

TECHNICAL MEMORANDUM

DATE December 20, 2019 **Project No.** 152539319.200

TO Grant Yang
Department of Ecology

CC Courtney Klein - JSH Properties, Jessica Atlakson - City of Redmond

FROM Eric Adams, Golder Associates Inc. on behalf of
TMT Bear Creek Shopping Center, Inc. **EMAIL** eadams@golder.com

REQUEST TO REDUCE NUMBER OF WELLS SAMPLED FOR BEAR CREEK VILLAGE SHOPPING CENTER

Dear Grant Yang

On behalf of TMT Bear Creek Shopping Center, Inc., Golder Associates Inc., (Golder) is submitting this letter regarding the Bear Creek Shopping Center (the Site), located at 17100 – 17262 Redmond Way, Redmond, Washington (Figure 1). The Site is registered under the Washington State Department of Ecology Voluntary Cleanup Action Program (VCP # NW2776). The Site is the location of a historical halogenated volatile organic compounds (HVOCs) release associated with a strip mall dry cleaner. Remedial actions were conducted on site between 1997 and 1998. Remedial actions are documented in Dames & Moore 1998¹. Compliance groundwater monitoring has been conducted on site since 1999 as documented in Golder 2019². Groundwater sampling is currently conducted bi-annually at the Site to monitor groundwater quality with respect to the continued presence of HVOCs.

As demonstrated by Table 1 there have been no detections of the constituents of concern exceeding MTCA Method A Cleanup Levels in four of the six wells (MW-2, MW-3, MW-4, and MW-9) sampled since 2013 or longer.

We are therefore requesting to temporarily discontinue the sampling of MW-2, MW-3, MW-4, and MW-9. Sampling will continue for MW-10A and MW-13 because they have had detections of one or more HVOCs exceeding MTCA cleanup levels in recent years. We will continue with semi-annual sampling schedule for MW-10A and MW-13 until two consecutive monitoring events below MTCA cleanup levels are achieved at which time sampling will resume for all six site monitoring wells on a quarterly basis. Sampling will be conducted on a quarterly basis to confirm that groundwater is not impacted with HVOCs at concentrations exceeding MTCA Method A cleanup levels for all seasons of the year.

¹ Dames & Moore. 1998. Voluntary Soil Cleanup – Former Bear Creek Cleaners – Bear Creek Village Shopping Center – Redmond, Washington. February 25.

² Golder Associates Inc. (Golder). 2019. Groundwater Monitoring March 2019 Bear Creek Village Shopping Center. May 29.

We thank you for your consideration of our proposition and look forward to your favorable response.



Eric Adams
Project Hydrogeologist



Ted Norton
Senior Consultant/Associate

Attachments:
Table 1
Figure 1

[https://golderassociates.sharepoint.com/sites/105030/project files/5 technical work/ecology request/152539319_l-rev0-bear creek ecology request 2019_122019.docx](https://golderassociates.sharepoint.com/sites/105030/project%20files/5%20technical%20work/ecology%20request/152539319_l-rev0-bear%20creek%20ecology%20request%202019_122019.docx)

