06	J	63.0	--	0.05	U	0.5	U	0.14	--	177	--	177	--	0.050	U	0.142	--
YVD-20	CD-060717-07	6/7/2017	K1705832	55.5	--	15.0	--	0.70	--	26.4	--	19.5	--	0.39	--	2.36	--	0.10	U	58.1	--	0.05	U	0.5	U	0.12	--	169	--	169	--	0.050	U	0.119	--
YVD-20	CD-092717-07	9/27/2017	K1710382	47.2	--	12.4	--	0.56	--	25.3	--	18.4	--	0.38	--	1.58	--	0.10	U	56.7	--	0.51	--	0.5	U	0.10	--	145	--	145	--	0.511	--	0.102	--
YVD-20	CD-120617-05	12/6/2017	K1713145	47.1	--	13.6	--	0.79	--	26.7	--	17.5	--	0.50	--	2.35	--	0.10	U	56.1	--	0.03	J	0.5	U	0.17	--	154	--	154	--	0.026	J	0.170	--
YVD-20	CD-031918-02	3/19/2018	871553	58.0	--	15.40	--	0.62	U	31.1	--	23.6	--	0.31	--	6.30	--	0.05	U	81.2	--	0.07	U	0.5	U	0.12	--	135	--	135	--	--	--	--	--
YVD-20	CD-060518-05	6/5/2018	874862	46.7	--	13.35	--	0.62	U	24.6	--	15.0	--	0.30	--	2.68	--	0.05	U	49.7	--	0.07	U	0.5	U	0.10	--	139	--	139	--	--	--	--	--
YVD-20	CD-091018-02	9/10/2018	880652	41.2	--	11.20	--	0.62	U	25.4	--	13.2	--	0.37	--	1.58	--	0.05	U	40.1	--	0.07	U	0.5	U	0.11	--	128	--	128	--	--	--	--	--
YVD-20	CD-121118-07	12/11/2018	884998	36.3	--	10.00	--	0.62	U	25.8	--	12.4	--	0.39	--	1.23	--	0.05	U	41.1	--	0.07	U	0.5	U	0.16	--	128	--	128	--	--	--	--	--
YVD-20	CD-031919-10	3/19/2019	988338	36.4	--	10.10	--	0.62	U	27.2	--	10.6	--	0.23	--	1.53	--	0.05	U	26.4	--	0.07	U	0.8	--	0.16	--	148	--	148	--	--	--	--	--
YVD-20	CD-060419-02	6/4/2019	992243	34.0	--	9.450	--	0.62	U	26.2	--	7.10	--	0.23	--	0.78	--	0.05	U	18.4	--	0.07	U	0.5	U	0.14	--	135	--	135	--	--	--	--	--
YVD-20 (FD)	CD-060419-03	6/4/2019	992243	33.4	--	9.350	--	0.62	U	26.5	--	6.02	--	0.22	--	0.72	--	0.05	U	14.6	--	0.07	U	0.5	U	0.15	--	135	--	135	--	--	--	--	--
YVD-20	CD-091019-04	9/10/2019	998440	47.1	--	13.20	--	0.71	--	28.0	--	10.7	--	0.34	--	4.13	--	0.05	U	59.8	--	0.07	U	0.5	U	0.08	--	149	--	149	--	--	--	--	--
YVD-20	CD-121019-02	12/10/2019	902326	37.6	--	10.50	--</																												

