

## **TABLES**

**TABLE 1**  
**Monitoring and Remedial Well Details**  
**7th Street and Arizona Avenue WQARF Site**

Well ID	ADWR Registration	Installation Date	State Plane Arizona Central NAD83 E (feet)	State Plane Arizona Central NAD83 N (feet)	Measuring Point Elevation NAVD88 (ft amsl)	Borehole Depth (ft bgs)	Casing Diameter/Schedule	Screened Interval (ft bgs)	Screen Slot Size (inch)
<b>PERCHED GROUNDWATER WELLS</b>									
<b>ADEQ Wells</b>									
7AZP-1 <sup>c</sup>	55-591718	4/18/2002	993,826.790	447,346.479	2,378.27	87.0	1", 4" / SCH40	14-15; 29-30; 44-45; 60 - 85	0.02
7AZP-2 <sup>c</sup>	55-591719	4/10/2002	993,827.832	447,179.925	2,378.35	86.0	1", 4" / SCH40	14-15; 29-30; 44-45; 58.7 - 83.9	0.02
7AZP-3 <sup>c</sup>	55-591720	4/15/2002	993,684.018	447,180.330	2,377.26	87.0	1", 4" / SCH40	14-15; 29-30; 44-45; 60 - 85	0.02
7AZP-4 <sup>c</sup>	55-591721	4/16/2002	993,761.950	447,241.212	2,377.58	87.0	1", 4" / SCH40	14-15; 29-30; 44-45; 60 - 85	0.02
7AZP-5	55-214637	2/13/2007	991,842.107	448,336.054	2,369.81	90.0	4" / SCH40	65 - 85	0.02
7AZP-6	55-214638	2/15/2007	992,635.997	448,753.758	2,386.61	95.0	4" / SCH40	65 - 95	0.02
7AZP-7 <sup>a</sup>	55-214639	2/18/2007	993,629.193	448,123.531	2,387.26	90.0	4" / SCH40	65 - 85	0.02
7AZP-8 <sup>b,c</sup>	none	2/19/2007	993,606.393	447,335.834	NA	46.0	1" / SCH40	14-15; 29-30; 44-45	0.02
7AZP-9	55-908158	11/15/2007	992,289.069	449,772.337	2,380.76	100.0	4" / SCH40	70 - 90	0.02
7AZP-10	55-908157	11/15/2007	993,253.360	448,838.421	2,385.61	95.0	4" / SCH40	74 - 94	0.02
7AZP-11	55-914796	11/1/2012	991,215.961	450,510.308	2,367.24	90.0	4" / SCH40	70 - 90	0.02
7AZP-12 <sup>d</sup>	55-914795	10/24/2012	992,265.334	451,317.162	2,378.00	87.0	4" / SCH40	67 - 87	0.02
<b>Bridgestone/Firestone Wells</b>									
BF-1	55-548521	6/10/1995	993,104.380	447,683.465	2,375.38	80.5	4" / SCH40	50.5 - 80.5	0.02
BF-3	55-555810	4/4/1996	992,877.393	447,911.237	2,373.07	76.0	4" / SCH40	50 - 75	0.02
<b>Yellow Cab Wells</b>									
YC-5	55-552811	4/12/1996	993,681.743	447,357.540	2,377.20	85.0	4" / SCH40	55 - 80	0.02
YC-6	55-553162	12/15/1995	993,108.723	447,348.073	2,374.64	85.0	4" / SCH40	55 - 80	0.02
<b>Union Pacific Railroad Wells</b>									
MW-PD-1	55-571702	4/7/1999	993,125.406	447,641.383	2,374.58	70.0	4" / SCH40	49.5 - 69.5	0.02
MW-PD-2	55-571705	4/9/1999	993,615.179	446,814.826	2,378.53	71.0	4" / SCH40	50.5 - 70.5	0.02
MW-PD-4	55-571710	4/15/1999	995,123.511	445,589.458	2,399.43	86.0	4" / SCH40	70 - 85	0.01
MW-PD-5	55-571709	4/19/1999	995,473.492	446,455.479	2,396.25	87.0	4" / SCH40	66 - 86	0.02
MW-PD-6	55-571707	4/21/1999	994,266.836	446,437.466	2,385.17	89.0	4" / SCH40	58 - 88	0.02
MW-PD-7	55-571704	4/22/1999	994,651.175	446,959.550	2,384.44	83.0	4" / SCH40	59 - 79	0.01
MW-PD-12	55-575075	7/1/1999	993,373.219	446,470.668	2,386.40	86.0	4" / SCH40	65.5 - 85.5	0.01
MW-PD-13	55-575616	8/30/1999	992,295.905	447,540.194	2,371.36	80.0	4" / SCH40	58 - 78	0.02
MW-PD-14 <sup>b</sup>	55-576297	9/1/1999	993,605.663	447,326.490	2,376.21	83.5	4" / SCH40	52 - 82	0.01
MW-PD-15	55-576300	9/2/1999	992,652.586	447,726.252	2,368.54	77.0	4" / SCH40	51 - 76	0.01

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**7th Street and Arizona Avenue WQARF Site**

Well ID	ADWR Registration	Installation Date	State Plane Arizona Central NAD83 E (feet)	State Plane Arizona Central NAD83 N (feet)	Measuring Point Elevation NAVD88 (ft amsl)	Borehole Depth (ft bgs)	Casing Diameter/Schedule	Screened Interval (ft bgs)	Screen Slot Size (inch)
MW-PD-16 <sup>b</sup>	55-576298	9/7/1999	992,583.469	447,012.016	2,377.52	88.5	4" / SCH40	57 - 82	0.01
MW-PD-17 <sup>b</sup>	55-576299	9/8/1999	994,180.269	446,949.532	2,380.30	81.5	4" / SCH40	51 - 81	0.01
MW-PD-29	55-902377	6/5/2005*	994,045.576	447,428.706	2,379.35	90.0	4" / SCH40	59 - 89	0.02
MW-PD-30	55-902378	6/5/2005*	992,647.644	448,258.043	2,375.24	85.0	4" / SCH40	61 - 81	0.02
MW-PD-31	55-902379	6/5/2005*	991,717.539	447,992.189	2,364.61	85.0	4" / SCH40	64.5 - 84.5	0.02
<b>REGIONAL AQUIFER WELLS</b>									
7AZR-1	55-591722	4/20/2002	993,841.492	447,313.505	2,378.23	201.0	4" / SCH80	133 - 195	0.02
7AZR-2	55-214640	3/2/2007	993,600.195	447,651.326	2,379.54	210.0	4" / SCH40	165 - 205	0.02
7AZR-3	55-914797	10/30/2012	992,647.088	448,234.225	2,374.78	200.0	4" / SCH40	160 - 205	0.02
MW-PD-19 <sup>b</sup>	55-581740	9/10/2000	993,770.309	446,949.703	2,378.21	194.5	4.5" / SCH80	153 - 193	0.02
<b>SOURCE PROPERTY REMEDIAL WELLS</b>									
7AZAS-1 <sup>e</sup>	55-907974	10/15/2007	993,753.223	447,235.092	2,375.56	88.0	2" / SCH40	82 - 87	0.02
7AZV-1 <sup>e</sup>	55-907978	10/16/2007	993,740.223	447,242.593	2,375.59	70.0	1" / SCH40	44-45; 62-63; 69-70	0.02
7AZV-2 <sup>e</sup>	55-907975	10/17/2007	993,727.224	447,250.092	2,375.93	70.0	1" / SCH40	44-45; 62-63; 69-70	0.02
SVE-1 <sup>e</sup>	NA	12/20/2005	993,766.223	447,227.593	NA	55.0	4" / SCH40	30 - 50	0.06

**Notes:**

- ADWR = Arizona Department of Water Resources
- ADEQ = Arizona Department of Environmental Quality
- ft amsl = feet above mean sea level
- ft bgs = feet below ground surface
- NAVD88 = North American Vertical Datum 1988
- NAD83 = North American Datum 1983
- UTM = Universal Transverse Mercator
- <sup>a</sup> = Well compromised
- <sup>b</sup> = Well has been abandoned
- <sup>c</sup> = Nested probes
- <sup>d</sup> = Well is dry; used as a soil vapor well
- <sup>e</sup> = Well not surveyed; measured off of surveyed wells
- \* = ADWR application date

Measuring point elevation for MW-PD-29 was resurveyed May 2012 because casing was cut off during City of Tucson construction activities (0.25 ft lower); coordinates from March 2007 survey

**TABLE 2**  
**Fluid Level Measurements, 2002 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
BF-1	03/25/02	2,375.38	64.28	No LNAPL	0.00	2,311.10	2,311.10
BF-3	03/25/02	2,373.07	62.97	No LNAPL	0.00	2,310.10	2,310.10
MW-PD-1	03/25/02	2,374.58	63.40	No LNAPL	0.00	2,311.18	2,311.18
MW-PD-2	03/25/02	2,378.53	67.59	64.40	3.19	2,310.94	2,313.72
MW-PD-4	03/25/02	2,399.43	80.69	80.55	0.14	2,318.74	2,318.86
MW-PD-5	03/25/02	2,396.25	79.25	No LNAPL	0.00	2,317.00	2,317.00
MW-PD-6	03/25/02	2,385.17	73.00	68.85	4.15	2,312.17	2,315.78
MW-PD-7	03/25/02	2,384.44	69.21	No LNAPL	0.00	2,315.23	2,315.23
MW-PD-12	03/25/02	2,386.40	72.75	71.54	1.21	2,313.65	2,314.70
MW-PD-14	03/25/02	2,376.21	63.54	No LNAPL	0.00	2,312.67	2,312.67
MW-PD-15	03/25/02	2,368.54	59.70	58.40	1.30	2,308.84	2,309.97
MW-PD-16	03/25/02	2,377.52	67.51	66.17	1.34	2,310.01	2,311.18
MW-PD-17	03/25/02	2,380.30	65.90	No LNAPL	0.00	2,314.40	2,314.40
MW-PD-19	03/25/02	2,378.21	167.73	No LNAPL	0.00	2,210.48	2,210.48
7AZP-1	06/05/02	2,378.27	65.32	No LNAPL	0.00	2,312.95	2,312.95
7AZP-2	06/05/02	2,378.35	65.95	64.93	1.02	2,312.40	2,313.29
7AZP-3	06/05/02	2,377.26	64.36	No LNAPL	0.00	2,312.90	2,312.90
7AZP-4	06/05/02	2,377.58	64.65	No LNAPL	0.00	2,312.93	2,312.93
7AZR-1	06/05/02	2,378.23	170.50	No LNAPL	0.00	2,207.73	2,207.73
BF-1	06/05/02	2,375.38	64.45	No LNAPL	0.00	2,310.93	2,310.93
BF-3	06/05/02	2,373.07	63.13	No LNAPL	0.00	2,309.94	2,309.94
MW-PD-1	06/05/02	2,374.58	63.59	No LNAPL	0.00	2,310.99	2,310.99
MW-PD-2	06/05/02	2,378.53	67.81	64.42	3.39	2,310.72	2,313.67
MW-PD-4	06/05/02	2,399.43	79.68	79.65	0.03	2,319.75	2,319.78
MW-PD-5	06/05/02	2,396.25	79.36	No LNAPL	0.00	2,316.89	2,316.89
MW-PD-6	06/05/02	2,385.17	72.83	68.96	3.87	2,312.34	2,315.71
MW-PD-7	06/05/02	2,384.44	69.35	No LNAPL	0.00	2,315.09	2,315.09
MW-PD-12	06/05/02	2,386.40	72.76	71.56	1.20	2,313.64	2,314.68
MW-PD-14	06/05/02	2,376.21	63.71	No LNAPL	0.00	2,312.50	2,312.50
MW-PD-15	06/05/02	2,368.54	60.11	58.51	1.60	2,308.43	2,309.82
MW-PD-16	06/05/02	2,377.52	67.82	66.35	1.47	2,309.70	2,310.98
MW-PD-17	06/05/02	2,380.30	66.00	No LNAPL	0.00	2,314.30	2,314.30
MW-PD-19	06/05/02	2,378.21	167.96	No LNAPL	0.00	2,210.25	2,210.25
7AZP-1	02/04/05	2,378.27	65.68	No LNAPL	0.00	2,312.59	2,312.59
7AZP-2	02/04/05	2,378.35	67.18	65.15	2.03	2,311.17	2,312.94

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Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
7AZP-3	02/01/05	2,377.26	64.68	No LNAPL	0.00	2,312.58	2,312.58
7AZP-4	02/07/05	2,377.58	67.23	64.65	2.58	2,310.35	2,312.59
7AZR-1	02/03/05	2,378.23	174.09	No LNAPL	0.00	2,204.14	2,204.14
BF-1	02/02/05	2,375.38	64.65	No LNAPL	0.00	2,310.73	2,310.73
BF-3	02/02/05	2,373.07	63.46	No LNAPL	0.00	2,309.61	2,309.61
MW-PD-1	02/02/05	2,374.58	63.79	No LNAPL	0.00	2,310.79	2,310.79
MW-PD-2	01/31/05	2,378.53	69.24	64.66	4.58	2,309.29	2,313.27
MW-PD-4	01/31/05	2,399.43	82.70	80.79	1.91	2,316.73	2,318.39
MW-PD-5	02/01/05	2,396.25	79.94	No LNAPL	0.00	2,316.31	2,316.31
MW-PD-6	02/07/05	2,385.17	72.58	69.54	3.04	2,312.59	2,315.23
MW-PD-7	02/04/05	2,384.44	69.93	69.78	0.15	2,314.51	2,314.64
MW-PD-12	01/31/05	2,386.40	76.06	71.60	4.46	2,310.34	2,314.22
MW-PD-14	02/03/05	2,376.21	63.92	No LNAPL	0.00	2,312.29	2,312.29
MW-PD-15	02/07/05	2,368.54	59.92	58.89	1.03	2,308.62	2,309.52
MW-PD-16	01/31/05	2,377.52	68.64	66.59	2.05	2,308.88	2,310.66
MW-PD-17	02/01/05	2,380.30	66.40	No LNAPL	0.00	2,313.90	2,313.90
MW-PD-19	02/03/05	2,378.21	172.03	No LNAPL	0.00	2,206.18	2,206.18
7AZP-1	05/04/05	2,378.27	65.46	No LNAPL	0.00	2,312.81	2,312.81
7AZP-2	05/05/05	2,378.35	66.79	64.98	1.81	2,311.56	2,313.13
7AZP-3	05/04/05	2,377.26	64.49	No LNAPL	0.00	2,312.77	2,312.77
7AZP-4	05/06/05	2,377.58	67.06	64.50	2.56	2,310.52	2,312.75
7AZR-1	05/03/05	2,378.23	174.08	No LNAPL	0.00	2,204.15	2,204.15
BF-1	05/04/05	2,375.38	64.52	No LNAPL	0.00	2,310.86	2,310.86
BF-3	05/04/05	2,373.07	63.26	No LNAPL	0.00	2,309.81	2,309.81
MW-PD-1	05/04/05	2,374.58	63.65	No LNAPL	0.00	2,310.93	2,310.93
MW-PD-2	05/02/05	2,378.53	68.25	64.57	3.68	2,310.28	2,313.48
MW-PD-4	05/02/05	2,399.43	80.97	80.80	0.17	2,318.46	2,318.61
MW-PD-5	05/04/05	2,396.25	79.77	No LNAPL	0.00	2,316.48	2,316.48
MW-PD-6	05/06/05	2,385.17	72.34	69.38	2.96	2,312.83	2,315.41
MW-PD-7	05/05/05	2,384.44	69.72	69.58	0.14	2,314.72	2,314.84
MW-PD-12	05/02/05	2,386.40	75.99	71.39	4.60	2,310.41	2,314.41
MW-PD-13	05/02/05	2,371.36	62.17	No LNAPL	0.00	2,309.19	2,309.19
MW-PD-14	05/05/05	2,376.21	63.71	No LNAPL	0.00	2,312.50	2,312.50
MW-PD-15	05/06/05	2,368.54	59.02	58.87	0.15	2,309.52	2,309.65
MW-PD-16	05/02/05	2,377.52	68.32	66.41	1.91	2,309.20	2,310.86
MW-PD-17	05/03/05	2,380.30	66.19	No LNAPL	0.00	2,314.11	2,314.11

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MW-PD-19	05/03/05	2,378.21	172.20	No LNAPL	0.00	2,206.01	2,206.01
MW-PD-29	05/03/05	2,379.60	66.58	No LNAPL	0.00	2,313.02	2,313.02
MW-PD-30	05/02/05	2,375.24	67.22	No LNAPL	0.00	2,308.02	2,308.02
MW-PD-31	05/02/05	2,364.61	57.63	No LNAPL	0.00	2,306.98	2,306.98
7AZP-1	12/02/05	2,378.27	65.45	No LNAPL	0.00	2,312.82	2,312.82
7AZP-2	12/07/05	2,378.35	66.31	64.95	1.36	2,312.04	2,313.22
7AZP-3	12/05/05	2,377.26	64.50	No LNAPL	0.00	2,312.76	2,312.76
7AZP-4	12/08/05	2,377.58	67.26	64.48	2.78	2,310.32	2,312.74
7AZR-1	12/01/05	2,378.23	173.74	No LNAPL	0.00	2,204.49	2,204.49
BF-1	12/06/05	2,375.38	64.59	No LNAPL	0.00	2,310.79	2,310.79
BF-3	12/01/05	2,373.07	63.20	No LNAPL	0.00	2,309.87	2,309.87
MW-PD-1	12/05/05	2,374.58	63.76	No LNAPL	0.00	2,310.82	2,310.82
MW-PD-2	11/28/05	2,378.53	68.37	64.54	3.83	2,310.16	2,313.49
MW-PD-4	11/28/05	2,399.43	80.81	80.69	0.12	2,318.62	2,318.72
MW-PD-5	12/02/05	2,396.25	79.53	No LNAPL	0.00	2,316.72	2,316.72
MW-PD-6	12/07/05	2,385.17	70.36	69.47	0.89	2,314.81	2,315.58
MW-PD-7	12/07/05	2,384.44	69.23	69.21	0.02	2,315.21	2,315.23
MW-PD-12	11/28/05	2,386.40	75.85	71.30	4.55	2,310.55	2,314.51
MW-PD-13	12/20/05	2,371.36	62.13	No LNAPL	0.00	2,309.23	2,309.23
MW-PD-14	12/06/05	2,376.21	63.82	No LNAPL	0.00	2,312.39	2,312.39
MW-PD-15	12/07/05	2,368.54	58.95	58.82	0.13	2,309.59	2,309.70
MW-PD-16	11/28/05	2,377.52	67.23	66.50	0.73	2,310.29	2,310.93
MW-PD-17	12/01/05	2,380.30	66.02	No LNAPL	0.00	2,314.28	2,314.28
MW-PD-19	12/01/05	2,378.21	171.93	No LNAPL	0.00	2,206.28	2,206.28
MW-PD-29	12/02/05	2,379.60	66.44	No LNAPL	0.00	2,313.16	2,313.16
MW-PD-30	12/02/05	2,375.24	67.06	No LNAPL	0.00	2,308.18	2,308.18
MW-PD-31	12/05/05	2,364.61	57.45	No LNAPL	0.00	2,307.16	2,307.16
YC-5	12/06/05	2,377.20	64.72	No LNAPL	0.00	2,312.48	2,312.48
7AZP-1	05/03/06	2,378.27	65.79	No LNAPL	0.00	2,312.48	2,312.48
7AZP-2	05/09/06	2,378.35	66.85	65.30	1.55	2,311.50	2,312.85
7AZP-3	05/03/06	2,377.26	64.84	No LNAPL	0.00	2,312.42	2,312.42
7AZP-4	05/10/06	2,377.58	67.64	64.83	2.81	2,309.94	2,312.38
7AZR-1	05/03/06	2,378.23	174.10	No LNAPL	0.00	2,204.13	2,204.13
BF-1	05/05/06	2,375.38	64.90	No LNAPL	0.00	2,310.48	2,310.48
BF-3	05/05/06	2,373.07	63.53	No LNAPL	0.00	2,309.54	2,309.54

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Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
MW-PD-1	05/05/06	2,374.58	64.05	No LNAPL	0.00	2,310.53	2,310.53
MW-PD-2	05/01/06	2,378.53	69.60	64.73	4.87	2,308.93	2,313.17
MW-PD-4	05/01/06	2,399.43	81.18	80.86	0.32	2,318.25	2,318.53
MW-PD-5	05/02/06	2,396.25	79.70	No LNAPL	0.00	2,316.55	2,316.55
MW-PD-6	05/09/06	2,385.17	70.70	69.72	0.98	2,314.47	2,315.32
MW-PD-7	05/08/06	2,384.44	69.83	69.68	0.15	2,314.61	2,314.74
MW-PD-12	05/01/06	2,386.40	76.27	71.47	4.80	2,310.13	2,314.31
MW-PD-13	06/12/06	2,371.36	62.57	No LNAPL	0.00	2,308.79	2,308.79
MW-PD-14	05/08/06	2,376.21	64.18	No LNAPL	0.00	2,312.03	2,312.03
MW-PD-15	05/10/06	2,368.54	59.34	59.17	0.17	2,309.20	2,309.35
MW-PD-16	05/01/06	2,377.52	67.50	66.82	0.68	2,310.02	2,310.61
MW-PD-17	05/02/06	2,380.30	66.38	No LNAPL	0.00	2,313.92	2,313.92
MW-PD-19	05/04/06	2,378.21	172.40	No LNAPL	0.00	2,205.81	2,205.81
MW-PD-29	05/02/06	2,379.60	66.80	No LNAPL	0.00	2,312.80	2,312.80
MW-PD-30	05/04/06	2,375.24	67.35	No LNAPL	0.00	2,307.89	2,307.89
MW-PD-31	05/05/06	2,364.61	57.86	No LNAPL	0.00	2,306.75	2,306.75
YC-5	05/03/06	2,377.20	65.04	No LNAPL	0.00	2,312.16	2,312.16
YC-6	05/10/06	2,374.64	65.97	63.32	2.65	2,308.67	2,310.98
7AZP-1	04/05/07	2,378.27	65.65	No LNAPL	0.00	2,312.62	2,312.62
7AZP-2	04/10/07	2,378.35	66.57	65.16	1.41	2,311.78	2,313.01
7AZP-3	04/05/07	2,377.26	64.70	No LNAPL	0.00	2,312.56	2,312.56
7AZP-4	04/10/07	2,377.58	67.05	64.70	2.35	2,310.53	2,312.57
7AZP-5	04/06/07	2,369.81	63.20	No LNAPL	0.00	2,306.61	2,306.61
7AZP-6	04/03/07	2,386.61	81.44	No LNAPL	0.00	2,305.17	2,305.17
7AZP-7	04/03/07	2,387.26	76.33	No LNAPL	0.00	2,310.93	2,310.93
7AZR-1	04/04/07	2,378.23	173.50	No LNAPL	0.00	2,204.73	2,204.73
7AZR-2	04/04/07	2,379.54	175.85	No LNAPL	0.00	2,203.69	2,203.69
BF-1	04/06/07	2,375.38	64.72	No LNAPL	0.00	2,310.66	2,310.66
BF-3	04/05/07	2,373.07	63.36	No LNAPL	0.00	2,309.71	2,309.71
MW-PD-1	04/06/07	2,374.58	63.86	No LNAPL	0.00	2,310.72	2,310.72
MW-PD-2	04/02/07	2,378.53	68.71	64.58	4.13	2,309.82	2,313.41
MW-PD-4	04/02/07	2,399.43	80.89	80.64	0.25	2,318.54	2,318.76
MW-PD-5	04/02/07	2,396.25	79.70	No LNAPL	0.00	2,316.55	2,316.55
MW-PD-6	04/09/07	2,385.17	70.50	69.52	0.98	2,314.67	2,315.52
MW-PD-7	04/09/07	2,384.44	69.93	69.54	0.39	2,314.51	2,314.85
MW-PD-12	04/02/07	2,386.40	76.68	71.08	5.60	2,309.72	2,314.59

**TABLE 2**  
**Fluid Level Measurements, 2002 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
MW-PD-13	05/11/07	2,371.36	62.35	No LNAPL	0.00	2,309.01	2,309.01
MW-PD-14	05/02/07	2,376.21	65.70	63.80	1.90	2,310.51	2,312.16
MW-PD-15	04/10/07	2,368.54	59.80	58.85	0.95	2,308.74	2,309.57
MW-PD-16	04/02/07	2,377.52	67.25	66.52	0.73	2,310.27	2,310.91
MW-PD-17	04/02/07	2,380.30	66.25	No LNAPL	0.00	2,314.05	2,314.05
MW-PD-19	04/04/07	2,378.21	171.95	No LNAPL	0.00	2,206.26	2,206.26
MW-PD-29	04/03/07	2,379.60	66.70	No LNAPL	0.00	2,312.90	2,312.90
MW-PD-30	04/05/07	2,375.24	67.25	No LNAPL	0.00	2,307.99	2,307.99
MW-PD-31	04/05/07	2,364.61	57.56	No LNAPL	0.00	2,307.05	2,307.05
YC-5	04/11/07	2,377.20	66.40	64.69	1.71	2,310.80	2,312.29
YC-6	04/10/07	2,374.64	65.85	63.10	2.75	2,308.79	2,311.18
7AZP-1	10/08/07	2,378.27	65.68	No LNAPL	0.00	2,312.59	2,312.59
7AZP-2	10/25/07	2,378.35	66.33	65.08	1.25	2,312.02	2,313.11
7AZP-3	10/08/07	2,377.26	64.62	No LNAPL	0.00	2,312.64	2,312.64
7AZP-4	10/25/07	2,377.58	66.72	64.63	2.09	2,310.86	2,312.68
7AZP-5	10/08/07	2,369.81	62.73	No LNAPL	0.00	2,307.08	2,307.08
7AZP-6	10/09/07	2,386.61	81.42	No LNAPL	0.00	2,305.19	2,305.19
7AZP-7	10/08/07	2,387.26	76.35	No LNAPL	0.00	2,310.91	2,310.91
7AZR-1	10/11/07	2,378.23	174.51	No LNAPL	0.00	2,203.72	2,203.72
7AZR-2	10/11/07	2,379.54	176.85	No LNAPL	0.00	2,202.69	2,202.69
BF-1	10/10/07	2,375.38	64.68	No LNAPL	0.00	2,310.70	2,310.70
BF-3	10/09/07	2,373.07	63.25	No LNAPL	0.00	2,309.82	2,309.82
MW-PD-1	10/10/07	2,374.58	63.81	No LNAPL	0.00	2,310.77	2,310.77
MW-PD-4	10/05/07	2,399.43	81.03	80.71	0.32	2,318.40	2,318.68
MW-PD-5	10/05/07	2,396.25	79.61	No LNAPL	0.00	2,316.64	2,316.64
MW-PD-6	10/23/07	2,385.17	70.40	69.50	0.90	2,314.77	2,315.55
MW-PD-7	10/23/07	2,384.44	69.30	68.98	0.32	2,315.14	2,315.42
MW-PD-12	10/05/07	2,386.40	76.70	71.24	5.46	2,309.70	2,314.45
MW-PD-13	10/26/07	2,371.36	62.00	No LNAPL	0.00	2,309.36	2,309.36
MW-PD-14	10/24/07	2,376.21	65.63	63.64	1.99	2,310.58	2,312.31
MW-PD-15	10/24/07	2,368.54	59.20	58.72	0.48	2,309.34	2,309.76
MW-PD-16	10/26/07	2,377.52	67.01	66.47	0.54	2,310.51	2,310.98
MW-PD-17	10/05/07	2,380.30	66.13	No LNAPL	0.00	2,314.17	2,314.17
MW-PD-19	10/11/07	2,378.21	172.96	No LNAPL	0.00	2,205.25	2,205.25
MW-PD-29	10/08/07	2,379.60	66.68	No LNAPL	0.00	2,312.92	2,312.92
MW-PD-30	10/09/07	2,375.24	67.19	No LNAPL	0.00	2,308.05	2,308.05