Table

Table 1: Historical Groundwater Reuslts

Monitoring Well ID	Sampling Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	VC	cis-1,2-DCE
MW-2	10/22/1997	36.7	2.23	<5.0	7.52
	2/19/1999	270	6	<5.0	6
	6/29/1999	<5.0	<5.0	<5.0	<5.0
	9/15/1999	51	<5.0	<5.0	<5.0
	12/14/1999	150	<5.0	<5.0	<5.0
	3/22/2000	39	<5.0	<5.0	<5.0
	9/27/2000	41	<2.0	<2.0	<2.0
	12/20/2000	34	<2.0	<2.0	<2.0
	3/29/2001	82	2.3	<0.20	3
	6/14/2001	51	1.7	<0.20	0.42
	9/12/2001	36	3.8	0.22	3.3
	12/18/2001	50	1.2	<0.20	0.33
	3/26/2002	17 (18)	0.46 (0.45)	<0.20	0.31 (0.37)
	6/10/2002	21 (21)	8.6 (7.0)	<0.20 (<0.20)	2.6 (2.4)
	9/12/2002	4.4	<0.20	<0.20	<0.20
	12/9/2002	4.8	0.46	<0.20	0.33
	3/13/2003	11	1.2	<0.20	1.1
	6/17/2003	11	2.1	0.47	3
	9/9/2003	*	*	*	*
	12/9/2003	30 (28)	0.63 (0.68)	<0.20	<0.20
	3/10/2004	17	0.6	<0.20	<0.20
	6/9/2004	5.2	3.6	<0.20	2.3
	9/22/2004	11	5.2	<0.20	3.6
	12/13/2004	19	0.35	<0.20	<0.20
	3/23/2005	10	2.1	<0.20	1.5
	6/20/2005	13	0.74	<0.20	<0.20
	9/8/2005	4.5	5.4	<0.20	6.2
	3/6/2006	16	0.33	<0.20	<0.20
	9/21/2006	6.1	3.6	<0.20	3.6
	3/16/2007	14	0.47	<0.20	0.28
	9/13/2007	8.8	4.4	<0.20	4.5
	2/28/2008	9.6	0.22	<0.20	<0.20
	9/8/2008	8.6 (8.1)	1.9 (1.9)	<0.20	0.96 (1.0)
	3/24/2009	11(11)	0.38 (0.28)	<0.20	<0.20
	9/18/2009	5.2	4	<0.20	6.4
	5/18/2010	6	<0.20	<0.20	<0.20
	10/7/2010	8.3	1.3	<0.20	1.1
	3/23/2011	7.9	<0.20	<0.20	<0.20
	9/8/2011	7.2	1.5	<0.20	1.2
	3/23/2012	7.0	<0.20	<0.20	<0.20
	9/14/2012	5.3	0.74	<0.20	0.52
	3/28/2013	2.8	<0.20	<0.20	<0.20
	9/4/2013	4.4	0.70	<0.20	0.53
	4/4/2014	3.3	<0.20	<0.20	<0.20
	9/23/2014	2.9	0.73	<0.20	1.7
	3/17/2015	2.6	<0.20	<0.20	<0.20
	9/28/2015	1.2	0.54	<0.20	6.2
	6/15/2016	2.3	0.2	<0.20	<0.20
	9/27/2016	1.6	0.47	<0.20	4.4
	3/29/2017	0.6	<0.20	<0.20	<0.20
	9/14/2017	*	*	*	*
	3/27/2018	0.57	<0.20	<0.20	<0.20
	11/28/2018	2.2	<0.20	<0.20	<0.20
	3/21/2019	1.4	<0.20	<0.20	<0.20
	9/25/2019	1.7	<0.20	<0.20	0.75

