



August 13, 2018

Project No. 30401358

Ms. Maureen Hatfield

Texas Commission on Environmental Quality
MC-127
VCP-CA Section, Team 1, Remediation Division
P.O. Box 13087
Austin, Texas 78711-3087

**SUBJECT: RESPONSE TO TEXAS COMMISSION ON ENVIRONMENTAL QUALITY LETTER DATED
NOVEMBER 29, 2018 – UPRR GROUNDWATER MONITORING DATA, HOUSTON WOOD
PRESERVING WORKS FACILITY
4910 LIBERTY ROAD FACILITY, HOUSTON, TEXAS
POST-CLOSURE CARE PERMIT NO. HW-50343; INDUSTRIAL SWR NO. 31547
CN600131098 / RN100674613**

Dear Ms. Hatfield

Golder Associates, Inc. (Golder), formerly Pastor, Behling & Wheeler, LLC (PBW), on behalf of Union Pacific Railroad (UPRR) is pleased to provide the attached responses to the Texas Commission on Environmental Quality (TCEQ) letter dated November 29, 2017 regarding additional groundwater monitoring data at the UPRR Houston Wood Preserving Works Facility (the Site). In the letter, the TCEQ requested that UPRR fulfill certain groundwater monitoring requirements (listed below) within seven months of the November 28, 2017 letter, with a due date of June 28, 2018. In a letter dated June 22, 2018, Golder on behalf of UPRR requested a 45-day extension, which was granted by the TCEQ in a letter dated July 5, 2018.

Below are responses to the TCEQ requests in the November 28, 2017 letter (responses and current status is provided below for each request):

- *Install all of the proposed APOE wells at the three different transmissive zones around their projected groundwater PCLE and DNAPL Zones in accordance with Attachment B.*

UPRR installed the additional APOE wells in January and February 2018 that were proposed in the Response Action Plan (RAP) Revision No. 3 dated June 24, 2017. Per the letter submitted to the TCEQ dated June 12, 2018, two additional APOE wells (MW-89B and MW-90B) that were proposed were installed on July 12 and 13, 2018 to evaluate the lateral extent of chemicals of concern (COCs) in the B-CZ unit north of the Site. The monitoring well locations are shown on the attached figure labeled Figure 1.

- *Monitor ALL newly installed APOE wells for BOTH the dissolved phase COC's and DNAPL in all three different transmissive zones shown on the June 2017, Attachment IA-1, Affected Property Map of the Part B Permit Renewal application.*

Based on the meeting with the TCEQ on November 29, 2017, the TCEQ requested that the monitoring wells be sampled up to three times over the seven-month period. Golder on behalf of UPRR collected site-wide samples from existing monitoring wells and the newly installed proposed APOE wells in January/February, March/April, and May/June 2018. In addition to the May/June 2018 sampling event, Golder collected groundwater samples from the two wells installed in July (MW-89B and MW-90B) as well as MW-83B and MW-84B just south and upgradient of the two newly installed wells. The analytical results from the sampling events are summarized in Tables 5B-1, 5B-2, 5B-3, and 5B-4 enclosed with this response letter. The figure and table numbers follow the same labeling format used for submittal in the Response Action Plan (RAP).

- *Monitor ALL currently installed wells UPRR used to collect monitoring data in July/August 2014 for BOTH the dissolved phase COC's and DNAPL in all four different transmissive zones shown on the June 2017, Attachment IA-1, Affected Property Map of the Part B Permit Renewal application.*

See response to previous request.

- *The following wells are exempt from the above monitoring requirements: 10 wells (MW-8, P-12, MW-01A, MW-02, MW-07, MW-10A, MW-11A, MW-10B MW-11B, and P-10) associated with RCRA unit, WMU 1 because they are not associated with the proposed PMZ and are already required to provide monitoring data under the current Permit; and 7 wells (MW-16, MW-39A, MW-31A, MW52A, MW-SSA, MW73B and the T-56A) that were plugged and abandoned due to the installation of the cap and soil cover.*

The 10 monitoring wells associated with the SMWU No. 1 were sampled in January and July 2018 as part of the groundwater monitoring currently required per the RCRA Permit and Compliance Plan.

- *Monitoring for ALL wells shall follow the current Sampling & Analysis Plan including sampling for the June 2017 CP Table II list of COC's and measurement for the presence or absence of NAPLs. Any well with NAPLs detected in the wellbore is not required to be analyzed for the CP Table III COCs.*

Groundwater monitoring activities followed the Sampling & Analysis Plan provided in the RAP (Rev. 3) dated June 24, 2017.

- *The results of 6 months of monitoring data should be included in a report that contains at least the following items:*

- *Tabulated results of all monitoring data, specifically, water level measurements and elevations, dissolved phase COCs, and NAPL measurement thicknesses.*

The tabulated groundwater levels and elevations, and NAPL measurements for the three site-wide sample events conducted in 2018, along with previous measurements are provided in the attached Table 5D under Attachment A-1 with this letter.

Tabulated results of the groundwater analytical data from the sampling events are provided in the following tables (Attachment A-2):

- Table 5B-1 (for the A-TZ wells)
- Table 5B-2 (BCZ/BTZ wells)
- Table 5B-3 (CTZ wells)
- Table 5B-4 (DTZ wells)
- Table 5B-5 (Arsenic and Lead data – A-TZ wells)
- Table 5B-6 (Arsenic and Lead data – B-CZ/B-TZ wells)
- Table 5B-7 (Arsenic and Lead data – C-TZ wells); and
- Table 5B-8 (Arsenic and Lead data – D-TZ wells).

The laboratory analytical reports and data usability summaries for the sampling events conducted in 2018 are provided in electronic format in the attached CD.

- *Prepare NAPL isopleth maps for each of the four transmissive zones.*

NAPL thickness maps for the February and July 2018 events depicting the in-well DNAPL thicknesses measured in each of the groundwater bearing units are presented on Figures 1 and 2, respectively, in Attachment B.

- *Prepare dissolved phase contaminant concentration isopleth maps for each of the four transmissive zones.*

The following groundwater COC concentration maps were updated and are included under Attachment C (C-1 for the Jan/Feb event, C-2, for the Mar/Apr event, and C-3 for the May/June event):

- Figure 5B-1 – Groundwater COC Concentration Map – A-TZ
- Figure 5B-2 – Groundwater COC Concentration Map – B-CZ/B-TZ
- Figure 5B-3 – Groundwater COC Concentration Map – C-TZ
- Figure 5B-4 – Groundwater COC Concentration Map – D-TZ

In addition, COC concentration isopleth maps were prepared for the primary COCs at the Site and are attached under Attachment C (C-1 for the Jan/Feb event, C-2, for the Mar/Apr event, and C-3 for the May/June event) for the following COCs:

COC	A-TZ	B-CZ/B-TZ	C-TZ
Benzene	Figure 5B-5	Figure 5B-10	Figure 5B-15
2,4 – Dimethylphenol	Figure 5B-6	Figure 5B-11	Figure 5B-16
2-Methylnaphthalene	Figure 5B-7	Figure 5B-12	Figure 5B-17
Dibenzofuran	Figure 5B-8	Figure 5B-13	Figure 5B-18
Naphthalene	Figure 5B-9	Figure 5B-14	Figure 5B-19