**TABLE 2**  
**Fluid Level Measurements, 2002 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
MW-PD-31	10/10/07	2,364.61	56.97	No LNAPL	0.00	2,307.64	2,307.64
YC-5	10/23/07	2,377.20	66.31	64.56	1.75	2,310.89	2,312.41
YC-6	10/24/07	2,374.64	65.63	63.02	2.61	2,309.01	2,311.28
7AZP-1	04/01/08	2,378.27	65.64	No LNAPL	0.00	2,312.63	2,312.63
7AZP-2	04/08/08	2,378.35	66.62	65.13	1.49	2,311.73	2,313.03
7AZP-3	04/01/08	2,377.26	64.68	No LNAPL	0.00	2,312.58	2,312.58
7AZP-4	04/09/08	2,377.58	67.46	64.66	2.80	2,310.12	2,312.56
7AZP-5	04/02/08	2,369.81	63.07	No LNAPL	0.00	2,306.74	2,306.74
7AZP-6	04/02/08	2,386.61	81.41	No LNAPL	0.00	2,305.20	2,305.20
7AZP-7	03/31/08	2,387.26	76.35	No LNAPL	0.00	2,310.91	2,310.91
7AZP-9	04/02/08	2,380.76	82.75	No LNAPL	0.00	2,298.01	2,298.01
7AZP-10	04/02/08	2,385.61	80.50	No LNAPL	0.00	2,305.11	2,305.11
7AZR-1	04/10/08	2,378.23	174.75	No LNAPL	0.00	2,203.48	2,203.48
7AZR-2	04/10/08	2,379.54	177.05	No LNAPL	0.00	2,202.49	2,202.49
BF-1	04/04/08	2,375.38	64.77	No LNAPL	0.00	2,310.61	2,310.61
BF-3	04/03/08	2,373.07	63.43	No LNAPL	0.00	2,309.64	2,309.64
MW-PD-1	04/04/08	2,374.58	63.94	No LNAPL	0.00	2,310.64	2,310.64
MW-PD-2	04/11/08	2,378.53	69.44	64.62	4.82	2,309.09	2,313.28
MW-PD-4	03/31/08	2,399.43	80.89	80.63	0.26	2,318.54	2,318.77
MW-PD-5	04/01/08	2,396.25	79.53	No LNAPL	0.00	2,316.72	2,316.72
MW-PD-6	04/07/08	2,385.17	70.48	69.60	0.88	2,314.69	2,315.46
MW-PD-7	04/07/08	2,384.44	69.78	69.40	0.38	2,314.66	2,314.99
MW-PD-12	03/31/08	2,386.40	76.77	71.36	5.41	2,309.63	2,314.34
MW-PD-13	05/09/08	2,371.36	62.38	No LNAPL	0.00	2,308.98	2,308.98
MW-PD-14	04/09/08	2,376.21	65.68	63.80	1.88	2,310.53	2,312.17
MW-PD-15	04/08/08	2,368.54	59.61	58.90	0.71	2,308.93	2,309.55
MW-PD-16	03/31/08	2,377.52	67.47	66.66	0.81	2,310.05	2,310.75
MW-PD-17	04/07/08	2,380.30	66.22	No LNAPL	0.00	2,314.08	2,314.08
MW-PD-19	04/10/08	2,378.21	173.20	No LNAPL	0.00	2,205.01	2,205.01
MW-PD-29	04/01/08	2,379.60	66.70	No LNAPL	0.00	2,312.90	2,312.90
MW-PD-30	04/03/08	2,375.24	67.30	No LNAPL	0.00	2,307.94	2,307.94
MW-PD-31	04/03/08	2,364.61	57.48	No LNAPL	0.00	2,307.13	2,307.13
YC-5	04/07/08	2,377.20	66.41	64.67	1.74	2,310.79	2,312.30
YC-6	04/08/08	2,374.64	66.09	63.10	2.99	2,308.55	2,311.15
7AZP-1	09/26/08	2,378.27	65.76	No LNAPL	0.00	2,312.51	2,312.51

**TABLE 2**  
**Fluid Level Measurements, 2002 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
7AZP-2	10/03/08	2,378.35	67.71	65.25	2.46	2,310.64	2,312.78
7AZP-3	09/30/08	2,377.26	64.82	No LNAPL	0.00	2,312.44	2,312.44
7AZP-4	10/03/08	2,377.58	67.59	64.75	2.84	2,309.99	2,312.46
7AZP-5	09/26/08	2,369.81	62.91	No LNAPL	0.00	2,306.90	2,306.90
7AZP-6	09/30/08	2,386.61	81.52	No LNAPL	0.00	2,305.09	2,305.09
7AZP-7	09/25/08	2,387.26	76.49	No LNAPL	0.00	2,310.77	2,310.77
7AZP-9	09/26/08	2,380.76	82.81	No LNAPL	0.00	2,297.95	2,297.95
7AZP-10	09/25/08	2,385.61	80.64	No LNAPL	0.00	2,304.97	2,304.97
7AZR-1	10/24/08	2,378.23	174.50	No LNAPL	0.00	2,203.73	2,203.73
7AZR-2	10/24/08	2,379.54	176.89	No LNAPL	0.00	2,202.65	2,202.65
BF-1	10/01/08	2,375.38	64.87	No LNAPL	0.00	2,310.51	2,310.51
BF-3	09/30/08	2,373.07	63.51	No LNAPL	0.00	2,309.56	2,309.56
MW-PD-1	10/01/08	2,374.58	64.06	No LNAPL	0.00	2,310.52	2,310.52
MW-PD-4	09/25/08	2,399.43	81.15	80.74	0.41	2,318.28	2,318.64
MW-PD-5	09/25/08	2,396.25	79.63	No LNAPL	0.00	2,316.62	2,316.62
MW-PD-6	10/22/08	2,385.17	74.20	72.10	2.10	2,310.97	2,312.80
MW-PD-7	10/02/08	2,384.44	69.28	No LNAPL	0.00	2,315.16	2,315.16
MW-PD-12	09/25/08	2,386.40	76.78	71.46	5.32	2,309.62	2,314.25
MW-PD-13	10/29/08	2,371.36	62.24	No LNAPL	0.00	2,309.12	2,309.12
MW-PD-14	10/03/08	2,376.21	65.35	63.91	1.44	2,310.86	2,312.11
MW-PD-15	10/02/08	2,368.54	59.59	58.95	0.64	2,308.95	2,309.51
MW-PD-17	09/25/08	2,380.30	66.26	No LNAPL	0.00	2,314.04	2,314.04
MW-PD-19	10/24/08	2,378.21	172.93	No LNAPL	0.00	2,205.28	2,205.28
MW-PD-29	09/26/08	2,379.60	66.75	No LNAPL	0.00	2,312.85	2,312.85
MW-PD-30	09/30/08	2,375.24	67.34	No LNAPL	0.00	2,307.90	2,307.90
MW-PD-31	10/01/08	2,364.61	57.24	No LNAPL	0.00	2,307.37	2,307.37
YC-5	10/02/08	2,377.20	64.85	64.80	0.05	2,312.35	2,312.39
YC-6	10/02/08	2,374.64	65.95	63.22	2.73	2,308.69	2,311.07
7AZP-1	05/02/12	2,378.27	67.11	0.00	0.00	2,311.16	2,311.16
7AZP-2	05/09/12	2,378.35	68.27	66.49	1.78	2,310.08	2,311.63
7AZP-3	05/08/12	2,377.26	66.98	65.93	1.05	2,310.28	2,311.19
7AZP-4	05/10/12	2,377.58	68.63	66.02	2.61	2,308.95	2,311.22
7AZP-5	05/02/12	2,369.81	64.99	0.00	0.00	2,304.82	2,304.82
7AZP-6	05/03/12	2,386.61	83.54	0.00	0.00	2,303.07	2,303.07
7AZP-7	05/23/12	2,387.26	NM	NM	NM	NM	NM
7AZP-9	05/18/12	2,380.76	84.35	0.00	0.00	2,296.41	2,296.41

**TABLE 2**  
**Fluid Level Measurements, 2002 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
7AZP-10	05/18/12	2,385.61	82.16	0.00	0.00	2,303.45	2,303.45
7AZR-1	05/14/12	2,378.23	174.27	0.00	0.00	2,203.96	2,203.96
7AZR-2	05/14/12	2,379.54	176.91	0.00	0.00	2,202.63	2,202.63
BF-1	05/04/12	2,375.38	66.30	0.00	0.00	2,309.08	2,309.08
BF-3	05/03/12	2,373.07	64.95	0.00	0.00	2,308.12	2,308.12
MW-PD-1	05/04/12	2,374.58	65.45	0.00	0.00	2,309.13	2,309.13
MW-PD-4	05/10/12	2,399.43	81.95	81.69	0.26	2,317.48	2,317.71
MW-PD-5	05/01/12	2,396.25	80.77	0.00	0.00	2,315.48	2,315.48
MW-PD-6	05/09/12	2,385.17	71.41	71.00	0.41	2,313.76	2,314.12
MW-PD-7	05/08/12	2,384.44	71.07	70.77	0.30	2,313.37	2,313.63
MW-PD-12	05/11/12	2,386.40	79.66	72.64	7.02	2,306.74	2,312.85
MW-PD-13	05/02/12	2,371.36	64.04	0.00	0.00	2,307.32	2,307.32
MW-PD-15	05/10/12	2,368.54	61.45	60.37	1.08	2,307.09	2,308.03
MW-PD-16	05/15/12	2,377.52	68.99	68.37	0.62	2,308.53	2,309.07
MW-PD-29	05/03/12	2,379.60	67.90	0.00	0.00	2,311.70	2,311.70
MW-PD-30	05/04/12	2,375.24	68.85	0.00	0.00	2,306.39	2,306.39
MW-PD-31	05/02/12	2,364.61	59.46	0.00	0.00	2,305.15	2,305.15
YC-5	05/08/12	2,377.20	67.37	66.09	1.28	2,309.83	2,310.94
YC-6	05/07/12	2,374.64	66.57	64.68	1.89	2,308.07	2,309.71
7AZP-11	11/08/12	2,367.24	77.58	0.00	0.00	2,289.66	2,289.66
7AZR-3	11/09/12	2,374.78	170.78	0.00	0.00	2,204.00	2,204.00
7AZP-1	01/02/13	2,378.27	67.15	0.00	0.00	2,311.12	2,311.12
7AZP-2	01/02/13	2,378.35	NM	NM	NM	NM	NM
7AZP-3	01/02/13	2,377.26	67.13	66.13	1.00	2,310.13	2,311.00
7AZP-4	01/02/13	2,377.58	68.62	66.21	2.41	2,308.96	2,311.06
7AZP-5	01/02/13	2,369.81	64.80	0.00	0.00	2,305.01	2,305.01
7AZP-6	01/02/13	2,386.61	83.74	0.00	0.00	2,302.87	2,302.87
7AZP-7	01/02/13	2,387.26	NM	NM	NM	NM	NM
7AZP-9	01/02/13	2,380.76	84.65	0.00	0.00	2,296.11	2,296.11
7AZP-10	01/02/13	2,385.61	82.46	0.00	0.00	2,303.15	2,303.15
7AZP-11	01/02/13	2,367.24	77.66	0.00	0.00	2,289.58	2,289.58
7AZP-12	01/02/13	2,378.00	DRY	0.00	0.00	NA	NA
7AZR-1	01/02/13	2,378.23	174.06	0.00	0.00	2,204.17	2,204.17
7AZR-2	01/02/13	2,379.54	176.86	0.00	0.00	2,202.68	2,202.68
7AZR-3	01/02/13	2,374.78	171.05	0.00	0.00	2,203.73	2,203.73

**TABLE 2**  
**Fluid Level Measurements, 2002 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
BF-1	01/02/13	2,375.38	66.33	0.00	0.00	2,309.05	2,309.05
BF-3	01/02/13	2,373.07	64.92	0.00	0.00	2,308.15	2,308.15
MW-PD-1	01/02/13	2,374.58	65.49	0.00	0.00	2,309.09	2,309.09
MW-PD-4	01/02/13	2,399.43	82.02	81.90	0.12	2,317.41	2,317.51
MW-PD-5	01/02/13	2,396.25	80.89	0.00	0.00	2,315.36	2,315.36
MW-PD-6	01/02/13	2,385.17	71.69	71.25	0.44	2,313.48	2,313.86
MW-PD-7	01/02/13	2,384.44	71.24	69.95	1.29	2,313.20	2,314.32
MW-PD-12	01/02/13	2,386.40	NM	NM	NM	NM	NM
MW-PD-13	01/02/13	2,371.36	63.92	0.00	0.00	2,307.44	2,307.44
MW-PD-15	01/02/13	2,368.54	61.39	60.45	0.94	2,307.15	2,307.97
MW-PD-16	01/02/13	2,377.52	NM	NM	NM	NM	NM
MW-PD-29	01/02/13	2,379.60	67.93	0.00	0.00	2,311.67	2,311.67
MW-PD-30	01/02/13	2,375.24	68.86	0.00	0.00	2,306.38	2,306.38
MW-PD-31	01/02/13	2,364.61	59.18	0.00	0.00	2,305.43	2,305.43
YC-5	01/02/13	2,377.20	67.36	66.29	1.07	2,309.84	2,310.77
YC-6	01/02/13	2,374.64	66.22	64.91	1.31	2,308.42	2,309.56
7AZR-1	01/03/13	2,378.23	174.05	0.00	0.00	2,204.18	2,204.18
7AZR-2	01/03/13	2,379.54	176.82	0.00	0.00	2,202.72	2,202.72
7AZR-3	01/03/13	2,374.78	171.04	0.00	0.00	2,203.74	2,203.74
7AZR-1	01/15/13	2,378.23	174.25	0.00	0.00	2,203.98	2,203.98
7AZR-2	01/15/13	2,379.54	176.9	0.00	0.00	2,202.64	2,202.64
7AZR-3	01/15/13	2,374.78	171.15	0.00	0.00	2,203.63	2,203.63
7AZP-1	03/19/13	2378.27	67.12	0.00	0.00	2311.15	2311.15
7AZP-2	03/21/13	2378.35	68.15	66.71	1.44	2310.20	2311.45
7AZP-3	03/26/13	2377.26	67.04	66.08	0.96	2310.22	2311.06
7AZP-4	03/26/13	2377.58	68.44	66.24	2.20	2309.14	2311.05
7AZP-5	03/21/13	2369.81	64.44	0.00	0.00	2305.37	2305.37
7AZP-6	03/20/13	2386.61	83.67	0.00	0.00	2302.94	2302.94
7AZP-9	03/19/13	2380.76	84.31	0.00	0.00	2296.45	2296.45
7AZP-10	03/21/13	2385.61	82.49	0.00	0.00	2303.12	2303.12
7AZP-11	03/19/13	2367.24	77.71	0.00	0.00	2289.53	2289.53
7AZP-12	03/26/13	2378.00	Dry	0.00	0.00	Dry	Dry
7AZR-1	03/26/13	2378.23	173.76	0.00	0.00	2204.47	2204.47
7AZR-2	03/26/13	2379.54	176.61	0.00	0.00	2202.93	2202.93
7AZR-3	03/26/13	2374.78	170.86	0.00	0.00	2203.92	2203.92

**TABLE 2**  
**Fluid Level Measurements, 2002 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well ID	Date	Measuring Point Elevation NAVD88 (ft amsl)	Depth to Water (ft bmp)	Depth to LNAPL (ft bmp)	Apparent LNAPL Thickness (feet)	Groundwater Elevation NAVD88 (ft amsl)	Corrected Groundwater Elevation NAVD88 (ft amsl)
BF-1	03/20/13	2375.38	66.20	0.00	0.00	2309.18	2309.18
BF-3	03/19/13	2373.07	64.77	0.00	0.00	2308.30	2308.30
MW-PD-1	03/26/13	2374.58	65.38	0.00	0.00	2309.20	2309.20
MW-PD-4	03/26/13	2399.43	82.24	81.93	0.31	2317.19	2317.46
MW-PD-5	03/18/13	2396.25	80.84	0.00	0.00	2315.41	2315.41
MW-PD-6	03/26/13	2385.17	71.72	71.27	0.45	2313.45	2313.84
MW-PD-7	03/26/13	2384.44	71.28	71.00	0.28	2313.16	2313.40
MW-PD-12	03/26/13	2386.40	79.75	72.86	6.89	2306.65	2312.64
MW-PD-13	03/26/13	2371.36	63.68	0.00	0.00	2307.68	2307.68
MW-PD-15	03/26/13	2368.54	61.01	60.31	0.70	2307.53	2308.14
MW-PD-29	03/26/13	2379.35	67.95	0.00	0.00	2311.40	2311.40
MW-PD-30	03/20/13	2375.24	68.66	0.00	0.00	2306.58	2306.58
MW-PD-31	03/26/13	2364.61	58.79	0.00	0.00	2305.82	2305.82
YC-5	03/21/13	2377.20	66.67	66.35	0.32	2310.53	2310.81
YC-6	03/26/13	2374.64	65.37	64.85	0.52	2309.27	2309.72

*Notes:*

*ft amsl = feet above mean sea level*

*ft bmp = feet below measuring point*

*Groundwater elevation corrected using a specific gravity for LNAPL of 0.87*

*LNAPL = Light nonaqueous phase liquid*

*NAVD = North American Vertical Datum 1988*

*NM = Not Measured; obstruction*

*Wells MW-PD-14, MW-PD-16, MW-PD-17 and MW-PD-19 were abandoned on 01/31/12, 05/23/12, 06/05/12, and 4/13/12 respectively.*

TABLE 3  
VOCs in Groundwater 2002 to 2013  
7th Street and Arizona Avenue WQARF Site  
Tucson, Arizona

Well	Date	LNAPL Present	Acetone	Acrolein	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloromethane	1,2-Dichloroethane	1,1-Dichloroethene (Vinylidene Chloride)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloroethenes (Total)	1,3-Dichloropropane	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	Methyl Tertiary Butyl Ether (MTBE)	Methylene Chloride (Dichloromethane)	Naphthalene	n-Propylbenzene	Tetrachloroethene (PCE)	Toluene	1,1,2-Trichloroethane	Trichloroethene (TCE)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m- & p-Xylene	O-Xylene	Xylenes, Total
Arizona AWQS			-	-	5	-	-	-	-	-	5	7	70	100	NA	-	700	-	-	-	-	5	-	-	-	5	1,000	5	5	-	-	NA	NA	10,000
PERCHED GROUNDWATER WELLS																																		
7AZP-1	6/5/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50	32.0	3.1	NA	<5.0	<0.50	<2.0	<0.50	<0.50	<0.5	<1.0	<2.0	<0.50	13.0	<0.50	<0.50	23.0	<0.50	<0.50	<1.0	<0.50	NA
7AZP-1	10/8/2003		<10	NA	<0.5	<10	<0.5	<2	<0.5	<0.5	<1	0.6	<0.5	7.9	<0.5	NA	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<1	<2	<0.5	25	<0.5	<0.5	6.7	<0.5	<0.5	<1	<0.5	NA
7AZP-1	3/12/2004		<10	NA	<0.5	<5.0	<1.0	<1.0	NA	<0.5	<0.5	<1.0	<0.5	8.0	<0.5	<0.5	<0.5	<0.5	<1.0	NA	<0.5	<1.0	<1.0	NA	<2.0	31	<0.5	<1.0	6.3	<0.5	<0.5	<1.0	<1.0	NA
7AZP-1	5/7/2004	P	<10	NA	<0.5	<5	<1	<1	NA	<0.5	<0.5	<1	<0.5	4.2	<0.5	4.2	<0.5	<1	NA	<0.5	<1	<1	NA	<2	29	<0.5	<1	3.7	<0.5	<0.5	<1	<1	NA	
7AZP-1	2/4/2005	P	<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	4.8	<1.0	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	27	<5.0	<1.0	6.2	<1.0	<1.0	NA	NA	<3.0
7AZP-1	5/4/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	2.6	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	26	<5.0	<1.0	4.6	<1.0	<1.0	NA	NA	<3.0
7AZP-1	12/2/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	6.4	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	17	<5.0	<1.0	4.6	<1.0	<1.0	NA	NA	<3.0
7AZP-1	5/3/2006		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	4.7	<0.50	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	12	<5.0	<1.0	3.4	<1.0	<1.0	NA	NA	<3.0
7AZP-1	4/5/2007		<20	NA	<1	<5	<1	<1	<1	<1	<5	<1	<1	1.5	<1	NA	<1	<1	<5	NA	<1	<1	<2	NA	<1	7.0	<1	<1	<1	<1	<1	<2	<1	NA
7AZP-1	10/8/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	3.2	<0.5	<0.5	0.75	<0.5	<0.5	<1	<0.5	NA
7AZP-1	4/1/2008		<20	NA	<1	<5	<1	<1	<1	<1	<2	<1	<1	<1	<1	NA	<1	<1	<5	NA	<1	<1	<2	NA	<1	2.0	<1	<1	<1	<1	<1	<2	<1	NA
7AZP-1	9/26/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<2.0	<2.5	<0.50	3.0	<1.0	<0.50	0.55	<0.50	<0.50	NA	NA	<1.0
7AZP-1	5/2/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	0.50	<1.0	<0.50	<0.50	0.92	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	11	<0.50	<0.50	2.1	<0.50	<0.50	NA	NA	<1.5
7AZP-1	3/19/2013		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	0.71	<1.0	<0.50	<0.50	2.4	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	17	<0.50	<0.50	3.6	<0.50	<0.50	NA	NA	<1.5
7AZP-1 dup	5/7/2004	P	<10	NA	<0.5	<5	<1	<1	NA	<0.5	<0.5	<1	<0.5	4.4	<0.5	4.4	<0.5	<0.5	<1	NA	<0.5	<1	<1	NA	<2	29	<0.5	<1	3.9	<0.5	<0.5	<1	<1	NA
7AZP-2	6/7/2002	P	<100	NA	<5.0	<100	<5.0	<20	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<0.50	<5.0	<20	<5.0	<5.0	<5.0	<10	93.0	<5.0	45.0	<5.0	<5.0	6.9	27.0	6.8	<10	<5.0	NA
7AZP-2	10/8/2003		<100	NA	<5	<100	<5	<20	<5	<5	<10	<5	<5	<5	<5	NA	<5	<5	<20	<5	<5	<5	<10	75	<5	47	<5	<5	<5	24	6.2	<10	<5	NA
7AZP-2	3/15/2004		<10	NA	<0.5	<5.0	<1.0	<1.0	NA	<0.5	<0.5	<1.0	<0.5	2.4	3.8	6.2	<0.5	0.6	<1.0	NA	0.9	<1.0	1.0	NA	<2.0	64	<0.5	<1.0	8.0	<0.5	<0.5	<1.0	<1.0	NA
7AZP-2	5/10/2004	P	<10	NA	<0.5	<5	1.1	0.9	NA	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	0.6	<1	NA	0.7	<1	<1	NA	0.9	23	<0.5	<1	2.3	6.1	3.0	0.6	0.8	NA	
7AZP-2	2/4/2005	P	<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	36 <sup>a</sup>	<1.0	24	<5.0	<1.0	3.0	7.1	2.1	NA	NA	<3.0
7AZP-2	5/5/2005	P	<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.5	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	23	1.1	28	<5.0	<1.0	1.5	8.6	2.6	NA	NA	<3.0
7AZP-2	12/7/2005	P	<50	<50	<1.0	<10	1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.5	<0.5	NA	<1.0	<1.0	NA	1.0	1.1	<1.0	<5.0	90	1.4	45	<5.0	<1.0	3.3	13	3.5	NA	NA	<3.0
7AZP-2	5/9/2006	P	<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<0.50	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	15.0	<1.0	20	<5.0	<1.0	4.2	3.8	1.1	NA	NA	<3.0
7AZP-2	4/10/2007	P	<10	NA	<0.5	<2.5	<0.5	0.67	<0.5	<0.5	<1	<0.5	<0.5	<0.5	0.59	NA	<0.5	<0.5	<2.5	NA	1.1	<0.5	<1	NA	0.83	27	<0.5	<0.5	6.2	5.9	2.1	<1	0.63	NA
7AZP-2	10/25/2007	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	0.57	0.83	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	21	<0.5	<0.5	7.8	2.3	0.91	<1	<0.5	NA
7AZP-2	4/8/2008	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	9.0	<0.5	<0.5	3.5	1.3	0.52	<1	<0.5	NA
7AZP-2	10/3/2008	P	<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	0.51	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.0	4.8	<0.50	5.5	<0.50	<0.50	2.3	1.3	<0.50	NA	NA	<1.0
7AZP-2	5/9/2012	P	<10	NA	<0.50	<5.0	<0.50	0.59	<0.50	0.51	<1.0	<0.50	<0.50	2.5	<0.50	NA	<0.50	<0.50	<5.0	0.52	0.85	<0.50	<1.0	35	0.70	19	1.6	<0.50	28	6.4	2.2	NA	NA	<1.5
7AZP-2	3/21/2013	P	<10	NA	<0.50	<5.0	<0.50	0.59	<0.50	<0.50	<1.0	<0.50	<0.50	1.4	<0.50	NA	<0.50	<0.50	<5.0	<0.50	0.72	<0.50	<1.0	24	0.68	8.2	<0.50	<0.50	12	4.0	1.3	NA	NA	<1.5
7AZP-2 dup	3/15/2004		<10	NA	<0.5	<5.0	1.7	1.1	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	NA	0.6	<1.0	<1.0	NA	1.6	24	<0.5	<1.0	2.1	1.7	4.7	<1.0	<1.0	NA	
7AZP-2 dup	2/4/2005	P	<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	26	<1.0	24	<5.0	<1.0	3.3	6.8	1.9	NA	NA	<3.0
7AZP-2 dup	12/7/2005	P	<250	<250	<5.0	<50	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<2.5	<2.5	NA	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<25	30	<5.0	46	<25	<5.0	3.5	8.0	<5.0	NA	NA	<15	
7AZP-2 dup	5/10/2006	P	<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<0.50	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	17	<1.0	20	<5.0	<1.0	3.9	3.8	1.1	NA	NA	<3.0
7AZP-2 dup	10/25/2007	P	<10	NA	<0.5	<2.5	0.51	<0.5	<0.5	<0.5	<1	<0.5	<0.5	0.61	0.92	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	20	<0.5	<0.5	8.2	2.2	<0.5	<1	<0.5	NA
7AZP-3	6/5/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50	70.0	0.7	NA	<0.50	<0.50	2.6	<0.50	<0.50	<0.5	<1.0	<2.0	<0.50	1.0	<0.50	<0.50	22.0	<0.50	<0.50	<1.0	<0.50	NA
7AZP-3	10/8/2003		<10	NA	<0.5	<10	<0.5	<2	<0.5	<0.5	<1	<0.5	<0.5	2.6	3.5	NA	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<1	<2	<0.5	56	<0.5	<0.5	8.7	<0.5	<0.5	<1	<0.5	NA
7AZP-3	3/10/2004																																	

TABLE 3  
VOCs in Groundwater 2002 to 2013  
7th Street and Arizona Avenue WQARF Site  
Tucson, Arizona