Table 1: Historical Groundwater Results

Monitoring Well ID	Sampling Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	VC	cis-1,2-DCE
MW-3	10/22/1997	<5.0	<5.0	<5.0	1.09
	2/19/1999	28	11	7	18
	6/29/1999	12	8	4	8
	9/15/1999	<5.0	10	<5.0	10
	12/14/1999	12	8	10	14
	3/22/2000	7	5	<5.0	7
	9/27/2000	<2.0	<2.0	<2.0	12
	12/20/2000	2	<2.0	<2.0	8
	3/29/2001	3.8	4.5	3.3	8.5
	6/14/2001	3.8	4.6	1.5	4.1
	9/12/2001	<0.20	1.4	0.79	6.2
	12/18/2001	1.8	5.7	0.98	5.2
	3/26/2002	0.39	1.5	0.9	3.5
	6/10/2002	<0.20	0.95	0.96	3.3
	9/10/2002	0.23	1.3	0.74	4.3
	12/9/2002	<0.20	0.55	0.74	2.6
	3/13/2003	<0.20	0.5(0.50)	0.45(0.45)	2.7(2.7)
	6/17/2003	<0.20	0.22	0.53	3
	9/9/2003	<0.20	<0.20	0.36	2.7
	12/9/2003	<0.20	0.45	0.33	3.1
	3/11/2004	<0.20	0.48	0.42	1.8
	6/9/2004	<0.20	<0.20	0.35	1.9
	9/22/2004	<0.20	<0.20	0.51	2.0
	12/13/2004	<0.20	0.25	0.31	2.4
	3/23/2005	<0.20	<0.20	0.28	2.0
	6/20/2005	<0.20	<0.20	<0.20	1.2 (1.3)
	9/8/2005	<0.20	<0.20	0.23	1.1
	3/16/2007	<0.20	<0.20	<0.20	0.88
	9/13/2007	<0.20	<0.20	<0.20	0.62
	2/28/2008	<0.20	<0.20	0.22	0.88
	9/8/2008	<0.20	<0.20	<0.20	0.47
	3/24/2009	<0.20	<0.20	<0.20	0.56
	9/18/2009	<0.20	<0.20	<0.20	0.72 (0.73)
	5/18/2010	<0.20	<0.20	<0.20	0.48 (0.52)
	10/7/2010	<0.20	<0.20	<0.20	0.36
	3/23/2011	<0.20	<0.20	<0.20	0.41
	9/8/2011	<0.20	<0.20	<0.20	0.32
	3/23/2012	<0.20	<0.20	<0.20	0.53
	9/14/2012	<0.20	<0.20	<0.20	0.24
	3/28/2013	<0.20	<0.20	<0.20	0.35
	9/4/2013	<0.20	<0.20	<0.20	0.34
	4/4/2014	<0.20	<0.20	<0.20	0.38
	9/23/2014	<0.20	<0.20	<0.20	0.23
	3/17/2015	<0.20	<0.20	<0.20	0.41
	9/28/2015	<0.20	<0.20	<0.20	0.31
	6/15/2016	<0.20	<0.20	<0.20	0.27
	9/27/2016	*	*	*	*
	3/29/2017	<0.20	<0.20	<0.20	0.29
	9/14/2017	*	*	*	*
	3/27/2018	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)
	11/28/2018	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)	0.27 (0.25)
	3/21/2019	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)
	9/25/2019	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)	0.21 (<0.20)

Table 1: Historical Groundwater Reuslts

Monitoring Well ID	Sampling Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	VC	cis-1,2-DCE
MW-4	10/22/1997	11.8	5.99(0.50)	1.9	6.84
	2/19/1999	74	17	16	26
	6/29/1999	60	16	14	14
	9/15/1999	42	19	19	16
	12/14/1999	38	14	12	12
	3/22/2000	36	9	<5.0	8
	9/27/2000	16	12	8	14
	12/20/2000	16	8	<2.0	8
	3/29/2001	11	7.5	2.8	5.1
	6/14/2001	6.8	6.1	1	2.1
	9/12/2001	8.3	6.8	1.3	5.7
	12/18/2001	12	6.3	1.7	3.4
	3/26/2002	5.1	2.4	<0.20	1.1
	6/10/2002	5.7	2.7	0.57	2
	9/12/2002	5.4	3.9	0.66	3.4
	12/9/2002	5	3	1.6	2.9
	3/13/2003	6.3	1.8	<0.20	0.71
	6/17/2003	2.7	2.6	0.69	4.4
	9/9/2003	3.5	2.8	0.42	3.2
	12/9/2003	5.7	2.5	0.37	2.9
	3/11/2004	4.1	1.8	0.23	2.0
	6/9/2004	1.8	2.2	0.33	2.4
	9/22/2004	1	1.4	0.68	2.1
	12/13/2004	3.8	1.3	<0.20	0.93
	3/23/2005	2.2	1.0	<0.20	1.5
	6/20/2005	0.74	0.93	0.57	2.1
	9/8/2005	0.64 (0.65)	0.88 (0.88)	<0.20 (<0.20)	2.3 (2.3)
	3/6/2006	1.5 (1.4)	1.2 (1.3)	0.36 (0.33)	0.82 (0.85)
	9/21/2006	0.99 (0.85)	1.1 (1.1)	0.22 (0.25)	1.7 (2.1)
	3/16/2007	2.6 (2.7)	1.7 (1.7)	<0.20 (<0.20)	1.2 (1.2)
	9/13/2007	0.68 (0.63)	0.65 (0.71)	<0.20 (<0.20)	1.2 (1.3)
	2/28/2008	0.73 (0.72)	0.64 (0.61)	0.2 (<0.20)	1.1 (1.1)
	9/8/2008	0.23	2.2	<0.20	4.6
	3/24/2009	0.56	2.9	<0.20	4.8
	9/18/2009	<0.20	1.2	<0.20	8.8
	5/18/2010	0.27	1.6	<0.20	6.9
	10/7/2010	<0.20	0.52	<0.20	2.4
	3/23/2011	0.46	0.48	<0.20	0.66
	9/8/2011	0.23 (0.25)	0.52 (0.58)	<0.20 (<0.20)	5.6 (5.1)
	3/23/2012	0.36 (0.34)	0.58 (0.57)	<0.20 (<0.20)	0.48 (0.47)
	9/14/2012	<0.20 (<0.20)	0.23 (0.29)	<0.20 (<0.20)	5.4 (6.1)
	3/28/2013	<0.20 (<0.20)	0.63 (0.62)	<0.20 (<0.20)	3.4 (3.5)
	9/4/2013	<0.20 (<0.20)	0.21 (0.21)	<0.20 (<0.20)	6.8 (6.7)
	4/4/2014	0.31 (0.29)	0.37 (0.36)	<0.20 (<0.20)	0.83 (0.85)
	9/23/2014	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)	3.8 (3.9)
	3/17/2015	<0.20 (<0.20)	0.32 (0.34)	<0.20 (<0.20)	5.1 (5.4)
	9/28/2015	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)	4.6 (4.6)
	6/15/2016	<0.20 (<0.20)	<0.20 (<0.20)	<0.20 (<0.20)	6.0 (5.7)
	9/27/2016	0.42 (0.37)	1.1 (1.1)	<0.20 (<0.20)	5.5 (5.5)
	3/29/2017	<0.20 (<0.20)	0.35 (0.36)	<0.20 (<0.20)	3.6 (3.8)
	9/14/2017	1.4 (1.5)	3.0 (3.0)	<0.20 (<0.20)	8.0 (8.1)
	3/27/2018	<0.20	<0.20	<0.20	2.4
	11/28/2018	<0.20	<0.20	<0.20	5.2
	3/21/2019	<0.20	<0.20	<0.20	2.8
	9/25/2019	<0.20	<0.20	<0.20	6.0