The monitoring wells in the four GWBUs were also sampled and analyzed for arsenic and lead as required under the RAP (PBW, November 21, 2014). Arsenic concentrations were detected above the TCEQ TRRP Tier 1 PCLs in the A-TZ and B-CZ/B-CZ zones. The following arsenic isopleth maps were generated based on the groundwater data and are attached under Attachment C (C-1 for the Jan/Feb event, C-2, for the Mar/Apr event, and C-3 for the May/June event):

- Figure 5B-20 – A-TZ Groundwater COC Concentration Map – Arsenic
 - Figure 5B-21 – B-CZ/B-TZ Groundwater COC Concentration Map – Arsenic
 - Figure 5B-22 – C-TZ Groundwater COC Concentration Map – Arsenic
- *Prepare potentiometric surface maps for each of the four transmissive zones that includes the direction and gradient of groundwater flow.*

The following groundwater potentiometric maps were prepared for the three groundwater sampling events and are included under Attachment D (D-1 for the Jan/Feb event, D-2, for the Mar/Apr event, and D-3 for the May/June event):

- Figure 5A-1 – Groundwater Gradient Map – A-TZ
- Figure 5A-2 – Groundwater Gradient Map – B-TZ and B-CZ
- Figure 5A-3 – Groundwater Gradient Map – C-TZ
- Figure 5A-4 – Groundwater Gradient Map – D-TZ

If you have any questions or need additional information, please feel free to call me at (512) 671-3434 or Mr. Kevin Peterburs of UPRR at (414) 267-4164.

Sincerely,

Golder Associates Inc.



Michelle Hermiston
Project Hydrogeologist

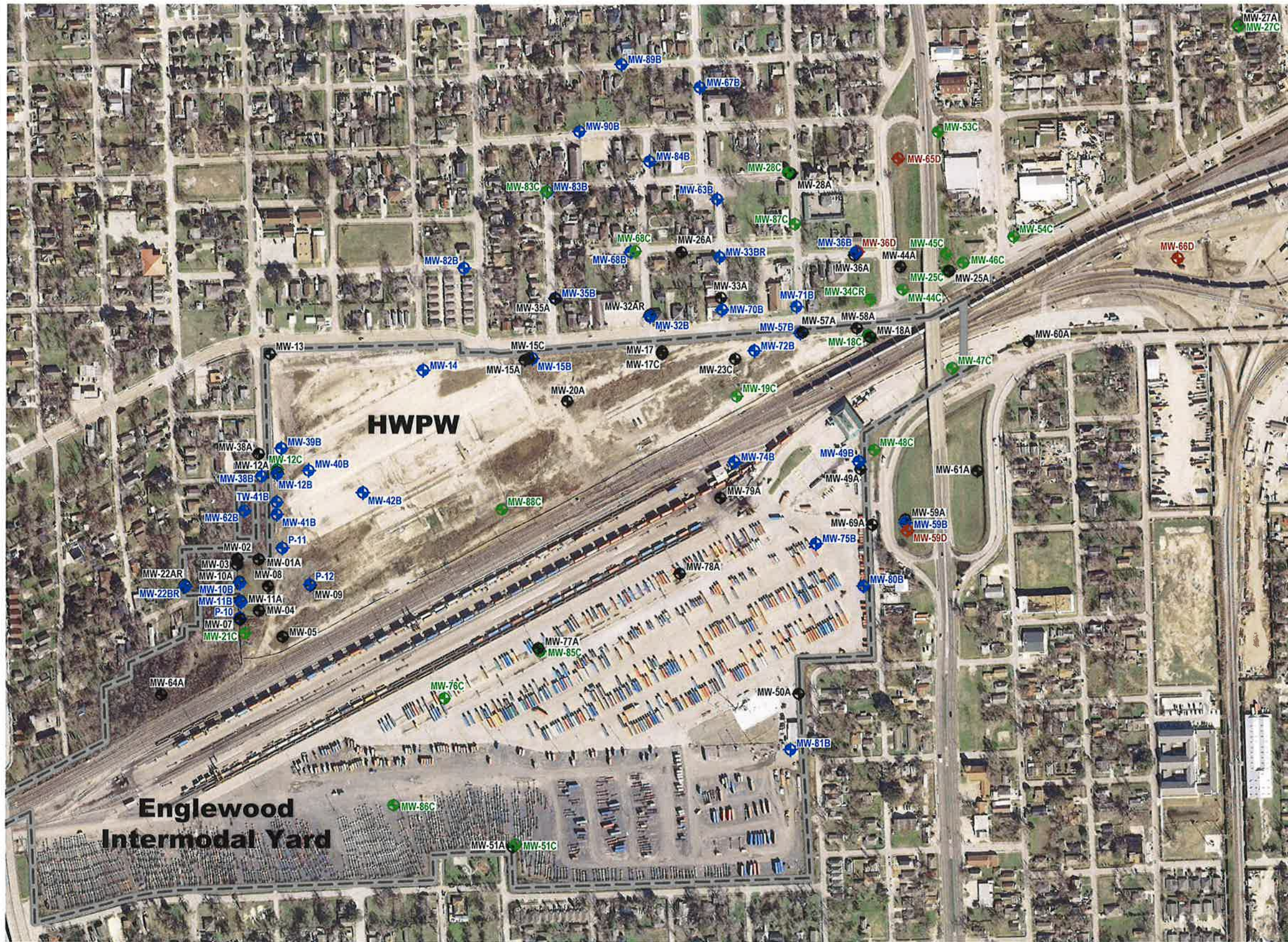


Eric C. Matzner, P.G.
Associate / Senior Consultant



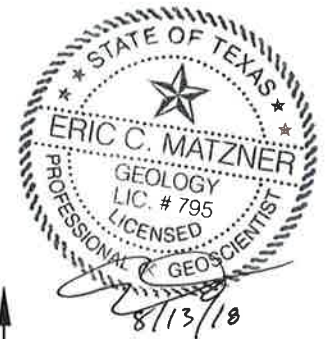
Texas Geosciences Firm No. 50248

CC: Mr. Kevin Peterburs – UPRR Milwaukee, WI
Mr. Nick Bryan – UPRR Law Department Houston, TX
Mr. Jason Ybarra, Waste Section Manager, TCEQ Region 12 Office, Houston
Ms. Karen Scott, TCEQ IHW Permits (MC130)
Mr. Aaron H. Vargas, TCEQ Environmental Law (MC173)



EXPLANATION

- UPRR Property Boundary
- A-TZ Monitoring Well Location
- ◆ B-CZ/B-TZ Monitoring Well Location
- ◆ C-TZ Monitoring Well Location
- ◆ D-TZ Monitoring Well Location



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.