Table 7
Historical Consent Decree Wells Groundwater Sampling Analytical Results

Analyte				Calcium		Magnesium		Potassium		Sodium		Chloride		Fluoride		Nitrate (as N)		Nitrite (as N)		Sulfate		Ammonia (as N)		Total Kjeldahl Nitrogen		Phosphorus		Alkalinity, Bicarbonate (as CaCO ₃)		Alkalinity, Total (as CaCO ₃)		Ammonia (as N)		Phosphorus	
Analytical Method				EPA 200.7		EPA 200.7		EPA 200.7		EPA 200.7		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		SM 4500 NH3-G		EPA 351.2		SM 4500-P E		SM 2320B		SM 2320B		EPA 350.1		EPA 365.3	
Well ID	Sample ID	Sample Date	Sample Group	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier
YVD-21	CD-032018-16	3/20/2018	870717	19.6	--	5.450	--	0.62	U	6.65	--	3.12	--	0.12	--	0.13	--	0.05	U	3.79	--	0.12	--	0.5	U	0.07	U	73	--	73	--	--	--	--	--
YVD-21	CD-060518-02	6/5/2018	875019	21.4	--	6.100	--	0.67	--	6.85	--	3.57	--	0.11	--	0.18	--	0.05	U	5.90	--	0.07	U	0.5	U	0.07	U	76.8	--	76.8	--	--	--	--	--
YVD-21 (FD)	CD-060518-04	6/5/2018	875019	21.6	--	6.200	--	0.66	--	6.90	--	3.58	--	0.11	--	0.18	--	0.05	U	5.97	--	0.07	U	0.5	U	0.07	U	78.2	--	78.2	--	--	--	--	--
YVD-21	CD-091018-04	9/10/2018	880652	22.4	--	6.100	--	0.62	--	6.85	--	3.33	--	0.13	--	0.14	--	0.05	U	4.42	--	0.07	U	0.5	U	0.07	U	81.2	--	81.2	--	--	--	--	--
YVD-21	CD-121218-14	12/12/2018	885015	20.0	--	5.550	--	0.62	U	6.85	--	3.83	--	0.11	--	0.11	--	0.05	U	4.97	--	0.07	U	0.5	U	0.07	U	81.0	--	81.0	--	--	--	--	--
YVD-21	CD-031819-05	3/18/2019	988274	19.4	--	5.350	--	0.62	U	6.95	--	3.00	--	0.11	--	0.12	--	0.05	U	3.07	--	0.07	U	0.5	U	0.07	U	78.8	--	78.8	--	--	--	--	--
YVD-21	CD-060419-07	6/4/2019	992243	20.8	--	5.750	--	0.62	U	6.80	--	3.10	--	0.1	U	0.24	--	0.05	U	4.74	--	0.07	U	0.5	U	0.07	U	81.4	--	81.4	--	--	--	--	--
YVD-21	CD-091119-18	9/11/2019	998512	22.6	--	6.200	--	0.62	U	6.75	--	3.94	--	0.1	U	0.16	--	0.05	U	7.60	--	0.07	U	0.5	U	0.07	U	83.0	--	83.0	--	--	--	--	--
YVD-21	CD-121019-06	12/10/2019	902326	23.0	--	6.500	--	0.66	--	7.35	--	3.68	--	0.12	--	0.19	--	0.05	U	8.17	--	0.07	U	0.5	U	0.07	U	91.5	--	91.5	--	--	--	--	--
YVD-21 (FD)	CD-121019-08	12/10/2019	902326	22.8	--	6.450	--	0.65	--	7.25	--	3.67	--	0.11	--	0.19	--	0.05	U	8.15	--	0.07	U	0.5	U	0.07	U	87.0	--	87.0	--	--	--	--	--
YVD-21	CD-033120-08	3/31/2020	006262	20.2	--	5.550	--	0.62	U	6.55	--	3.38	--	0.10	--	0.16	--	0.05	U	4.58	--	0.07	U	0.5	U	0.07	U	79.0	--	79.0	--	--	--	--	--
YVD-21	CD-061120-20	6/11/2020	009424	21.6	--	5.900	--	0.62	U	6.60	--	3.31	--	0.10	U	0.12	--	0.05	U	4.86	--	0.07	U	0.5	U	0.07	U	71.6	--	71.6	--	--	--	--	--
YVD-21	CD-092320-18	9/23/2020	014011	22.8	--	6.250	--	0.62	U	6.65	--	3.36	--	0.10	--	0.14	--	0.05	U	4.26	--	0.07	U	0.50	U	0.07	U	86.5	--	86.5	--	--	--	--	--
YVD-21	CD-120820-08	12/8/2020	017141	22.0	--	6.000	--	0.62	--	7.05	--	3.52	--	0.13	--	0.16	--	0.05	U	6.06	--	0.07	U	0.50	U	0.07	U	85.8	--	85.8	--	--	--	--	--
YVD-21	CD-030221-09	3/2/2021	120039	20.6	--	5.750	--	0.62	U	6.35	--	3.09	--	0.12	--	0.12	--	0.05	U	4.20	--	0.07	U	1.1	--	0.07	U	81.6	--	81.6	--	--	--	--	--
YVD-22	CD-031517-10	3/15/2017	K1702583	201	--	48.6	--	2.07	--	112	--	85.3	--	0.18	J	75.7	--	0.05	J	81.0	--	--	--	0.5	U	--	--	459	--	459	--	0.023	J	0.043	--
YVD-22 (FD)	CD-031517-12	3/15/2017	K1702583	203	--	48.4	--	2.12	--	111	--	89.6	--	0.17	J	76.1	--	0.05	J	84.0	--	--	--	0.5	U	--	--	455	--	455	--	0.050	U	0.038	--
YVD-22	CD-062217-05	6/22/2017	K1706560	195	--	47.7	--	1.89	--	108	--	87.1	--	0.18	J	78.1	--	0.10	U	95.1	--	--	--	0.5	U	--	--	447	--	447	--	0.050	U	0.012	--
YVD-22 (FD)	CD-062217-06	6/22/2017	K1706560	197	--	48.5	--	2.01	--	111	--	87.6	--	0.18	J	79.2	--	0.10	U	95.0	--	--	--	0.5	U	--	--	447	--	447	--	0.050	U	0.010	J
YVD-22	CD-092717-10	9/27/2017	K1710430	134	--	32.7	--	1.73	--	97.0	--	47.1	--	0.21	--	43.4	--	0.10	U	63.6	--	--	--	0.5	U	--	--	362	--	362	--	0.050	U	0.024	--
YVD-22	CD-120617-02	12/6/2017	K1713145	132	--	34.5	--	1.55	--	89.3	--	57.9	--	0.20	J	57.2	--	0.10	U	60.4	--	--	--	0.5	U	--	--	364	--	364	--	0.106	--	0.014	--
YVD-22 (FD)	CD-120617-03	12/6/2017	K1713145	130	--	33.8	--	1.60	--	89.1	--	58.2	--	0.19	J	57.5	--	0.10	U	61.6	--	--	--	0.5	U	--	--	368	--	368	--	0.050	U	0.013	--
YVD-22	CD-032018-18	3/20/2018	870717	201	--	46.95	--	2.10	--	111	--	101	--	0.14	--	84.0	--	0.05	U	96.6	--	0.11	--	0.5	U	0.07	U	464	--	464	--	--	--	--	--
YVD-22	CD-060618-15	6/6/2018	875019	209	--	55.50	--	2.37	--	123	--	96.3	--	0.15	--	88.5	--	0.05	U	94.7	--	0.07	U	0.5	U	0.07	U	468	--	468	--	--	--	--	--
YVD-22	CD-091018-06	9/10/2018	880652	157	--	40.35	--	2.00	--	105	--	72.6	--	0.18	--	62.0	--	0.05	U	77.6	--	0.07	U	0.5	U	0.07	U	394	--	394	--	--	--	--	--
YVD-22	CD-121218-16	12/12/2018	885015	158	--	39.80	--	1.91	--	99.0	--	76.6	--	0.16	--	71.0	--	0.05	U	72.4	--	0.07	U	0.5	U	0.07	U	394	--	394	--	--	--	--	--
YVD-22	CD-031919-08	3/19/2019	988338	215	--	53.50	--	2.58	--	118	--	106	--	0.52	--	95.5	--	0.05	U	106	--	0.07	U	0.5	U	0.07	U	496	--	496	--	--	--	--	--
YVD-22	CD-060419-11	6/4/2019	992243	215	--	55.50	--	2.22	--	122	--	123	--	0.12	--	89.8	--	0.05	U	122	--	0.07	U	0.5	U	0.07	U	490	--	490	--	--	--	--	--
YVD-22	CD-091019-09	9/10/2019	998440	162	--	42.10	--	2.00	--	104	--	66.9	--	0.16	--	66.4	--	0.05	U	83.2	--	0.07	U	0.5	U	0.07	U	415	--	415	--	--	--	--	--
YVD-22																																			