Table 1: Historical Groundwater Results

Monitoring Well ID	Sampling Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	VC	cis-1,2-DCE
MW-9	10/22/1997	<5.0	<5.0	<5.0	<5.0
	2/19/1999	<5.0	<5.0	<5.0	<5.0
	6/29/1999	<5.0	<5.0	<5.0	<5.0
	9/15/1999	<5.0	<5.0	<5.0	<5.0
	12/14/1999	<5.0	<5.0	<5.0	<5.0
	3/22/2000	<5.0	<5.0	<5.0	<5.0
	9/28/2000	<2.0	<2.0	<2.0	<2.0
	12/20/2000	<2.0	<2.0	<2.0	<2.0
	3/28/2001	<0.20	<0.20	<0.20	<0.20
	6/14/2001	<0.20	<0.20	<0.20	<0.20
	9/12/2001	<0.20	<0.20	<0.20	<0.20
	12/18/2001	<0.20	<0.20	<0.20	<0.20
	3/26/2002	<0.20	<0.20	0.21	0.44
	6/10/2002	<0.20	<0.20	<0.20	0.21
	9/10/2002	<0.20	<0.20	<0.20	0.46
	12/9/2002	<0.20	<0.20	<0.20	0.26
	3/13/2003	<0.20	<0.20	<0.20	<0.20
	6/18/2003	<0.20	<0.20	<0.20	<0.20
	9/9/2003	<0.20	<0.20	<0.20	<0.20
	12/9/2003	<0.20	<0.20	<0.20	<0.20
	3/10/2004	<0.20	<0.20	<0.20	<0.20
	6/9/2004	<0.20	<0.20	<0.20	<0.20
	9/22/2004	<0.20	<0.20	<0.20	<0.20
	12/13/2004	<0.20	<0.20	<0.20	<0.20
	3/23/2005	<0.20	<0.20	<0.20	<0.20
	6/20/2005	<0.20	<0.20	<0.20	<0.20
	9/8/2005	<0.20	<0.20	<0.20	<0.20
	3/6/2006	<0.20	<0.20	<0.20	<0.20
	9/21/2006	<0.20	<0.20	<0.20	<0.20
	3/16/2007	<0.20	<0.20	<0.20	<0.20
	9/13/2007	<0.20	<0.20	<0.20	<0.20
	2/28/2008	<0.20	<0.20	<0.20	<0.20
	9/8/2008	<0.20	<0.20	<0.20	<0.20
	3/24/2009	<0.20	<0.20	<0.20	<0.20
	9/18/2009	<0.20	<0.20	<0.20	<0.20
	5/18/2010	<0.20	<0.20	<0.20	<0.20
	10/7/2010	<0.20	<0.20	<0.20	<0.20
	3/23/2011	<0.20	<0.20	<0.20	<0.20
	9/8/2011	<0.20	<0.20	<0.20	<0.20
	3/23/2012	<0.20	<0.20	<0.20	<0.20
	9/14/2012	<0.20	<0.20	<0.20	<0.20
	3/28/2013	<0.20	<0.20	<0.20	<0.20
	9/4/2013	<0.20	<0.20	<0.20	<0.20
	4/4/2014	<0.20	<0.20	<0.20	<0.20
	9/23/2014	<0.20	<0.20	<0.20	<0.20
	3/17/2015	<0.20	<0.20	<0.20	<0.20
	9/28/2015	<0.20	<0.20	<0.20	<0.20
	6/15/2016	<0.20	<0.20	<0.20	<0.20
	9/27/2016	<0.20	<0.20	<0.20	<0.20
	3/29/2017	<0.20	<0.20	<0.20	<0.20
	9/14/2017	<0.20	<0.20	<0.20	<0.20
	3/27/2018	<0.20	<0.20	<0.20	<0.20
	11/28/2018	<0.20	<0.20	<0.20	<0.20
	3/21/2019	<0.20	<0.20	<0.20	<0.20
	9/25/2019	<0.20	<0.20	<0.20	<0.20