Path: \\mapserver\mapserver\maps\fig1_mw_location_map.dwg | Last Edited By: jhans Date: 2018-06-13 Time: 7:26:27 AM | Printed By: jhans Date: 2018-06-13 Time: 7:26:46 AM

0	2018-06-11	Proposed Monitoring Well Locations	AJD	AJD	ECM	ECM
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED

SEAL

CLIENT
 UNION PACIFIC RAILROAD CO.

CONSULTANT
GOLDER
 ROUND ROCK
 2201 DOUBLE CREEK DR, SUITE 4004
 ROUND ROCK, TX 78664
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 512-671-3434
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PROJECT
 HOUSTON WOOD PRESERVING WORKS

TITLE
 MONITORING WELL LOCATION MAP

PROJECT NO
 30401358

REV. 1 of 1
 0

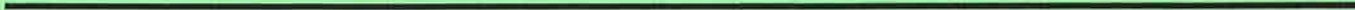
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIB

Attachment A
Groundwater Data

Attachment A-1 – Table 5D - Groundwater Measurements

Attachment A-2 – Table 5B-1 through 5B-8 – Summaries of Groundwater Sampling Results



Attachment A-1

Table 5D - Groundwater Measurements

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-01A	47.92	9/2/1993	6.96			40.99
	47.92	12/21/1993	3.28			44.67
	47.92	3/24/1994	3.95			44
	47.92	6/22/1994	5.30			42.65
	47.92	9/28/1994	7.10			40.85
	47.92	10/13/1994	7.26			40.69
	47.92	1/24/1995	2.63			45.32
	47.92	4/11/1995	2.61			45.34
	47.92	7/11/1995	4.78			43.17
	47.92	1/23/1996	5.67			42.28
	47.92	7/19/1996	7.84			40.11
	47.92	9/17/1996	8.33			39.62
	47.92	10/31/1996	6.90			41.05
	47.92	11/22/1996	8.63			39.32
	47.92	12/27/1996	5.50			42.45
	47.92	1/22/1997	3.41			44.54
	47.92	2/21/1997	2.68			45.27
	47.92	3/25/1997	2.96			44.99
	47.92	4/23/1997	4.27			43.68
	47.92	4/24/1997	4.47			43.48
	47.92	5/13/1997	2.91			45.04
	47.92	6/20/1997	4.88			43.07
	47.92	6/25/1997	2.59			45.36
	47.92	7/1/1997	4.04			43.91
	47.92	7/24/1997	6.80			41.15
	47.92	8/16/1997	7.84			40.11
	47.92	8/22/1997	9.52			38.43
	47.92	9/25/1997	6.02			41.93
	47.92	10/22/1997	4.89			43.06
	47.92	11/25/1997	4.88			43.07
	47.92	12/19/1997	4.26			43.69
	47.92	1/20/1998	3.10			44.85
	47.92	3/3/1998	2.87			45.08
	47.92	3/18/1998	2.68			45.27
	47.92	4/24/1998	6.73			41.22
	47.92	5/21/1998	6.89			41.06
	47.92	7/30/1998	7.96			39.99
	47.92	8/25/1998	6.87			41.08
	47.92	9/21/1998	4.70			43.25
	47.92	10/26/1998	5.98			41.97
	47.92	11/23/1998	4.11			43.84
	47.92	1/29/1999	3.01			44.94
	47.92	2/26/1999	3.20			44.75
	47.92	3/16/1999	3.71			44.24
	47.92	4/29/1999	3.93			44.02
	47.92	6/1/1999	3.98			43.97
	47.92	7/30/1999	4.31			43.64
	47.92	8/27/1999	4.11			43.84
	47.92	9/27/1999	9.67			38.28
	47.92	10/29/1999	10.67			37.28
	47.92	12/29/1999	10.00			37.95
	47.92	2/4/2000	12.71			35.24
	47.92	2/25/2000	9.10			38.85
	47.92	3/27/2000	7.38			40.57
	47.92	4/7/2000	7.00			40.95
	47.92	5/31/2000	7.15			40.8
	47.92	6/1/2000	7.00			40.95
	47.92	7/28/2000	7.11			40.84
	47.92	8/30/2000	10.33			37.62
	47.92	9/19/2000	11.56			36.39
	47.92	10/27/2000	9.01			38.94
	47.92	11/21/2000	8.49			39.46
	47.92	5/1/2001	6.60			41.35
	47.92	10/1/2001	6.85			41.1
	47.92	3/11/2002	3.31			44.64
	47.92	9/23/2002	3.23			44.72
	47.92	3/10/2003	2.48			45.44