Well	Date	LNAPL Present	Acetone	Acrolein	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloromethane	1,2-Dichloroethane	1,1-Dichloroethene (Vinylidene Chloride)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloroethenes (Total)	1,3-Dichloropropane	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	Methyl Tertiary Butyl Ether (MTBE)	Methylene Chloride (Dichloromethane)	Naphthalene	n-Propylbenzene	Tetrachloroethene (PCE)	Toluene	1,1,2-Trichloroethane	Trichloroethene (TCE)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m- & p-Xylene	O-Xylene	Xylenes, Total	
	Arizona AWQS	--	--	5	--	--	--	--	--	--	5	7	70	100	NA	--	700	--	--	--	--	5	--	--	5	1,000	5	5	--	--	NA	NA	NA	10,000	
7AZP-4	3/12/2004		<10	NA	<0.5	<5.0	2.8	1.9	NA	<0.5	<0.5	<1.0	<0.5	22.0	4.4	26	<0.5	<0.5	<1.0	NA	1.8	<1.0	<1.0	NA	2.2	34	<0.5	<1.0	41	8.3	2.9	0.5	1.3	NA	
7AZP-4	5/10/2004	P	<10	NA	<0.5	<5	6.4	3.3	NA	3.7	<0.5	<1	<0.5	240	43	280	<0.5	2.0	<1	NA	3.6	<1	<1	NA	4.3	43	<0.5	<1	300	24	7.7	1.3	3.8	NA	
7AZP-4	2/7/2005	P	<50	<50	1.4	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	20	10	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	18	<1.0	17	<5.0	<1.0	42	2.6	<1.0	NA	NA	<3.0	
7AZP-4	5/6/2005	P	<50	<50	<1.0	<10	2.6	2.5	<1.0	<5.0	<1.0	<1.0	<1.0	18	6.7	NA	<1.0	<1.0	NA	2.0	2.2	<1.0	<5.0	56	2.5	25	<5.0	<1.0	64	12	2.4	NA	NA	<3.0	
7AZP-4	12/8/2005	P	<250	<250	<5.0	<50	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	69.0	19.0	NA	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<25	62	<5.0	18	62	<5.0	95	13	<5.0	NA	NA	<15	
7AZP-4	5/10/2006	P	<50	<50	1.8	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	93	16	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	21	<1.0	13	<5.0	<1.0	50	3.3	<1.0	NA	NA	<3.0	
7AZP-4	4/10/2007	P	<10	NA	2.5	<2.5	<0.5	1.3	<0.5	<0.5	<1	<0.5	0.62	200	32	NA	<0.5	1.4	<2.5	NA	1.2	<0.5	<1	NA	2.3	23	<0.5	<0.5	95	11	2.3	<1	1.8	NA	
7AZP-4	10/25/2007	P	<50	NA	2.9	<12	<2.5	<2.5	<2.5	<2.5	<5	<2.5	<2.5	240	31	NA	<2.5	<2.5	<12	NA	<2.5	<2.5	<5	NA	<2.5	12	<2.5	<2.5	70	7.8	<2.5	<5	<2.5	NA	
7AZP-4	4/9/2008	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	6.7	1.7	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	0.51	<0.5	<0.5	2.0	1.4	<0.5	<1	<0.5	NA	
7AZP-4	10/3/2008	P	<10	NA	1.1	<2.5	3.7	1.8	<0.50	<0.50	<1.0	<0.50	<0.50	110	16	NA	<0.50	2.0	<2.5	2.8	2.0	<0.50	<1.0	67	3.7	7.2	<0.50	<0.50	14	20	4.8	NA	NA	3.9	
7AZP-4	5/10/2012	P	<10	NA	<0.50	<5.0	<0.50	1.0	<0.50	<0.50	<1.0	<0.50	<0.50	22	2.6	NA	<0.50	0.74	<5.0	1.2	0.91	<0.50	<1.0	39	1.7	0.52	<0.50	<0.50	0.70	7.3	1.4	NA	NA	<1.5	
7AZP-4 dup	5/6/2005	P	<50	<50	<1.0	<10	2.4	2.5	<1.0	<5.0	<1.0	<1.0	<1.0	21	8.3	NA	<1.0	1.0	NA	2.0	2.1	<1.0	<5.0	51	2.5	28	<5.0	<1.0	63	13	2.5	NA	NA	<3.0	
7AZP-4 dup	10/3/2008	P	<10	NA	1.1	<2.5	3.2	1.6	<0.50	<0.50	<1.0	<0.50	<0.50	110	15	NA	<0.50	1.7	<2.5	2.4	1.7	<0.50	<1.0	65	3.1	6.3	<0.50	<0.50	12	16	4.0	NA	NA	3.3	
7AZP-5	4/6/2007		<20	NA	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	<1	<1	<5	NA	<1	<1	<2	NA	<1	2.9	<1	<1	<1	<1	<1	<2	<1	NA	
7AZP-5	10/8/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA
7AZP-5	4/2/2008		<20	NA	<1	<5	<1	<1	<1	<1	<2	<1	<1	<1	<1	NA	<1	<1	<5	NA	<1	<1	<2	NA	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	NA
7AZP-5	9/26/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<2.0	<2.5	<0.50	0.88	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.0
7AZP-5	5/2/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<2.0	<2.5	<0.50	2.0	<0.50	<0.50	0.74	<0.50	<0.50	NA	NA	<1.5	
7AZP-5	3/21/2013		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	1.9	<0.50	<0.50	0.92	<0.50	<0.50	NA	NA	<1.5	
7AZP-5 dup	5/2/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	2.1	<0.50	<0.50	0.65	<0.50	<0.50	NA	NA	<1.5	
7AZP-6	4/3/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	2.2	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	7.2	<1	NA	<0.5	31	<0.5	<0.5	4.5	<0.5	<0.5	<1	<0.5	NA	
7AZP-6	10/9/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	2.7	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	4.8	<1	NA	<0.5	38	<0.5	<0.5	6.2	<0.5	<0.5	<1	<0.5	NA	
7AZP-6	4/2/2008		<20	NA	<1	<5	<1	<1	<1	<1	<2	<1	<1	3	<1	NA	<1	<1	<5	NA	<1	4.5	<2	NA	<1	45	<1	<1	6.9	<1	<1	<2	<1	NA	
7AZP-6	9/30/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	3.2	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	4.8	<1.0	<2.5	<0.50	47	<0.50	<0.50	8.0	<0.50	<0.50	NA	NA	<1.0	
7AZP-6	5/3/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	0.74	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	0.69	<1.0	<2.5	<0.50	26	<0.50	<0.50	2.6	<0.50	<0.50	NA	NA	<1.5	
7AZP-6	3/20/2013		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	0.56	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	0.64	<1.0	<2.5	<0.50	25	<0.50	<0.50	2.3	<0.50	<0.50	NA	NA	<1.5	
7AZP-6 dup	10/9/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	2.7	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	4.5	<1	NA	<0.5	38	<0.5	<0.5	6.0	<0.5	<0.5	<1	<0.5	NA	
7AZP-7	4/3/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA
7AZP-7	10/8/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA
7AZP-7	3/31/2008		<20	NA	<1	<5	<1	<1	<1	<1	<2	<1	<1	<1	<1	NA	<1	<1	<5	NA	<1	<1	<2	NA	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	NA
7AZP-7	9/25/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<2.0	<2.5	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.0
7AZP-9	4/2/2008		<20	NA	<1	<5	<1	<1	<1	<1	<2	<1	<1	<1	<1	NA	<1	<1	<5	NA	<1	<1	<2	NA	<1	13	<1	<1	<1	<1	<1	<2	<1	NA	
7AZP-9	9/26/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50																					

TABLE 3  
VOCs in Groundwater 2002 to 2013  
7th Street and Arizona Avenue WQARF Site  
Tucson, Arizona

Well	Date	LNAPL Present	Acetone	Acrolein	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloromethane	1,2-Dichloroethane	1,1-Dichloroethene (Vinylidene Chloride)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloroethenes (Total)	1,3-Dichloropropane	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	Methyl Tertiary Butyl Ether (MTBE)	Methylene Chloride (Dichloromethane)	Naphthalene	n-Propylbenzene	Tetrachloroethene (PCE)	Toluene	1,1,2-Trichloroethane	Trichloroethene (TCE)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m- & p-Xylene	O-Xylene	Xylenes, Total	
Arizona AWQS			<20	NA	5	<5	<1	<1	<1	<1	<1	5	7	70	100	NA	<1	700	<1	<1	<1	51	5	<1	<1	5	1,000	5	5	<1	<1	NA	NA	NA	10,000
BF-1	4/6/2007		<20	NA	1.3	<5	<1	<1	<1	<1	<1	<1	<1	130	14	NA	<1	<5	<1	<1	<1	51	<2	NA	<1	150	<1	<1	16	<1	<1	<2	<1	<1	NA
BF-1	10/10/2007		<10	NA	0.74	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	190	14	NA	<0.5	<0.5	<2.5	NA	<0.5	180	<1	NA	<0.5	85	<0.5	<0.5	13	<0.5	<0.5	<1	<0.5	<0.5	NA
BF-1	4/4/2008		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	170	13	NA	<0.5	<0.5	<2.5	NA	<0.5	28	<1	NA	<0.5	200	<0.5	<0.5	18	<0.5	<0.5	<1	<0.5	<0.5	NA
BF-1	10/1/2008		<10	NA	0.62	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	61	13	NA	<0.50	<0.50	<2.5	<0.50	<0.50	16	<1.0	<2.5	<0.50	120	<0.50	<0.50	16	<0.50	<0.50	NA	NA	<1.0	NA
BF-1	5/4/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	24	3.4	NA	<0.50	<0.50	<5.0	<0.50	<0.50	10	<1.0	<2.5	<0.50	53	<0.50	<0.50	5.3	<0.50	<0.50	NA	NA	<1.5	NA
BF-1	3/20/2013		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	16	2.1	NA	<0.50	<0.50	<5.0	<0.50	<0.50	4.3	<1.0	<2.5	<0.50	33	<0.50	<0.50	3.3	<0.50	<0.50	NA	NA	<1.5	NA
BF-1 dup	3/11/2004	P	<10	NA	<0.5	<5.0	<1.0	<1.0	NA	<0.5	<0.5	<1.0	<1.0	26	2.9	29	<0.5	<0.5	<1.0	NA	<0.5	160	<1.0	NA	<2.0	92	<0.5	<1.0	10	<0.5	<0.5	<1.0	<1.0	<1.0	NA
BF-1 dup	5/4/2005		<50	<50	<1.0	23	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	150	32	NA	<1.0	<1.0	NA	<1.0	<1.0	33	<5.0	<5.0	<1.0	300	<5.0	<1.0	52	<1.0	<1.0	NA	NA	<3.0	NA
BF-1 dup	5/5/2006		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	48	4.7	NA	<1.0	<1.0	NA	<1.0	<1.0	27	<5.0	<5.0	<1.0	19	<5.0	<1.0	5.2	<1.0	<1.0	NA	NA	<3.0	NA
BF-1 dup	4/4/2008		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	160	13	NA	<0.5	<0.5	<2.5	NA	<0.5	26	<1	NA	<0.5	200	<0.5	<0.5	18	<0.5	<0.5	<1	<0.5	<0.5	NA
BF-1 dup	10/1/2008		<10	NA	0.59	270	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	53	11	NA	<0.50	<0.50	<2.5	<0.50	<0.50	14	<1.0	<2.5	<0.50	120	<0.50	<0.50	15	<0.50	<0.50	NA	NA	<1.0	NA
BF-1 dup	3/20/2013		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	16	2.1	NA	<0.50	<0.50	<5.0	<0.50	<0.50	4.4	<1.0	<2.5	<0.50	31	<0.50	<0.50	3.3	<0.50	<0.50	NA	NA	<1.5	NA
BF-2	3/27/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	0.6	<1.0	<0.50	<0.50	3.3	<0.50	NA	<0.50	<0.50	<2.0	<0.50	<0.50	41.0	<1.0	<2.0	<0.50	260.0	<0.50	<0.50	14.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA
BF-2	6/6/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	0.5	<1.0	<0.50	<0.50	9.1	1.6	NA	<0.50	<0.50	<2.0	<0.50	<0.50	51.3	<1.0	<2.0	<0.50	32.0	<0.50	<0.50	11.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA
BF-3	3/27/2002		<10	NA	<0.50	<10	<0.50	<2.0	0.6	<0.50	<1.0	<0.50	<0.50	4.6	1.8	NA	<0.50	<0.50	<2.0	<0.50	<0.50	160.0	<1.0	<2.0	<0.50	82.0	0.5	<0.50	23.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA
BF-3	6/6/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50	6.1	1.8	NA	<0.50	<0.50	<2.0	<0.50	<0.50	160	<1.0	<2.0	<0.50	52.0	<0.50	<0.50	20.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA
BF-3	3/11/2004	P	<10	NA	<0.5	<5.0	<1.0	<1.0	NA	<0.5	<0.5	<1.0	<0.5	3.3	1.5	4.8	<0.5	<0.5	<1.0	NA	<0.5	20	<1.0	NA	<2.0	180	<0.5	<1.0	18	<0.5	<0.5	<1.0	<0.50	<0.50	NA
BF-3	5/4/2004		<10	NA	<0.5	<5	<1	<1	NA	<0.5	<0.5	<1	<0.5	3.7	2.1	5.8	<0.5	<0.5	<1	NA	<0.5	15	<1	NA	<2	170	<0.5	<1	18	<0.5	<0.5	<1	<0.50	<0.50	NA
BF-3	2/2/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	2.0	<1.0	NA	<1.0	<1.0	NA	<1.0	<1.0	13	<5.0	<5.0	<1.0	41	<5.0	<1.0	7.7	<1.0	<1.0	NA	NA	<3.0	NA
BF-3	5/4/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	16.0	4.3	NA	<1.0	<1.0	NA	<1.0	<1.0	55	<5.0	<5.0	<1.0	130	<5.0	<1.0	30	<1.0	<1.0	NA	NA	<3.0	NA
BF-3	12/1/2005		<2500	<2500	<50	<500	<50	<50	<50	<250	<50	<50	<50	95	<25	NA	<50	<50	NA	<50	<50	130	<250	<250	<50	220	<250	<50	37	<50	<50	NA	NA	<150	NA
BF-3	5/5/2006		<500	520	<10	<100	<10	<10	<10	<50	<10	<10	<10	98	12	NA	<10	<10	NA	<10	<10	83	<50	<50	<10	28	<50	<10	14	<10	<10	NA	NA	<30	NA
BF-3	4/5/2007		<20	NA	<1	<5	<1	<1	<1	<1	<5	<1	<1	29	4.8	NA	<1	<1	<5	NA	<1	47	<2	NA	<1	120	<1	<1	22	<1	<1	<2	<1	<1	NA
BF-3	10/9/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	56	6.2	NA	<0.5	<0.5	<2.5	NA	<0.5	71	<1	NA	<0.5	76	<0.5	<0.5	16	<0.5	<0.5	<1	<0.50	<0.50	NA
BF-3	4/3/2008		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	49	5.4	NA	<0.5	<0.5	<2.5	NA	<0.5	53	<1	NA	<0.5	45	<0.5	<0.5	16	<0.5	<0.5	<1	<0.50	<0.50	NA
BF-3	9/30/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	35	4.1	NA	<0.50	<0.50	<2.5	<0.50	<0.50	33	<1.0	<2.5	<0.50	32	<0.50	<0.50	9.8	<0.50	<0.50	NA	NA	<1.0	NA
BF-3	5/3/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	0.52	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	0.66	<1.0	<2.5	<0.50	22	<0.50	<0.50	2.2	<0.50	<0.50	NA	NA	<1.5	NA
BF-3	3/19/2013		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	0.64	<1.0	<2.5	<0.50	15	<0.50	<0.50	1.4	<0.50	<0.50	NA	NA	<1.5	NA
BF-3 dup	2/2/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	2.4	<1.0	NA	<1.0	<1.0	NA	<1.0	<1.0	14	<5.0	<5.0	<1.0	45	<5.0	<1.0	8.2	<1.0	<1.0	NA	NA	<3.0	NA
BF-3 dup	4/5/2007		<20	NA	<1	<5	<1	<1	<1	<1	<5	<1	<1	30	4.7	NA	<1	<1	<5	NA	<1	44	<2	NA	<1	99	<1	<1	21	<1	<1	<2	<1	<1	NA
MW-PD-1	3/27/2002		<10	NA	0.8	<10	<0.50	<2.0	<0.50	0.5	<1.0	<0.50	<0.50	62.0	7.5	NA	<0.50	<0.50	<2.0	<0.50	<0.50	59.0	<1.0	<2.0	<0.50	310.0	9.0	<0.50	14.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA
MW-PD-1	6/6/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50																						



TABLE 3  
VOCs in Groundwater 2002 to 2013  
7th Street and Arizona Avenue WQARF Site  
Tucson, Arizona

Well	Date	LNAPL Present	Acetone	Acrolein	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloromethane	1,2-Dichloroethane	1,1-Dichloroethene (Vinylidene Chloride)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloroethenes (Total)	1,3-Dichloropropane	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	Methyl Tertiary Butyl Ether (MTBE)	Methylene Chloride (Dichloromethane)	Naphthalene	n-Propylbenzene	Tetrachloroethene (PCE)	Toluene	1,1,2-Trichloroethane	Trichloroethene (TCE)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m- & p-Xylene	O-Xylene	Xylenes, Total
Arizona AWQS			--	--	5	--	--	--	--	--	5	7	70	100	NA	--	700	--	--	--	--	5	--	--	5	1,000	5	5	--	--	NA	NA	10,000	
MW-PD-14	6/5/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50	62.0	5.9	NA	<5.0	<0.50	<2.0	<0.50	<0.50	<0.5	<1.0	<2.0	<0.50	11.0	<0.50	<0.50	33.0	<0.50	<0.50	<1.0	<0.50	NA
MW-PD-14	10/8/2003		<10	NA	0.6	<10	<0.5	<2	<0.5	<0.5	<1	<0.5	<0.5	190	22	NA	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<1	<2	<0.5	140	<0.5	<0.5	78	<0.5	<0.5	<1	<0.5	NA
MW-PD-14	3/10/2004	P	<10	NA	0.8	<5.0	<1.0	<1.0	NA	<0.5	<0.5	<1.0	1.3	410	81	490	<0.5	<0.5	<1.0	NA	<0.5	<1.0	0.8	NA	<2.0	500	<0.5	<1.0	160	<0.5	<0.5	<1.0	<1.0	NA
MW-PD-14	5/4/2004		<10	NA	<0.5	<5	<1	<1	NA	<0.5	<0.5	<1	<0.5	260	66	330	<0.5	<0.5	<1	NA	<0.5	<1	<1	NA	<2	380	<0.5	<1	48	<0.5	<0.5	<1	<1	NA
MW-PD-14	2/3/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	750	240	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	450	<5.0	<1.0	240	<1.0	<1.0	NA	NA	<3.0
MW-PD-14	5/5/2005		<50	<50	<1.0	<10	<1.0	1.3	<1.0	<5.0	<1.0	<1.0	1.6	560	170	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	420	<5.0	<1.0	210	<1.0	<1.0	NA	NA	<3.0
MW-PD-14	12/6/2005		<50	<50	<1.0	170	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	1.2	1700	510	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	840	<5.0	8.7	230	<1.0	<1.0	NA	NA	<3.0
MW-PD-14	5/8/2006		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	1.0	500	84	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	91	<5.0	<1.0	32	<1.0	<1.0	NA	NA	<3.0
MW-PD-14	5/2/2007	P	<10	NA	0.7	<2.5	0.57	0.54	<0.5	<0.5	<1	<0.5	<0.5	32	7.7	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	5.7	<0.5	<0.5	6.3	2.0	<0.5	<1	<0.5	NA
MW-PD-14	10/24/2007	P	<10	NA	0.9	<2.5	1.1	0.96	<0.5	<0.5	<1	<0.5	<0.5	120	19	NA	<0.5	<0.5	<2.5	NA	0.87	<0.5	<1	NA	0.76	25	<0.5	<0.5	10	3.6	<0.5	<1	<0.5	NA
MW-PD-14	4/9/2008	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	6.4	1.0	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	1.0	<0.5	<0.5	0.54	<0.5	<0.5	<1	<0.5	NA
MW-PD-14	10/2/2008	P	<10	NA	<0.50	<2.5	<0.50	0.51	<0.50	<0.50	<1.0	<0.50	<0.50	8.8	1.4	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.0	6.8	<0.50	2.4	<0.50	<0.50	2.2	1.3	<0.50	NA	NA	<1.0
MW-PD-14	3/26/2002		<10	NA	0.7	<10	<0.50	2.2	<0.50	<0.50	<1.0	<0.50	0.8	400.0	57.0	NA	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<1.0	<2.0	<0.50	370.0	<0.50	<0.50	190.0	<0.50	<0.50	<1.0	<0.50	NA
MW-PD-14 dup	3/26/2002		<10	NA	0.8	<10	<0.50	2.6	<0.50	<0.50	<1.0	<0.50	0.9	370.0	54.0	NA	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<1.0	<2.0	<0.50	360.0	<0.50	<0.50	180.0	<0.50	<0.50	<1.0	<0.50	NA
MW-PD-14 dup	10/8/2003		<10	NA	0.6	<10	<0.5	<2	<0.5	<0.5	<1	<0.5	<0.5	210	23	NA	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<1	<2	<0.5	140	<0.5	<0.5	87	<0.5	<0.5	<1	<0.5	NA
MW-PD-14 dup	3/10/2004	P	<10	NA	0.6	<5.0	<1.0	<1.0	NA	<0.5	<0.5	<1.0	1.0	390	78	470	<0.5	<0.5	<1.0	NA	<0.5	<1.0	<1.0	NA	<2.0	470	<0.5	<1.0	160	<0.5	<0.5	<1.0	<1.0	NA
MW-PD-14 dup	5/4/2004		<10	NA	<0.5	<5	<1	<1	NA	<0.5	<0.5	<1	<0.5	260	66	330	<0.5	<0.5	<1	NA	<0.5	<1	<1	NA	<2	390	<0.5	<1	56	<0.5	<0.5	<1	<1	NA
MW-PD-15	3/28/2002	P	<100	NA	<5.0	<100	5.0	<20	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<20	16.0	<5.0	<5.0	<10	62.0	15.0	14.0	<5.0	<5.0	8.0	<5.0	<5.0	<10	<5.0	NA
MW-PD-15	6/7/2002	P	<100	NA	<5.0	<100	8.3	10.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<0.50	<5.0	<20	13.0	<5.0	<5.0	<10	49.0	14.0	38.0	<5.0	<5.0	15.0	<5.0	<5.0	<10	<5.0	NA
MW-PD-15	3/15/2004			NA	<0.5	<5.0	2.0	2.1	NA	<0.5	<0.5	<1.0	4.8	1.4	6.2	<0.5	<0.5	<1.0	NA	<0.5	<1.0	<1.0	NA	2.4	51.0	<0.5	<1.0	4.5	1.4	<0.5	<1.0	<1.0	NA	
MW-PD-15	5/7/2004	P	<10	NA	0.9	<5	2.5	4.0	NA	<0.5	1.0	<1	<0.5	3.9	1.5	5.4	<0.5	0.6	<1	NA	<0.5	<1	1.7	NA	6.3	48	<0.5	<1	5.9	<0.5	4.1	<1	<1	NA
MW-PD-15	2/7/2005	P	420	<250	<5.0	<50	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<25	<25	<5.0	110	<25	<5.0	11	<5.0	<5.0	NA	NA	<15
MW-PD-15	5/6/2005	P	<50	<50	<1.0	<10	<1.0	1.0	<1.0	<5.0	<1.0	<1.0	2.6	1.1	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	97	<5.0	<1.0	6.4	<1.0	<1.0	NA	NA	<3.0	
MW-PD-15	12/7/2005	P	<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	1.6	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	6.8	<1.0	10	<5.0	<1.0	3.0	<1.0	<1.0	NA	NA	<3.0	
MW-PD-15	5/10/2006	P	<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	4.3	2.8	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	9.0	<1.0	170	<5.0	<1.0	23	<1.0	<1.0	NA	NA	<3.0	
MW-PD-15	4/10/2007	P	<10	NA	<0.5	<2.5	<0.5	0.62	<0.5	<0.5	<1	<0.5	<0.5	6.5	6.2	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	180	<0.5	<0.5	27	<0.5	<0.5	<1	<0.5	NA
MW-PD-15	10/24/2007	P	<10	NA	<0.5	<2.5	<0.5	0.55	<0.5	<0.5	<1	<0.5	<0.5	2.9	3.6	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	44	<0.5	<0.5	15	<0.5	<0.5	<1	<0.5	NA
MW-PD-15	4/8/2008	P	<10	NA	<0.5	<2.5	<0.5	0.77	<0.5	<0.5	<1	<0.5	<0.5	1.8	1.2	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	34	<0.5	<0.5	14	<0.5	<0.5	<1	<0.5	NA
MW-PD-15	10/3/2008	P	<10	NA	<0.50	<2.5	0.61	1.6	<0.50	<0.50	<1.0	<0.50	<0.50	2.3	1.3	NA	<0.50	<0.50	<2.5	2.5	<0.50	<0.50	<1.0	<2.5	0.68	24	<0.50	<0.50	11	<0.50	<0.50	NA	NA	<1.0
MW-PD-15	5/10/2012	P	<10	NA	<0.50	<5.0	<0.50	0.65	<0.50	<0.50	<1.0	<0.50	<0.50	130	40	NA	<0.50	<0.50	<5.0	0.74	<0.50	<0.50	<1.0	<2.5	<0.50	16	<0.50	<0.50	11	<0.50	<0.50	NA	NA	<1.5
MW-PD-15 dup	2/7/2005	P	430	<250	<5.0	<50	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	<5.0	<25	<25	<5.0	98	<25	<5.0	10	<5.0	<5.0	NA	NA	<15	
MW-PD-15 dup	4/8/2008	P	<10	NA	<0.5	<2.5	<0.5	0.85	<0.5	<0.5	<1	<0.5	<0.5	1.6	1.2	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	32	<0.5	<0.5	13	2.2	<0.5	<1	<0.5	NA
MW-PD-15 dup	5/10/2012	P	<10	NA	<0.50	<5.0	<0.50	0.62	<0.50	<0.50	<1.0	<0.50	<0.50	140	42	NA	<0.50	<0.50	<5.0	0.64	<0.50	<0.50	<1.0	<2.5	<0.50	18	<0.50	<0.50	11	<0.50	<0.50	NA	NA	<1.5
MW-PD-16	5/14/2012	P	<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	42	1.0	<0.50	0.65	<0.50	<0.50	3.4	0.65	NA	NA	<1.5
MW-PD-17	3/26/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<1.0	<2.0	<0.50	0.6	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	NA
MW-PD-17	6/5/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.0	<0.50	<0.50	<0.5	<1.0	<2.0	<0.50	<0.								