Table 1: Historical Groundwater Results

Monitoring Well ID	Sampling Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	VC	cis-1,2-DCE
MW-10	10/22/1997	<5.0	<5.0	1.39	2.53
	2/19/1999	67	14	<5.0	22
	6/29/1999	30	14	<5.0	11
	9/15/1999	7	8	<5.0	7
	12/14/1999	15	14	<5.0	21
	3/22/2000	17	9	<5.0	11
	9/28/2000	3	5	<2.0	5
	12/20/2000	4	<2.0	<2.0	6
	3/28/2001	4.2 (4.6)	6.6 (6.2)	2.1 (2.2)	11 (10)
	6/14/2001	4.4	6	0.97	4.6
	9/12/2001	1.1	4.4	1.2	3.6
	12/18/2001	1.8	5.7	0.98	5.2
	3/26/2002	1.1	5.1	0.76	5.1
	6/10/2002	0.28	4.8	0.95	4.5
	9/10/2002	1.3	2	<0.20	2.4
	12/9/2002	<0.20	2.5	0.61	4.9
	3/13/2003	<0.20	2.2	0.22	3.1
	6/18/2003	<0.20	1.6	0.38	5.7
	9/9/2003	<0.20	0.84	0.33	1.9
	12/9/2003	0.31	3.6	0.59	7.5
	3/11/2004	<0.20	2.8	0.53	5.7
	6/9/2004	<0.20	0.64	1.3	4.4
	9/22/2004	<0.20	0.94	1.1	3.2
	12/13/2004	<0.20	0.81	0.51	4.8
	3/23/2005	<0.20	0.62	0.62	4.1
	6/20/2005	0.5	1.5	0.25	3.9
MW-10A	3/16/2007	1.1	1.1	0.28	7.10
	9/13/2007	<0.20	1.5	<0.20	9.1
	2/28/2008	<0.20	0.82	0.33	14
	9/8/2008	<0.20	0.21	0.34	8.7
	3/24/2009	<0.20	<0.20	0.24	6.5
	9/18/2009	<0.20	<0.20	0.27	5
	5/18/2010	<0.20	<0.20	0.52	5.2
	10/7/2010	<0.20	<0.20	0.26 (0.21)	6.4 (6.3)
	3/23/2011	<0.20	<0.20	<0.20 (<0.20)	6.8 (6.8)
	9/8/2011	<0.20	<0.20	0.43	4.1
	3/23/2012	<0.20	<0.20	0.21	4.5
	9/14/2012	<0.20	<0.20	<0.20	4.1
	3/28/2013	<0.20	<0.20	<0.20	4.7
	9/4/2013	<0.20	<0.20	0.54	5.9
	4/4/2014	<0.20	<0.20	<0.20	4.2
	9/23/2014	<0.20	<0.20	0.39	5.5
	3/17/2015	<0.20	<0.20	0.65	5.9
	9/28/2015	<0.20	<0.20	0.41	3.7
	6/15/2016	<0.20	<0.20	0.91	5.8
	9/27/2016	<0.20	<0.20	0.37	3.2
	3/29/2017	<0.20	<0.20	0.59	3.8
	9/14/2017	<0.20	<0.20	0.29	2.3
	3/27/2018	<0.20	<0.20	1.3	3.7
	11/28/2018	<0.20	<0.20	0.32	3.7
	3/21/2019	<0.20	<0.20	1.0	2.9
	9/25/2019	<0.20	<0.20	<0.20	3.1