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-01A	47.92	9/23/2003	4.29			43.63
	47.92	3/15/2004	3.49			44.43
	47.92	9/13/2004	8.26			39.66
	47.92	7/18/2005	3.73			44.19
	47.92	1/4/2006	8.54			39.38
	47.92	7/27/2006	3.10			44.82
	47.92	1/23/2007	2.26			45.66
	47.92	3/7/2007	2.36			45.56
	47.92	7/27/2007	4.05			43.87
	47.92	1/28/2008	2.51			45.41
	47.92	7/16/2008	7.21			40.71
	47.92	1/22/2009	6.21			41.71
	47.92	7/22/2009	6.96			40.96
	47.92	1/8/2010	3.07			44.85
	47.92	7/12/2010	3.87			44.05
	47.88	1/12/2011	3.63			44.25
	47.88	7/13/2011	9.94			37.94
	47.88	1/27/2012	3.19			44.69
	47.88	7/10/2013	9.96			37.92
	47.88	1/8/2014	5.21			42.67
	47.88	7/2/2014	6.81			41.07
	47.88	1/7/2015	2.36			45.52
	47.88	8/10/2015	4.11			43.77
	47.90	1/12/2016	2.49			45.41
47.90	7/7/2016	5.42			42.48	
47.90	1/12/2017	4.29			43.61	
47.90	7/12/2017	6.19			41.71	
47.90	1/3/2018	6.47			41.43	
MW-02	47.97	9/2/1993	7.45			40.58
	47.97	12/21/1993	2.58			45.45
	47.97	3/24/1994	4.08			43.95
	47.97	6/22/1994	5.85			42.18
	47.97	9/28/1994	7.05			40.98
	47.97	10/13/1994	7.69			40.34
	47.97	1/24/1995	2.12			45.91
	47.97	4/11/1995	2.53			45.5
	47.97	7/11/1995	5.34			42.69
	47.97	1/23/1996	5.69			42.34
	47.97	7/19/1996	8.28			39.75
	47.97	9/17/1996	8.84			39.19
	47.97	10/31/1996	7.11			40.92
	47.97	11/22/1996	8.99			39.04
	47.97	12/27/1996	5.42			42.61
	47.97	1/22/1997	3.08			44.95
	47.97	2/21/1997	2.60			45.43
	47.97	3/25/1997	2.98			45.05
	47.97	4/23/1997	4.60			43.43
	47.97	4/24/1997	4.78			43.25
	47.97	5/13/1997	2.89			45.14
	47.97	6/20/1997	5.45			42.58
	47.97	6/25/1997	2.59			45.44
	47.97	7/1/1997	4.48			43.55
	47.97	7/24/1997	7.42			40.61
	47.97	8/16/1997	8.42			39.61
	47.97	8/22/1997	9.20			38.83
	47.97	9/25/1997	4.53			43.5
	47.97	10/22/1997	4.95			43.08
	47.97	11/25/1997	4.97			43.06
	47.97	12/19/1997	4.33			43.7
	47.97	1/20/1998	3.05			44.98
	47.97	3/3/1998	2.88			45.15
	47.97	3/18/1998	2.66			45.37
47.97	4/24/1998	7.09			40.94	
47.97	5/21/1998	7.00			41.03	
47.97	7/30/1998	8.11			39.92	
47.97	8/25/1998	7.33			40.7	
47.97	9/21/1998	4.18			43.85	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-02	47.97	10/26/1998	6.85			41.18
	47.97	11/23/1998	4.63			43.4
	47.97	1/29/1999	3.51			44.52
	47.97	2/26/1999	3.61			44.42
	47.97	3/16/1999	3.55			44.48
	47.97	4/29/1999	3.76			44.27
	47.97	6/1/1999	3.76			44.27
	47.97	7/30/1999	4.61			43.42
	47.97	8/27/1999	3.96			44.07
	47.97	9/27/1999	10.12			37.91
	47.97	10/29/1999	11.33			36.7
	47.97	12/29/1999	10.66			37.37
	47.97	2/4/2000	13.19			34.84
	47.97	2/25/2000	9.57			38.46
	47.97	3/27/2000	7.73			40.3
	47.97	4/7/2000	7.30			40.73
	47.97	5/31/2000	7.33			40.7
	47.97	6/1/2000	7.31			40.72
	47.97	7/28/2000	7.35			40.68
	47.97	8/30/2000	10.55			37.48
	47.97	9/19/2000	11.93			36.1
	47.97	10/27/2000	9.04			38.99
	47.97	11/21/2000	8.66			39.37
	47.97	5/1/2001	6.91			41.12
	47.97	10/1/2001	8.22			39.81
	47.97	3/11/2002	3.33			44.7
	47.97	9/23/2002	3.16			44.87
	47.97	3/10/2003	2.54			45.43
	47.97	9/23/2003	3.29			44.68
	47.97	3/15/2004	2.87			45.1
	47.97	9/13/2004	8.71			39.26
	47.97	7/18/2005	2.98			44.99
	47.97	1/4/2006	8.77			39.2
	47.97	7/27/2006	2.87			45.1
	47.97	1/23/2007	2.34			45.63
	47.97	3/7/2007	2.23			45.74
	47.97	7/27/2007	4.40			43.57
	47.97	1/28/2008	2.42			45.55
	47.97	7/16/2008	7.72			40.25
	47.97	1/22/2009	6.31			41.66
	47.97	7/22/2009	7.56			40.41
	47.97	1/8/2010	3.91			44.06
47.97	7/12/2010	4.37			43.6	
48.00	1/12/2011	3.63			44.37	
48.00	7/13/2011	10.28			37.72	
48.00	1/27/2012	2.67			45.33	
48.00	7/10/2013	10.58			37.42	
48.00	1/8/2014	5.47			42.53	
48.00	7/2/2014	7.51			40.49	
48.00	1/7/2015	2.41			45.59	
48.00	8/10/2015	4.96			43.04	
47.89	1/12/2016	2.91			44.98	
47.89	7/7/2016	6.12			41.77	
47.89	1/12/2017	4.62			43.27	
47.89	7/12/2017	6.82			41.07	
47.89	1/3/2018	6.87			41.02	
MW-03	48.34	9/2/1993	8.17			40.17
	48.34	12/21/1993	3.81			44.53
	48.34	3/24/1994	4.74			43.6
	48.34	6/22/1994	6.35			41.99
	48.34	9/28/1994	7.56			40.78
	48.34	10/13/1994	8.21			40.13
	48.34	1/24/1995	3.18			45.16
	48.34	4/11/1995	3.22			45.12
	48.34	7/11/1995	7.90			40.44
	48.34	1/23/1996	6.27			42.07
	48.34	7/19/1996	8.77			39.57

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-03	48.34	9/17/1996	9.31			39.03
	48.34	10/31/1996	7.61			40.73
	48.34	11/22/1996	9.48			38.86
	48.34	12/27/1996	6.14			42.2
	48.34	1/22/1997	5.68			42.66
	48.34	2/21/1997	3.13			45.21
	48.34	3/25/1997	3.48			44.86
	48.34	4/23/1997	5.17			43.17
	48.34	4/24/1997	5.25			43.09
	48.34	5/13/1997	3.41			44.93
	48.34	6/20/1997	5.91			42.43
	48.34	6/25/1997	3.11			45.23
	48.34	7/1/1997	4.91			43.43
	48.34	7/24/1997	7.90			40.44
	48.34	8/16/1997	8.91			39.43
	48.34	8/22/1997	9.65			38.69
	48.34	9/25/1997	6.96			41.38
	48.34	10/22/1997	5.50			42.84
	48.34	11/25/1997	5.55			42.79
	48.34	12/19/1997	5.10			43.24
	48.34	1/20/1998	3.58			44.76
	48.34	3/3/1998	3.37			44.97
	48.34	3/18/1998	3.16			45.18
	48.34	4/24/1998	7.54			40.8
	48.34	5/21/1998	7.50			40.84
	48.34	7/30/1998	8.44			39.9
	48.34	8/25/1998	7.56			40.78
	48.34	9/21/1998	5.28			43.06
	48.34	10/26/1998	6.96			41.38
	48.34	11/23/1998	5.11			43.23
	48.34	1/29/1999	4.21			44.13
	48.34	2/26/1999	4.32			44.02
	48.34	3/16/1999	4.16			44.18
	48.34	4/29/1999	4.33			44.01
	48.34	6/1/1999	4.39			43.95
	48.34	7/30/1999	5.88			42.46
	48.34	8/27/1999	4.57			43.77
	48.34	9/27/1999	10.48			37.86
	48.34	10/29/1999	11.61			36.73
	48.34	12/29/1999	10.11			38.23
	48.34	2/4/2000	13.22			35.12
	48.34	2/25/2000	9.14			39.2
	48.34	3/27/2000	8.06			40.28
	48.34	4/7/2000	7.64			40.7
	48.34	5/31/2000	7.70			40.64
	48.34	6/1/2000	7.66			40.68
	48.34	7/28/2000	7.71			40.63
	48.34	8/30/2000	10.59			37.75
	48.34	9/19/2000	12.29			36.05
	48.34	10/27/2000	9.09			39.25
	48.34	11/21/2000	9.11			39.23
	48.34	5/1/2001	7.26			41.08
	48.34	10/1/2001	7.57			40.77
	48.34	3/11/2002	7.40			40.94
	48.34	9/23/2002	4.60			43.74
	48.34	3/10/2003	2.89			45.45
	48.34	9/23/2003	3.74			44.6
	48.34	3/15/2004	3.27			45.07
	48.34	9/13/2004	9.03			39.31
	48.34	7/18/2005	3.94			44.4
	48.34	1/4/2006	9.13			39.21
	48.34	7/27/2006	3.30			45.04
	48.34	3/7/2007	2.62			45.72
	48.34	7/27/2007	3.74			44.6
	48.34	1/30/2008	2.85			45.49
	48.34	7/16/2008	7.96			40.38
	48.34	2/4/2009	7.18			41.16