Table 7
Historical Consent Decree Wells Groundwater Sampling Analytical Results

Analyte				Calcium		Magnesium		Potassium		Sodium		Chloride		Fluoride		Nitrate (as N)		Nitrite (as N)		Sulfate		Ammonia (as N)		Total Kjeldahl Nitrogen		Phosphorus		Alkalinity, Bicarbonate (as CaCO ₃)		Alkalinity, Total (as CaCO ₃)		Ammonia (as N)		Phosphorus	
Analytical Method				EPA 200.7		EPA 200.7		EPA 200.7		EPA 200.7		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		SM 4500 NH3-G		EPA 351.2		SM 4500-P E		SM 2320B		SM 2320B		EPA 350.1		EPA 365.3	
Well ID	Sample ID	Sample Date	Sample Group	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier
YVD-23	CD-031918-06	3/19/2018	870717	131	--	37.10	--	2.86	--	40.1	--	65.2	--	0.23	--	18.4	--	0.05	U	175	--	0.11	--	0.5	U	0.07	U	207	--	207	--	--	--	--	--
YVD-23	CD-060618-16	6/6/2018	875019	122	--	36.50	--	2.80	--	40.2	--	61.6	--	0.24	--	18.2	--	0.05	U	180	--	0.07	U	0.5	U	0.07	U	196	--	196	--	--	--	--	--
YVD-23	CD-091018-08	9/10/2018	880652	118	--	33.60	--	2.76	--	39.8	--	59.0	--	0.24	--	16.5	--	0.05	U	195	--	0.07	U	0.5	U	0.07	U	188	--	188	--	--	--	--	--
YVD-23	CD-121218-18	12/12/2018	885015	110	--	31.55	--	2.54	--	37.7	--	40.5	--	0.23	--	12.8	--	0.05	U	176	--	0.07	U	0.5	U	0.07	U	206	--	206	--	--	--	--	--
YVD-23	CD-032019-19	3/20/2019	988419	110	--	28.35	--	9.45	--	34.2	--	32.1	--	0.10	U	13.0	--	0.05	U	156	--	0.32	--	0.5	U	0.15	--	237	--	237	--	--	--	--	--
YVD-23	CD-060419-09	6/4/2019	992243	100	--	29.20	--	2.50	--	40.9	--	30.9	--	0.24	--	14.8	--	0.05	U	142	--	0.07	U	0.5	U	0.07	U	228	--	228	--	--	--	--	--
YVD-23	CD-091019-07	9/10/2019	998440	100	--	29.50	--	2.58	--	40.7	--	44.1	--	0.26	--	17.3	--	0.05	U	133	--	0.07	U	0.5	U	0.07	U	219	--	219	--	--	--	--	--
YVD-23	CD-121119-19	12/11/2019	902392	102	--	29.15	--	2.58	--	39.9	--	44.3	--	0.31	--	18.2	--	0.05	U	134	--	0.07	U	0.5	U	0.07	U	229	--	229	--	--	--	--	--
YVD-23	CD-033120-04	3/31/2020	006262	108	--	30.75	--	2.74	--	44.3	--	44.9	--	0.27	--	18.4	--	0.05	U	135	--	0.07	U	0.5	U	0.07	U	241	--	241	--	--	--	--	--
YVD-23 (FD)	CD-033120-06	3/31/2020	006262	106	--	30.65	--	2.71	--	44.1	--	44.6	--	0.26	--	18.4	--	0.05	U	134	--	0.07	U	0.5	U	0.07	U	242	--	242	--	--	--	--	--
YVD-23	CD-061020-08	6/10/2020	009364	102	--	29.40	--	2.58	--	43.2	--	58.0	--	0.20	--	18.8	--	0.05	U	150	--	0.07	U	0.5	U	0.07	U	223	--	223	--	--	--	--	--
YVD-23	CD-092220-13	9/22/2020	013976	118	--	33.20	--	2.81	--	49.7	--	69.2	--	0.20	--	22.6	--	0.5	U	197	--	0.07	U	0.5	U	0.07	U	196	--	196	--	--	--	--	--
YVD-23	CD-120920-11	12/9/2020	017224	115	--	33.15	--	2.86	--	46.8	--	59.8	--	0.21	--	20.4	--	0.05	U	185	--	0.07	U	2.5	U	0.07	U	200	--	200	--	--	--	--	--
YVD-23	CD-030221-04	3/2/2021	120039	116	--	33.50	--	2.80	--	47.6	--	63.2	--	0.25	--	21.1	--	0.05	U	182	--	0.07	U	5.0	U	0.07	U	208	--	208	--	--	--	--	--
YVD-23 (FD)	CD-030221-06	3/2/2021	120039	116	--	33.80	--	2.80	--	48.0	--	63.0	--	0.25	--	21.2	--	0.05	U	183	--	0.07	U	5.0	U	0.07	U	206	--	206	--	--	--	--	--
YVD-24	CD-031517-07	3/15/2017	K1702541	115	--	41.5	--	1.65	--	25.8	--	51.8	--	0.33	--	11.2	--	0.10	U	144	--	--	--	0.5	U	--	--	237	--	237	--	0.050	U	0.012	
YVD-24	CD-062217-08	6/22/2017	K1706560	109	--	39.1	--	1.59	--	27.0	--	39.8	--	0.30	--	9.33	--	0.10	U	153	--	--	--	0.5	U	--	--	258	--	258	--	0.050	U	0.021	
YVD-24	CD-092717-06	9/27/2017	K1710382	112	--	36.4	--	1.49	--	26.8	--	41.0	--	0.31	--	9.08	--	0.10	U	143	--	--	--	0.5	U	--	--	259	--	259	--	0.405	--	0.008	J
YVD-24	CD-120617-10	12/6/2017	K1713145	98.9	--	36.2	--	1.51	--	26.6	--	30.8	--	0.33	--	7.29	--	0.10	U	142	--	--	--	0.5	U	--	--	263	--	263	--	0.023	J	0.015	--
YVD-24	CD-031918-04	3/19/2018	870717	109	--	36.40	--	1.63	--	29.6	--	32.3	--	0.30	--	7.50	--	0.05	U	130	--	0.11	--	0.5	U	0.07	U	264	--	264	--	--	--	--	--
YVD-24	CD-060518-08	6/5/2018	875019	103	--	36.05	--	1.62	--	29.4	--	33.6	--	0.31	--	7.70	--	0.05	U	112	--	0.07	U	0.5	U	0.07	U	265	--	265	--	--	--	--	--
YVD-24	CD-091018-10	9/10/2018	880652	110	--	37.25	--	1.64	--	31.2	--	57.5	--	0.30	--	8.20	--	0.05	U	131	--	0.07	U	0.5	U	0.07	U	257	--	257	--	--	--	--	--
YVD-24	CD-121218-17	12/12/2018	885015	100	--	34.10	--	1.52	--	30.1	--	38.8	--	0.29	--	7.20	--	0.05	U	116	--	0.07	U	0.5	U	0.07	U	263	--	263	--	--	--	--	--
YVD-24	CD-032019-18	3/20/2019	988419	105	--	35.70	--	1.60	--	31.8	--	37.6	--	0.25	--	11.6	--	0.05	U	118	--	0.07	U	0.5	U	0.07	U	286	--	286	--	--	--	--	--
YVD-24	CD-060419-10	6/4/2019	992243	108	--	36.40	--	1.50	--	33.6	--	40.8	--	0.26	--	11.1	--	0.05	U	115	--	0.07	U	0.5	U	0.07	U	278	--	278	--	--	--	--	--
YVD-24	CD-091019-05	9/10/2019	998440	97.0	--	33.20	--	1.53	--	32.6	--	41.2	--	0.31	--	8.20	--	0.05	U	110	--	0.07	U	0.5	U	0.07	U	265	--	265	--	--	--	--	--
YVD-24 (FD)	CD-091019-06	9/10/2019	998440	97.5	--	33.30	--	1.55	--	32.5	--	41.0	--	0.32	--	8.20	--	0.05	U	110	--	0.07	U	0.5	U	0.07	U	266	--	266	--	--	--	--	--
YVD-24	CD-121019-04	12/10/2019	902326	92.5	--	31.65	--	1.62	--	33.4	--	37.1	--	0.34	--	8.10	--	0.05	U	106	--	0.07	U	0.5	U	0.07	U	264	--	264	--	--	--	--	--
YVD-24	CD-040120-20	4/1/2020	006312	100	--	34.25	--	1.56	--	33.4	--	40.6	--	0.33	--	10.5	--	0.05	U	110	--	0.07	U	0.5	U	0.07	U	280	--	280	--	--	--	--	--
YVD-24	CD-061020-07	6/10/2020	009364	85.0	--	28.65	--	1.1																											