TABLE 3  
VOCs in Groundwater 2002 to 2013  
7th Street and Arizona Avenue WQARF Site  
Tucson, Arizona

Well	Date	LNAPL Present	Acetone	Acrolein	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloromethane	1,2-Dichloroethane	1,1-Dichloroethene (Vinylidene Chloride)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloroethenes (Total)	1,3-Dichloropropane	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	Methyl Tertiary Butyl Ether (MTBE)	Methylene Chloride (Dichloromethane)	Naphthalene	n-Propylbenzene	Tetrachloroethene (PCE)	Toluene	1,1,2-Trichloroethane	Trichloroethene (TCE)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m- & p-Xylene	O-Xylene	Xylenes, Total		
Arizona AWQS		--	--	5	--	--	--	--	--	--	5	7	70	100	NA	--	700	--	--	--	--	5	--	--	5	1,000	5	5	--	--	NA	NA	10,000			
MW-PD-29	4/3/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<b>0.73</b>	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<b>4.9</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	<0.5	NA	
MW-PD-29	10/8/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<b>2.4</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	<0.5	NA	
MW-PD-29	4/1/2008		<20	NA	<1	<5	<1	<1	<1	<1	<2	<1	<1	<1	NA	<1	<1	<5	NA	<1	<1	<2	NA	<1	<b>2.0</b>	<1	<1	<1	<1	<1	<2	<1	NA	<1	NA	
MW-PD-29	9/26/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<2.0	<2.5	<0.50	<b>2.0</b>	<1.0	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.0	NA	
MW-PD-29	5/3/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	<b>1.2</b>	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.5	NA	
MW-PD-30	5/2/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<b>1.6</b>	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<b>12</b>	<5.0	<5.0	<1.0	<b>16</b>	<5.0	<1.0	<b>3.2</b>	<1.0	<1.0	NA	NA	<3.0	NA	
MW-PD-30	12/2/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<b>7.5</b>	<b>1.8</b>	NA	<1.0	<1.0	NA	<1.0	<1.0	<b>36</b>	<5.0	<5.0	<1.0	<b>90</b>	<5.0	<1.0	<b>16</b>	<1.0	<1.0	NA	NA	<3.0	NA	
MW-PD-30	5/4/2006		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<b>12</b>	<b>2.3</b>	NA	<1.0	<1.0	NA	<1.0	<1.0	<b>33</b>	<5.0	<5.0	<1.0	<b>74</b>	<5.0	<1.0	<b>14</b>	<1.0	<1.0	NA	NA	<3.0	NA	
MW-PD-30	4/5/2007		<20	NA	<1	<5	<1	<1	<1	<1	<5	<1	<1	<b>21</b>	<b>3.2</b>	NA	<1	<1	<5	NA	<1	<b>28</b>	<2	NA	<1	<b>92</b>	<1	<1	<b>14</b>	<1	<1	<2	<1	NA	<1	NA
MW-PD-30	10/9/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<b>11</b>	<b>2.0</b>	NA	<0.5	<0.5	<2.5	NA	<0.5	<b>17</b>	<1	NA	<0.5	<b>85</b>	<0.5	<0.5	<b>14</b>	<0.5	<0.5	<1	<0.5	NA	<0.5	NA
MW-PD-30	4/3/2008		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<b>13</b>	<b>2.2</b>	NA	<0.5	<0.5	<2.5	NA	<0.5	<b>16</b>	<1	NA	<0.5	<b>76</b>	<0.5	<0.5	<b>14</b>	<0.5	<0.5	<1	<0.5	NA	<0.5	NA
MW-PD-30	9/30/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<b>11</b>	<b>2.3</b>	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<b>12</b>	<1.0	<2.5	<0.50	<b>76</b>	<0.50	<0.50	<b>12</b>	<0.50	<0.50	NA	NA	<1.0	NA	
MW-PD-30	5/4/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<b>3.3</b>	<0.50	NA	<b>1.1</b>	<0.50	<5.0	<0.50	<0.50	<b>1.6</b>	<1.0	<2.5	<0.50	<b>57</b>	<0.50	<0.50	<b>4.0</b>	<0.50	<0.50	NA	NA	<1.5	NA	
MW-PD-30	3/20/2013		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<b>2.5</b>	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<b>1.0</b>	<1.0	<2.5	<0.50	<b>39</b>	<0.50	<0.50	<b>2.8</b>	<0.50	<0.50	NA	NA	<1.5	NA	
MW-PD-31	5/2/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.5	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<b>45</b>	<5.0	<5.0	<1.0	<0.5	<5.0	<1.0	<0.5	<1.0	<1.0	NA	NA	<3.0	NA	
MW-PD-31	12/5/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.5	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<b>490</b>	<5.0	<5.0	<1.0	<b>0.51</b>	<5.0	<1.0	<0.5	<1.0	<1.0	NA	NA	<3.0	NA	
MW-PD-31	5/5/2006		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<0.50	NA	<1.0	<1.0	NA	<1.0	<1.0	<b>430</b>	<5.0	<5.0	<1.0	<0.50	<5.0	<1.0	<0.50	<1.0	<1.0	NA	NA	<3.0	NA	
MW-PD-31	4/5/2007		<20	NA	<1	<5	<1	<1	<1	<1	<5	<1	<1	<1	<1	NA	<1	<1	<5	NA	<1	<b>570</b>	<2	NA	<1	<1	<1	<1	<1	<1	<2	<1	NA	<1	NA	
MW-PD-31	10/10/2007		<20	NA	<1	<5	<1	<1	<1	<1	<2	<1	<1	<1	<1	NA	<1	<1	<5	NA	<1	<b>340</b>	<2	NA	<1	<1	<1	<1	<1	<1	<2	<1	NA	<1	NA	
MW-PD-31	4/3/2008		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<b>320</b>	<1	NA	<0.5	<b>0.51</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	<0.5	NA
MW-PD-31	10/1/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<b>120</b>	<1.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.0	NA	
MW-PD-31	5/2/2012		<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<b>23</b>	<1.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.5	NA	
YC-5	12/6/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<b>0.83</b>	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<b>18</b>	<5.0	<1.0	<b>2.1</b>	<1.0	<1.0	NA	NA	<3.0	NA	
YC-5	5/3/2006		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<b>0.98</b>	<0.50	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<b>10</b>	<5.0	<1.0	<b>2.0</b>	<1.0	<1.0	NA	NA	<3.0	NA	
YC-5	4/11/2007	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<b>29</b>	<b>2.8</b>	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<b>3.8</b>	<0.5	<0.5	<b>0.93</b>	<b>1.1</b>	<0.5	<1	<0.5	NA	<0.5	NA
YC-5	10/23/2007	P	<10	NA	<0.5	<2.5	<b>0.53</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<b>7.0</b>	<b>0.65</b>	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<b>6.5</b>	<0.5	<0.5	<b>0.83</b>	<b>1.5</b>	<0.5	<1	<0.5	NA	<0.5	NA
YC-5	4/7/2008	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<b>2.8</b>	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<b>2.5</b>	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	<0.5	NA	
YC-5	10/2/2008	P	<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<b>5.6</b>	<b>0.63</b>	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.0	<b>5.2</b>	<0.50	<b>5.0</b>	<0.50	<0.50	<b>3.2</b>	<b>1.2</b>	<0.50	NA	NA	<1.0	NA	
YC-5	5/8/2012	P	<10	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<b>5.2</b>	<0.50	<b>3.9</b>	<0.50	<0.50	<b>2.5</b>	<b>1.3</b>	<0.50	NA	NA	<1.5	NA	
YC-5	3/21/2013	P	<b>10</b>	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<b>13</b>	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<b>7.3</b>	<0.50	<b>3.5</b>	<0.50	<0.50	<b>4.4</b>	<b>1.0</b>	<0.50	NA	NA	<1.5	NA	
YC-5 dup	4/11/2007	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<b>27</b>	<b>2.6</b>	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<b>3.3</b>	<0.5	<0.5	<b>0.83</b>	<b>1.0</b>	<0.5	<1	<0.5	NA	<0.5	NA
YC-6	5/10/2006	P	<50	<50	<1.0	<10	<b>1.0</b>	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<0.50	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<b>43.0</b>	<b>1.3</b>	<0.50	<5.0	<1.0	<0.50	<b>1.6</b>	<b>1.0</b>	NA	NA	<3.0	NA	
YC-6	4/10/2007	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<b>0.78</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	<0.5	NA
YC-6	10/24/2007	P	<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	NA	&lt																			

TABLE 3  
VOCs in Groundwater 2002 to 2013  
7th Street and Arizona Avenue WQARF Site  
Tucson, Arizona

Well	Date	LNAPL Present	Acetone	Acrolein	Benzene	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloromethane	1,2-Dichloroethane	1,1-Dichloroethene (Vinylidene Chloride)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloroethenes (Total)	1,3-Dichloropropane	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	Methyl Tertiary Butyl Ether (MTBE)	Methylene Chloride (Dichloromethane)	Naphthalene	n-Propylbenzene	Tetrachloroethene (PCE)	Toluene	1,1,2-Trichloroethane	Trichloroethene (TCE)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m- & p-Xylene	O-Xylene	Xylenes, Total	
	Arizona AWQS	--	--	5	--	--	--	--	--	--	5	7	70	100	NA	--	700	--	--	--	--	5	--	--	5	1,000	5	5	5	--	--	NA	NA	10,000	
7AZR-1	5/14/2012		<b>24</b>	NA	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	NA	<0.50	<0.50	<1.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.5	
7AZR-1 dup	5/10/2004		<10	NA	<0.5	<5	<1	<1	NA	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	NA	<0.5	<1	<b>1.8</b>	NA	<2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	NA
7AZR-1 dup	2/3/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	<3.0	
7AZR-2	4/4/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	
7AZR-2	10/11/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	
7AZR-2	4/10/2008		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	
7AZR-2	8/29/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.0	
7AZR-2	10/24/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.0	
7AZR-2	5/14/2012		<b>30</b>	NA	<0.50	<b>22</b>	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.5	
7AZR-3	11/8/2012		<20	NA	<1	<10	<1	<1	<1	<1	<4	<1	<2	<1	NA	<1	<2	<10	<1	<1	<1	<5	<4	<2	<1	<1	<2	<1	<1	<1	<1	NA	NA	<3	
7AZR-3 dup	11/8/2012		<20	NA	<1	<10	<1	<1	<1	<1	<4	<1	<2	<1	NA	<1	<2	<10	<1	<1	<1	<5	<4	<2	<1	<1	<2	<1	<1	<1	<1	NA	NA	<3	
MW-PD-19	3/29/2002		<10	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<1.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	
MW-PD-19	6/5/2002		<b>13</b>	NA	<0.50	<10	<0.50	<2.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<b>5.3</b>	<0.50	<0.50	<0.50	<1.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	
MW-PD-19	10/8/2002		<10	NA	<0.5	<10	<0.5	<2	<0.5	<0.5	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	
MW-PD-19	3/11/2004		<10	NA	<0.5	<5.0	<1.0	<1.0	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	NA	<0.5	<1.0	<1.0	NA	<2.0	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	NA	
MW-PD-19	5/10/2004		<10	NA	<0.5	<5	<1	<1	NA	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	NA	<0.5	<1	<b>1.6</b>	NA	<2	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1	<1	NA	
MW-PD-19	2/3/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	<3.0	
MW-PD-19	5/3/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.5	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<0.5	<5.0	<1.0	<0.5	<1.0	<1.0	NA	NA	<3.0	
MW-PD-19	12/1/2005		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.5	<0.5	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<0.5	<5.0	<1.0	<0.5	<1.0	<1.0	NA	NA	<3.0	
MW-PD-19	5/4/2006		<50	<50	<1.0	<10	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<0.50	NA	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<0.50	<5.0	<1.0	<0.50	<1.0	<1.0	NA	NA	<3.0	
MW-PD-19	4/4/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	
MW-PD-19	10/11/2007		<10	NA	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	
MW-PD-19	4/10/2008		<10	NA	<b>25</b>	<2.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<2.5	NA	<0.5	<0.5	<1	NA	<0.5	<0.5	<b>1.2</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	NA	
MW-PD-19	8/29/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.0	
MW-PD-19	10/24/2008		<10	NA	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<1.0	

Note:  
This table presents an abridged list of EPA Method 8260B compounds; compounds not included were below the reporting limit in all samples.  
The 10/8/2003 samples are taken directly from a Kleinfelder report dated July 3, 2003 and may have been collected in October 2002.  
Results are reported in µg/L (micrograms per liter)  
AWQS = Aquifer Water Quality Standards  
Bolded value indicates concentration is above laboratory reporting limit  
dup = duplicate sample  
-- = no AWQS  
NA = not analyzed  
<### = Sample concentration below ### (practical quantitation limit)  
P = LNAPL was present

**TABLE 4**  
**Groundwater Sampling Stable Purge Parameters, 2005 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well Name	Sample Date	Sample Time	Steady State Flow Rate (mL/min)	Temperature (°C)	Electrical Conductivity (µS/cm)	pH (Standard Units)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)
<b>PERCHED GROUNDWATER WELLS</b>									
<b>Wells without LNAPL</b>									
7AZP-3	02/01/05	15:32	500	25.28	1,852	6.63	Clear	9.5%	154
MW-PD-17	02/01/05	11:46	500	24.39	1,929	6.56	Clear	10.2%	140
MW-PD-5	02/01/05	9:35	350	23.01	2,806	6.62	27.60	12.2%	191
BF-1	02/02/05	14:12	300	23.50	2,251	6.66	1.04	9.5%	156
BF-3	02/02/05	9:56	550	24.89	2,395	7.26	SI Cloudy	14.1%	123
MW-PD-1	02/02/05	16:15	150	21.83	3,165	6.66	2.31	3.12	180
MW-PD-14	02/03/05	11:23	440	24.94	1,930	6.63	1.49	0.66	228
MW PD-30	05/02/05	16:10	340	28.2	1,990	6.92	940	0.58	57
MW PD-31	05/02/05	14:22	630	28.1	1,550	6.96	230	0.42	69
MW PD-29	05/03/05	16:15	380	26.6	1,570	6.75	65	5.37	150
MW-PD-17	05/03/05	14:48	450	27.6	2,040	6.49	0	2.54	86
7AZP-1	05/04/05	14:05	340	27.2	2,340	6.66	7	2.35	201
7AZP-3	05/04/05	12:53	360	27.4	2,040	6.62	11	1.02	207
BF-1	05/04/05	16:32	400	27.8	2,640	6.66	33	1.17	201
BF-3	05/04/05	11:42	300	28.7	2,520	6.66	36	1.63	178
MW-PD-1	05/04/05	15:21	210	30.0	3,300	6.68	0	1.95	207
MW-PD-5	05/04/05	9:54	310	26.9	3,050	6.63	40	1.90	159
MW-PD-14	05/05/05	12:42	350	28.7	2,120	6.63	8	1.43	138
BF-3	12/01/05	14:28	400	27.62	2,550	6.66	1.83	1.10	156.4
MW-PD-17	12/01/05	15:55	400	26.20	1,977	6.54	14.20	1.00	183.6
7AZP-1	12/02/05	17:05	400	25.02	1,931	6.67	5.31	3.05	171.7
MW PD-29	12/02/05	12:46	400	26.44	1,265	6.95	8.14	4.60	129.9
MW PD-30	12/02/05	15:20	400	26.57	2,284	6.66	4.34	0.73	125.5
MW-PD-5	12/02/05	10:48	400	24.98	2,940	6.64	4.92	1.14	197.8
7AZP-3	12/05/05	14:08	454	25.08	1,812	6.69	6.45	0.25	190.7
MW PD-31	12/05/05	11:10	450	24.99	2,268	6.64	4.25	1.00	133.3
MW-PD-1	12/05/05	16:20	230	23.96	2,892	6.72	4.25	1.00	194.1
BF-1	12/06/05	9:55	450	23.92	1,926	6.75	4.40	0.44	204.3
MW-PD-14	12/06/05	14:21	428	26.09	1,989	6.65	1.79	0.38	160.1
YC-5	12/06/05	11:48	455	25.55	1,941	6.63	0.59	0.38	225.3
MW PD-29	05/02/06	16:15	750	31.28	1,227	6.98	1.99	4.98	-29.7
MW-PD-17	05/02/06	10:18	450	27.33	2,026	6.55	0.88	0.23	-31.9
MW-PD-5	05/02/06	14:12	330	30.58	7,770	6.59	3.00	1.06	-16.7
7AZP-1	05/03/06	13:46	650	28.85	1,711	6.72	8.24	3.24	-42.3
7AZP-3	05/03/06	15:50	600	28.94	1,852	6.64	6.66	1.36	-75.0
YC-5	05/03/06	10:50	675	27.67	2,015	6.55	0.17	0.27	-63.2
MW PD-30	05/04/06	12:49	475	28.18	2,350	6.64	9.76	9.29	-88.9
BF-1	05/05/06	12:11	450	27.41	1,988	6.65	1.19	1.00	-56.7
BF-3	05/05/06	14:15	375	28.23	2,496	6.63	0.73	0.63	-88.8
MW PD-31	05/05/06	16:00	450	28.29	2,001	6.61	2.72	0.90	-93.3
MW-PD-1	05/05/06	10:15	250	27.79	2,447	6.75	9.71	4.22	34.2
MW-PD-14	05/08/06	7:44	400	26.55	2,057	6.63	0.99	0.51	-61.4
MW-PD-17	04/02/07	17:05	450	27.62	2,027	6.60	1.50	0.37	-68.3
MW-PD-5	04/02/07	13:40	450	28.12	3,011	6.68	10.67	1.64	-69.5
7AZP-6	04/03/07	7:15	600	25.32	2,011	6.75	2.41	2.02	33.4
7AZP-7	04/03/07	10:10	600	27.30	2,533	6.71	3.20	3.98	-22.9
MW PD-29	04/03/07	16:27	600	27.09	2,123	7.77	2.62	5.33	-457.3
7AZP-1	04/05/07	7:50	600	25.34	2,000	6.82	9.44	3.49	-176.9
7AZP-3	04/05/07	9:35	600	26.06	1,896	6.80	0.56	1.52	-296.0
BF-3	04/05/07	15:05	600	28.95	2,315	6.83	0.45	1.23	-365.0
MW PD-30	04/05/07	10:50	600	27.26	2,317	6.85	1.56	2.01	-326.8
MW PD-31	04/05/07	13:07	600	28.78	2,231	6.85	7.01	1.75	-401.3
7AZP-5	04/06/07	7:55	600	25.98	1,616	6.80	3.78	1.56	-265.6
BF-1	04/06/07	9:22	600	27.81	2,109	6.84	1.85	1.23	-375.9
MW-PD-1	04/06/07	10:45	600	28.90	2,667	6.79	12.90	1.11	-241.3
MW-PD-17	10/05/07	14:25	450	28.64	3,707	6.44	7.12	0.99	100.1
MW-PD-5	10/05/07	16:13	450	27.27	5,253	6.50	23.80	2.40	131.8
7AZP-1	10/08/07	13:50	450	29.00	4,084	6.57	2.55	2.12	93.3
7AZP-3	10/08/07	15:05	450	29.20	3,507	6.54	NR	0.52	72.3
7AZP-5	10/08/07	11:50	450	28.30	3,199	6.59	0.46	1.13	93.0
7AZP-7	10/08/07	10:10	450	27.80	4,503	6.58	1.93	3.90	118.7
MW PD-29	10/08/07	8:20	450	25.50	2,570	6.84	0.90	5.19	142.6
7AZP-6	10/09/07	9:50	450	27.60	4,492	6.72	0.56	2.59	129.2
BF-3	10/09/07	14:25	450	30.20	5,120	6.68	12.10	0.47	78.3
MW PD-30	10/09/07	11:45	450	29.00	5,125	6.65	0.69	0.49	39.9
BF-1	10/10/07	8:40	450	27.50	4,765	6.57	1.40	1.75	153.5
MW PD-31	10/10/07	13:25	450	30.60	5,126	6.49	1.55	1.11	52.1
MW-PD-1	10/10/07	11:05	450	29.10	5,319	6.56	12.40	2.87	124.0
7AZP-7	03/31/08	15:57	100	28.40	2,785	6.45	1.36	3.76	48.9
7AZP-1	04/01/08	12:15	450	27.30	2,284	6.49	1.07	2.51	45.1
7AZP-3	04/01/08	15:56	450	27.72	1,996	6.43	0.16	0.32	36.8
MW PD-29	04/01/08	9:50	450	26.18	1,684	6.75	0.32	5.12	55.2

**TABLE 4**  
**Groundwater Sampling Stable Purge Parameters, 2005 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well Name	Sample Date	Sample Time	Steady State Flow Rate (mL/min)	Temperature (°C)	Electrical Conductivity (µS/cm)	pH (Standard Units)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)
MW-PD-5	04/01/08	7:47	450	23.50	3,058	6.42	9.51	1.08	69.4
7AZP-10	04/02/08	11:09	450	26.58	2,708	6.58	6.52	5.54	0.0
7AZP-5	04/02/08	7:37	450	24.48	2,254	6.45	0.11	0.57	53.7
7AZP-6	04/02/08	13:45	450	27.84	2,527	6.53	1.10	2.93	-15.8
7AZP-9	04/02/08	9:25	450	25.90	2,176	6.65	0.16	5.70	14.6
BF-3	04/03/08	10:05	450	27.16	2,648	6.53	0.18	0.49	-1.1
MW PD-30	04/03/08	8:33	450	26.05	2,544	6.52	0.44	0.55	50.4
MW PD-31	04/03/08	12:15	450	28.08	2,974	6.47	2.02	0.85	-8.8
BF-1	04/04/08	10:19	450	26.80	2,418	6.58	0.00	0.78	-12.4
MW-PD-1	04/04/08	7:54	450	24.30	2,587	6.55	16.80	1.57	39.8
MW-PD-17	04/07/08	13:55	450	27.72	2,341	6.40	4.07	0.51	-4.6
7AZP-10	09/25/08	16:00	450	28.00	2,512	6.56	9.26	4.63	-61.5
7AZP-7	09/25/08	12:30	450	28.64	2,720	6.51	2.01	3.93	-67.3
MW-PD-17	09/25/08	11:05	450	28.49	2,139	6.49	50.20	0.33	-70.9
MW-PD-5	09/25/08	14:25	450	28.86	3,529	6.42	7.43	1.20	-71.9
7AZP-1	09/26/08	10:55	450	26.78	1,845	6.60	7.68	3.05	-65.8
7AZP-5	09/26/08	7:20	450	26.04	1,806	6.58	0.89	1.65	-65.6
7AZP-9	09/26/08	9:25	450	26.68	1,983	6.66	0.63	4.69	-64.5
MW PD-29	09/26/08	13:10	450	28.96	1,781	6.74	0.80	4.33	-73.2
7AZP-3	09/30/08	11:48	450	28.49	1,999	6.52	5.96	0.27	-97.5
7AZP-6	09/30/08	13:15	450	29.51	2,301	6.59	3.00	2.62	-90.8
BF-3	09/30/08	16:42	450	29.10	2,516	6.53	0.24	0.47	-91.9
MW PD-30	09/30/08	15:05	450	29.41	2,347	6.58	2.42	0.59	-91.9
BF-1	10/01/08	9:45	450	28.57	2,111	6.60	2.92	0.31	-86.9
MW PD-31	10/01/08	7:58	450	27.41	2,550	6.55	4.37	0.70	-91.1
MW-PD-1	10/01/08	11:28	450	29.10	2,742	6.64	8.86	1.09	-82.2
MW-PD-7	10/02/08	10:33	450	28.42	3,428	6.54	2.90	0.04	-177.0
MW-PD-5	05/01/12	17:35	400	27.70	3,219	6.53	7.86	0.74	140.2
7AZP-1	05/02/12	16:26	600	27.80	50	6.75	3.83	2.13	161.7
7AZP-5	05/02/12	17:58	600	27.10	1,085	6.75	0.00	0.27	140.0
MW PD-31	05/02/12	14:10	600	28.90	1,573	6.71	0.00	0.33	198.9
MW-PD-13	05/02/12	11:39	500	27.50	1,310	6.73	0.00	1.06	61.1
7AZP-6	05/03/12	15:25	600	28.60	2,275	6.59	11.28	2.93	137.4
BF-3	05/03/12	14:06	500	30.00	2,351	6.57	9.66	0.25	106.2
MW PD-29	05/03/12	9:15	600	26.40	1,552	6.77	NR-39.41	3.18	213.5
BF-1	05/04/12	13:43	600	28.00	1,534	6.56	0.00	0.23	147.1
MW PD-30	05/04/12	11:06	600	27.90	2,278	6.60	16.98	0.24	135.2
MW-PD-1	05/04/12	9:34	500	27.40	2,128	6.71	0.00	1.04	173.2
7AZP-10	05/18/12	12:14	400	29.40	2,284	6.64	26.40	5.81	131.9
7AZP-9	05/18/12	14:09	450	28.80	2,079	6.66	5.39	2.59	88.7
7AZP-7	05/23/12	10:50	NM	NM	NM	NM	NM	NM	NM
7AZP-1	03/19/13	14:55	600	27.00	3,340	6.62	0.45	3.28	182.0
7AZP-5	03/21/13	9:28	600	25.70	1,801	6.56	1.04	0.85	295.0
7AZP-6	03/20/13	10:50	550	26.80	2,797	6.56	29.00	3.27	162.0
7AZP-9	03/19/13	12:20	500	26.30	2,834	6.61	14.80	2.48	146.0
7AZP-10	03/18/13	13:05	400	27.30	4,733	6.55	23.60	3.03	109.3
7AZP-10D	03/21/13	11:40	550	26.90	2,665	6.62	3.48	3.06	295.0
7AZP-11	03/19/13	9:40	600	25.90	2,890	6.51	0.75	2.90	139.0
BF-1	03/20/13	13:20	600	27.20	2,503	6.51	1.18	0.31	340.0
BF-3	03/19/13	16:38	600	27.70	2,777	6.50	0.54	0.46	320.0
MW-PD-5	03/18/13	15:55	500	26.50	6,540	6.33	6.67	0.54	180.0
MW-PD-30	03/20/13	14:55	600	28.00	2,721	6.54	9.20	0.59	329.0
<b>Wells with LNAPL</b>									
7AZP-1 <sup>c</sup>	02/04/05	16:21	450	24.16	2,043	6.68	9.57	7.53	110
7AZP-2	02/04/05	13:45	450	24.16	970	6.92	9.25	5.11	-191
MW-PD-7	02/04/05	10:28	390	24.09	2,340	6.51	2.76	0.64	171
7AZP-4	02/07/05	15:38	450	24.94	1,749	6.66	42.00	2.67	-71
MW-PD-15	02/07/05	13:03	460	24.83	1,840	6.72	3.57	0.76	-8.8
MW-PD-6	02/07/05	9:57	420	24.27	1,887	6.71	2.95	2.98	-111
7AZP-2	05/05/05	17:19	150	27.9	907	7.23	67	1.09	116
MW-PD-7	05/05/05	15:23	300	28.2	2,550	6.53	14	0.73	-60
7AZP-4	05/06/05	11:18	400	26.5	2,060	6.58	58	0.77	9
MW-PD-15	05/06/05	13:03	400	26.9	1,860	6.67	4	0.74	73
MW-PD-6	05/06/05	9:22	310	26.2	2,350	6.67	0	0.84	-132
7AZP-2	12/07/05	14:36	430	23.96	955	7.03	5.53	0.64	-120.2
MW-PD-15	12/07/05	17:06	450	22.93	1,322	6.95	30.2	1.15	-150.9
MW-PD-6	12/07/05	11:42	460	23.64	2,115	6.74	1.03	0.94	-260.5
MW-PD-7	12/07/05	9:58	560	24.14	2,920	6.59	0.94	0.32	-189.0
7AZP-4	12/08/05	12:38	450	25.82	1,145	6.73	35.5	0.06	-164.0
MW-PD-7	05/08/06	10:21	400	27.84	2,967	6.55	1.11	0.31	-216.7
7AZP-2	05/09/06	16:40	450	28.53	1,306	6.76	3.17	0.23	-216.1
MW-PD-6	05/09/06	14:07	500	28.86	2,261	6.68	0.93	0.30	-240.8
7AZP-4	05/10/06	15:02	450	28.41	1,940	6.82	1.71	0.85	-163.1
MW-PD-15	05/10/06	12:33	490	28.75	1,986	6.67	0.85	2.80	7.5
YC-6	05/10/06	9:02	400	26.67	1,905	6.59	3.32	0.07	-54.0
YC-5	01/11/07	9:35	500	26.40	1,995	6.57	1.17	1.21	61.5