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-03	48.34	7/24/2009	7.63			40.71
	48.34	1/8/2010	5.06			43.28
	48.34	7/12/2010	3.86			44.48
	48.34	1/12/2011	3.71			44.63
	48.34	7/12/2011	6.42			41.92
	48.34	1/26/2012	--			
	48.34	7/9/2012	4.06			44.28
	48.34	1/7/2013	5.09			43.25
	48.34	7/22/2013	8.24			40.1
	48.34	1/7/2014	8.09			40.25
	48.34	7/15/2014	8.78			39.56
	48.34	1/5/2015	7.06			41.28
	48.34	2/11/2018	5.29			43.05
	48.34	3/11/2018	5.72			42.62
	48.34	5/14/2018	5.61			42.73
MW-04	49.85	9/2/1993	8.57			41.28
	49.85	12/21/1993	5.42			44.43
	49.85	3/24/1994	5.85			44
	49.85	6/22/1994	6.77			43.08
	49.85	9/28/1994	8.18			41.67
	49.85	10/13/1994	8.93			40.92
	49.85	1/24/1995	4.72			45.13
	49.85	4/11/1995	4.57			45.28
	49.85	7/11/1995	6.47			43.38
	49.85	1/23/1996	7.85			42
	49.85	7/19/1996	9.62			40.23
	49.85	9/17/1996	10.09			39.76
	49.85	10/31/1996	7.93			41.92
	49.85	11/22/1996	10.62			39.23
	49.85	12/27/1996	8.06			41.79
	49.85	1/22/1997	6.07			43.78
	49.85	2/21/1997	4.86			44.99
	49.85	3/25/1997	5.16			44.69
	49.85	4/23/1997	6.25			43.6
	49.85	4/24/1997	6.45			43.4
	49.85	5/13/1997	5.07			44.78
	49.85	6/20/1997	6.69			43.16
	49.85	6/25/1997	4.68			45.17
	49.85	7/1/1997	5.91			43.94
	49.85	7/24/1997	8.61			41.24
	49.85	8/16/1997	9.62			40.23
	49.85	8/22/1997	10.35			39.5
	49.85	9/25/1997	8.13			41.72
	49.85	10/22/1997	7.23			42.62
	49.85	11/25/1997	7.25			42.6
	49.85	12/19/1997	6.76			43.09
	49.85	1/20/1998	5.40			44.45
	49.85	3/3/1998	5.00			44.85
	49.85	3/18/1998	4.82			45.03
	49.85	4/24/1998	8.63			41.22
	49.85	5/21/1998	9.30			40.55
	49.85	7/30/1998	10.19			39.66
	49.85	8/25/1998	9.05			40.8
	49.85	9/21/1998	7.05			42.8
	49.85	10/26/1998	8.12			41.73
49.85	11/23/1998	6.01			43.84	
49.85	1/29/1999	5.19			44.66	
49.85	2/26/1999	5.22			44.63	
49.85	3/16/1999	6.21			43.64	
49.85	4/29/1999	6.33			43.52	
49.85	6/1/1999	6.39			43.46	
49.85	7/30/1999	7.79			42.06	
49.85	8/27/1999	6.51			43.34	
49.85	9/27/1999	11.32			38.53	
49.85	10/29/1999	12.21			37.64	
49.85	12/29/1999	11.52			38.33	
49.85	2/4/2000	14.33			35.52	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-04	49.85	2/25/2000	10.63			39.22
	49.85	3/27/2000	9.38			40.47
	49.85	4/7/2000	9.09			40.76
	49.85	5/31/2000	9.13			40.72
	49.85	6/1/2000	9.10			40.75
	49.85	7/28/2000	9.18			40.67
	49.85	8/30/2000	12.17			37.68
	49.85	9/19/2000	13.39			36.46
	49.85	10/27/2000	10.69			39.16
	49.85	11/21/2000	9.61			40.24
	49.85	5/1/2001	8.41			41.44
	49.85	10/1/2001	8.68			41.17
	49.85	3/11/2002	5.41			44.44
	49.85	9/23/2002	5.29			44.56
	49.85	3/10/2003	4.36			45.49
	49.85	9/23/2003	5.28			44.57
	49.85	3/15/2004	4.80			45.05
	49.85	9/13/2004	9.80			40.05
	49.85	7/18/2005	5.84			44.01
	49.85	1/4/2006	10.48			39.37
	49.85	7/27/2006	5.30			44.55
	49.85	3/7/2007	4.10			45.75
	49.85	7/27/2007	5.36			44.49
	49.85	1/29/2008	4.18			45.67
	49.85	7/16/2008	8.66			41.19
	49.85	2/4/2009	8.93			40.92
	49.85	7/24/2009	9.27			40.58
	49.85	1/8/2010	6.34			43.51
	49.85	7/12/2010	5.02			44.83
	49.85	1/12/2011	5.26			44.59
	49.85	7/12/2011	8.06			41.79
	49.85	1/26/2012	--			
	49.85	7/9/2012	3.74			46.11
	49.85	1/7/2013	4.62			45.23
	49.85	7/22/2013	7.59			42.26
	49.85	1/7/2014	7.16			42.69
	49.85	7/15/2014	7.62			42.23
	49.85	1/5/2015	6.12			43.73
	49.85	8/10/2015	4.26			45.59
	49.85	1/13/2016	3.92			45.93
49.85	7/6/2016	4.31			45.54	
49.85	1/12/2017	4.67			45.18	
49.85	7/6/2017	5.12			44.73	
49.85	9/5/2017	5.01			44.84	
49.85	2/11/2018	5.12			44.73	
49.85	3/11/2018	5.67			44.18	
49.85	5/14/2018	6.06			43.79	
MW-05	49.24	9/2/1993	4.90			44.34
	49.24	12/21/1993	2.21			47.03
	49.24	3/24/1994	2.30			46.94
	49.24	6/22/1994	2.80			46.44
	49.24	9/28/1994	3.90			45.34
	49.24	10/13/1994	5.05			44.19
	49.24	1/24/1995	1.36			47.88
	49.24	4/11/1995	3.90			45.34
	49.24	7/11/1995	5.33			43.91
	49.24	1/23/1996	7.42			41.82
	49.24	7/19/1996	8.61			40.63
	49.24	9/17/1996	9.01			40.23
	49.24	10/31/1996	7.84			41.4
	49.24	11/22/1996	9.68			39.56
	49.24	12/27/1996	7.66			41.58
	49.24	1/22/1997	5.89			43.35
	49.24	2/21/1997	4.45			44.79
	49.24	3/25/1997	4.65			44.59
	49.24	4/23/1997	5.53			43.71
	49.24	4/24/1997	5.68			43.56