Table 7
Historical Consent Decree Wells Groundwater Sampling Analytical Results

Analyte				Calcium		Magnesium		Potassium		Sodium		Chloride		Fluoride		Nitrate (as N)		Nitrite (as N)		Sulfate		Ammonia (as N)		Total Kjeldahl Nitrogen		Phosphorus		Alkalinity, Bicarbonate (as CaCO ₃)		Alkalinity, Total (as CaCO ₃)		Ammonia (as N)		Phosphorus	
Analytical Method				EPA 200.7		EPA 200.7		EPA 200.7		EPA 200.7		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		SM 4500 NH3-G		EPA 351.2		SM 4500-P E		SM 2320B		SM 2320B		EPA 350.1		EPA 365.3	
Well ID	Sample ID	Sample Date	Sample Group	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier
YVD-25	CD-060618-14	6/6/2018	875019	62.5	--	33.25	--	0.72	--	70.0	--	15.4	--	0.46	--	11.2	--	0.05	U	40.3	--	0.07	U	0.5	U	0.07	U	331	--	331	--	--	--	--	--
YVD-25	CD-091118-18	9/11/2018	880728	67.0	--	31.90	--	0.62	U	51.0	--	13.9	--	0.46	--	8.00	--	0.05	U	40.0	--	0.07	U	0.5	U	0.07	--	317	--	317	--	--	--	--	--
YVD-25	CD-121218-15	12/12/2018	885015	64.0	--	32.10	--	0.68	--	55.5	--	7.71	--	0.19	--	4.25	--	0.05	U	17.1	--	0.07	U	0.5	U	0.07	U	329	--	329	--	--	--	--	--
YVD-25	CD-032019-17	3/20/2019	988419	64.5	--	33.40	--	0.74	--	64.5	--	15.8	--	0.38	--	12.6	--	0.05	U	40.3	--	0.07	U	0.5	U	0.07	U	344	--	344	--	--	--	--	--
YVD-25	CD-060519-18	6/5/2019	992296	64.5	--	32.55	--	0.62	U	66.5	--	14.2	--	0.45	--	13.2	--	0.05	U	36.5	--	0.07	U	0.5	U	0.07	U	326	--	326	--	--	--	--	--
YVD-25	CD-091119-25	9/11/2019	998512	64.5	--	33.25	--	0.68	--	61.5	--	14.8	--	0.52	--	11.7	--	0.05	U	40.5	--	0.07	U	0.5	U	0.07	U	336	--	336	--	--	--	--	--
YVD-25	CD-121119-15	12/11/2019	902392	62.0	--	30.70	--	0.68	--	55.0	--	14.8	--	0.47	--	11.2	--	0.05	U	40.9	--	0.07	U	0.5	U	0.07	U	328	--	328	--	--	--	--	--
YVD-25 (FD)	CD-121119-17	12/11/2019	902392	62.5	--	31.30	--	0.72	--	56.0	--	14.8	--	0.48	--	11.4	--	0.05	U	41.1	--	0.07	U	0.5	U	0.07	U	326	--	326	--	--	--	--	--
YVD-25	CD-040120-17	4/1/2020	006312	63.0	--	32.25	--	0.69	--	60.5	--	15.6	--	0.42	--	11.3	--	0.05	U	41.5	--	0.07	U	0.5	U	0.07	U	333	--	333	--	--	--	--	--
YVD-25	CD-061120-16	6/11/2020	009424	62.5	--	31.95	--	0.80	--	60.0	--	14.7	--	0.40	--	10.7	--	0.05	U	41.0	--	0.07	U	0.5	U	0.07	U	325	--	325	--	--	--	--	--
YVD-25	CD-092220-09	9/22/2020	013976	64.5	--	32.70	--	0.64	--	62.5	--	14.9	--	0.42	--	10.0	--	0.05	U	41.5	--	0.07	U	0.5	U	0.07	U	328	--	328	--	--	--	--	--
YVD-25	CD-120920-15	12/9/2020	017224	64.0	--	32.85	--	0.81	--	56.0	--	14.4	--	0.43	--	10.0	--	0.05	U	39.4	--	0.07	U	2.5	U	0.07	U	330	--	330	--	--	--	--	--
YVD-25	CD-030321-19	3/3/2021	120106	65.5	--	33.85	--	0.70	--	56.0	--	15.2	--	0.46	--	10.4	--	0.05	U	41.1	--	0.07	U	0.5	U	0.07	U	334	--	334	--	--	--	--	--
YVD-26	CD-031417-06	3/14/2017	K1702541	68.1	--	31.6	--	1.10	--	30.4	--	17.2	--	0.57	--	9.96	--	0.18	--	32.1	--	--	--	0.5	U	--	--	262	--	262	--	0.050	U	0.077	--
YVD-26	CD-062217-03	6/22/2017	K1706560	69.3	--	30.2	--	0.71	--	28.4	--	17.5	--	0.56	--	8.30	--	0.10	U	30.0	--	--	--	0.5	U	--	--	281	--	281	--	0.050	U	0.049	--
YVD-26	CD-092817-12	9/28/2017	K1710430	76.9	--	30.3	--	0.65	--	28.6	--	19.9	--	0.58	--	8.41	--	0.10	U	25.9	--	--	--	0.5	U	--	--	288	--	288	--	0.050	U	0.054	--
YVD-26	CD-120717-15	12/7/2017	K1713207	68.1	--	29.2	--	0.55	--	26.0	--	19.5	--	0.59	--	8.45	--	0.10	U	26.2	--	--	--	0.5	U	--	--	287	--	287	--	0.025	J	0.060	--
YVD-26	CD-032018-09	3/20/2018	870717	70.5	--	29.45	--	0.62	U	29.1	--	18.2	--	0.55	--	7.70	--	0.05	U	24.6	--	0.07	--	0.5	U	0.07	U	284	--	284	--	--	--	--	--
YVD-26	CD-060618-09	6/6/2018	875019	75.5	--	32.30	--	0.62	U	29.2	--	21.8	--	0.55	--	8.40	--	0.05	U	24.0	--	0.07	U	0.5	U	0.07	U	296	--	296	--	--	--	--	--
YVD-26 (FD)	CD-060618-11	6/6/2018	875019	73.0	--	31.90	--	0.62	U	30.0	--	18.7	--	0.54	--	8.40	--	0.05	U	23.8	--	0.07	U	0.5	U	0.07	U	289	--	289	--	--	--	--	--
YVD-26	CD-091118-15	9/11/2018	880728	72.5	--	30.75	--	0.62	U	28.6	--	20.2	--	0.53	--	7.60	--	0.05	U	23.0	--	0.07	U	0.5	U	0.07	U	288	--	288	--	--	--	--	--
YVD-26	CD-121218-09	12/12/2018	885015	71.5	--	29.95	--	0.62	U	26.1	--	18.4	--	0.46	--	8.20	--	0.05	U	21.9	--	0.07	U	0.5	U	0.07	U	289	--	289	--	--	--	--	--
YVD-26	CD-032019-12	3/20/2019	988419	71.5	--	31.20	--	0.62	U	28.4	--	17.8	--	0.46	--	8.80	--	0.05	U	24.6	--	0.07	U	0.5	U	0.07	U	293	--	293	--	--	--	--	--
YVD-26 (FD)	CD-032019-14	3/20/2019	988419	69.0	--	30.00	--	0.62	U	27.8	--	17.9	--	0.41	--	8.74	--	0.05	U	25.2	--	0.07	U	0.5	U	0.07	U	290	--	290	--	--	--	--	--
YVD-26	CD-060519-13	6/5/2019	992296	74.0	--	31.80	--	0.62	U	29.1	--	20.6	--	0.50	--	10.4	--	0.05	U	23.6	--	0.07	U	0.5	U	0.07	U	293	--	293	--	--	--	--	--
YVD-26	CD-091119-13	9/11/2019	998512	78.0	--	32.25	--	0.62	U	26.4	--	24.0	--	0.53	--	8.60	--	0.05	U	22.9	--	0.07	U	0.5	U	0.07	U	312	--	312	--	--	--	--	--
YVD-26	CD-121119-12	12/11/2019	902392	71.5	--	30.35	--	0.62	U	25.4	--	20.0	--	0.54	--	9.20	--	0.05	U	22.6	--	0.07	U	0.5	U	0.07	U	298	--	298	--	--	--	--	--
YVD-26	CD-040120-14	4/1/2020	006312	74.5	--	31.10	--	0.62	U	27.0	--	19.5	--	0.49	--	7.80	--	0.05	U	23.4	--	0.07	U	0.5	U	0.07	U	296	--	296	--	--	--	--	--
YVD-26 (FD)	CD-040120-16	4/1/2020	006312	70.5	--	30.25	--	0.62	U	26.8	--	18.6	--	0.48	--	7.80	--	0.05	U	23.3	--	0.07	U	0.5	U	0.07	U	293	--	293	--	--	--	--	--
YVD-26	CD-0612																																		