**TABLE 4**  
**Groundwater Sampling Stable Purge Parameters, 2005 - 2013**  
**7th Street and Arizona Avenue WQARF Site**

Well Name	Sample Date	Sample Time	Steady State Flow Rate (mL/min)	Temperature (°C)	Electrical Conductivity (µS/cm)	pH (Standard Units)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)
MW-PD-6	04/09/07	15:00	550	27.23	2,638	6.67	N/A	4.93	-276.0
MW-PD-7	04/09/07	11:10	550	26.45	2,849	6.66	2.70	1.04	-298.1
7AZP-2	04/10/07	6:45	550	24.36	1,072	6.95	4.84	5.69	-265.8
7AZP-4	04/10/07	11:42	500	26.87	1,841	6.65	1.31	1.09	-242.1
MW-PD-15	04/10/07	15:10	500	27.77	1,781	6.71	N/A	1.61	-224.9
YC-6	04/10/07	9:38	500	26.48	1,925	6.62	N/A	1.42	-192.0
MW-PD-14	05/02/07	10:02	500	28.90	1,904	6.74	N/A	N/A	N/A
MW-PD-6	10/23/07	11:30	450	26.73	5,816	6.51	0.46	1.70	134.2
MW-PD-7	10/23/07	9:20	450	25.92	6,059	6.57	1.19	1.69	79.8
YC-5	10/23/07	13:55	450	28.53	4,146	6.99	0.37	1.10	35.4
MW-PD-14	10/24/07	16:05	450	28.10	4,349	6.15	1.84	1.43	29.0
MW-PD-15	10/24/07	14:20	450	28.60	3,760	6.32	0.5	1.03	-131.9
YC-6	10/24/07	11:15	450	27.74	4,336	6.13	0.58	0.99	117.5
7AZP-2	10/25/07	9:18	450	25.58	2,447	6.63	1.71	3.07	-138.2
7AZP-4	10/25/07	11:50	450	28.69	3,952	6.48	1.61	1.19	-101.5
MW-PD-6	04/07/08	10:53	450	26.94	2,871	6.53	0.28	0.45	-209.1
MW-PD-7	04/07/08	8:56	450	25.75	3,142	6.44	0.97	0.52	-185.0
YC-5	04/07/08	16:06	450	27.36	2,298	6.40	2.82	0.52	-35.1
7AZP-2	04/08/08	11:15	450	26.99	1,345	6.68	3.29	0.91	-125.5
MW-PD-15	04/08/08	14:00	450	28.24	1,903	6.59	0.46	0.52	-141.5
YC-6	04/08/08	8:50	450	26.02	2,153	6.47	27.30	0.46	-76.2
7AZP-4	04/09/08	11:25	450	24.84	2,061	6.49	13.2	0.23	-176.1
MW-PD-14	04/09/08	9:08	450	25.16	2,207	6.45	2.78	0.68	24.7
MW-PD-14	10/02/08	13:12	450	31.45	2,176	6.57	1.16	0.7	-118.7
YC-5	10/02/08	11:53	450	29.58	2,192	6.48	2.06	0.42	-125.2
YC-6	10/02/08	8:10	450	26.61	1,933	6.55	3.24	0.62	-121.0
7AZP-2	10/03/08	9:45	450	26.49	1,160	6.67	1.97	1.31	-133.9
7AZP-4	10/03/08	8:25	450	26.66	1,896	6.56	1.09	0.05	-182.0
MW-PD-15	10/03/08	11:40	450	28.70	1,459	6.63	1.18	0.17	-195.3
MW-PD-6	10/22/08	14:18	450	23.44	2,460	6.45	NM	NM	NM
YC-6	05/07/12	15:20	600	28.10	1,687	6.51	0.00	0.29	-67.4
7AZP-3	05/08/12	14:56	400	30.80	2,241	6.57	40.00	0.51	-12.7
MW-PD-7	05/08/12	10:55	400	26.30	2,669	6.52	20.00	0.38	-173.1
YC-5	05/08/12	17:06	400	29.20	2,512	6.47	3.93	0.62	91.9
7AZP-2	05/09/12	17:29	400	23.60	1,261	6.69	6.7	2.34	192.0
MW-PD-6	05/09/12	10:41	400	26.80	2,298	6.63	0	0.44	-82.3
7AZP-4	05/10/12	9:55	400	26.30	2,191	6.60	43.37	0.06	-132.9
MW-PD-15	05/10/12	14:35	425	29.30	2,413	6.58	0	0.48	27.9
MW-PD-4	05/10/12	16:27	300	29.70	2,897	6.54	19.79	5.30	-32.4
MW-PD-12	05/11/12	10:28	200	32.20	2,591	6.59	348.00	1.70	-9.7
MW-PD-16	05/15/12	10:45	400	29.30	2,440	6.54	-8.9	0.17	-62.7
7AZP-2	03/21/13	16:31	600	25.60	1,589	6.62	1.4	4.65	-96.0
YC-5	03/21/13	14:55	500	26.70	2,393	6.43	1.50	1.52	-42.0
REGIONAL AQUIFER WELLS									
7AZR-1	02/03/05	17:17	12,870	26.79	512	7.84	0.73	5.94	220
MW-PD-19	02/03/05	14:57	9,085	27.72	516	7.87	5.78	5.70	199
7AZR-1	05/03/05	10:16	10,599	27.4	540	7.28	0	6.71	118
MW-PD-19	05/03/05	13:05	7,571	28.7	550	7.49	160	6.02	53
7AZR-1	12/01/05	10:02	5,716	28.82	572	7.67	0.78	62.8%	175.6
MW-PD-19	12/01/05	11:22	7,571	29.97	546	7.77	5.97	50.4%	179.1
7AZR-1	05/03/06	9:51	7,949	28.29	589	7.60	0.24	4.93	-36.7
MW-PD-19	05/04/06	9:54	8,327	29.49	559	7.71	3.66	5.31	-54.0
7AZR-1	04/04/07	8:38	7,570	22.96	589	7.88	-1.09	4.56	-251.1
7AZR-2	04/04/07	10:35	11,356	28.98	553	7.86	0.03	5.00	-262.7
MW-PD-19	04/04/07	13:00	9,463	28.90	564	7.94	2.13	4.33	-265.4
7AZR-1	10/11/07	8:30	7,570	29.20	1,313	7.66	0.38	7.49	134.4
7AZR-2	10/11/07	10:05	7,570	29.30	1,218	7.64	0.36	7.44	78.7
MW-PD-19	10/11/07	12:20	7,570	30.70	1,255	7.72	3.25	5.48	56.6
7AZR-1	04/10/08	8:37	2	27.80	715	7.71	76.50	5.09	3.4
7AZR-2	04/10/08	11:17	2	27.80	638	7.79	90.30	5.13	-14.9
MW-PD-19	04/10/08	13:30	1	27.92	657	7.85	0.75	6.34	-0.9
7AZR-1	10/24/08	9:49	5,300	16.56	683	7.22	NM	NM	NM
7AZR-2	10/24/08	12:43	6,800	25.44	582	7.36	NM	NM	NM
MW-PD-19	10/24/08	16:34	1,800	26.22	556	7.43	NM	NM	NM
7AZR-1	05/14/12	12:25	4,429	29.10	719	7.39	-0.10	11.20	143.4
7AZR-2	05/14/12	14:54	5,678	31.70	515	8.10	8.75	10.36	55.4

Notes:

°C = Degrees Celcius	mV = Millivolts
LNAPL = Light non-aqueous phase liquid	NM = Not measured; obstructed
mg/L = Milligrams per liter	NTUs = Nephelometric turbidity units
mL/min = Milliliters per minute	µS/cm = MicroSiemens per centimeter

**TABLE 5**  
**Groundwater Geochemical Results, March 2013**  
**7th Street Arizona Avenue WQARF Site**

Well	Date	Alkalinity as CaCO <sub>3</sub>	Chloride	Oxidation Reduction Potential (mV)	E <sub>h</sub> (mV)	Dissolved Oxygen	Nitrate-N	Nitrate (NO <sub>3</sub> )	Sulfate	Total Organic Carbon	Ethane	Ethene	Methane	Ferrous Iron	Sulfide
7AZP-1	3/19/2013	350	230	182.0	404.3	3.28	9.6	42	810	1.1	<0.0020	<0.0028	<0.00099	0.16	0.001
7AZP-2	3/21/2013	320	180	-96.0	126.3	4.65	2.6	12	180	2.4	<0.0020	<0.0028	0.072	0.08	0.033
7AZP-5	3/21/2013	460	190	295.0	517.3	0.85	0.36	1.6	140	1.8	<0.0020	<0.0028	0.055	0.05	0.005
7AZP-6	3/20/2013	330	280	162.0	384.3	3.27	6.5	29	500	1.1	<0.0020	<0.0028	<0.00099	1.23	0.04
7AZP-9	3/19/2013	270	310	146.0	368.3	2.48	9.7	43	560	1.4	<0.0020	<0.0028	0.021	0.62	0.052
7AZP-10	3/18/2013	290	240	109.3	331.6	3.03	13	58	690	1.6	NM	NM	NM	1.13	0.028
7AZP-10 <sup>b</sup>	3/21/2013	280	240	295.0	517.3	3.06	14	62	690	1.1	<0.0020	<0.0028	<0.00099	0.66	0.026
7AZP-11	3/19/2013	360	200	139.0	361.3	2.90	6.5	29	680	1.4	<0.0020	<0.0028	<0.00099	0.09	0.001
BF-1	3/20/2013	340	320	340.0	562.3	0.31	3.0	13	270	1.8	<0.0020	<0.0028	<0.00099	0.1	0.003
BF-3	3/19/2013	380	230	320.0	542.3	0.46	4.5	20	530	1.2	<0.0020	<0.0028	<0.00099	0.08	0.001
MW-PD-5	3/18/2013	340	850	180.0	402.3	0.54	1.3 <sup>a</sup>	5.8	200	1.9	<0.0020	<0.0028	<0.00099	0.6	0.004
MW-PD-30	3/20/2013	330	300	329.0	551.3	0.59	5.0	22	410	1.4	<0.0020	<0.0028	<0.00099	0.39	0.014
YC-5	3/21/2013	420	410	-42.0	180.3	1.52	0.72	3.2	130	2.3	<0.0020	<0.0028	0.015	0.11	0.004

*Note:*

*All reported data in units of mg/L (milligrams per liter) except as noted*

<sup>a</sup> *Analyzed past hold time*

<sup>b</sup> *Groundwater samples were collected twice from well 7AZP-10*

*mV = millivolts*

*E<sub>h</sub> = reduction potential*

*NM = not measured*

*<### = Sample concentration below ### (practical quantitation limit)*

**TABLE 6**  
**Volatile Organic Compounds Detected in LNAPL Samples, 2002 - 2012**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Sample	Date Collected	1,1,2,2-Tetrachloroethane	1,2,4-Trimethylbenzene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,3,5-Trimethylbenzene	1,1-Dichloroethene	4-Isopropyltoluene	Benzene	Chlorobenzene	Chloroform	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene	Trichloroethene	Xylenes, Total	
MW-PD-2	Mar-02	<100	<b>345</b>	<100	<100	<b>120</b>	<100	<100	<100	<100	<100	<100	<100	<100	<100	<b>1,235</b>	<b>220</b>	<b>100</b>	<b>115</b>	<100	<100	<100	<100	
MW-PD-6	Mar-02	<100	<b>710</b>	<100	<100	<b>180</b>	<100	<100	<100	<100	<100	<100	<100	<100	<100	<b>1,380</b>	<100	<100	<100	<100	<100	<100	<100	
MW-PD-15	Mar-02	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<b>735</b>	<b>315</b>	<b>250</b>	<b>290</b>	<100	<100	<100	<100	
7AZP-2	Jun-02	<10	<b>264</b>	<10	<10	<b>71</b>	<10	<10	<10	<10	<10	<10	<10	<10	<b>21</b>	<b>529</b>	<b>144</b>	<b>39</b>	<b>48</b>	<10	<b>198</b>	<10	<b>20</b>	
7AZP-4	May-04	<100	<b>410</b>	<100	<100	<100	<100	<b>150</b>	<100	<100	<100	<100	<100	<100	<100	<b>820</b>	NA	<100	<b>140</b>	<100	<b>500</b>	<b>570</b>	<200	
7AZP-2	May-04	<100	<b>480</b>	<100	<100	<b>150</b>	<100	<b>100</b>	<100	<100	<100	<100	<100	<100	<100	<b>920</b>	NA	<100	<100	<100	<b>680</b>	<100	<200	
MW-PD-2	Feb-05	<b>84</b>	<b>280</b>	<b>29</b>	<b>38</b>	<b>110</b>	<1.0	<b>110</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<b>1.2</b>	<b>62</b>	<b>800</b>	<b>150</b>	<b>93</b>	<b>89</b>	<2.5	<b>0.85</b>	<b>0.5</b>	<b>15</b>	
MW-PD-15	Feb-05	<1.0	<2.5	<2.5	<2.5	<2.5	<1.0	<b>8.6</b>	<b>0.8</b>	<b>0.56</b>	<0.5	<b>0.58</b>	<0.5	<b>5.0</b>	<b>120</b>	<b>320</b>	<b>140</b>	<b>140</b>	<b>190</b>	<b>8.6</b>	<b>2.0</b>	<b>5.8</b>	<1.5	
7AZP-4	Feb-05	<b>120</b>	<b>130</b>	<25	<b>38</b>	<b>25</b>	<1.0	<25	<0.5	<0.5	<b>0.81</b>	<b>46</b>	<b>13</b>	<b>6.0</b>	<25	<b>440</b>	<b>66</b>	<b>28</b>	<b>35</b>	<25	<b>150</b>	<b>300</b>	<b>11</b>	
7AZP-2	Feb-05	<b>210</b>	<b>290</b>	<25	<b>66</b>	<b>95</b>	<1.0	<b>66</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<b>7.3</b>	<25	<b>450</b>	<b>93</b>	<b>42</b>	<b>43</b>	<25	<b>520</b>	<b>8.5</b>	<b>21</b>	
MW-PD-2	May-05	<20	<b>450</b>	<50	<50	<b>180</b>	<20	<b>120</b>	<10	<10	<10	<10	<10	<20	<b>110</b>	<b>1,000</b>	<b>190</b>	<b>160</b>	<b>150</b>	<50	<10	<10	<30	
7AZP-4	May-05	<20	<b>260</b>	<50	<50	<50	<20	<b>73</b>	<10	<10	<10	<b>120</b>	<b>23</b>	<20	<50	<b>630</b>	<b>100</b>	<b>56</b>	<b>70</b>	<50	<b>440</b>	<b>690</b>	<30	
7AZP-2	May-05	<20	<b>380</b>	<50	<50	<b>120</b>	<20	<b>78</b>	<10	<10	<10	<10	<10	<20	<50	<b>670</b>	<b>95</b>	<b>58</b>	<b>61</b>	<50	<b>790</b>	<b>13</b>	<b>56</b>	
MW-PD-2	Nov-05	<9.8	<b>430</b>	<24	<24	<b>180</b>	<9.8	<b>120</b>	<4.9	<4.9	<4.9	<4.9	<4.9	<9.8	<b>120</b>	<b>1,100</b>	<b>180</b>	<b>160</b>	<b>170</b>	<24	<4.9	<4.9	<b>29</b>	
MW-PD-6	Nov-05	<9.9	<b>650</b>	<25	<25	<b>210</b>	<9.9	<b>94</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<9.9	<b>45</b>	<b>730</b>	<b>110</b>	<b>59</b>	<b>82</b>	<25	<b>8.1</b>	<b>15</b>	<b>36</b>	
7AZP-4	Nov-05	<9.9	<b>240</b>	<25	<25	<b>57</b>	<9.9	<b>79</b>	<4.9	<4.9	<4.9	<b>220</b>	<b>37</b>	<b>11</b>	<b>37</b>	<b>790</b>	<b>110</b>	<b>59</b>	<b>77</b>	<25	<b>620</b>	<b>970</b>	<b>16</b>	
7AZP-2	Nov-05	<9.9	<b>470</b>	<25	<25	<b>130</b>	<9.9	<b>80</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<9.9	<b>30</b>	<b>820</b>	<b>84</b>	<b>53</b>	<b>62</b>	<25	<b>1,100</b>	<b>13</b>	<15	
MW-PD-2	May-06	<10	<b>380</b>	<25	<25	<b>160</b>	<10	<b>120</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<b>93</b>	<b>810</b>	<b>230</b>	<b>150</b>	<b>170</b>	<25	<5.0	<5.0	<15	
YC-6	May-06	<10	<b>50</b>	<25	<25	<b>33</b>	<10	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<25	<b>570</b>	<b>85</b>	<b>51</b>	<b>26</b>	<25	<5.0	<5.0	<15	
7AZP-4	May-06	<10	<b>270</b>	<25	<25	<b>57</b>	<b>22</b>	<b>73</b>	<5.0	<5.0	<5.0	<b>110</b>	<5.0	<b>12</b>	<b>32</b>	<b>670</b>	<b>130</b>	<b>60</b>	<b>72</b>	<25	<b>310</b>	<b>530</b>	<b>16</b>	
7AZP-2	May-06	<10	<b>370</b>	<25	<25	<b>120</b>	<10	<b>87</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<b>10</b>	<b>29</b>	<b>660</b>	<b>110</b>	<b>57</b>	<b>71</b>	<25	<b>830</b>	<b>17</b>	<b>28</b>	
MW-PD-2	Apr-07	<4.5	<b>290</b>	<9.1	<9.1	<b>110</b>	<4.5	<b>79</b>	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	NA	NA	<4.5	<b>120</b>	<b>110</b>	<4.5	<4.5	<4.5	<b>5</b>	
YC-6	Apr-07	<4.9	<b>53</b>	<9.8	<9.8	<b>33</b>	<4.9	<b>13</b>	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	NA	NA	<4.9	<b>47</b>	<b>17</b>	<4.9	<4.9	<4.9	<b>6.8</b>	
7AZP-4	Apr-07	<5.0	<b>250</b>	<9.9	<9.9	<b>57</b>	<5.0	<b>49</b>	<5.0	<5.0	<5.0	<b>240</b>	<b>62</b>	<b>13</b>	NA	NA	<5	<b>52</b>	<b>49</b>	<5.0	<b>360</b>	<b>820</b>	<b>19</b>	
7AZP-2	Apr-07	<4.6	<b>260</b>	<9.3	<9.3	<b>97</b>	<4.6	<b>70</b>	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<b>8.3</b>	NA	NA	<4.6	<b>39</b>	<b>45</b>	<4.6	<b>630</b>	<b>19</b>	<b>17</b>
MW-PD-14	Oct-07	<50	<b>160</b>	<100	<250	<50	<50	<b>66</b>	<50	<50	<50	<b>78</b>	<50	<50	NA	NA	<50	<50	<b>94</b>	<50	<50	<50	<150	
YC-6	Oct-07	<51	<b>56</b>	<100	<250	<51	<51	<51	<51	<51	<51	<51	<51	<51	NA	NA	<51	<51	<51	<51	<51	<51	<151	
7AZP-4	Oct-07	<50	<b>220</b>	<99	<250	<b>68</b>	<50	<b>73</b>	<50	<50	<50	<b>170</b>	<50	<50	NA	NA	<b>140</b>	<b>61</b>	<b>67</b>	<50	<b>310</b>	<b>660</b>	<149	
7AZP-2	Oct-07	<50	<b>190</b>	<100	<250	<b>84</b>	<50	<b>70</b>	<50	<50	<50	<50	<50	<50	NA	NA	<50	<50	<b>54</b>	<50	<b>480</b>	<50	<150	
7AZP-4 <sup>a</sup>	10/31/07	<49	<b>200</b>	<98	<250	<49	<49	<49	<49	<49	<49	<b>180</b>	<49	<49	NA	NA	<b>110</b>	<49	<49	<49	<b>290</b>	<b>690</b>	<147	
7AZP-4PT <sup>b</sup>	11/2/07	<48	<b>210</b>	<95	<240	<b>62</b>	<48	<b>49</b>	<48	<48	<48	<48	<48	<48	<b>92</b>	NA	NA	<b>130</b>	<b>50</b>	<b>52</b>	<48	<b>150</b>	<b>130</b>	<b>414</b>
MW-PD-14	Apr-08	<25	<b>130</b>	<50	<50	<25	<25	<b>54</b>	<25	<25	<25	<b>89</b>	<25	<25	NA	NA	<b>96</b>	<b>40</b>	<b>64</b>	<25	<b>26</b>	<25	<75	
YC-6	Apr-08	<25	<b>50</b>	<50	<50	<b>31</b>	<25	<25	<25	<25	<25	<25	<25	<25	NA	NA	<b>84</b>	<b>45</b>	<25	<25	<25	<25	<75	
7AZP-4	Apr-08	<25	<b>180</b>	<50	<50	<b>50</b>	<25	<b>38</b>	<25	<25	<25	<b>98</b>	<b>32</b>	<25	NA	NA	<b>96</b>	<b>41</b>	<b>41</b>	<25	<b>140</b>	<b>280</b>	<75	
7AZP-2	Apr-08	<25	<b>170</b>	<49	<49	<b>70</b>	<25	<b>59</b>	<25	<25	<25	<25	<25	<25	NA	NA	<b>83</b>	<b>33</b>	<b>40</b>	<25	<b>440</b>	<25	<74	
MW-PD-14	Oct-08	<49	<b>140</b>	<120	<250	<49	<12	<b>61</b>	<49	<49	<49	<b>94</b>	<49	<49	<49	<b>590</b>	<120	<49	<120	<120	<49	<49	<150	
YC-6	Oct-08	<48	<b>50</b>	<120	<240	<48	<12	<48	<48	<48	<48	<48	<48	<48	<48	<b>710</b>	<120	<48	<120	<120	<48	<48	<140	
7AZP-4	Oct-08	<50	<b>170</b>	<120	<250	<50	<12	<50	<50	<50	<50	<b>69</b>	<50	<50	<50	<b>560</b>	<120	<50	<120	<120	<50	<b>52</b>	<150	
7AZP-2	Oct-08	<50	<b>190</b>	<120	<250	<b>71</b>	<12	<b>59</b>	<50	<50	<50	<50	<50	<50	<50	<b>590</b>	<120	<50	<120	<120	<b>390</b>	<50	<150	
MW-PD-6	Nov-12	<4.9	<b>140</b>	<12	<24	<b>83</b>	<12	<b>25</b>	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<b>5.2</b>	<b>260</b>	<12	<4.9	<b>22</b>	<12	<4.9	<b>16</b>	<15	
YC-6	Nov-12	<5.1	<b>37</b>	<13	<25	<b>18</b>	<13	<b>14</b>	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<b>19</b>	<b>870</b>	<13	<b>56</b>	<b>22</b>	<13	<5.1	<5.1	<15	
7AZP-2	Nov-12	<5.0	<b>170</b>	<12	<25	<b>68</b>	<12	<b>59</b>	<5.0	<5.0	<5.0	<5	<5	<b>5.6</b>	<b>26</b>	<b>540</b>	<12	<b>40</b>	<b>52</b>	<12	<b>190</b>	<b>130</b>	<b>20</b>	
7AZP-4	Nov-12	<5.0	<b>170</b>	<12	<25	<b>39</b>	<12	<b>62</b>	<5.0	<5.0	<5.0	<b>57</b>	<5	<b>13</b>	<b>39</b>	<b>740</b>	<12	<b>67</b>	<b>74</b>	<12	<b>19</b>	<b>15</b>	<b>26</b>	
YC-5	Nov-12	<5.0	<b>160</b>	<12	<25	<5	<12	<b>19</b>	<5.0	<5.0	<5.0	<b>31</b>	<5	<b>5.5</b>	<b>34</b>	<b>430</b>	<b>170</b>	<b>58</b>	<b>120</b>	<12	<b>150</b>	<b>150</b>	<15	

Notes:  
All concentrations are in milligrams per kilogram (or parts per million).  
Boded value indicates concentration is above laboratory reporting limit  
NA = not analyzed  
<sup>a</sup> Sample collected directly prior to pilot air sparge test  
<sup>b</sup> Sample collected directly following pilot air sparge test  
<### = Sample concentration below ### (practical quantitation limit)

**TABLE 7**  
**Volatile Organic Compounds in Soil Samples, 2002**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Depth (ft bgs)	7AZP-2							7AZP-3				7AZP-4	
	<i>n</i> -Butylbenzene	<i>sec</i> -Butylbenzene	4-Isopropyltoluene	<i>n</i> -Propylbenzene	Tetrachloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Ethylbenzene	Tetrachloroethene	Toluene	Xylenes	Tetrachloroethene	Trichloroethene
<b>Residential SRL</b>	240*	220*	--	240*	0.51	52	21	400*	0.51	650*	270	0.51	3
<b>Non-Residential SRL</b>	240*	220*	--	240*	13	170	70	400*	13	650*		13	65
5	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<b>0.098</b>	<b>0.84</b>	<b>0.070</b>	<b>0.74</b>	<b>1.3</b>	<0.050
10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<b>0.062</b>	<0.050
15	<0.10	<0.10	<b>0.12</b>	<0.10	<b>0.59</b>	<b>0.14</b>	<0.10	<0.050	<0.050	<0.050	<0.20	<b>0.064</b>	<0.050
20	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<b>0.33</b>	<0.050	<0.20	<0.050	<0.050
25	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<b>0.094</b>	<0.050
30	<b>0.14</b>	<0.10	<b>0.19</b>	<0.10	<b>5.3</b>	<b>0.3</b>	<b>0.25</b>	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050
35	<b>1.7</b>	<b>2.0</b>	<b>0.90</b>	<b>0.82</b>	<b>17</b>	<b>4.8</b>	<b>2.6</b>	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050
40	<0.25	<0.25	<0.25	<0.25	<b>1.8</b>	<b>0.84</b>	<b>0.39</b>	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050
45	<b>0.55</b>	<b>0.37</b>	<b>0.65</b>	<0.10	<b>3.6</b>	<b>2.3</b>	<b>0.84</b>	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050
50	<b>0.58</b>	<b>0.32</b>	<b>0.95</b>	<0.10	<b>4.4</b>	<b>3.2</b>	<b>1.1</b>	<0.050	<0.050	<0.050	<0.20	<b>0.082</b>	<b>0.054</b>
55	<b>1.3</b>	<b>0.63</b>	<b>1.5</b>	<b>0.11</b>	<b>7.5</b>	<b>5.2</b>	<b>1.5</b>	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050
60	<b>2.3</b>	<b>1.7</b>	<b>2.0</b>	<b>1.0</b>	<b>8.6</b>	<b>6.9</b>	<b>2.1</b>	<0.050	<b>0.064</b>	<0.050	<0.20	<0.050	<0.050
65	<b>2.1</b>	<b>2.0</b>	<b>1.7</b>	<b>0.57</b>	<b>0.74</b>	<b>4.2</b>	<b>1.5</b>	<0.050	<b>0.34</b>	<0.050	<0.20	<0.050	<0.050
70	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050
75	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<b>0.089</b>	<0.050	<0.20	<0.050	<0.050
80	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<b>0.14</b>	<b>0.088</b>
85	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050

Notes:

Results are reported in mg/kg

Results presented are for constituents detected

Bolded value indicates concentration is above laboratory reporting limit

Soil samples were analyzed for volatile organic compounds by Turner Laboratories, Tucson, Arizona, by EPA SW-846 Method 8260