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-05	49.24	5/13/1997	4.39			44.85
	49.24	6/20/1997	5.67			43.57
	49.24	6/25/1997	3.97			45.27
	49.24	7/1/1997	5.06			44.18
	49.24	7/24/1997	7.46			41.78
	49.24	8/16/1997	8.57			40.67
	49.24	8/22/1997	9.20			40.04
	49.24	9/25/1997	7.28			41.96
	49.24	10/22/1997	6.70			42.54
	49.24	11/25/1997	6.70			42.54
	49.24	12/19/1997	6.26			42.98
	49.24	1/20/1998	5.05			44.19
	49.24	3/4/1998	4.54			44.7
	49.24	3/18/1998	4.36			44.88
	49.24	4/24/1998	7.67			41.57
	49.24	5/21/1998	8.80			40.44
	49.24	7/30/1998	9.90			39.34
	49.24	8/25/1998	8.86			40.38
	49.24	9/21/1998	6.59			42.65
	49.24	10/26/1998	7.77			41.47
	49.24	11/23/1998	5.79			43.45
	49.24	1/29/1999	4.88			44.36
	49.24	2/26/1999	4.96			44.28
	49.24	3/16/1999	5.81			43.43
	49.24	4/29/1999	5.91			43.33
	49.24	6/1/1999	5.99			43.25
	49.24	7/30/1999	7.00			42.24
	49.24	8/27/1999	6.13			43.11
	49.24	9/27/1999	10.17			39.07
	49.24	10/29/1999	11.65			37.59
	49.24	12/29/1999	10.90			38.34
	49.24	2/4/2000	13.77			35.47
	49.24	2/25/2000	9.46			39.78
	49.24	3/27/2000	8.62			40.62
	49.24	4/7/2000	8.20			41.04
	49.24	5/31/2000	8.26			40.98
	49.24	6/1/2000	8.21			41.03
	49.24	7/28/2000	8.26			40.98
	49.24	8/30/2000	11.33			37.91
	49.24	9/19/2000	12.33			36.91
	49.24	10/27/2000	9.94			39.3
	49.24	11/21/2000	9.21			40.03
	49.24	5/1/2001	7.47			41.77
	49.24	10/1/2001	7.79			41.45
	49.24	3/11/2002	4.92			44.32
	49.24	9/23/2002	4.76			44.48
	49.24	3/10/2003	3.77			45.47
	49.24	9/23/2003	4.61			44.63
	49.24	3/15/2004	4.22			45.02
	49.24	9/13/2004	8.58			40.66
	49.24	7/18/2005	5.61			43.63
	49.24	1/4/2006	9.76			39.48
	49.24	7/27/2006	4.85			44.39
	49.24	3/7/2007	5.94			43.3
	49.24	7/27/2007	4.53			44.71
	49.24	1/29/2008	3.71			45.53
	49.24	7/15/2008	7.77			41.47
	49.24	2/4/2009	8.33			40.91
	49.24	7/24/2009	8.67			40.57
	49.24	1/8/2010	6.06			43.18
	49.24	7/12/2010	4.86			44.38
	49.24	1/12/2011	5.06			44.18
	49.24	7/12/2011	10.96			38.28
	49.24	2/2/2012	4.9			44.34
	49.24	7/9/2012	4.61			44.63
	49.24	1/7/2013	7.58			41.66
	49.24	7/22/2013	10.44			38.8

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)	
MW-07	49.24	1/7/2014	6.92			42.32	
	49.24	7/16/2014	8.46			40.78	
	49.24	1/5/2015	5.96			43.28	
	49.24	8/10/2015	4.13			45.11	
	49.24	1/13/2016	3.76			45.48	
	49.24	7/7/2016	3.94			45.30	
	49.24	1/12/2017	4.31			44.93	
	49.24	7/6/2017	4.84			44.40	
	49.24	9/5/2017	4.71			44.53	
	49.24	2/11/2018	5.56			43.68	
	49.24	3/11/2018	5.98			43.26	
	49.24	5/14/2018	6.57			42.67	
	MW-07	48.86	9/2/1993	8.09			40.77
		48.86	12/21/1993	4.60			44.26
48.86		3/24/1994	5.06			43.8	
48.86		6/22/1994	6.03			42.83	
48.86		9/28/1994	7.52			41.34	
48.86		10/13/1994	8.13			40.73	
48.86		1/24/1995	3.81			45.05	
48.86		4/11/1995	3.41			45.45	
48.86		7/11/1995	5.74			43.12	
48.86		1/23/1996	6.99			41.87	
48.86		7/19/1996	8.89			39.97	
48.86		9/17/1996	9.41			39.45	
48.86		10/31/1996	8.04			40.82	
48.86		11/22/1996	9.94			38.92	
48.86		12/27/1996	7.30			41.56	
48.86		1/22/1997	5.25			43.61	
48.86		2/21/1997	4.00			44.86	
48.86		3/25/1997	4.32			44.54	
48.86		4/23/1997	5.51			43.35	
48.86		4/24/1997	5.67			43.19	
48.86		5/13/1997	4.26			44.6	
48.86		6/20/1997	6.00			42.86	
48.86		6/25/1997	3.86			45	
48.86		7/1/1997	5.21			43.65	
48.86		7/24/1997	7.99			40.87	
48.86		8/16/1997	8.92			39.94	
48.86		8/22/1997	9.72			39.14	
48.86		9/25/1997	7.50			41.36	
48.86		10/22/1997	6.48			42.38	
48.86		11/25/1997	6.50			42.36	
48.86		12/19/1997	6.12			42.74	
48.86		1/20/1998	4.52			44.34	
48.86		3/4/1998	4.14			44.72	
48.86		3/18/1998	3.94			44.92	
48.86		4/24/1998	7.85			41.01	
48.86		5/21/1998	8.61			40.25	
48.86		7/30/1998	9.54			39.32	
48.86		8/25/1998	8.63			40.23	
48.86		9/21/1998	6.34			42.52	
48.86		10/26/1998	7.56			41.3	
48.86		11/23/1998	5.91			42.95	
48.86		1/29/1999	4.71			44.15	
48.86		2/26/1999	4.76			44.1	
48.86		3/16/1999	5.32			43.54	
48.86		4/29/1999	5.41			43.45	
48.86		6/1/1999	5.49			43.37	
48.86		7/30/1999	6.98			41.88	
48.86		8/27/1999	5.61			43.25	
48.86		9/27/1999	10.64			38.22	
48.86		10/29/1999	11.56			37.3	
48.86	12/29/1999	9.90			38.96		
48.86	2/4/2000	14.21			34.65		
48.86	2/25/2000	8.86			40		
48.86	3/27/2000	8.62			40.24		
48.86	4/7/2000	8.15			40.71		