Table 7
Historical Consent Decree Wells Groundwater Sampling Analytical Results

Analyte				Calcium		Magnesium		Potassium		Sodium		Chloride		Fluoride		Nitrate (as N)		Nitrite (as N)		Sulfate		Ammonia (as N)		Total Kjeldahl Nitrogen		Phosphorus		Alkalinity, Bicarbonate (as CaCO ₃)		Alkalinity, Total (as CaCO ₃)		Ammonia (as N)		Phosphorus				
Analytical Method				EPA 200.7		EPA 200.7		EPA 200.7		EPA 200.7		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		SM 4500 NH3-G		EPA 351.2		SM 4500-P E		SM 2320B		SM 2320B		EPA 350.1		EPA 365.3				
Well ID	Sample ID	Sample Date	Sample Group	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier			
YVD-27	CD-032018-11	3/20/2018	870717	49.8	--	17.65	--	1.30	--	38.6	--	13.9	--	0.61	--	10.3	--	0.05	U	29.6	--	0.10	--	0.5	U	0.07	U	185	--	185	--	--	--	--	--			
YVD-27	CD-060618-10	6/6/2018	875019	50.0	--	18.55	--	1.32	--	39.7	--	14.6	--	0.58	--	11.3	--	0.05	U	30.2	--	0.07	U	0.5	U	0.07	U	184	--	184	--	--	--	--	--			
YVD-27	CD-091118-13	9/11/2018	880728	53.0	--	18.70	--	1.17	--	40.4	--	16.0	--	0.58	--	12.5	--	0.05	U	32.2	--	0.07	U	0.5	U	0.07	U	191	--	191	--	--	--	--	--			
YVD-27 (FD)	CD-091118-14	9/11/2018	880728	54.0	--	18.80	--	1.16	--	40.6	--	16.1	--	0.58	--	12.6	--	0.05	U	32.4	--	0.07	U	0.5	U	0.07	U	191	--	191	--	--	--	--	--			
YVD-27	CD-121218-10	12/12/2018	885015	47.8	--	17.20	--	1.24	--	36.0	--	15.1	--	0.58	--	11.2	--	0.05	U	28.9	--	0.07	U	0.5	U	0.07	U	184	--	184	--	--	--	--	--			
YVD-27	CD-032019-13	3/20/2019	988419	49.5	--	17.65	--	1.28	--	38.1	--	15.0	--	0.52	--	12.3	--	0.05	U	28.2	--	0.07	U	0.5	U	0.07	U	187	--	187	--	--	--	--	--			
YVD-27	CD-060519-14	6/5/2019	992296	47.4	--	17.05	--	1.15	--	38.1	--	12.8	--	0.59	--	11.2	--	0.05	U	23.8	--	0.07	U	0.5	U	0.07	U	176	--	176	--	--	--	--	--			
YVD-27	CD-091119-14	9/11/2019	998512	47.0	--	16.95	--	1.18	--	36.0	--	13.9	--	0.58	--	11.1	--	0.05	U	26.7	--	0.07	U	0.5	U	0.07	U	182	--	182	--	--	--	--	--			
YVD-27	CD-121119-11	12/11/2019	902392	45.6	--	16.40	--	1.18	--	34.1	--	14.5	--	0.59	--	11.4	--	0.05	U	28.1	--	0.07	U	0.5	U	0.07	U	182	--	182	--	--	--	--	--			
YVD-27	CD-040120-13	4/1/2020	006312	46.9	--	16.75	--	1.18	--	35.8	--	14.3	--	0.59	--	10.2	--	0.05	U	28.5	--	0.07	U	0.5	U	0.07	U	174	--	174	--	--	--	--	--			
YVD-27	CD-061120-11	6/11/2020	009424	45.4	--	16.20	--	1.18	--	34.8	--	13.8	--	0.55	--	9.60	--	0.05	U	27.8	--	0.07	U	0.5	U	0.07	U	179	--	179	--	--	--	--	--			
YVD-27	CD-092220-04	9/22/2020	013976	48.5	--	17.45	--	1.22	--	38.6	--	14.7	--	0.55	--	10.6	--	0.05	U	28.4	--	0.07	U	0.5	U	0.07	U	180	--	180	--	--	--	--	--			
YVD-27	CD-120920-17	12/9/2020	017224	45.6	--	16.55	--	1.29	--	35.0	--	12.4	--	0.56	--	9.80	--	0.05	U	23.3	--	0.07	U	2.5	U	0.07	--	184	--	184	--	--	--	--	--			
YVD-27	CD-030321-12	3/3/2021	120106	48.1	--	17.20	--	1.20	--	36.2	--	14.2	--	0.60	--	10.3	--	0.05	U	26.7	--	0.07	U	0.5	U	0.07	U	183	--	183	--	--	--	--	--			
YVD-28	CD-031417-05	3/14/2017	K1702541	66.9	--	20.0	--	7.30	--	11.9	--	4.43	--	0.22	--	0.75	--	0.07	J	32.0	--	--	--	0.5	U	--	--	232	--	232	--	0.050	U	0.067	--			
YVD-28	CD-062217-10	6/22/2017	K1706560	70.2	--	20.2	--	7.42	--	12.1	--	4.76	--	0.13	J	1.50	--	0.10	U	36.2	--	--	--	0.5	U	--	--	249	--	249	--	0.050	U	0.067	--			
YVD-28	CD-092717-05	9/27/2017	K1710382	67.7	--	20.4	--	5.53	--	13.8	--	8.55	--	0.19	J	6.73	--	0.10	U	24.8	--	--	--	0.5	U	--	--	241	--	241	--	0.690	--	0.081	--			
YVD-28	CD-120617-08	12/6/2017	K1713145	66.8	--	19.3	--	7.05	--	10.8	--	4.0	--	0.12	J	0.80	--	0.10	U	36.4	--	--	--	0.5	U	--	--	254	--	254	--	0.022	J	0.078	--			
YVD-28	CD-031918-05	3/19/2018	870717	73.0	--	19.75	--	7.65	--	12.0	--	4.12	--	0.10	U	0.80	--	0.05	U	35.4	--	0.09	--	0.5	U	0.07	U	255	--	255	--	--	--	--	--			
YVD-28	CD-060618-18	6/6/2018	875019	72.0	--	21.30	--	7.70	--	13.0	--	4.52	--	0.10	--	2.40	--	0.05	U	33.6	--	0.07	U	0.5	U	0.07	U	253	--	253	--	--	--	--	--			
YVD-28	CD-091018-07	9/10/2018	880652	75.5	--	21.90	--	6.90	--	14.6	--	9.07	--	0.15	--	8.20	--	0.05	U	26.2	--	0.07	U	0.5	U	0.07	--	247	--	247	--	--	--	--	--			
YVD-28	CD-121118-02	12/11/2018	884998	72.5	--	19.40	--	8.30	--	12.6	--	4.95	--	0.10	--	1.02	--	0.05	U	32.2	--	0.07	U	0.5	U	0.07	--	265	--	265	--	--	--	--	--			
YVD-28	CD-031919-07	3/19/2019	988338	73.0	--	19.90	--	7.75	--	12.4	--	3.76	--	0.10	U	0.84	--	0.05	U	31.7	--	0.07	U	0.5	U	0.09	--	267	--	267	--	--	--	--	--			
YVD-28	CD-060419-08	6/4/2019	992243	73.5	--	20.20	--	7.45	--	13.0	--	4.50	--	0.10	U	2.33	--	0.05	U	27.2	--	0.07	U	0.5	U	0.07	U	254	--	254	--	--	--	--	--			
YVD-28	CD-091019-10	9/10/2019	998440	89.5	--	26.70	--	7.05	--	16.2	--	16.5	--	0.15	--	22.4	--	0.05	U	29.2	--	0.07	U	0.5	U	0.07	U	255	--	255	--	--	--	--	--			
YVD-28	CD-121119-16	12/11/2019	902392	72.0	--	19.80	--	7.65	--	12.3	--	4.12	--	0.10	U	1.58	--	0.05	U	31.1	--	0.07	U	0.5	U	0.07	U	256	--	256	--	--	--	--	--			
YVD-28	CD-033120-09	3/31/2020	006262	72.0	--	19.70	--	7.65	--	12.6	--	4.14	--	0.10	U	1.45	--	0.05	U	31.2	--	0.07	U	0.5	U	0.07	U	264	--	264	--	--	--	--	--			
YVD-28	CD-061020-05	6/10/2020	009364	76.0	--	21.70	--	7.20	--	14.0	--	11.1	--	0.10	U	11.6	--	0.05	U	28.6	--	0.07	U	0.5	U	0.07	U	252	--	252	--	--	--	--	--			
YVD-28	CD-092220-10	9/22/2020	013976	89.0	--	26.65	--	7.05	--	17.4	--	18.3	--	0.11	--	21.8	--	0.05	U	27.6	--	0.07	U	0.5	U	0.07	U	241	--	241	--	--	--	--	--			
YVD-28	CD-120820-02	12/8/2020	017141																																			