\*Indicates SRL is based on the chemical-saturation level in soil for volatile organic chemicals only

No analytes were reported greater than laboratory detection limits in boring 7AZP-1 or boring 7AZR-1 (collected from 95 to 200 feet bls only).

ft bgs = feet below ground surface

SRL = soil remediation level

<### = Sample concentration below ### (practical quantitation limit)

**TABLE 8**  
**Organic Carbon Content**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Location	Sample Depth (ft bgs)	TOC (mg/kg)	$f_{oc}$ (g/g)
7AZP-1	30	<10	<0.00001
7AZP-2	10	35.9	0.0000359
7AZP-3	35	11.8	0.0000118
7AZP-4	20	21.8	0.0000218
7AZR-1	135	38.7	0.0000387
YC-9	50	230	0.00023
YC-9	75	350	0.00035
YC-9	85	330	0.00033

*Notes:*

*TOC = total organic carbon*

*$f_{oc}$  = fractional organic carbon content*

*Data from Kleinfelder & HGC (2003) and B&R (1998)*

*ft bgs = foot below ground surface*

*mg/kg = milligrams per kilogram*

**TABLE 9**  
**Total TPH, PAH, and Metals Results in Soil for 2006**  
**7th Street and Arizona Avenue WQARF Site**  
**Tucson, Arizona**

Sample ID	METALS							
	ARSENIC	BARIUM	CADMIUM	CHROMIUM	LEAD	SELENIUM	SILVER	MERCURY
SRL	10	15,000 <sup>a</sup>	39 <sup>b</sup>	30 <sup>c</sup>	400	390	390 <sup>d</sup>	23
NRSRL	10	170000 <sup>a</sup>	510 <sup>b</sup>	65 <sup>c</sup>	800	5,100	5100 <sup>d</sup>	310
OC-1 45 FT	0.36	26	0.13	2.2	2	<1.0	<0.53	<0.021
OC-1 55 FT	<1.1	38	0.18	3.6	2.3	0.23	<0.56	<0.022

Notes:

All results in milligrams per kilogram

<sup>a</sup> = Barium and compounds

<sup>b</sup> = Cadmium and compounds

<sup>c</sup> = assumes Cr VI to be conservative; SRL = carcinogenic risk

<sup>d</sup> = Silver and compounds

SRL = Arizona Residential Soil Remediation Level

NRSRL = Arizona Non-Residential Soil Remediation Level

<### = Sample concentration below ### (practical quantitation limit)

Sample ID	TOTAL PETROLEUM HYDROCARBONS AND POLYCYCLIC AROMATIC HYDROCARBONS																					
	TPH (GC/FID) LOW FRACTION	FUEL, DIESEL RANGE (C10-C22)	FUEL, DIESEL RANGE (C22-C32)	1-METHYLNAPHTHALENE	2-METHYLNAPHTHALENE	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BENZO(a)ANTHRACENE	BENZO(a)PYRENE	BENZO(b)FLUORANTHENE	BENZO(ghi)PERYLENE (1,12-BENZOPERYLENE)	BENZO(k)FLUORANTHENE	CHRYSENE	DIBENZ(a,h)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO (1,2,3-c,d) PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	
SRL	NA	NA	NA	NA	NA	3,900	NA	20,000	6.1	0.61	6.1	NA	61	610	0.61	2,600	2,600	6.1	2,600	NA	2,000	
NRSRL	NA	NA	NA	NA	NA	29,000	NA	240,000	21	2.1	21	NA	210	2,000	2.1	22,000	26,000	21	190	NA	29,000	
OC-1 5 FT	<0.10	<32.0	<52.0	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
OC-1 10 FT	<0.11	<32.0	<54.0	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	
OC-1 15 FT	<0.11	<33.0	<55.0	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	
OC-1 20 FT	<0.11	<33.0	<55.0	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	
OC-1 25 FT	<0.10	<32.0	<53.0	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
OC-1 30 FT	<0.11	<34.0	<56.0	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	
OC-1 35 FT	<0.11	<32.0	<54.0	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	
OC-1 40 FT	<0.10	<32.0	<53.0	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
OC-1 45 FT	<0.10	<32.0	<53.0	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
OC-1 50 FT	<0.11	<32.0	<53.0	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
OC-1 55 FT	<0.11	<33.0	<56.0	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	
OC-1 60 FT	<0.11	<32.0	<54.0	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	

Notes:

All results in milligrams per kilogram

SRL = Arizona Residential Soil Remediation Level

NRSRL = Arizona Non-Residential Soil Remediation Level

NA = Not applicable

<### = Sample concentration below ### (practical quantitation limit)

**TABLE 10**  
**Passive Soil Gas Analytical Results, 2002**  
**7th Street and Arizona Avenue WQARF Site**  
**Tucson, Arizona**

Sample ID	Sample ID		Total VOCs	Tetrachlorethene	Trichoroethene	cis-1,2-dichloroethene	Chloroform	1,3-dichlorobenzene	1,2-dichlorobenzene	1,4-dichlorobenzene	trans-1,2-dichloroethene	1,1,2-trichloroethane	1,1,2,2-tetrachloroethane	Chlorobenzene	1,1-dichloroethane	1,1,1-trichloroethane	1,2-dichloroethane	Carbon tetrachloride	1,1,1,2-tetrachloroethane	1,1-dichloroethene	
	Northing (ft)	Easting (ft)																			MDL=
SG	196	44	98.01	96.19	1.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	196	88	119.22	114.98	4.09	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	196	132	222.21	206.03	13.52	2.58	0.09	ND	ND	ND	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	160	176	321.76	304.73	15.03	1.92	0.08	ND	ND	ND	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	160	132	82.29	77.34	3.26	1.66	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	160	88	5.05	4.68	0.17	0.16	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	160	44	87.16	84.32	2.53	0.19	0.06	0.02	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	160	0	223.40	221.66	1.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	120	0	51.98	51.54	0.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	120	44	275.05	266.69	7.42	0.45	0.18	0.13	0.16	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	120	88	174.74	164.49	9.55	0.27	0.13	ND	ND	ND	0.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	120	132	59.97	51.06	7.66	1.19	0.05	ND	ND	ND	BDL	BDL	BDL	ND	ND	ND	ND	ND	ND	ND	ND
SG	120	176	80.62	76.92	3.62	ND	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	80	0	270.61	267.50	3.12	ND	ND	ND	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	80	44	648.84	633.96	13.71	0.91	0.15	0.05	0.05	0.02	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	80	88	749.58	702.85	43.60	2.73	0.32	0.04	0.03	0.01	BDL	BDL	BDL	ND	ND	ND	ND	ND	ND	ND	ND
SG	80	132	223.61	198.59	21.84	2.08	1.05	0.01	0.05	BDL	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	80	176	188.45	168.54	19.51	0.19	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	40	176	157.99	157.14	0.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	40	132	363.02	356.60	6.05	0.03	0.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	40	88	685.63	653.90	31.05	0.51	0.17	ND	ND	ND	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	40	44	241.05	238.88	2.06	ND	0.09	0.01	0.01	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	40	0	455.53	450.27	5.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	6.5	44	193.23	192.30	0.93	ND	ND	ND	ND	ND	ND	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	6.5	88	426.07	422.07	4.90	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SG	6.4	132	243.56	240.64	2.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

*Notes:*

*MDL = Method Detection Limit*

*BDL = Below MDL but Detected*

*ND = Not Detected*

*µg = micrograms (per sorber), reported for compounds*

*VOC = Volatile Organic Compound*

*Data from Kleinfelder and Hydro Geo Chem (2003)*

*All VOCs reported in µg*

TABLE 11  
Soil Vapor VOC Concentrations, 2002 - 2012  
7th Street and Arizona Avenue WQARF Site, Tucson, Arizona

Well/Probe	Date	Acetone	Benzene	Bromochloromethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cyclohexane	Dibromochloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	cis-1,2-Dichloroethane	trans-1,2-Dichloroethane	Ethyl acetate	Ethylbenzene	4-Ethyltoluene	Heptane	Hexane	Isopropylbenzene	Methyl tert-butyl ether	Methylcyclohexane	Naphthalene	Nonane	Octane	2-Propanol	Propene	n-Propylbenzene	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,1,2-Trichlorofluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2,2,4-Trimethylpentane	Vinyl chloride	m,p-Xylene	o-Xylene
7AZP-1	5/7/2002	NA	320	NA	NA	NA	<24	2,000	<16	NA	NA	<46	84	62	<76	260	260,000	NA	NA	<33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<33	99	1,200,000	NA	30	NA	260,000	<43	110	<38	<38	NA	120	<33	<33	
7AZP-1-15	5/7/2002	NA	140	NA	NA	NA	<28	280	<18	NA	NA	<53	<53	<53	30	<18	9,100	NA	NA	<38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<37	<60	210,000	NA	<33	NA	26,000	<49	<67	<43	<43	NA	<11	<38	<38
7AZP-1-30	5/7/2002	NA	180	NA	NA	NA	<26	880	<17	NA	NA	<49	<49	<49	<81	42	32,000	NA	NA	<36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<35	<56	540,000	NA	<31	NA	57,000	<46	<63	<40	<40	NA	<10	<36	<36
7AZP-1-45	5/7/2002	NA	320	NA	NA	NA	<26	5,900	<17	NA	NA	<49	<49	<49	29	160	130,000	NA	NA	<35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<35	<56	1,110,000	NA	<31	NA	230,000	<46	<62	<40	<40	NA	15	<35	<35
7AZP-2	5/8/2002	NA	100	NA	NA	NA	<120	2,500	<79	NA	NA	<260	<260	<260	<380	<77	120	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	860,000	NA	230	NA	12,000	<240	<330	21,000	11,000	NA	<49	6,900	2,800	
7AZP-2-15	5/8/2002	NA	<61	NA	NA	NA	<121	<100	<79	NA	NA	<260	<260	<260	<379	<78	<76	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	290,000	NA	<144	NA	293	<240	<330	1,800	2,300	NA	<49	194	<180	
7AZP-2-30	5/8/2002	NA	<94	NA	NA	NA	<122	200	<80	NA	NA	<260	<260	<260	<383	<78	<77	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	470,000	NA	470	NA	1,500	<240	<330	980	1,600	NA	<50	760	270	
7AZP-2-45	5/8/2002	NA	<230	NA	NA	NA	<120	1,100	<80	NA	NA	<260	<260	<260	<390	<79	610	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	1,110,000	NA	1,200	NA	7,000	<240	<330	11,000	5,400	NA	<50	5,800	2,100	
7AZP-3	5/7/2002	NA	32	NA	NA	NA	<25	1,400	<17	NA	NA	140	280	170	<80	97	11,000	NA	NA	<35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<35	<56	6,510,000	NA	<31	NA	305,000	<46	<62	<40	<40	NA	<10	37	25	
7AZP-3-15	5/7/2002	NA	<63	NA	NA	NA	<124	<100	<82	NA	NA	<260	<260	<260	<391	<80	<78	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	480,000	NA	<149	NA	3,600	<240	<330	<210	<210	NA	<51	<180	<180	
7AZP-3-30	5/7/2002	NA	<63	NA	NA	NA	<120	560	<81	NA	NA	<260	<260	<260	<390	<80	3,000	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	2,740,000	NA	<149	NA	88,000	<240	<330	<210	<210	NA	<50	<180	<180	
7AZP-3-45	5/7/2002	NA	23	NA	NA	NA	<24	1,200	<16	NA	NA	68	110	68	<76	36	7,400	NA	NA	<34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<33	<53	4,000,000	NA	50	NA	205,000	<43	<59	<38	<38	NA	<10	<34	<34	
7AZP-4	5/7/2002	NA	<66	NA	NA	NA	<130	17,000	<85	NA	NA	300	520	520	<409	250	780,000	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	1,850,000	NA	<156	NA	4,340,000	<240	<330	1,600	440	NA	31	<180	<180	
7AZP-4-15	5/7/2002	NA	<65	NA	NA	NA	<129	1,800	<85	NA	NA	<260	<260	<260	<405	<83	7,800	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	5,550,000	NA	<154	NA	160,000	<240	<330	<210	<210	NA	<52	<180	<180	
7AZP-4-30	5/7/2002	NA	<65	NA	NA	NA	<128	14,000	<84	NA	NA	320	380	280	<402	76	65,000	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	7,400,000	NA	<153	NA	880,000	<240	<330	<210	<210	NA	<52	<180	<180	
7AZP-4-45	5/7/2002	NA	<66	NA	NA	NA	<130	22,000	<85	NA	NA	260	280	240	<408	110	78,000	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	7,330,000	NA	<156	NA	1,300,000	<240	<330	<210	<210	NA	<53	<180	<180	
7AZP-1	6/4/2002	NA	<53	NA	NA	NA	<105	1,400	<69	NA	NA	<260	<260	<260	<329	200	290,000	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	2,100,000	NA	<125	NA	230,000	<240	180	<210	<210	NA	110	<180	<180	
7AZP-1-15	6/4/2002	NA	<64	NA	NA	NA	<130	270	<83	NA	NA	<260	<260	<260	<399	<82	8,200	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	410,000	NA	<152	NA	20,000	<240	<330	<210	<210	NA	<52	<180	<180	
7AZP-1-30	6/4/2002	NA	<64	NA	NA	NA	<126	1,200	<83	NA	NA	<260	<260	<260	<397	<81	50,000	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	760,000	NA	<151	NA	130,000	<240	<330	<210	<210	NA	<51	<180	<180	
7AZP-1-45	6/4/2002	NA	<63	NA	NA	NA	<120	5,900	<81	NA	NA	<260	<260	<260	<389	200	160,000	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	3,000,000	NA	<150	NA	320,000	<240	<330	<210	<210	NA	33	<180	<180	
7AZP-2	6/4/2002	NA	130	NA	NA	NA	<130	2,800	<83	NA	NA	<260	<260	<260	<400	<81	210	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	2,100,000	NA	390	NA	18,000	<240	<330	35,000	5,900	NA	<51	3,700	1,200	
7AZP-2-15	6/4/2002	NA	<170	NA	NA	NA	<330	<250	<220	NA	NA	<630	<630	<630	<1000	<210	<210	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1300	<720	580,000	NA	<390	NA	<280	<590	<800	1,600	1,200	NA	<130	270	<450	
7AZP-2-30	6/4/2002	NA	180	NA	NA	NA	<330	350	<220	NA	NA	<630	<630	<630	<1000	<210	<210	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1300	<720	740,000	NA	560	NA	1,800	<590	<800	830	710	NA	<130	880	310	
7AZP-2-45	6/4/2002	NA	460	NA	NA	NA	<330	2,000	<220	NA	NA	<630	<630	<630	<1000	<210	<210	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1300	<720	14,000,000	NA	1,400	NA	10,000	<590	<800	20,000	6,400	NA	<130	5,200	1,500	
7AZP-3	6/4/2002	NA	<65	NA	NA	NA	<128	1,400	<84	NA	NA	<260	<260	<260	<403	110	12,000	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	7,200,000	NA	<150	NA	320,000	<240	<330	<210	<210	NA	<52	<180	<180	
7AZP-3-15	6/4/2002	NA	<65	NA	NA	NA	<130	<100	<83	NA	NA	<260	<260	<260	<400	<82	95	NA	NA	<180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<180	<290	1,000,000	NA	<152	NA	7,600	<240	<330	<210	<210	NA	<52	<180	<180	
7AZP-3-30	6/4/2002	NA	<65	NA	NA	NA	<127	530	<83	NA	NA	<260	<260	<260	<400	<82																																

TABLE 11  
Soil Vapor VOC Concentrations, 2002 - 2012  
7th Street and Arizona Avenue WQARF Site, Tucson, Arizona

Well/ Probe	Date	Acetone	Benzene	Bromochloromethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cyclohexane	Dibromochloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	cis-1,2-Dichloroethane	trans-1,2-Dichloroethane	Ethyl acetate	Ethylbenzene	4-Ethyltoluene	Heptane	Hexane	Isopropylbenzene	Methyl tert-butyl ether	Methylcyclohexane	Naphthalene	Nonane	Octane	2-Propanol	Propene	n-Propylbenzene	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,1,2-Trichlorotrifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2,2,4-Trimethylpentane	Vinyl chloride	m,p-Xylene	o-Xylene		
7AZP-1	1/3/2006	NA	<105	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<221	299,000	4,000	NA	<237	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,110,000	NA	<206	NA	234,000	NA	NA	NA	NA	NA	NA	NA	70	<237	<237
7AZP-2	1/3/2006	NA	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<221	230	<216	NA	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	730,000	NA	200	NA	18,000	NA	NA	NA	NA	NA	NA	NA	<140	4,300	3,100
7AZP-3	1/3/2006	NA	195	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	69,000	2,300	NA	<221	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,700,000	NA	<206	NA	586,000	NA	NA	NA	NA	NA	NA	NA	<140	<237	<237	
7AZP-4	1/3/2006	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<221	822,000	37,000	NA	<237	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,480,000	NA	<206	NA	2,580,000	NA	NA	NA	NA	NA	NA	NA	<140	<237	270	
YC-5	1/3/2006	NA	<105	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<221	19,000	2,700	NA	<237	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,550,000	NA	<206	NA	2,810,000	NA	NA	NA	NA	NA	NA	NA	<140	<237	<237	
MW-PD-14	1/5/2006	NA	320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<221	24,000	4,800	NA	<237	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,140,000	NA	<206	NA	369,000	NA	NA	NA	NA	NA	NA	NA	<140	<237	<237	
7AZP-1	6/13/2006	<59111	<7950	<16671	<14678	NA	<7749	<15655	<12150	<5139	<8565	<21283	<15021	<15021	<14961	<12306	<10112	229,000	<9867	<9004	<10805	<12232	<10198	<8771	NA	<18016	NA	NA	NA	NA	NA	NA	NA	607,584	<29356	<9378	<74167	182,000	<13981	<19148	<12232	<12232	<11626	<6387	<21611	<10805				
7AZP-2	6/13/2006	<59111	<7950	<16671	<14678	NA	<7749	<15655	<12150	<5139	<8565	<21283	<15021	<15021	<14961	<12306	<10112	<9867	<9867	<9004	<10805	<12232	<10198	<8771	NA	<18016	NA	NA	NA	NA	NA	NA	11,900	<17152	330,796	<29356	29,300	<74167	15,500	<13981	<19148	<12232	<12232	<11626	<6387	<21611	<10805			
7AZP-3	6/13/2006	<236444	<31799	<66683	<58712	NA	<30996	<62620	<48600	<20554	<34262	<85134	<60086	<60086	<59844	<49222	<40450	710,000	<39468	<36015	<43222	<48929	<40791	<35084	NA	<72062	NA	NA	NA	NA	NA	NA	NA	1,687,734	<117424	<37510	<296669	262,000	<55923	<76591	<48929	<48929	<46503	<25547	<86444	<43222				
7AZP-4	6/13/2006	<236444	<31799	<66683	<58712	NA	<30996	<62620	<48600	<20554	<34262	<85134	<60086	<60086	<59844	<49222	<40450	710,000	<39468	<36015	<43222	<48929	<40791	<35084	NA	<72062	NA	NA	NA	NA	NA	NA	NA	742,603	<117424	<37510	<296669	2,460,000	<55923	<76591	<48929	<48929	<46503	<25547	<86444	<43222				
YC-5	6/13/2006	<236444	<31799	<66683	<58712	NA	<30996	<62620	<48600	<20554	<34262	<85134	<60086	<60086	<59844	<49222	<40450	67,100	<39468	<36015	<43222	<48929	<40791	<35084	NA	<72062	NA	NA	NA	NA	NA	NA	NA	1,147,659	<117424	<37510	<296669	2,140,000	<55923	<76591	<48929	<48929	<46503	<25547	<86444	<43222				
7AZP-1	9/27/2006	<59111	<7950	<16671	<14678	NA	<7749	<15655	<12150	<5139	<8565	<21283	<15021	<15021	<14961	<12306	<10112	138,000	<9867	<9004	<10805	<12232	<10198	<8771	NA	<18016	NA	NA	NA	NA	NA	NA	NA	1,282,678	<29356	<9378	<74167	134,000	<13981	<19148	<12232	<12232	<11626	<6387	<21611	<10805				
7AZP-2	9/27/2006	<59111	<7950	<16671	<14678	NA	<7749	<15655	<12150	<5139	<8565	<21283	<15021	<15021	<14961	<12306	<10112	11,800	<9867	<9004	<10805	<12232	<10198	<8771	NA	<18016	NA	NA	NA	NA	NA	NA	NA	492,818	<29356	<9378	<74167	47,100	<13981	<19148	<12232	<12232	<11626	<6387	<21611	<10805				
7AZP-3	9/27/2006	<236444	<31799	<66683	<58712	NA	<30996	<62620	<48600	<20554	<34262	<85134	<60086	<60086	<59844	<49222	<40450	71,000	<39468	<36015	<43222	<48929	<40791	<35084	NA	<72062	NA	NA	NA	NA	NA	NA	NA	945,131	<117424	<37510	<296669	257,000	<55923	<76591	<48929	<48929	<46503	<25547	<86444	<43222				
7AZP-4	9/27/2006	<236444	<31799	<66683	<58712	NA	<30996	<62620	<48600	<20554	<34262	<85134	<60086	<60086	<59844	<49222	<40450	868,000	55,300	<36015	<43222	<48929	<40791	<35084	NA	<72062	NA	NA	NA	NA	NA	NA	NA	3,037,921	<117424	<37510	<296669	2,300,000	<55923	<76591	88,100	<48929	<46503	<25547	<86444	<43222				
MW-PD-14	9/27/2006	<236444	<31799	<66683	<58712	NA	<30996	<62620	<48600	<20554	<34262	<85134	<60086	<60086	<59844	<49222	<40450	39,500	<39468	<36015	<43222	<48929	<40791	<35084	NA	<72062	NA	NA	NA	NA	NA	NA	NA	1,417,697	<117424	<37510	<296669	123,000	<55923	<76591	<48929	<48929	<46503	<25547	<86444	<43222				
YC-5	9/27/2006	<118222	<15899	<33341	<29356	NA	<15498	<31310	<24300	<10277	<17131	<42567	<30043	<30043	<29922	<24611	<20225	<19734	<18007	<21611	<24465	<20396	<17542	NA	<36031	NA	NA	NA	NA	NA	NA	NA	NA	1,080,150	<58712	<18755	<148334	29,400	<27962	<38296	<24465	<24465	<23252	<12773	<43222	<21611				
7AZP-1	1/30/2007	<23644	<3180	<6668	<5871	NA	<3100	<6262	<4860	<2055	<3426	<8513	<6009	<6009	<5984	<4922	<4045	51,300	<3947	<3601	<4322	<4893	<4079	<3508	NA	<7206	NA	NA	NA	NA	NA	NA	NA	405,056	<11742	<3751	<29667	39,600	<5592	<7659	<4893	<4893	<4650	<2555	<8644	<4322				
7AZP-2	1/30/2007	<23644	<3180	<6668	<5871	NA	<3100	<6262	<4860	<2055	<3426	<8513	<6009	<6009	<5984	<4922	<4045	<3947	<3947	<3601	<4322	11,300	<4079	<3508	NA	<7206	NA	NA	NA	NA	NA	NA	NA	438,811	<11742	<3751	<29667	<5349	<5592	<7659	14,200	8,810	<4650	<2555	<8644	<4322				
7AZP-3	1/30/2007	<11822	<1590	<3334	<2936	NA	<1550	<3131	<2430	<1028	<1713	<4257	<3004	<3004	<2992	<2461	<2022	<1973	<1801	<2161	<2446	<2040	<1754	NA	<3603	NA	NA	NA	NA	NA	NA	NA	NA	202,528	<5871	<1876	<14833	6,420	<2796	<3830	<2446	<2446	<2325	<1277	<4322	<2161				
7AZP-4	1/30/2007	<23644	<3180	<6668	<5871	NA	<3100	<6262	<4860	<2055	<3426	<8513	<6009	<6009	<5984	<4922	<4045	245,000	24,500	<3601	<4322	<4893	<4079	<3508	NA	<7206	NA	NA	NA	NA	NA	NA	NA	465,815	<11742	<3751	<29667	449,000	<5592	<7659	8,320	<4893	<4650	<2555	<8644	<4322				
MW-PD-14	1/30/2007	<23644	<3180	<6668	<5871	NA	<3100	<6262	<4860	<2055	<3426	<8513	<6009	<6009	<5984	<4922	<4045	18,900	7,800	<3601	<4322	<4893	<4079	<3508	NA	<7206	NA	NA	NA	NA	NA	NA	NA	391,554	<11742	<3751	<29667	13,900	<5592	<7659	4,890	<4893	14,900	<2555	<8644	<4322				
YC-5	1/30/2007	16,600	<795	<1667	<1468	NA	<775	<1566	<1215	<514	<857	<2128	<1502	<1502	<1496	<1231	<1011	1,820	<987	<900	<1081	<1223	<1020	<877	NA	<1802																								