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-07	48.86	5/31/2000	8.21			40.65
	48.86	6/1/2000	8.22			40.64
	48.86	7/28/2000	8.29			40.57
	48.86	8/30/2000	11.55			37.31
	48.86	9/19/2000	12.65			36.21
	48.86	10/27/2000	10.00			38.86
	48.86	11/21/2000	9.46			39.4
	48.86	5/1/2001	7.64			41.22
	48.86	10/1/2001	8.00			40.86
	48.86	3/11/2002	4.56			44.3
	48.86	9/23/2002	4.69			44.17
	48.86	3/10/2003	3.52			45.34
	48.86	9/23/2003	4.70			44.16
	48.86	3/15/2004	3.89			44.97
	48.86	9/13/2004	9.04			39.82
	48.86	7/18/2005	5.27			43.59
	48.86	1/4/2006	9.91			38.95
	48.86	7/27/2006	4.60			44.26
	48.86	1/23/2007	3.46			45.4
	48.86	3/7/2007	3.82			45.04
	48.86	7/27/2007	4.94			43.92
	48.86	1/29/2008	3.39			45.47
	48.86	7/16/2008	7.94			40.92
	48.86	1/22/2009	7.49			41.37
	48.86	7/24/2009	NM			
	48.86	1/8/2010	4.02			44.84
	48.86	7/12/2010	4.72			44.14
	48.92	1/12/2011	4.56			44.36
	48.92	7/12/2011	10.91			38.01
	48.92	1/27/2012	3.86			45.06
	48.92	7/10/2013	10.62			38.30
	48.92	1/8/2014	6.42			42.50
	48.92	7/3/2014	7.61			41.31
48.92	1/7/2015	3.46			45.46	
48.92	8/10/2015	5.01			43.91	
48.91	1/12/2016	3.09			45.82	
48.91	7/7/2016	6.72			42.19	
48.91	1/12/2017	5.81			43.10	
48.91	7/12/2017	7.71			41.20	
48.91	1/3/2018	7.87			41.04	
MW-08	49.33	9/2/1993	8.18			41.19
	49.33	12/21/1993	5.02			44.35
	49.33	3/24/1994	5.53			43.84
	49.33	6/22/1994	6.38			42.99
	49.33	9/28/1994	7.72			41.65
	49.33	10/13/1994	8.43			40.94
	49.33	1/24/1995	4.15			45.22
	49.33	4/11/1995	4.02			45.35
	49.33	7/11/1995	5.95			43.42
	49.33	1/23/1996	7.20			42.17
	49.33	7/19/1996	9.06			40.31
	49.33	9/17/1996	9.51			39.86
	49.33	10/31/1996	7.99			41.38
	49.33	11/22/1996	9.98			39.39
	49.33	12/27/1996	7.24			42.13
	49.33	1/22/1997	5.25			44.12
	49.33	2/21/1997	4.21			45.16
	49.33	3/25/1997	4.48			44.89
	49.33	4/23/1997	5.61			43.76
	49.33	4/24/1997	5.76			43.61
	49.33	5/13/1997	4.45			44.92
	49.33	6/20/1997	6.09			43.28
	49.33	6/25/1997	4.56			44.81
	49.33	7/1/1997	5.06			44.31
	49.33	7/24/1997	7.97			41.4
	49.33	8/16/1997	8.05			41.32
	49.33	8/22/1997	9.73			39.64

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-08	49.33	9/25/1997	7.57			41.8
	49.33	10/22/1997	6.43			42.94
	49.33	11/25/1997	6.48			42.89
	49.33	12/19/1997	5.22			44.15
	49.33	1/20/1998	4.70			44.67
	49.33	3/4/1998	4.38			44.99
	49.33	3/18/1998	4.18			45.19
	49.33	4/24/1998	8.00			41.37
	49.33	5/21/1998	8.45			40.92
	49.33	7/30/1998	9.33			40.04
	49.33	8/25/1998	8.46			40.91
	49.33	9/21/1998	6.31			43.06
	49.33	10/26/1998	7.66			41.71
	49.33	11/23/1998	5.96			43.41
	49.33	1/29/1999	4.80			44.57
	49.33	2/26/1999	4.89			44.48
	49.33	3/16/1999	5.45			43.92
	49.33	4/29/1999	5.66			43.71
	49.33	6/1/1999	5.66			43.71
	49.33	7/30/1999	7.20			42.17
	49.33	8/27/1999	5.85			43.52
	49.33	9/27/1999	10.78			38.59
	49.33	10/29/1999	11.76			37.61
	49.33	12/29/1999	11.03			38.34
	49.33	2/4/2000	14.66			34.71
	49.33	2/25/2000	10.33			39.04
	49.33	3/27/2000	8.75			40.62
	49.33	4/7/2000	8.37			41
	49.33	5/31/2000	8.40			40.97
	49.33	6/1/2000	8.36			41.01
	49.33	7/28/2000	8.40			40.97
	49.33	8/30/2000	11.29			38.08
	49.33	9/19/2000	12.82			36.55
	49.33	10/27/2000	12.63			36.74
	49.33	11/21/2000	9.64			39.73
	49.33	5/1/2001	7.83			41.54
	49.33	10/1/2001	8.05			41.32
	49.33	3/11/2002	4.75			44.62
	49.33	9/23/2002	4.69			44.68
	49.33	3/10/2003	3.84			45.49
	49.33	9/23/2003	4.73			44.6
	49.33	3/15/2004	4.31			45.02
	49.33	9/13/2004	9.31			40.02
	49.33	7/18/2005	5.32			44.01
	49.33	1/4/2006	10.63			38.7
	49.33	7/27/2006	4.79			44.54
	49.33	1/22/2007	3.81			45.52
	49.33	3/7/2007	3.96			45.37
	49.33	7/27/2007	5.06			44.27
	49.33	1/29/2008	3.71			45.62
	49.33	7/16/2008	8.32			41.01
	49.33	1/22/2009	7.71			41.62
	49.33	7/24/2009	NM			
	49.33	1/8/2010	4.17			45.16
	49.33	7/12/2010	4.96			44.37
	49.33	1/12/2011	5.32			44.01
	49.33	7/12/2011	11.24			38.09
	49.33	1/27/2012	4.68			44.65
	49.33	7/10/2013	11.07			38.26
	49.33	1/8/2014	6.87			42.46
	49.33	7/3/2014	8.16			41.17
	49.33	1/7/2015	3.82			45.51
	49.33	8/10/2015	5.06			44.27
	49.33	1/12/2016	3.87			45.46
	49.33	7/7/2016	6.44			42.89
	49.33	1/12/2017	5.82			43.51
	49.33	7/12/2017	7.92			41.41