Table 1: Historical Groundwater Results

Monitoring Well ID	Sampling Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	VC	cis-1,2-DCE
MW-13	6/29/1999	54	42	<5.0	45
	9/15/1999	38	35	<5.0	41
	12/14/1999	53	48	<5.0	67
	3/22/2000	58	40	<5.0	28
	9/27/2000	27	19	<2.0	16
	12/20/2000	24	13	<2.0	9
	3/28/2001	19	18	0.78	15
	6/14/2001	24	17	0.49	6
	9/12/2001	20	12	<0.20	4.5
	12/18/2001	26	27	0.44	14
	3/26/2002	24	21	<0.20	12
	6/11/2002	22	14	<0.20	6.5
	9/12/2002	14 (12)	11 (9.2)	<0.20 (0.24)	5.8 (4.6)
	12/9/2002	10 (10)	6.5 (6.6)	0.30 (0.29)	2.8 (2.7)
	3/13/2003	12	9.3	0.27	3.8
	6/18/2003	10	6.8	<0.20	4.3
	9/9/2003	10	6.7	<0.20	1.9
	12/9/2003	12	7.2	<0.20	2.7
	3/10/2004	16 (15)	7.7 (7.4)	<0.20	2.2 (2.2)
	6/9/2004	7.9	5.9	<0.20	2.3
	9/22/2004	11(11)	7.7 (7.8)	<0.20 (<0.20)	2.7 (2.7)
	12/13/2004	9.7	5.9	<0.20	2.3
	3/23/2005	8.0	5.1	<0.20	1.7
	6/20/2005	4.9	3.1	<0.20	1.0
	9/8/2005	5.0	3.9	<0.20	1.5
	3/6/2006	8.2	3.5	<0.20	0.78
	9/21/2006	4.2	2.8	<0.20	0.67
	3/16/2007	6.8	3.1	<0.20	0.81
	9/13/2007	3.1	2.2	<0.20	0.59
	2/28/2008	5.7	1.4	<0.20	0.35
	9/8/2008	1.8	2.4	<0.20	0.57
	3/24/2009	4.3	1.4	<0.20	0.47
	9/18/2009	2	2.2	<0.20	0.66
	5/18/2010	4	1.4	<0.20	0.37
	10/7/2010	1.9	2.5	<0.20	0.66
	3/23/2011	4.8	1	<0.20	<0.20
	9/8/2011	1.5	2.2	<0.20	0.47
	3/23/2012	4.5	2.1	<0.20	0.55
	9/14/2012	1.5	2	<0.20	0.51
	3/28/2013	4.1	2.7	<0.20	0.87
	9/4/2013	3.1	3.4	<0.20	1.4
	4/4/2014	4.4	2.2	<0.20	0.54
	9/23/2014	3.7	3.8	<0.20	1.1
	3/17/2015	3.5	2.9	<0.20	1.2
	9/28/2015	4.3	3.6	<0.20	1.1
	6/15/2016	3	3.4	<0.20	0.74
	9/27/2016	3.2	3.9	<0.20	1.1
	3/29/2017	3.6	2.3	<0.20	0.49
	9/14/2017	1.2	5.1	<0.20	1.5
	3/27/2018	2.9	2	<0.20	0.46
	11/28/2018	4	2.5	<0.20	0.64
	3/21/2019	2.9	1.9	<0.20	0.46
	9/25/2019	3	1.9	<0.20	0.47