Table 7
Historical Consent Decree Wells Groundwater Sampling Analytical Results

Analyte				Calcium		Magnesium		Potassium		Sodium		Chloride		Fluoride		Nitrate (as N)		Nitrite (as N)		Sulfate		Ammonia (as N)		Total Kjeldahl Nitrogen		Phosphorus		Alkalinity, Bicarbonate (as CaCO ₃)		Alkalinity, Total (as CaCO ₃)		Ammonia (as N)		Phosphorus	
Analytical Method				EPA 200.7		EPA 200.7		EPA 200.7		EPA 200.7		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		SM 4500 NH3-G		EPA 351.2		SM 4500-P E		SM 2320B		SM 2320B		EPA 350.1		EPA 365.3	
Well ID	Sample ID	Sample Date	Sample Group	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier
YVD-29 (FD)	CD-121118-06	12/11/2018	884998	72.5	--	22.80	--	4.00	--	21.0	--	19.4	--	0.12	--	13.4	--	0.05	U	32.2	--	0.07	U	0.5	U	0.07	--	228	--	228	--	--	--	--	--
YVD-29	CD-031919-09	3/19/2019	988338	74.0	--	23.20	--	3.90	--	20.4	--	17.4	--	0.10	U	13.0	--	0.05	U	32.4	--	0.07	U	0.5	U	0.07	U	234	--	234	--	--	--	--	--
YVD-29	CD-060419-06	6/4/2019	922243	73.0	--	23.50	--	3.76	--	20.4	--	28.6	--	0.88	--	14.4	--	0.05	U	31.5	--	0.07	U	0.5	U	0.07	U	228	--	228	--	--	--	--	--
YVD-29	CD-091019-08	9/10/2019	998440	76.0	--	24.30	--	3.82	--	19.4	--	19.1	--	0.13	--	15.0	--	0.05	U	33.0	--	0.07	U	0.5	U	0.07	U	229	--	229	--	--	--	--	--
YVD-29	CD-121119-18	12/11/2019	902392	73.0	--	22.75	--	3.72	--	18.4	--	17.4	--	0.12	--	14.4	--	0.05	U	32.7	--	0.07	U	0.5	U	0.07	U	215	--	215	--	--	--	--	--
YVD-29	CD-033120-07	3/31/2020	006262	73.5	--	23.25	--	3.80	--	18.9	--	16.5	--	0.10	--	13.8	--	0.05	U	30.0	--	0.07	U	0.5	U	0.07	U	222	--	222	--	--	--	--	--
YVD-29	CD-061020-06	6/10/2020	009364	68.0	--	21.55	--	3.72	--	18.0	--	16.1	--	0.10	U	13.3	--	0.05	U	27.6	--	0.07	U	0.5	U	0.07	U	226	--	226	--	--	--	--	--
YVD-29	CD-092220-08	9/22/2020	013976	76.5	--	24.35	--	3.96	--	19.2	--	19.1	--	0.10	U	15.5	--	0.05	U	29.7	--	0.07	U	0.5	U	0.07	U	224	--	224	--	--	--	--	--
YVD-29	CD-120820-04	12/8/2020	017141	88.0	--	24.80	--	4.10	--	18.6	--	17.4	--	0.12	--	16.8	--	0.05	U	24.2	--	0.07	U	2.5	U	0.07	U	246	--	246	--	--	--	--	--
YVD-29 (FD)	CD-120820-06	12/8/2020	017141	81.5	--	24.35	--	4.15	--	19.0	--	16.4	--	0.10	U	15.8	--	0.05	U	24.8	--	0.07	U	2.5	U	0.07	U	226	--	226	--	--	--	--	--
YVD-29	CD-030321-17	3/3/2021	120106	74.0	--	24.15	--	3.80	--	18.6	--	17.0	--	0.10	--	16.9	--	0.05	U	23.9	--	0.07	U	0.5	U	0.07	U	226	--	226	--	--	--	--	--
YVD-30	CD-031417-03	3/14/2017	K1702541	55.7	--	14.0	--	1.95	--	6.92	--	7.89	--	0.24	--	4.98	--	0.10	U	21.8	--	--	--	0.5	U	--	--	159	--	159	--	0.050	U	0.110	--
YVD-30	CD-060717-11	6/7/2017	K1705832	32.6	--	8.55	--	1.30	--	5.75	--	4.22	--	0.22	--	1.39	--	0.10	U	6.28	--	--	--	0.5	U	--	--	115	--	115	--	0.050	U	0.093	--