**TABLE 11**  
**Soil Vapor VOC Concentrations, 2002 - 2012**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Well/ Probe	Date	Acetone	Benzene	Bromochloromethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cyclohexane	Dibromochloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	cis-1,2-Dichloroethane	trans-1,2-Dichloroethane	Ethyl acetate	Ethylbenzene	4-Ethyltoluene	Heptane	Hexane	Isopropylbenzene	Methyl tert-butyl ether	Methylcyclohexane	Naphthalene	Nonane	Octane	2-Propanol	Propene	n-Propylbenzene	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,1,2-Trichlorofluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2,2,4-Trimethylpentane	Vinyl chloride	m,p-Xylene	o-Xylene
7AZP-3-45	9/15/2008	<230	<31.0	<65	<b>210</b>	NA	<30.2	<61	<47.4	<20.0	<33.4	<82.6	<58.3	<58.3	<58.3	<48.0	<39.3	<38.5	<38.5	<35.0	<42.1	<47.7	<39.8	<34.2	NA	<68.5	NA	NA	NA	NA	<95.9	<16.7	NA	<41	<66.6	<b>11,000</b>	<b>1,700</b>	<36.6	<289	<b>520</b>	<55	NA	<47.7	<47.7	<45.3	<24.8	<82.5	<42.1
7AZP-4	9/15/2008	<2380	<319	<670	<590	NA	<311	<629	<b>730</b>	<206	<344	<852	<601	<601	<601	<495	<405	<b>18,000</b>	<b>6,700</b>	<360	<434	<492	<410	<352	NA	<721	NA	NA	NA	NA	<983	<172	NA	<426	<687	<b>48,000</b>	<1180	<377	<400	<b>45,000</b>	<562	NA	<492	<492	<467	<256	<868	<434
7AZP-4-15	9/15/2008	<5940	<799	<1680	<b>1,700</b>	NA	<778	<1570	<1220	<516	<861	<2130	<1500	<1500	<1240	<1010	<991	<991	<901	<1090	<1230	<1020	<881	NA	<1800	NA	NA	NA	NA	<2460	<430	NA	<1060	<1720	<b>220,000</b>	<2950	<942	<b>2,000</b>	<b>1,500</b>	<1400	NA	<2200	<1230	<1170	<639	<2170	<1090	
7AZP-4-30	9/15/2008	<5940	<799	<1680	<1470	NA	<778	<1570	<1220	<516	<861	<2130	<1500	<1500	<1240	<1010	<991	<991	<901	<1090	<1230	<1020	<881	NA	<1800	NA	NA	NA	NA	<2460	<430	NA	<1060	<1720	<b>310,000</b>	<2950	<942	<7420	<b>2,100</b>	<1400	NA	<1230	<1230	<1170	<639	<2170	<1090	
7AZP-4-45	9/15/2008	<2380	<319	<670	<b>890</b>	NA	<311	<629	<488	<206	<344	<852	<601	<601	<601	<495	<405	<396	<396	<360	<434	<492	<410	<352	NA	<721	NA	NA	NA	NA	<b>5,700</b>	<172	NA	<426	<687	<b>55,000</b>	<1180	<377	<2970	<b>3,400</b>	<562	NA	<492	<492	<467	<256	<868	<434
MW-PD-14	9/15/2008	<2380	<319	<670	<590	NA	<311	<629	<488	<206	<344	<852	<601	<601	<601	<495	<405	<b>8,300</b>	<b>2,000</b>	<360	<434	<492	<410	<352	NA	<721	NA	NA	NA	NA	<983	<172	NA	<426	<687	<b>22,000</b>	<1180	<377	<2970	<b>540</b>	<562	NA	<492	<492	<467	<256	<868	<434
YC-5	9/15/2008	<11900	<1600	<3350	<2950	NA	<1,560	<3150	<2440	<1030	<1720	<4260	<3010	<3010	<2470	<2020	<b>3,700</b>	<1980	<1800	<1800	<2170	<2460	<2050	<1760	NA	<3610	NA	NA	NA	NA	<4920	<861	NA	<2130	<3430	<b>160,000</b>	<1880	<1880	<14800	<b>4,900</b>	<2810	NA	<2460	<2460	<2340	<1280	<4340	<2170
7AZP-1	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<b>1,470</b>	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>17,600</b>	<1180	<377	<2970	<b>1,990</b>	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-1-15	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<396	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<490	<172	NA	<426	<687	<b>19,700</b>	<1180	<377	<2970	<537	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-1-30	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<396	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>19,000</b>	<1180	<377	<2970	<b>591</b>	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-1-45	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<396	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>16,300</b>	<1180	<377	<2970	<b>752</b>	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-3	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<396	<b>475</b>	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>25,100</b>	<1180	<377	<2970	<b>1,070</b>	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-3-15	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<396	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>35,900</b>	<1180	<377	<2970	<537	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-3-30	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<396	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>17,000</b>	<1180	<377	<2970	<537	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-3-45	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<396	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>13,600</b>	<1180	<377	<2970	<b>644</b>	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-8-15	10/20/2011	<59.5	<7.98	<17	<b>257</b>	NA	<7.78	<15.7	<12.2	<10.4	<8.60	<21.3	<15.0	<15.0	<15.0	<24.8	<10.1	<9.9	<9.9	<9.0	<10.9	<12.3	<10.3	<8.80	NA	<18.1	NA	NA	NA	NA	<24.5	<4.30	NA	<11	<17.2	<b>35.9</b>	<b>41.3</b>	<9.43	<74.2	<13.4	<14	<19.2	<12.3	<12.3	<11.7	<6.4	<21.7	<10.9
7AZP-8-30	10/20/2011	<119	<16.0	<34	<b>708</b>	NA	<15.6	<31.5	<24.4	<20.7	<17.2	<42.6	<30.1	<30.1	<30.1	<49.5	<20.3	<19.8	<19.8	<18.0	<21.7	<24.6	<20.5	<17.6	NA	<36.1	NA	NA	NA	NA	<49.0	<8.60	NA	<21	<34.4	<b>305</b>	<59.0	<18.9	<148	<26.9	<28	<38.3	<24.6	<24.6	<b>60.6</b>	<12.8	<43.4	<21.7
7AZP-8-45	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<396	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>12,900</b>	<1180	<377	<2970	<537	<562	<766	<492	<492	<466	<256	<868	<434
MW-PD-14	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<b>413</b>	<852	<601	<601	<601	<990	<405	<b>19,800</b>	<b>5,540</b>	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>25,800</b>	<1180	<377	<2970	<b>5,160</b>	<562	<766	<492	<492	<466	<256	<868	<434
YC-5	10/20/2011	<2380	<319	<670	<1180	NA	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<b>3,090</b>	<396	<360	<434	<492	<410	<352	NA	<722	NA	NA	NA	NA	<980	<172	NA	<426	<687	<b>17,600</b>	<1180	<377	<2970	<b>3,170</b>	<562	<766	<492	<492	<466	<256	<868	<434
7AZP-2	11/1/2011	<11900	<1600	<3350	<5900	NA	<1560	<3150	<2440	<1070	<1720	<4260	<3010	<3010	<3010	<2480	<2030	<1980	<1800	<1800	<2170	<2460	<2050	<1760	NA	<3610	NA	NA	NA	NA	<4900	<860	NA	<2130	<3440	<b>5,910</b>	<5900	<1890	<14800	<b>88,100</b>	<2810	<3830	<b>4,920</b>	<b>2,900</b>	<2330	<1280	<4340	<2170
7AZP-2-15	11/1/2011	<1190	<160	<335	<590	NA	<156	<315	<244	<207	<172	<426	<301	<301	<301	<495	<2																															

**TABLE 12**  
**Soil Gas Investigation VOC Concentrations, 2013**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Well / Probe	Date	Acetone	Benzene	Bromodichloromethane	2-Butanone (MEK)	1,3-Butadiene	sec-Butylbenzene	Carbon Disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cyclohexane	Dibromochloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethyl acetate	Ethylbenzene	4-Ethyltoluene	Heptane	Hexane	Isopropylbenzene	Methyl tert-butyl ether
SG-1-5'	5/1/2013	<b>1,130</b>	<b>12.3</b>	<16.8	<b>44.7</b>	<5.53	<27.5	<7.78	<15.7	<12.2	<10.4	<8.6	<21.3	<15.0	<15.0	<15.0	<24.8	<10.1	<9.9	<9.9	<9.0	<b>135</b>	<24.6	<10.3	<b>17.2</b>	<24.6	<36.1
SG-2-5'	5/1/2013	<b>280</b>	<31.9	<67.0	<118	<22.1	<110	<31.1	<62.9	<48.8	<41.4	<34.4	<85.2	<60.1	<60.1	<60.1	<99.0	<40.5	<39.6	<39.6	<36.0	<43.4	<98.4	<41.0	<35.2	<98.4	<144
SG-3-5'	5/1/2013	<b>325</b>	<b>38.9</b>	<67.0	<118	<b>25.6</b>	<110	<31.1	<62.9	<48.8	<41.4	<34.4	<85.2	<60.1	<60.1	<60.1	<99.0	<40.5	<39.6	<39.6	<36.0	<43.3	<98.4	<41.0	<35.2	<98.4	<144
SG-4-5'	5/1/2013	<b>262</b>	<b>17.5</b>	<33.5	<59.0	<b>36.0</b>	<54.9	<15.6	<31.5	<24.4	<20.7	<17.2	<42.6	<30.1	<30.1	<30.1	<49.5	<20.3	<19.8	<19.8	<18.0	<21.7	<49.2	<20.5	<b>22.2</b>	<49.2	<72.2
SG-5-5'	5/1/2013	<238	<31.9	<67.0	<118	<22.1	<110	<31.1	<62.9	<48.8	<41.4	<34.4	<85.2	<60.1	<60.1	<60.1	<99.0	<40.5	<b>207</b>	<39.6	<36.0	<43.4	<98.4	<41.0	<35.2	<98.4	<144
SG-6-5'	5/1/2013	<11900	<1600	<3350	<b>12,600</b>	<1110	<5490	<1560	<3150	<2440	<2070	<1720	<4260	<3010	<3010	<3010	<4950	<2030	<1980	<1980	<1800	<2170	<4920	<2050	<1760	<4920	<7220
SG-7-4'	5/1/2013	<238	<31.9	<67.0	<118	<22.1	<110	<31.1	<62.9	<48.8	<41.4	<34.4	<85.2	<60.1	<60.1	<60.1	<99.0	<40.5	<39.6	<39.6	<36.0	<43.4	<98.4	<41.0	<35.2	<98.4	<144
SG-8-5'	5/1/2013	<238	<31.9	<67.0	<118	<22.1	<110	<31.1	<62.9	<48.8	<41.4	<34.4	<85.2	<60.1	<60.1	<60.1	<99.0	<40.5	<39.6	<39.6	<36.0	<43.4	<98.4	<41.0	<35.2	<98.4	<144
SG-9-4'	5/1/2013	<238	<31.9	<67.0	<118	<22.1	<110	<31.1	<62.9	<48.8	<41.4	<34.4	<85.2	<60.1	<60.1	<60.1	<99.0	<40.5	<39.6	<39.6	<36.0	<43.4	<98.4	<41.0	<35.2	<98.4	<144
SG-10-5'	5/1/2013	<1190	<160	<335	<590	<111	<549	<156	<315	<244	<207	<172	<426	<301	<301	<301	<495	<203	<198	<198	<180	<217	<492	<205	<176	<492	<722
SG-11-5'	5/1/2013	<119	<16.0	<33.5	<59.0	<11.1	<54.9	<15.6	<31.5	<24.4	<20.7	<17.2	<42.6	<30.1	<30.1	<30.1	<49.5	<20.3	<19.8	<19.8	<18.0	<21.7	<49.2	<20.5	<17.6	<49.2	<72.2
SG-5-10'	5/1/2013	<2380	<319	<670	<1180	<221	<1100	<311	<629	<488	<414	<344	<852	<601	<601	<601	<990	<405	<b>491</b>	<396	<360	<434	<984	<410	<352	<984	<1440

Notes:

This table presents an abridged list of EPA Method TO-15 compounds; compounds not included were below the reporting limit in all samples.

Results reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )

Bolded value indicates concentration is above laboratory reporting limit

<### = Sample concentration below ### (practical quantitation limit)

**TABLE 12**  
**Soil Gas Investigation VOC Concentrations, 2013**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Well / Probe	Date	Methylcyclohexane	Naphthalene	Nonane	Octane	2-Propanol	Propene	n-Propylbenzene	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	Trichlorotrifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2,2,4-Trimethylpentane	Vinyl chloride	m & p-Xylene	o-Xylene
SG-1-5'	5/1/2013	<20.1	<52.4	<b>89.6</b>	<b>46.7</b>	<24.5	<b>88.4</b>	<24.6	<10.7	<17.2	<b>886</b>	<29.5	<b>123</b>	<74.2	<13.4	<14.1	<19.2	<12.3	<12.3	<11.7	<6.4	<b>372</b>	<b>103</b>
SG-2-5'	5/1/2013	<80.4	<210	<105	<93.4	<98.0	<b>82.2</b>	<98.4	<42.6	<68.7	<b>2,410</b>	<118	<37.7	<297	<53.7	<56.2	<76.6	<49.2	<49.2	<46.6	<25.6	<86.8	<43.4
SG-3-5'	5/1/2013	<80.4	<210	<105	<93.4	<98.0	<b>329</b>	<98.4	<42.6	<68.7	<b>2,260</b>	<118	<b>66.4</b>	<297	<53.7	<56.2	<76.6	<49.2	<49.2	<46.6	<25.6	<86.8	<43.4
SG-4-5'	5/1/2013	<40.2	<105	<52.4	<46.7	<49.0	<b>258</b>	<49.2	<21.3	<34.4	<b>3,030</b>	<59.0	<b>36.2</b>	<148	<b>43.0</b>	<28.1	<38.3	<24.6	<24.6	<23.3	<12.8	<43.4	<21.7
SG-5-5'	5/1/2013	<80.4	<210	<105	<93.4	<98.0	<b>118</b>	<98.4	<42.6	<68.7	<b>12,300</b>	<118	<37.7	<297	<b>1,890</b>	<56.2	<76.6	<49.2	<49.2	<46.6	<25.6	<86.8	<43.4
SG-6-5'	5/1/2013	<4020	<10500	<5240	<4670	<4900	<860	<4920	<2130	<3440	<b>499,000</b>	<5900	<1890	<14800	<b>16,900</b>	<2810	<3830	<2460	<2460	<2330	<1280	<4340	<2170
SG-7-4'	5/1/2013	<80.4	<210	<105	<93.4	<98.0	<b>358</b>	<98.4	<42.6	<68.7	<b>5,850</b>	<118	<37.7	<297	<b>158</b>	<56.2	<76.6	<49.2	<49.2	<46.6	<25.6	<86.8	<43.4
SG-8-5'	5/1/2013	<80.4	<210	<105	<93.4	<98.0	<b>97.7</b>	<98.4	<42.6	<68.7	<b>4,350</b>	<118	<b>44.5</b>	<297	<53.7	<56.2	<76.6	<49.2	<49.2	<46.6	<25.6	<86.8	<43.4
SG-9-4'	5/1/2013	<80.4	<210	<105	<93.4	<98.0	<b>24.1</b>	<98.4	<42.6	<68.7	<b>82,700</b>	<118	<37.7	<297	<b>266</b>	<56.2	<76.6	<49.2	<49.2	<46.6	<25.6	<86.8	<43.4
SG-10-5'	5/1/2013	<402	<1050	<524	<467	<490	<b>141</b>	<492	<213	<344	<b>25,500</b>	<590	<189	<1480	<269	<281	<383	<246	<246	<233	<128	<434	<217
SG-11-5'	5/1/2013	<40.2	<105	<52.4	<46.7	<49.0	<b>63.1</b>	<49.2	<21.3	<34.4	<b>1,600</b>	<59.0	<b>31.7</b>	<148	<26.9	<28.1	<38.3	<24.6	<24.6	<23.3	<12.8	<43.4	<21.7
SG-5-10'	5/1/2013	<804	<2100	<1050	<934	<980	<172	<984	<426	<687	<b>38,500</b>	<1180	<377	<2970	<b>5,690</b>	<562	<766	<492	<492	<466	<256	<868	<434

Notes:

This table presents an abridged list of EPA Method TO-15 compounds; compounds not included were below the reporting limit in all samples.

Results reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )

Bold values indicate detections above laboratory reporting limits

<### = Sample concentration below ### (practical quantitation limit)

**TABLE 13**  
**Pneumatic Property Estimates**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Measurement Location	$k_h$	$k_v$	$k_{conf}$	$\emptyset$	$c$	$n$
SVE-1	30	2.0	1.0	0.23	2800	1.59
7AZP-4	15	2.0	2.0	0.23	na	na
7AZP-4-15 ft	40	2.5	2.5	0.23	na	na
7AZP-4-30 ft	20	3.0	3.0	0.23	na	na
7AZP-4-45 ft	21	2.5	2.5	0.23	na	na
7AZP-2	41	5.7	0.6	0.08	na	na
7AZP-2-15 ft	41	2.2	2.2	0.23	na	na
7AZP-2-30 ft	41	2.2	2.2	0.23	na	na
7AZP-2-45 ft	41	1.0	1.0	0.15	na	na
7AZP-3	41	2.1	0.9	0.08	na	na
7AZP-3-15 ft	40.9	3.0	3.0	0.10	na	na
7AZP-3-30 ft	24.5	3.0	1.7	0.10	na	na
7AZP-3-45 ft	22.9	3.6	1.8	0.10	na	na
7AZP-1	15.9	3.0	1.7	0.10	na	na
7AZP-1-45 ft	24.5	3.0	1.7	0.10	na	na

*Notes:*

$k_h$  = Horizontal gas permeability (darcies)

$k_v$  = Vertical gas permeability (darcies)

$k_{conf}$  = Semi-confining layer permeability (darcies)

$\emptyset$  = Effective air porosity

$c$  = Well loss constant

$n$  = Well loss exponent

na = not applicable

**TABLE 14**  
**SVE Influent, Between Vessel and**  
**Effluent VOC and Hydrocarbon Concentrations**  
**7th Street and Arizona Avenue WQARF Site**

Compound	Sample Date																						
	5/13/2009	8/8/2008	6/30/2008	4/11/08	3/5/08	1/9/08	12/6/07	11/1/07	9/27/07	8/28/07	7/25/07	6/22/07	5/31/07	4/13/07	3/2/07	1/15/07	11/7/06	9/27/06	9/7/06	7/28/06	6/30/06	6/13/06	
	<b>Influent/Wellhead Samples</b>																						
1,1-Dichloroethane	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
1,2,4-Trimethylbenzene	<1,900	<b>370</b>	<b>950</b>	<500	<500	<500	<b>240</b>	<b>220</b>	<800	<1000	<b>290</b>	<b>260</b>	<b>510</b>	<b>200</b>	<500	<b>1,400</b>	<500	<b>790</b>	<500	<b>530</b>	<1,000	<10,000	
1,3,5-Trimethylbenzene	<1,900	<250	<500	<500	<500	<500	<100	<b>190</b>	<200	<250	<b>280</b>	<b>210</b>	<b>370</b>	<b>140</b>	<500	<b>560</b>	<500	<500	<500	<500	<1,000	<10,000	
2,2,4-Trimethylpentane	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<b>100</b>	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
2-Butanone (MEK)	<3,900	<500	<1,000	<1,000	<1,000	<1,000	<200	<200	<400	<500	<500	<200	<200	<200	<1,000	<1,000	<1,000	<b>5,600</b>	<1,000	<1,000	<2,000	<20,000	
2-Propanol	<7,800	<1000	<2,000	<2,000	<2,000	<2,000	<400	<400	<800	<1000	<1,000	<400	<400	<400	<2,000	<b>4,200</b>	<2,000	<2,000	<2,000	<2,000	<4,000	<40,000	
4-Ethyltoluene	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<b>280</b>	<b>240</b>	<b>390</b>	<b>160</b>	<500	<b>720</b>	<500	<500	<500	<500	<1,000	<10,000	
Acetone	<19,000	<2500	<5,000	<5,000	<5,000	<5,000	<1,000	<1,000	<2000	<2500	<2,500	<b>1,000</b>	<1,000	<1,000	<5,000	<5,000	<5,000	<b>14,000</b>	<5,000	<b>7,200</b>	<10,000	<100,000	
Benzene	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Carbon Disulfide	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Chloroform	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Cholormethane	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
cis-1,2-Dichloroethene	<1,900	<250	<500	<500	<500	<500	<b>110</b>	<b>150</b>	<200	<250	<b>280</b>	<b>340</b>	<b>430</b>	<b>460</b>	<b>530</b>	<b>610</b>	<b>950</b>	<b>2,300</b>	<b>2,600</b>	<b>7,600</b>	<b>15,000</b>	<b>19,000</b>	
Dichlorodifluoromethane	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Ethyl Acetate	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Ethylbenzene	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
m&p-Xylene	<3,900	<500	<1,000	<1,000	<1,000	<1,000	<200	<200	<400	<500	<500	<200	<200	<200	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<2,000	<20,000
Methyl tert-butyl ether	<3,900	<500	<1,000	<1,000	<1,000	<1,000	<200	<200	<400	<500	<500	<200	<200	<200	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<2,000	<20,000
Methylene Chloride	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<b>1,100</b>	<500	<500	<500	<500	<1,000	<10,000	
o-Xylene	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<b>100</b>	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Propene	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Styrene	<1,900	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Tetrachloroethene	<b>11,000</b>	<b>7,300</b>	<b>12,000</b>	<b>7,700</b>	<b>14,000</b>	<b>6,700</b>	<b>4,100</b>	<b>6,400</b>	<b>3,500</b>	<b>6,800</b>	<b>6,400</b>	<b>7,400</b>	<b>8,200</b>	<b>6,300</b>	<b>8,400</b>	<b>12,000</b>	<b>9,600</b>	<b>30,000</b>	<b>25,000</b>	<b>66,000</b>	<b>110,000</b>	<b>310,000</b>	
Tetrahydrofuran	<7,800	<1000	<2,000	<2,000	<2,000	<2,000	<400	<400	<800	<1000	<1,000	<400	<400	<400	<2,000	<2,000	<2,000	<b>2,700</b>	<2,000	<2,000	<4,000	<40,000	
Toluene	<250	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Trans-1,2-Dichloroethene	<250	<250	<500	<500	<500	<500	<100	<100	<200	<250	<250	<100	<100	<100	<500	<500	<500	<500	<500	<500	<1,000	<10,000	
Trichloroethene	<1,900	<b>470</b>	<b>890</b>	<b>740</b>	<b>980</b>	<b>690</b>	<b>780</b>	<b>630</b>	<b>390</b>	<b>1,200</b>	<b>950</b>	<b>2,000</b>	<b>1,500</b>	<b>1,500</b>	<b>1,900</b>	<b>2,200</b>	<b>2,800</b>	<b>7,200</b>	<b>6,900</b>	<b>17,000</b>	<b>39,000</b>	<b>100,000</b>	
Hydrocarbons (C <sub>6</sub> - C <sub>10</sub> )	<b>1,200,000</b>	<b>1,600,000</b>	<b>1,300,000</b>	<b>1,500,000</b>	<b>2,000,000</b>	<b>3,600,000</b>	<b>1,400,000</b>	<b>1,600,000</b>	<b>1,200,000</b>	<b>2,200,000</b>	<b>1,400,000</b>	<b>1,400,000</b>	<b>2,300,000</b>	NS	<b>2,300,000</b>	<b>3,800,000</b>	<b>840,000</b>	<b>3,400,000</b>	NS	NS	NS	NS	

**TABLE 14**  
**SVE Influent, Between Vessel and**  
**Effluent VOC and Hydrocarbon Concentrations**  
**7th Street and Arizona Avenue WQARF Site**

Compound	Sample Date																					
	5/13/2009	8/8/2008	6/30/2008	4/11/08	3/5/08	1/9/08	12/6/07	11/1/07	9/27/07	8/28/07	7/25/07	6/22/07	5/31/07	4/13/07	3/2/07	1/15/07	11/7/06	9/27/06	9/7/06	7/28/06	6/30/06	6/13/06
	<b>Between-Vessel Samples</b>																					
1,1-Dichloroethane	<10	<250	<1.0	<25	<50	<25	<50	<0.50	<100	<0.50	<0.50	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
1,2,4-Trimethylbenzene	<10	<250	<b>12</b>	<25	<50	<25	<50	<b>0.50</b>	<100	<b>2.5</b>	<0.50	<50	<b>44</b>	<50	<250	<250	<50	<b>630</b>	<50	<500	NS	NS
1,3,5-Trimethylbenzene	<10	<250	<b>3.9</b>	<25	<50	<25	<50	<0.50	<100	<b>0.72</b>	<0.50	<50	<25	<50	<250	<250	<50	<b>300</b>	<50	<500	NS	NS
2,2,4-Trimethylpentane	<10	<250	<1.0	<25	<50	<25	<50	<b>2.7</b>	<100	<0.50	<b>5.7</b>	<50	<b>37</b>	<50	<250	<250	<50	<50	<50	<500	NS	NS
2-Butanone (MEK)	<20	<500	<2.0	<50	<100	<50	<100	<b>4.6</b>	<200	<b>67</b>	<b>15</b>	<100	<50	<100	<500	<500	<100	<b>1,600</b>	<100	<1,000	NS	NS
2-Propanol	<40	<1,000	<4.0	<100	<200	<100	<200	<2.0	<400	<2.0	<2.0	<b>480</b>	<100	<200	<1,000	<b>1,700</b>	<200	<200	<200	<2,000	NS	NS
4-Ethyltoluene	<10	<250	<b>4.2</b>	<25	<50	<25	<50	<0.50	<100	<b>1.4</b>	<0.50	<50	<b>32</b>	<50	<250	<250	<50	<50	<50	<500	NS	NS
Acetone	<100	<2,500	<b>12</b>	<250	<500	<250	<500	<b>8.8</b>	<1,000	<b>17</b>	<b>25</b>	<500	<250	<b>1,200</b>	<2,500	<2,500	<500	<500	<500	<5,000	NS	NS
Benzene	<10	<250	<1.0	<25	<50	<25	<50	<b>0.55</b>	<100	<0.50	<b>1.6</b>	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
Carbon Disulfide	<10	<250	<1.0	<25	<50	<25	<50	<0.50	<100	<b>1.4</b>	<0.50	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
Chloroform	<10	<250	<1.0	<b>34</b>	<b>50</b>	<b>68</b>	<50	<b>2.9</b>	<100	<0.50	<b>3.6</b>	<b>80</b>	<25	<50	<250	<250	<b>66</b>	<b>800</b>	<b>1,300</b>	<b>3,400</b>	NS	NS
Cholormethane	<10	<250	<1.0	<25	<50	<25	<50	<b>0.75</b>	<100	<b>1.0</b>	<0.50	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
cis-1,2-Dichloroethene	<10	<b>270</b>	<1.0	<b>280</b>	<b>93</b>	<b>470</b>	<b>140</b>	<b>1.0</b>	<b>240</b>	<b>0.66</b>	<b>0.84</b>	<b>900</b>	<b>310</b>	<b>400</b>	<b>1,400</b>	<b>650</b>	<b>1,700</b>	<b>15,000</b>	<b>22,000</b>	<b>36,000</b>	NS	NS
Dichlorodifluoromethane	<10	<250	<1.0	<25	<50	<25	<50	<0.50	<100	<0.50	<0.50	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
Ethyl Acetate	<10	<250	<1.0	<25	<50	<25	<50	<0.50	<100	<0.50	<0.50	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
Ethylbenzene	<10	<250	<1.0	<25	<50	<25	<50	<0.50	<100	<b>0.57</b>	<0.50	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
m&p-Xylene	<20	<500	<2.0	<50	<100	<50	<100	<1.0	<200	<1.0	<1.0	<100	<b>100</b>	<100	<500	<500	<100	<100	<100	<1,000	NS	NS
Methyl tert-butyl ether	<20	<500	<2.0	<b>62</b>	<100	<50	<100	<1.0	<200	<1.0	<b>1.9</b>	<100	<b>57</b>	<100	<500	<500	<100	<100	<100	<1,000	NS	NS
Methylene Chloride	<b>31</b>	<250	<1.0	<25	<50	<25	<50	<b>1.8</b>	<100	<b>0.54</b>	<b>2.2</b>	<b>96</b>	<25	<50	<250	<b>390</b>	<50	<50	<50	<500	NS	NS
o-Xylene	<10	<250	<1.0	<25	<50	<25	<50	<0.50	<100	<b>0.83</b>	<0.50	<50	<b>40</b>	<50	<250	<250	<50	<50	<50	<500	NS	NS
Propene	<b>50</b>	<250	<b>27</b>	<b>25</b>	<50	<25	<50	<b>14</b>	<100	<b>16</b>	<b>14</b>	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
Styrene	<10	<250	<1.0	<25	<50	<25	<50	<0.50	<100	<b>0.66</b>	<b>0.53</b>	<50	<25	<50	<250	<250	<50	<50	<50	<500	NS	NS
Tetrachloroethene	<10	<b>6,700</b>	<b>15</b>	<b>4,400</b>	<b>56</b>	<b>710</b>	<b>3,700</b>	<b>1.5</b>	<100	<b>10</b>	<b>5.0</b>	<b>3,100</b>	<b>3,000</b>	<b>3,100</b>	<b>12,000</b>	<b>9,600</b>	<b>2,900</b>	<b>5,100</b>	<b>4,500</b>	<b>120,000</b>	NS	NS
Tetrahydrofuran	<40	<1,000	<4.0	<100	<200	<100	<200	<b>4.7</b>	<400	<b>41</b>	<b>11</b>	<200	<100	<200	<1,000	<1,000	<200	<b>1,400</b>	<200	<2,000	NS	NS
Toluene	<10	<250	<1.0	<25	<50	<25	<50	<b>0.69</b>	<100	<b>10</b>	<b>1.1</b>	<50	<b>36</b>	<50	<250	<250	<50	<50	<50	<500	NS	NS
Trans-1,2-Dichloroethene	<10	<250	<1.0	<b>37</b>	<50	<b>50</b>	<50	<0.50	<100	<0.50	<0.50	<b>70</b>	<b>29</b>	<50	<250	<250	<b>60</b>	<b>380</b>	<b>700</b>	<b>1,400</b>	NS	NS
Trichloroethene	<10	<b>720</b>	<b>1.3</b>	<b>680</b>	<b>100</b>	<b>640</b>	<b>490</b>	<0.50	<100	<b>2.5</b>	<b>3.0</b>	<b>2,300</b>	<b>960</b>	<b>1,200</b>	<b>4,400</b>	<b>2,100</b>	<b>2,300</b>	<b>1,500</b>	<b>14,000</b>	<b>93,000</b>	NS	NS