Table 1: Historical Groundwater Results

Monitoring Well ID	Sampling Date	Volatile Organic Compounds (µg/L)			
		PCE	TCE	VC	<i>cis</i> -1,2-DCE
MW-1	10/22/1997	<5.0	<5.0	7.7	25.2
	2/19/1999	<5.0	<5.0	<5.0	<5.0
	6/29/1999	<5.0	<5.0	<5.0	<5.0
	9/15/1999	<5.0	<5.0	<5.0	<5.0
	12/14/1999	<5.0	<5.0	<5.0	<5.0
	3/22/2000	<5.0	<5.0	<5.0	<5.0
MW-5	10/22/1997	1.58	2.55	<5.0	<5.0
	2/19/1999	<5.0	<5.0	<5.0	<5.0
	6/29/1999	<5.0	<5.0	<5.0	<5.0
	9/15/1999	<5.0	<5.0	<5.0	<5.0
	12/14/1999	<5.0	<5.0	<5.0	<5.0
MW-6	10/22/1997	<5.0	<5.0	<5.0	<5.0
	2/19/1999	<5.0	<5.0	<5.0	<5.0
MW-7	10/22/1997	<5.0	<5.0	<5.0	<5.0
	2/18/1999	<5.0	<5.0	<5.0	<5.0
MW-8	10/22/1997	<5.0	<5.0	<5.0	<5.0
	2/18/1999	<5.0	<5.0	<5.0	<5.0
MW-11	10/22/1997	<5.0	<5.0	<5.0	<5.0
	2/18/1999	<5.0	<5.0	<5.0	<5.0
MW-12	10/22/1997	<5.0	<5.0	<5.0	<5.0
	2/19/1999	<5.0	<5.0	<5.0	<5.0
MW-14	6/29/1999	<5.0	<5.0	<5.0	<5.0
	9/15/1999	<5.0	<5.0	<5.0	<5.0
	12/14/1999	<5.0	<5.0	<5.0	<5.0
	3/22/2000	<5.0	<5.0	<5.0	<5.0
	9/27/2000	<2.0	<2.0	<2.0	<2.0
	12/20/2000	<2.0	<2.0	<2.0	<2.0
	3/28/2001	<0.20	<0.20	<0.20	<0.20
	6/14/2001	<0.20	<0.20	<0.20	<0.20
	9/12/2001	<0.20	<0.20	<0.20	<0.20
MTCA Cleanup Levels		5.0 A	5.0 A	0.2 A	16 B¹

Notes:

Analytical results in parentheses represent duplicate samples.

Bold Italic = indicates the analytical result exceeds the MTCA Method A or B Cleanup Level.

<0.20 = indicates sample was not detected above the laboratory analytical detection limit.

A = MTCA Method A Cleanup Level (Model Toxics Control Act Cleanup Regulation - Chapter 173-340 WAC).

Toxics Control Act Cleanup Levels and Risk Calculations - February 1996).

¹ Current (2014) MTCA Method B value. Historical value was 80 µg/L.

* Groundwater elevation resided beneath the well screen. Sample could not be collected.