YVD-30	CD-092717-02	9/27/2017	K1710382	32.8	--	9.17	--	1.17	--	7.34	--	4.06	--	0.23	--	1.52	--	0.10	U	8.26	--	--	--	0.5	U	--	--	123	--	123	--	0.668	--	0.073	--
YVD-30 (FD)	CD-092717-03	9/27/2017	K1710382	32.4	--	8.88	--	1.14	--	7.08	--	4.04	--	0.22	--	1.52	--	0.10	U	8.20	--	--	--	0.5	U	--	--	122	--	122	--	0.610	--	0.079	--
YVD-30	CD-120617-07	12/6/2017	K1713145	39.2	--	11.1	--	1.36	--	6.49	--	5.42	--	0.23	--	2.85	--	0.10	U	12.9	--	--	--	0.5	U	--	--	140	--	140	--	0.027	J	0.081	--
YVD-30	CD-032018-10	3/20/2018	870717	61.0	--	14.20	--	2.02	--	7.30	--	9.96	--	0.14	--	7.40	--	0.05	U	26.1	--	0.10	--	0.5	U	0.07	U	156	--	156	--	--	--	--	--
YVD-30 (FD)	CD-032018-12	3/20/2018	870717	61.0	--	14.20	--	1.97	--	7.35	--	9.88	--	0.14	--	7.10	--	0.05	U	25.9	--	0.07	U	0.5	U	0.07	U	155	--	155	--	--	--	--	--
YVD-30	CD-060518-06	6/5/2018	875019	32.5	--	9.550	--	1.34	--	6.50	--	5.00	--	0.19	--	1.78	--	0.05	U	6.20	--	0.07	U	0.5	U	0.07	--	115	--	115	--	--	--	--	--
YVD-30	CD-091018-03	9/10/2018	880652	33.1	--	9.850	--	1.22	--	8.15	--	4.83	--	0.21	--	1.96	--	0.05	U	8.74	--	0.07	U	0.5	U	0.07	--	115	--	115	--	--	--	--	--
YVD-30 (FD)	CD-091018-05	9/10/2018	880652	33.8	--	10.15	--	1.32	--	8.20	--	4.79	--	0.21	--	1.92	--	0.05	U	8.66	--	0.07	U	0.5	U	0.08	--	117	--	117	--	--	--	--	--
YVD-30	CD-121118-05	12/11/2018	884998	41.1	--	11.00	--	1.58	--	7.05	--	7.04	--	0.18	--	2.35	--	0.05	U	12.0	--	0.07	U	0.5	U	0.07	--	141	--	141	--	--	--	--	--
YVD-30	CD-031819-03	3/18/2019	988274	53.5	--	12.40	--	1.94	--	7.00	--	7.56	--	0.12	--	4.07	--	0.05	U	19.1	--	0.07	U	0.5	U	0.07	U	158	--	158	--	--	--	--	--
YVD-30 (FD)	CD-031819-02	3/18/2019	988274	53.5	--	12.40	--	1.96	--	7.00	--	7.50	--	0.13	--	4.01	--	0.05	U	18.8	--	0.07	U	0.5	U	0.09	--	156	--	156	--	--	--	--	--
YVD-30	CD-060419-05	6/4/2019	992243	30.2	--	8.300	--	1.34	--	6.00	--	4.18	--	0.16	--	0.86	--	0.05	U	6.03	--	0.07	U	0.5	U	0.07	U	107	--	107	--	--	--	--	--
YVD-30	CD-091119-20	9/11/2019	998512	35.0	--	10.45	--	1.36	--	8.20	--	5.17	--	0.18	--	2.31	--	0.05	U	8.82	--	0.07	U	0.5	U	0.08	--	123	--	123	--	--	--	--	--
YVD-30	CD-121019-07	12/10/2019	902326	42.6	--	11.45	--	1.64	--	6.90	--	6.34	--	0.14	--	3.04	--	0.05	U	12.5	--	0.07	U	0.5	U	0.07	U	146	--	146	--	--	--	--	--
YVD-30	CD-033120-11	3/31/2020	006262	33.6	--	9.000	--	1.39	--	5.90	--	5.87	--	0.11	--	1.95	--	0.05	U	11.2	--	0.07	U	0.5	U	0.07	U	114	--	114	--	--	--	--	--
YVD-30	CD-061020-03	6/10/2020	009364	30.2	--	8.400	--	1.30	--	5.90	--	3.93	--	0.12	--	1.04	--	0.05	U	5.60	--	0.07	U	0.5	U	0.07	U	119	--	119	--	--	--	--	--
YVD-30 (FD)	CD-061020-04	6/10/2020	009364																																