**TABLE 14**  
**SVE Influent, Between Vessel and**  
**Effluent VOC and Hydrocarbon Concentrations**  
**7th Street and Arizona Avenue WQARF Site**

Compound	Sample Date																						
	5/13/2009	8/8/2008	6/30/2008	4/11/08	3/5/08	1/9/08	12/6/07	11/1/07	9/27/07	8/28/07	7/25/07	6/22/07	5/31/07	4/13/07	3/2/07	1/15/07	11/7/06	9/27/06	9/7/06	7/28/06	6/30/06	6/13/06	
	<b>Effluent/Discharge Samples</b>																						
1,1-Dichloroethane	<9.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS
1,2,4-Trimethylbenzene	<9.7	<0.50	<b>1.6</b>	<0.50	<b>1.3</b>	<b>3.1</b>	<b>1.3</b>	<0.50	<0.50	<b>1.1</b>	<b>0.66</b>	<2.5	<10	<b>8.7</b>	<0.50	<10	<5.0	<b>130</b>	<25	<5.0	<b>5.6</b>	NS	
1,3,5-Trimethylbenzene	<9.7	<0.50	<b>0.60</b>	<0.50	<0.50	<b>0.89</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<2.5	<b>5.1</b>	<b>2.8</b>	<10	<5.0	<b>55</b>	<25	<5.0	<5.0	NS	
2,2,4-Trimethylpentane	<9.7	<0.50	<0.50	<b>2.6</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
2-Butanone (MEK)	<19	<b>13</b>	<b>1.3</b>	<1.0	<1.0	<1.0	<b>23</b>	<b>12</b>	<b>22</b>	<b>66</b>	<b>17</b>	<5.0	<5.0	<10	<1.0	<b>13</b>	<b>13</b>	<b>31</b>	<50	<b>360</b>	<10	NS	
2-Propanol	<39	<2.0	<2.0	<2.0	<b>2.8</b>	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	<b>24</b>	<20	<2.0	<40	<20	<20	<100	<20	<20	NS	
4-Ethyltoluene	<9.7	<0.50	<0.50	<0.50	<b>1.1</b>	<b>1.0</b>	<0.50	<0.50	<0.50	<b>0.91</b>	<0.50	<2.5	<2.5	<b>5.20</b>	<b>0.94</b>	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
Acetone	<97	<5.0	<5.0	<5.0	<b>6.0</b>	<5.0	<b>30</b>	<b>20</b>	<b>31</b>	<b>38</b>	<b>22</b>	<25	<25	<50	<b>12</b>	<100	<50	<50	<250	<50	<50	NS	
Benzene	<9.7	<0.50	<0.50	<0.50	<b>0.72</b>	<0.50	<0.50	<b>0.66</b>	<0.50	<b>1.6</b>	<b>0.98</b>	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
Carbon Disulfide	<9.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<b>1.1</b>	<0.50	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
Chloroform	<9.7	<b>1.8</b>	<0.50	<b>4.2</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<b>160</b>	<b>74</b>	<b>5.2</b>	<0.50	<b>50</b>	<b>66</b>	<5.0	<25	<5.0	<5.0	NS	
Cholormethane	<9.7	<0.50	<b>0.91</b>	<b>0.62</b>	<b>1.5</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.62</b>	<b>0.91</b>	<0.50	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
cis-1,2-Dichloroethene	<9.7	<b>3.2</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<2.5	<b>8.2</b>	<0.50	<b>450</b>	<b>690</b>	<b>85</b>	<b>31</b>	<5.0	<5.0	NS	
Dichlorodifluoromethane	<9.7	<0.50	<0.50	<0.50	<0.50	<0.50	<b>0.73</b>	<0.50	<b>0.63</b>	<b>0.67</b>	<0.50	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
Ethyl Acetate	<9.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<b>0.58</b>	<b>2.0</b>	<0.50	<0.50	<2.5	<b>3.6</b>	<5.0	<0.50	<10	<5.0	<5.0	<b>27</b>	<b>14</b>	<b>96</b>	NS	
Ethylbenzene	<9.7	<0.50	<0.50	<0.50	<b>0.54</b>	<b>0.93</b>	<0.50	<b>0.50</b>	<0.50	<b>0.83</b>	<0.50	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
m&p-Xylene	<19	<1.0	<1.0	<1.0	<b>4.1</b>	<b>7.6</b>	<1.0	<1.0	<1.0	<b>1.5</b>	<1.0	<5.0	<5.0	<10	<1.0	<20	<10	<10	<50	<10	<10	NS	
Methyl tert-butyl ether	<19	<1.0	<1.0	<b>1.2</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<10	<1.0	<20	<10	<10	<50	<10	<10	NS	
Methylene Chloride	<b>24</b>	<b>0.65</b>	<0.50	<0.50	<0.50	<b>0.69</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<b>3</b>	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
o-Xylene	<9.7	<0.50	<0.50	<0.50	<b>1.3</b>	<b>2.8</b>	<0.50	<0.50	<0.50	<b>0.98</b>	<0.50	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
Propene	<b>57</b>	<0.50	<b>49</b>	<b>14</b>	<b>46</b>	<b>18</b>	<b>1.3</b>	<b>1.2</b>	<b>0.67</b>	<b>0.69</b>	<b>0.74</b>	<b>21</b>	<b>15</b>	<b>15</b>	<b>14</b>	<b>19</b>	<5.0	<b>18</b>	<b>29</b>	<b>16</b>	<b>76</b>	NS	
Styrene	<9.7	<b>3.3</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<b>1.1</b>	<0.50	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
Tetrachloroethene	<9.7	<b>12</b>	<b>3.1</b>	<0.50	<b>0.79</b>	<b>0.50</b>	<b>7.6</b>	<b>1.1</b>	<0.50	<b>2.4</b>	<b>22</b>	<2.5	<b>52</b>	<b>52</b>	<b>8.7</b>	<10	<5.0	<b>1,800</b>	<b>160</b>	<b>14</b>	<b>180</b>	NS	
Tetrahydrofuran	<39	<2.0	<2.0	<2.0	<2.0	<2.0	<b>32</b>	<b>25</b>	<b>38</b>	<b>96</b>	<b>29</b>	<10	<b>51</b>	<b>51</b>	<2.0	<40	<20	<b>34</b>	<100	<b>83</b>	<20	NS	
Toluene	<9.7	<b>1.1</b>	<b>0.94</b>	<0.50	<b>4.3</b>	<b>6.7</b>	<b>0.81</b>	<b>1.5</b>	<b>0.61</b>	<b>9.4</b>	<b>1.2</b>	<2.5	<2.5	<5.0	<0.50	<10	<5.0	<5.0	<25	<5.0	<5.0	NS	
Trans-1,2-Dichloroethene	<9.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<2.5	<2.5	<5.0	<0.50	<b>51</b>	<b>26</b>	<5.0	<25	<5.0	<5.0	<5.0	NS	
Trichloroethene	<9.7	<b>4.4</b>	<0.50	<0.50	<b>0.68</b>	<0.50	<0.50	<0.50	<b>0.29</b>	<0.50	<b>2.1</b>	<b>3.6</b>	<5.0	<5.0	<b>1.3</b>	<b>160</b>	<b>53</b>	<b>160</b>	<b>50</b>	<b>17</b>	<b>24</b>	NS	

**Note:**  
All sample results in parts per billion by volume (ppbv) except hydrocarbons  
NS = Not sampled  
Hydrocarbons analyzed by TO-15 modified reported as micrograms per cubic meter (µg/m<sup>3</sup>)  
<### = Sample concentration below ### (practical quantitation limit)  
Bolded values indicate concentrations are above laboratory reporting limit

**TABLE 15**  
**SVE System Removal Results through June 2009**  
**7th Street and Arizona Avenue WQARF Site**

Unit Conversion = 28.32 L/ft <sup>3</sup> x 60 min/hr x 1.0E-09 kg/μg x 2.2046 lb/kg = 3.746E-06						As of: 6/23/09			
Remedial Time Period		Duration hours	Flow Rate ft <sup>3</sup> /min	Concentration		Mass Removed			
Start Time hours	End Time hours			VOCs μg/L	HCs μg/L	VOCs pounds	HCs pounds	VOCs pounds per day	HCs pounds per day
0	202	202	65	2,963	10,000	146	492	17	58
202	724	522	65	1,108	5,300	141	673	6.5	31
724	1,530	806	65	624	4,200	122	824	3.6	25
1,530	2,255	725	65	237	3,600	42	636	1.4	21
2,255	2,981	726	65	329	3,400	58	601	1.9	20
2,981	4,199	1,218	72	92	840	30	276	0.60	5.4
4,199	5,473	1,274	72	104	3,800	36	1,306	0.67	25
5,473	6,509	1,037	72	76	3,300	21	923	0.49	21
6,509	7,546	1,037	72	57	2,300	16	643	0.37	15
7,546	8,350	804	72	71	2,300	15	499	0.46	15
8,350	9,000	649	60	71	1,400	10	204	0.38	7.6
9,000	9,705	705	60	54	1,400	9	222	0.29	7.6
9,705	10,670	965	60	57	2,200	12	477	0.31	12
10,670	11,809	1,139	60	28	1,200	7	307	0.15	6.5
11,809	12,706	896	60	35	1,400	7	282	0.19	7.6
12,706	13,499	793	60	54	3,600	10	642	0.29	19
13,499	14,229	730	60	110	2,000	18	328	0.59	11
14,229	14990	761	72	61	1,500	13	308	0.39	10
14,990	15790	801	72	94	1,300	20	281	0.61	8
15,790	17,104	1,314	60	57	1,600	17	473	0.31	9
17,104	18,400	1,296	72	75	1,200	26	419	0.49	8
<b>Totals</b>						<b>777</b>	<b>10,816</b>		

Note:

ft<sup>3</sup>/min = cubic feet per minute

μg/L = micrograms per liter

VOCs = sum of volatile organic compounds by Method TO-15

HCs = total petroleum hydrocarbon compounds C<sub>6</sub>-C<sub>10</sub> by Method TO-15 Modified

SVE remedial system started up on 6/13/2006 at 15:10; operation ended 6/23/2009 at 7:50.

**TABLE 16**  
**Vapor Intrusion Screening of**  
**Soil Gas Investigation Results, May 2013**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Well / Probe	Date	Tetrachloroethene		Trichloroethene	
		Result	x 0.03 AF	Result	x 0.03 AF
SG-1-5'	5/1/2013	886	27	<13.4	<0.4
SG-2-5'	5/1/2013	2,410	<b>72</b>	<53.7	<1.61
SG-3-5'	5/1/2013	2,260	<b>68</b>	<53.7	<1.61
SG-4-5'	5/1/2013	3,030	<b>91</b>	43.0	1.29
SG-5-5'	5/1/2013	12,300	<b>369</b>	1,890	<b>56.7</b>
SG-6-5'	5/1/2013	499,000	<b>14,970</b>	16,900	<b>507</b>
SG-7-4'	5/1/2013	5,850	<b>176</b>	158	<b>4.74</b>
SG-8-5'	5/1/2013	4,350	<b>131</b>	<53.7	<1.61
SG-9-4'	5/1/2013	82,700	<b>2,481</b>	266	<b>7.98</b>
SG-10-5'	5/1/2013	25,500	<b>765</b>	<269.	<b>&lt;8.07</b>
SG-11-5'	5/1/2013	1,600	<b>48</b>	<26.9	<0.81
SG-5-10'	5/1/2013	38,500	<b>1,155</b>	5,690	<b>170.7</b>
Cancer SL TR=1e-6			47		3
Non-cancer SL HQ=1			180		8.8

*Notes:*

*AF = attenuation factor*

*SL = screening level, industrial air*

*Values reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )*

*Values in **bold** exceed either or both screening level*

**TABLE 17**  
**Comparison Between Actual Soil Vapor to Groundwater Concentration Ratio with**  
**Henry's Law Constant for PCE**  
**7th Street and Arizona Avenue WQARF Site**

Well	Soil Vapor				Groundwater		C <sub>sv</sub> /C <sub>gw</sub>	H'
	Date	Sampled Interval (feet bgs)	Concentration (µg/m <sup>3</sup> )	Concentration (µg/L)	Date	Concentration (µg/L)		
7AZP-1	10/20/2011	60-66.78	<b>17,600</b>	<b>17.6</b>	5/2/2012	<b>11</b>	1.6	0.723
7AZP-3	10/20/2011	60-65.7	<b>25,100</b>	<b>25.1</b>	5/8/2012	<b>2</b>	12.55	0.723
7AZP-6	5/16/2012	60-83.54	<b>17,600</b>	<b>17.6</b>	5/3/2012	<b>26</b>	0.68	0.723
7AZP-9	5/16/2012	70-84.35	<b>4,480</b>	<b>4.48</b>	5/18/2012	<b>16</b>	0.28	0.723
7AZP-10	5/16/2012	74-82.16	<b>67.8</b>	<b>0.0678</b>	5/18/2012	< 0.50	>0.14	0.723
BF-1	5/17/2012	50.5-66.30	<b>7,460</b>	<b>7.46</b>	5/4/2012	<b>53</b>	0.14	0.723
BF-3	5/16/2012	50-64.95	<b>2,710</b>	<b>2.71</b>	5/3/2012	<b>22</b>	0.12	0.723
MW-PD-1	5/17/2012	49.5-65.45	<b>8,140</b>	<b>8.14</b>	5/4/2012	<b>21</b>	0.39	0.723
MW-PD-5	5/16/2012	66-80.77	<b>25.8</b>	<b>0.0258</b>	5/1/2012	< 0.50	>0.05	0.723
MW-PD-7	5/17/2012	59-70.77	<b>746</b>	<b>0.746</b>	5/8/2012	< 0.50	>1.49	0.723
MW-PD-13	5/16/2012	58-64.04	<b>10.2</b>	<b>0.0102</b>	5/2/2012	< 0.50	>0.02	0.723
MW-PD-29	5/16/2012	59-67.9	<b>6,780</b>	<b>6.78</b>	5/3/2012	<b>1.2</b>	5.65	0.723
MW-PD-30	5/17/2012	61-68.85	<b>81.4</b>	<b>0.0814</b>	5/4/2012	<b>57</b>	0.0014	0.723
MW-PD-30	6/26/2012	61-68.85	<b>563</b>	<b>0.563</b>	5/4/2012	<b>57</b>	0.0099	0.723

*Notes:*

*H' = dimensionless Henry's Law constant = C<sub>sv</sub>/C<sub>gw</sub>*

*µg/L = micrograms per liter*

*µg/m<sup>3</sup> = micrograms per cubic meter*

*bgs = below ground surface*

*C<sub>sv</sub>/C<sub>gw</sub> = ratio of concentration in soil vapor to concentration in groundwater*

*Bolded value indicates concentration is above laboratory reporting limit*

*<### = Sample concentration below ### (practical quantitation limit)*

**TABLE 18**  
**Comparison Between Actual Soil Vapor to Groundwater Concentration Ratio with**  
**Henry's Law Constant for TCE**  
**7th Street and Arizona Avenue WQARF Site**

Well	Soil Vapor				Groundwater		C <sub>sv</sub> /C <sub>gw</sub>	H'
	Date	Sampled Interval (feet bgs)	Concentration (µg/m <sup>3</sup> )	Concentration (µg/L)	Date	Concentration (µg/L)		
7AZP-1	10/20/2011	60-66.78	<b>1,990</b>	<b>1.99</b>	5/2/2012	<b>2.1</b>	0.95	0.403
7AZP-3	10/20/2011	60-65.7	<b>1,070</b>	<b>1.07</b>	5/8/2012	<b>7.7</b>	0.14	0.403
7AZP-6	5/16/2012	60-83.54	<b>1,770</b>	<b>1.77</b>	5/3/2012	<b>2.6</b>	0.68	0.403
7AZP-9	5/16/2012	70-84.35	<b>252</b>	<b>0.252</b>	5/18/2012	<b>0.54</b>	0.47	0.403
7AZP-10	5/16/2012	74-82.16	<5.37	<0.00537	5/18/2012	<0.5	--	0.403
BF-1	5/17/2012	50.5-66.30	<b>537</b>	<b>0.537</b>	5/4/2012	<b>5.3</b>	0.10	0.403
BF-3	5/16/2012	50-64.95	<1340	<1.34	5/3/2012	<b>2.2</b>	< 0.61	0.403
MW-PD-1	5/17/2012	49.5-65.45	<b>913</b>	<b>0.913</b>	5/4/2012	<b>4.4</b>	0.21	0.403
MW-PD-5	5/16/2012	66-80.77	<13.4	<0.0134	5/1/2012	<0.5	--	0.403
MW-PD-7	5/17/2012	59-70.77	<b>30.6</b>	<b>0.0306</b>	5/8/2012	<0.5	>0.06	0.403
MW-PD-13	5/16/2012	58-64.04	<5.37	<0.00537	5/2/2012	<0.5	--	0.403
MW-PD-29	5/16/2012	59-67.9	<b>240.6</b>	<b>0.2406</b>	5/3/2012	<0.5	>0.48	0.403
MW-PD-30	5/17/2012	61-68.85	<5.37	<0.00537	5/4/2012	<b>4.0</b>	< 0.001	0.403
MW-PD-30	6/26/2012	61-68.85	<269	0.269	5/4/2012	<b>4.0</b>	< 0.07	0.403

**Notes:**

*H'* = dimensionless Henry's Law constant = C<sub>sv</sub>/C<sub>gw</sub>

-- = not calculated if both values reported as "less than" reporting limit

µg/L = micrograms per liter

µg/m<sup>3</sup> = micrograms per cubic meter

bgs = below ground surface

C<sub>sv</sub>/C<sub>gw</sub> = ratio of concentration in soil vapor to concentration in groundwater

Bolded value indicates concentration is above laboratory reporting limit

<### = Sample concentration below ### (practical quantitation limit)

**TABLE 19**  
**Comparison Between Actual Soil Vapor to Groundwater Concentration Ratio with**  
**Henry's Law Constant for cis-1,2-DCE**  
**7th Street and Arizona Avenue WQARF Site**

Well	Soil Vapor				Groundwater		C <sub>sv</sub> /C <sub>gw</sub>	H'
	Date	Sampled Interval (feet bgs)	Concentration (µg/m <sup>3</sup> )	Concentration (µg/L)	Date	Concentration (µg/L)		
7AZP-1	10/20/2011	60-66.78	<b>1,470</b>	<b>1.47</b>	5/2/2012	<b>0.92</b>	1.60	0.167
7AZP-3	10/20/2011	60-65.7	<396	<0.396	5/8/2012	<b>3</b>	< 0.132	0.167
7AZP-6	5/16/2012	60-83.54	<b>277</b>	<b>0.277</b>	5/3/2012	<b>0.74</b>	0.374	0.167
7AZP-9	5/16/2012	70-84.35	<39.6	<0.0396	5/18/2012	<0.5	--	0.167
7AZP-10	5/16/2012	74-82.16	<3.96	<0.00396	5/18/2012	<0.5	--	0.167
BF-1	5/17/2012	50.5-66.30	<b>1,310</b>	<b>1.31</b>	5/4/2012	<b>24</b>	0.055	0.167
BF-3	5/16/2012	50-64.95	<990	<0.99	5/3/2012	<b>0.52</b>	< 1.90	0.167
MW-PD-1	5/17/2012	49.5-65.45	<b>1,700</b>	<b>1.7</b>	5/4/2012	<b>46</b>	0.037	0.167
MW-PD-5	5/16/2012	66-80.77	<9.9	<0.0099	5/1/2012	<0.5	--	0.167
MW-PD-7	5/17/2012	59-70.77	<9.9	<0.0099	5/8/2012	<0.5	--	0.167
MW-PD-13	5/16/2012	58-64.04	<3.96	<0.00396	5/2/2012	<0.5	--	0.167
MW-PD-29	5/16/2012	59-67.9	<39.6	<0.0396	5/3/2012	<0.5	--	0.167
MW-PD-30	5/17/2012	61-68.85	<3.96	<0.00396	5/4/2012	<b>3.3</b>	< 0.001	0.167
MW-PD-30	6/26/2012	61-68.85	<198	<0.198	5/4/2012	<b>3.3</b>	< 0.060	0.167

*Notes:*

*H' = dimensionless Henry's Law constant = C<sub>sv</sub>/C<sub>gw</sub>*

*-- = not calculated if both values reported as "less than" reporting limit*

*µg/L = micrograms per liter*

*µg/m<sup>3</sup> = micrograms per cubic meter*

*bgs = below ground surface*

*C<sub>sv</sub>/C<sub>gw</sub> = ratio of concentration in soil vapor to concentration in groundwater*

*Bolded value indicates concentration is above laboratory reporting limit*

*<### = Sample concentration below ### (practical quantitation limit)*

**TABLE 20**  
**Comparison Between Actual Soil Vapor to Groundwater Concentration Ratio with**  
**Henry's Law Constant for trans-1,2-DCE**  
**7th Street and Arizona Avenue WQARF Site**

Well	Soil Vapor				Groundwater		$C_{sv}/C_{gw}$	H'
	Date	Sampled Interval (feet bgs)	Concentration ( $\mu\text{g}/\text{m}^3$ )	Concentration ( $\mu\text{g}/\text{L}$ )	Date	Concentration ( $\mu\text{g}/\text{L}$ )		
7AZP-1	10/20/2011	60-66.78	<396	<0.396	5/2/2012	<0.50	--	0.167
7AZP-3	10/20/2011	60-65.7	<b>475</b>	<b>0.475</b>	5/8/2012	<b>7.6</b>	0.063	0.167
7AZP-6	5/16/2012	60-83.54	<198	<0.198	5/3/2012	<0.50	--	0.167
7AZP-9	5/16/2012	70-84.35	<39.6	<0.0396	5/18/2012	<0.50	--	0.167
7AZP-10	5/16/2012	74-82.16	<3.96	<0.00396	5/18/2012	<0.50	--	0.167
BF-1	5/17/2012	50.5-66.30	<b>329</b>	<b>0.329</b>	5/4/2012	<b>3.4</b>	0.097	0.167
BF-3	5/16/2012	50-64.95	<990	<0.990	5/3/2012	<0.50	--	0.167
MW-PD-1	5/17/2012	49.5-65.45	<b>594</b>	<b>0.594</b>	5/4/2012	<b>3.3</b>	0.18	0.167
MW-PD-5	5/16/2012	66-80.77	<9.9	<0.0099	5/1/2012	<0.50	--	0.167
MW-PD-7	5/17/2012	59-70.77	<9.9	<0.0099	5/8/2012	<0.50	--	0.167
MW-PD-13	5/16/2012	58-64.04	<3.96	<0.00396	5/2/2012	<0.50	--	0.167
MW-PD-29	5/16/2012	59-67.9	<39.6	<0.0396	5/3/2012	<0.50	--	0.167
MW-PD-30	5/17/2012	61-68.85	<3.96	<0.00396	5/4/2012	<0.50	--	0.167
MW-PD-30	6/26/2012	61-68.85	<198	<0.198	5/4/2012	<0.50	--	0.167

Notes:

$H'$  = dimensionless Henry's Law constant =  $C_{sv}/C_{gw}$

-- = not calculated if both values reported as "less than" reporting limit

$\mu\text{g}/\text{L}$  = micrograms per liter

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

bgs = below ground surface

$C_{sv}/C_{gw}$  = ratio of concentration in soil vapor to concentration in groundwater

Bolded value indicates concentration is above laboratory reporting limit

<### = Sample concentration below ### (practical quantitation limit)

**TABLE 21**  
**Risk and Hazard for Future Commercial Worker Exposure at Source Property**  
**7th Street and Arizona Avenue WQARF Site, Tucson, Arizona**

Probe Location	Soil Vapor Concentration ( $\mu\text{g}/\text{m}^3$ )	Indoor Air Concentration ( $\mu\text{g}/\text{m}^3$ )	Exposure Concentration ( $\mu\text{g}/\text{m}^3$ )		Cancer Risk	Hazard
			Cancer	Non-Cancer		
<b>Tetrachloroethene</b>						
SG-1-5'	886	2.66E+01	2.17E+00	6.07E+00	5.6E-07	1.5E-01
SG-2-5'	2410	7.23E+01	5.90E+00	1.65E+01	1.5E-06	4.1E-01
SG-3-5'	2260	6.78E+01	5.53E+00	1.55E+01	1.4E-06	3.9E-01
SG-4-5'	3030	9.09E+01	7.41E+00	2.08E+01	1.9E-06	5.2E-01
SG-5-5'	12300	3.69E+02	3.01E+01	8.42E+01	7.8E-06	2.1E+00
SG-6-5'	499000	1.50E+04	1.22E+03	3.42E+03	3.2E-04	8.5E+01
SG-7-4'	5850	1.76E+02	1.43E+01	4.01E+01	3.7E-06	1.0E+00
SG-8-5'	4350	1.31E+02	1.06E+01	2.98E+01	2.8E-06	7.4E-01
SG-9-4'	82700	2.48E+03	2.02E+02	5.66E+02	5.3E-05	1.4E+01
SG-10-5'	25500	7.65E+02	6.24E+01	1.75E+02	1.6E-05	4.4E+00
SG-11-5'	1600	4.80E+01	3.91E+00	1.10E+01	1.0E-06	2.7E-01
SG-5-10'	38500	1.16E+03	9.42E+01	2.64E+02	2.4E-05	6.6E+00
<b>Trichloroethene</b>						
SG-1-5'	<13.4	< 4.02E-01	< 3.28E-02	< 9.18E-02	< 1.3E-07	< 4.6E-02
SG-2-5'	<53.7	< 1.61E+00	< 1.31E-01	< 3.68E-01	< 5.4E-07	< 1.8E-01
SG-3-5'	<53.7	< 1.61E+00	< 1.31E-01	< 3.68E-01	< 5.4E-07	< 1.8E-01
SG-4-5'	43.0	1.29E+00	1.05E-01	2.95E-01	4.3E-07	1.5E-01
SG-5-5'	1,890	5.67E+01	4.62E+00	1.29E+01	1.9E-05	6.5E+00
SG-6-5'	16,900	5.07E+02	4.13E+01	1.16E+02	1.7E-04	5.8E+01
SG-7-4'	158	4.74E+00	3.86E-01	1.08E+00	1.6E-06	5.4E-01
SG-8-5'	<53.7	< 1.61E+00	< 1.31E-01	< 3.68E-01	< 5.4E-07	< 1.8E-01
SG-9-4'	266	7.98E+00	6.51E-01	1.82E+00	2.7E-06	9.1E-01
SG-10-5'	<269.	< 8.07E+00	< 6.58E-01	< 1.84E+00	< 2.7E-06	< 9.2E-01
SG-11-5'	<26.9	< 8.07E-01	< 6.58E-02	< 1.84E-01	< 2.7E-07	< 9.2E-02
SG-5-10'	5,690	1.71E+02	1.39E+01	3.90E+01	5.7E-05	1.9E+01

Notes:

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

$\text{mg}/\text{m}^3$  = milligrams per cubic meter