cis-1,2-DCE = *cis*-1,2-Dichloroethene

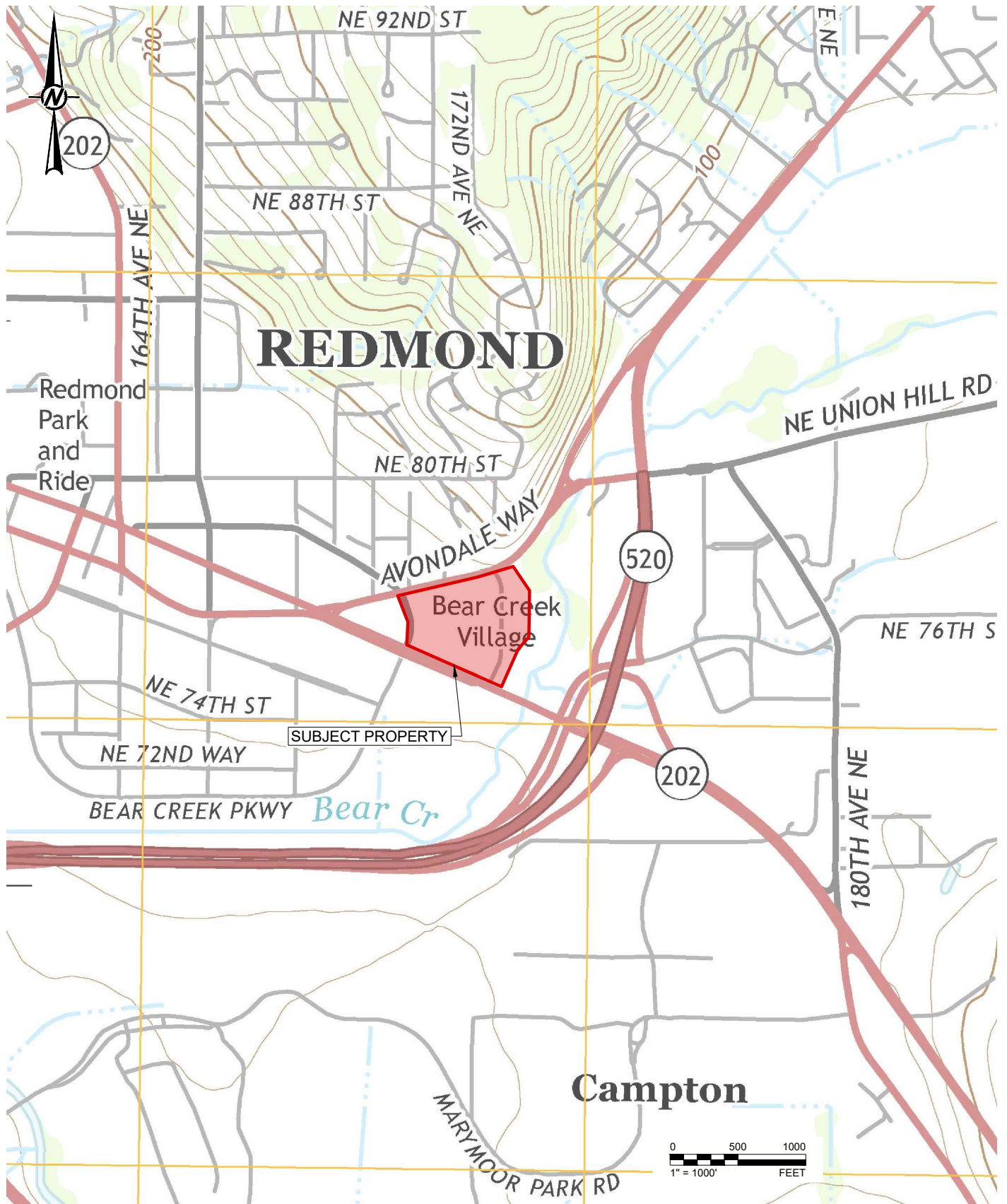
PCE = Perchloroethylene = Tetrachloroethene

TCE = Trichloroethene

VC = Vinyl Chloride

Figure

Path: \\redmond-golder-gis\data\geomatics\TMT_Bear_Creek_Shopping_Center\Redmond09_PROJECTS\152539319_GW_Monitoring\02_PRODUCTION\DWG\1 File Name: 152539319_200_001.dwg



CLIENT
TMT BEAR CREEK SHOPPING CENTER, INC

CONSULTANT



YYYY-MM-DD 2019-10-31

DESIGNED XXX

PREPARED REDMOND

REVIEWED EA

APPROVED XXX

PROJECT
BEAR CREEK GROUNDWATER MONITORING -
BEAR CREEK SHOPPING CENTER
REDMOND, WA

TITLE
SITE LOCATION MAP

PROJECT NO.
152539319

PHASE
200

REV.
A

FIGURE
1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A
1 in