Table 7
Historical Consent Decree Wells Groundwater Sampling Analytical Results

Analyte				Calcium		Magnesium		Potassium		Sodium		Chloride		Fluoride		Nitrate (as N)		Nitrite (as N)		Sulfate		Ammonia (as N)		Total Kjeldahl Nitrogen		Phosphorus		Alkalinity, Bicarbonate (as CaCO ₃)		Alkalinity, Total (as CaCO ₃)		Ammonia (as N)		Phosphorus				
Analytical Method				EPA 200.7		EPA 200.7		EPA 200.7		EPA 200.7		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		EPA 300.0		SM 4500 NH ₃ -G		EPA 351.2		SM 4500-P E		SM 2320B		SM 2320B		EPA 350.1		EPA 365.3				
Well ID	Sample ID	Sample Date	Sample Group	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier	Result (mg/L)	Qualifier			
YVD-31	CD-091119-15	9/11/2019	998512	24.7	--	10.95	--	0.62	U	13.5	--	3.99	--	0.88	--	1.18	--	0.05	U	6.86	--	0.07	U	0.5	U	0.07	U	118	--	118	--	--	--	--	--			
YVD-31	CD-121119-14	12/11/2019	902392	22.2	--	9.800	--	0.62	U	12.4	--	3.18	--	0.91	--	0.76	--	0.05	U	6.37	--	0.07	U	0.5	U	0.07	U	110	--	110	--	--	--	--	--			
YVD-31	CD-040120-18	4/1/2020	006312	22.5	--	10.00	--	0.62	U	13.3	--	3.30	--	0.93	--	0.80	--	0.05	U	6.40	--	0.07	U	0.5	U	0.07	U	112	--	112	--	--	--	--	--			
YVD-31	CD-061120-14	6/11/2020	009424	23.0	--	10.15	--	0.62	U	13.4	--	3.54	--	0.80	--	0.98	--	0.05	U	6.46	--	0.07	U	0.5	U	0.07	U	116	--	116	--	--	--	--	--			
YVD-31	CD-092220-07	9/22/2020	013976	24.4	--	10.80	--	0.62	U	13.6	--	3.76	--	0.81	--	0.92	--	0.05	U	6.74	--	0.07	U	0.5	U	0.07	U	111	--	111	--	--	--	--	--			
YVD-31	CD-120920-19	12/9/2020	017224	23.0	--	10.25	--	0.62	U	13.3	--	3.32	--	0.82	--	0.69	--	0.05	U	5.96	--	0.07	U	2.5	U	0.07	U	115	--	115	--	--	--	--	--			
YVD-31	CD-030321-13	3/3/2021	120106	23.3	--	10.40	--	0.62	U	13.8	--	3.42	--	0.93	--	0.76	--	0.05	U	6.50	--	0.07	U	0.5	U	0.07	U	121	--	121	--	--	--	--	--			
YVD-32	CD-032018-15	3/20/2018	870717	76.5	--	25.25	--	1.74	--	64.0	--	29.1	--	0.48	--	39.5	--	0.09	--	68.5	--	0.11	--	0.5	U	0.07	U	226	--	226	--	--	--	--	--			
YVD-32	CD-060618-13	6/6/2018	875019	83.0	--	28.95	--	1.84	--	72.0	--	29.4	--	0.50	--	37.1	--	0.05	U	62.3	--	0.07	U	0.5	U	0.07	U	233	--	233	--	--	--	--	--			
YVD-32	CD-091118-17	9/11/2018	880728	81.0	--	27.25	--	1.60	--	70.5	--	27.8	--	0.49	--	36.0	--	0.05	U	68.9	--	0.07	U	0.5	U	0.07	U	236	--	236	--	--	--	--	--			
YVD-32	CD-121218-11	12/12/2018	885015	83.0	--	27.45	--	1.80	--	68.5	--	24.4	--	0.40	--	39.4	--	0.05	U	68.4	--	0.07	U	0.5	U	0.07	U	235	--	235	--	--	--	--	--			
YVD-32 (FD)	CD-121218-12	12/12/2018	885015	82.0	--	27.40	--	1.76	--	68.0	--	28.6	--	0.47	--	38.3	--	0.05	U	66.6	--	0.07	U	0.5	U	0.07	U	236	--	236	--	--	--	--	--			
YVD-32	CD-032019-15	3/20/2019	988419	86.0	--	28.85	--	1.88	--	71.0	--	30.2	--	0.42	--	45.0	--	0.05	U	63.4	--	0.07	U	0.5	U	0.07	U	240	--	240	--	--	--	--	--			
YVD-32	CD-060519-16	6/5/2019	992296	87.5	--	29.50	--	1.77	--	75.5	--	28.5	--	0.47	--	47.0	--	0.05	U	65.0	--	0.07	U	0.5	U	0.07	U	234	--	234	--	--	--	--	--			
YVD-32 (FD)	CD-060519-17	6/5/2019	992296	87.5	--	29.40	--	1.76	--	75.0	--	26.7	--	0.44	--	44.7	--	0.05	U	69.1	--	0.07	U	0.5	U	0.07	U	233	--	233	--	--	--	--	--			
YVD-32	CD-091119-16	9/11/2019	998512	84.0	--	28.60	--	1.72	--	70.5	--	29.7	--	0.52	--	44.0	--	0.05	U	71.1	--	0.07	U	0.5	U	0.07	U	249	--	249	--	--	--	--	--			
YVD-32 (FD)	CD-091119-17	9/11/2019	998512	86.5	--	29.20	--	1.79	--	72.0	--	29.7	--	0.51	--	43.6	--	0.05	U	70.7	--	0.07	U	0.5	U	0.07	U	248	--	248	--	--	--	--	--			
YVD-32	CD-121119-13	12/11/2019	902392	81.0	--	27.25	--	1.78	--	67.0	--	27.9	--	0.52	--	41.0	--	0.05	U	69.6	--	0.07	U	0.5	U	0.07	U	247	--	247	--	--	--	--	--			
YVD-32	CD-040120-15	4/1/2020	006312	85.5	--	28.50	--	1.83	--	71.5	--	28.2	--	0.46	--	39.6	--	0.05	U	68.8	--	0.07	U	0.5	U	0.07	U	250	--	250	--	--	--	--	--			
YVD-32	CD-061120-13	6/11/2020	009424	83.5	--	28.05	--	1.94	--	70.0	--	27.0	--	0.42	--	37.3	--	0.05	U	73.5	--	0.07	U	0.5	U	0.07	U	250	--	250	--	--	--	--	--			
YVD-32 (FD)	CD-061120-15	6/11/2020	009424	84.5	--	28.00	--	1.98	--	71.5	--	27.4	--	0.41	--	37.6	--	0.05	U	73.1	--	0.07	U	0.5	U	0.07	U	254	--	254	--	--	--	--	--			
YVD-32	CD-092220-06	9/22/2020	013976	83.0	--	27.80	--	1.77	--	76.0	--	24.5	--	0.43	--	32.4	--	0.05	U	79.3	--	0.07	U	0.5	U	0.07	U	258	--	258	--	--	--	--	--			
YVD-32	CD-120920-20	12/9/2020	017224	79.0	--	26.70	--	1.87	--	69.0	--	17.8	--	0.44	--	28.0	--	0.05	U	70.2	--	0.07	U	2.5	U	0.07	U	265	--	265	--	--	--	--	--			
YVD-32	CD-030321-14	3/3/2021	120106	81.0	--	27.65	--	1.72	--	70.5	--	23.3	--	0.49	--	30.1	--	0.05	U	75.4	--	0.07	U	0.6	--	0.07	U	267	--	267	--	--	--	--	--			
YVD-32 (FD)	CD-030321-15	3/3/2021	120106	80.0	--	27.30	--	1.71	--	70.0	--	23.1	--	0.49	--	29.8	--	0.05	U	75.7	--	0.07	U	0.5	U	0.07	U	262	--	262	--	--	--	--	--			

Notes:

Bold: detected value

--: not qualified

CaCO₃: calcium carbonate

EPA: U.S. Environmental Protection Agency Method

FD: Field Duplicate

J: estimated value

mg/L: milligrams per liter

N: nitrogen

SM: Standard Method

U: not detected above the method detection limit

Attachment A

First Quarter 2021 Field Forms

Attachment B

First Quarter 2021 Analytical Laboratory
Reports