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-08	49.33	1/3/2018	8.02			41.31
MW-09	49.26	9/2/1993	7.43			41.86
	49.26	12/21/1993	4.89			44.4
	49.26	3/24/1994	4.92			44.37
	49.26	6/22/1994	5.51			43.78
	49.26	9/28/1994	6.90			42.39
	49.26	10/13/1994	7.66			41.63
	49.26	1/24/1995	4.10			45.19
	49.26	4/11/1995	3.74			45.55
	49.26	7/11/1995	5.08			44.21
	49.26	1/23/1996	7.09			42.2
	49.26	7/19/1996	8.27			41.02
	49.26	9/17/1996	8.58			40.71
	49.26	10/31/1996	7.27			42.02
	49.26	11/22/1996	9.17			40.12
	49.26	12/27/1996	7.05			42.24
	49.26	1/22/1997	5.42			43.87
	49.26	2/21/1997	4.09			45.2
	49.26	3/25/1997	4.17			45.12
	49.26	4/23/1997	5.05			44.24
	49.26	4/24/1997	5.21			44.08
	49.26	5/13/1997	4.16			45.13
	49.26	6/20/1997	5.32			43.97
	49.26	6/25/1997	3.80			45.49
	49.26	7/1/1997	4.57			44.72
	49.26	7/24/1997	7.03			42.26
	49.26	8/16/1997	8.26			41.03
	49.26	8/22/1997	8.67			40.62
	49.26	9/25/1997	6.99			42.3
	49.26	10/22/1997	6.10			43.19
	49.26	11/25/1997	6.12			43.17
	49.26	12/19/1997	5.62			43.67
	49.26	1/20/1998	4.60			44.69
	49.26	3/4/1998	4.15			45.14
	49.26	3/18/1998	4.02			45.27
	49.26	4/24/1998	7.32			41.97
	49.26	5/21/1998	8.10			41.19
	49.26	7/30/1998	9.12			40.17
	49.26	8/25/1998	8.41			40.88
	49.26	9/21/1998	6.11			43.18
	49.26	10/26/1998	7.61			41.68
	49.26	11/23/1998	5.43			43.86
	49.26	1/29/1999	4.60			44.69
	49.26	2/26/1999	4.68			44.61
	49.26	3/16/1999	5.46			43.83
	49.26	4/29/1999	5.66			43.63
	49.26	6/1/1999	5.66			43.63
	49.26	7/30/1999	7.11			42.18
	49.26	8/27/1999	5.86			43.43
	49.26	9/27/1999	9.81			39.48
	49.26	10/29/1999	10.63			38.66
	49.26	12/29/1999	9.99			39.3
	49.26	2/4/2000	12.44			36.85
	49.26	2/25/2000	8.88			40.41
	49.26	3/27/2000	8.22			41.07
	49.26	4/7/2000	8.10			41.19
	49.26	5/31/2000	8.15			41.14
	49.26	6/1/2000	8.00			41.29
	49.26	7/28/2000	8.11			41.18
	49.26	8/30/2000	11.10			38.19
	49.26	9/19/2000	11.91			37.38
	49.26	10/27/2000	9.84			39.45
	49.26	11/21/2000	8.89			40.4
	49.26	5/1/2001	7.16			42.13
	49.26	10/1/2001	7.39			41.9
	49.26	3/11/2002	4.61			44.68
	49.26	9/23/2002	4.45			44.84

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-09	49.26	3/10/2003	3.59			45.67
	49.26	9/23/2003	4.31			44.95
	49.26	3/15/2004	4.18			45.08
	49.26	9/13/2004	8.39			40.87
	49.26	7/18/2005	5.53			43.73
	49.26	1/4/2006	9.46			39.8
	49.26	7/27/2006	4.85			44.41
	49.26	3/7/2007	5.58			43.68
	49.26	7/27/2007	3.78			45.48
	49.26	1/29/2008	3.52			45.74
	49.26	7/15/2008	7.04			42.22
	49.26	2/4/2009	8.01			41.25
	49.26	7/24/2009	8.34			40.92
	49.26	1/8/2010	5.89			43.37
	49.26	7/12/2010	4.32			44.94
	49.26	1/12/2011	4.61			44.65
	49.26	7/12/2011	10.71			38.55
	49.26	1/26/2012	4.73			44.53
	49.26	7/9/2012	4.23			45.03
	49.26	1/7/2013	6.73			42.53
	49.26	7/22/2013	9.16			40.1
	49.26	1/7/2014	8.72			40.54
	49.26	7/16/2014	8.17			41.09
	49.26	1/5/2015	8.01			41.25
	49.26	8/10/2015	6.17			43.09
	49.26	1/13/2016	5.81			43.45
	49.26	7/6/2016	6.14			43.12
	49.26	1/12/2017	6.71			42.55
	49.26	7/6/2017	7.09			42.17
	49.26	9/5/2017	7.06			42.20
49.26	2/11/2018	5.16			44.10	
49.26	3/11/2018	6.01			43.25	
49.26	5/14/2018	6.21			43.05	
MW-10A	49.86	9/28/1994	8.69			41.21
	49.86	10/13/1994	9.36			40.54
	49.86	1/24/1995	4.62			45.28
	49.86	4/11/1995	4.60			45.3
	49.86	7/11/1995	7.00			42.9
	49.86	1/23/1996	7.74			42.16
	49.86	7/19/1996	9.98			39.92
	49.86	9/17/1996	10.54			39.36
	49.86	10/31/1996	7.94			41.96
	49.86	11/22/1996	10.82			39.08
	49.86	12/27/1996	7.81			42.09
	49.86	1/22/1997	5.45			44.45
	49.86	2/21/1997	4.63			45.27
	49.86	3/25/1997	5.01			44.89
	49.86	4/23/1997	6.39			43.51
	49.86	4/24/1997	6.58			43.32
	49.86	5/13/1997	4.93			44.97
	49.86	6/20/1997	7.08			42.82
	49.86	6/25/1997	4.58			45.32
	49.86	7/1/1997	6.13			43.77
	49.86	7/24/1997	9.11			40.79
	49.86	8/16/1997	10.10			39.8
	49.86	8/22/1997	10.81			39.09
	49.86	9/25/1997	8.47			41.43
	49.86	10/22/1997	7.02			42.88
	49.86	11/25/1997	7.05			42.85
	49.86	12/19/1997	6.89			43.01
	49.86	1/20/1998	5.10			44.8
	49.86	3/3/1998	4.87			45.03
	49.86	3/18/1998	4.65			45.25
49.86	4/24/1998	8.84			41.06	
49.86	5/21/1998	9.10			40.8	
49.86	7/30/1998	10.23			39.67	
49.86	8/25/1998	9.11			40.79	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-10A	49.86	9/21/1998	6.82			43.08
	49.86	10/26/1998	8.19			41.71
	49.86	11/23/1998	6.12			43.78
	49.86	1/29/1999	5.61			44.29
	49.86	2/26/1999	5.69			44.21
	49.86	3/16/1999	5.91			43.99
	49.86	4/29/1999	6.11			43.79
	49.86	6/1/1999	6.10			43.8
	49.86	7/30/1999	7.70			42.2
	49.86	8/27/1999	6.31			43.59
	49.86	9/27/1999	11.73			38.17
	49.86	10/29/1999	12.69			37.21
	49.86	12/29/1999	12.00			37.9
	49.86	2/4/2000	14.30			35.6
	49.86	2/25/2000	11.44			38.46
	49.86	3/27/2000	9.57			40.33
	49.86	4/7/2000	9.27			40.63
	49.86	5/31/2000	9.31			40.59
	49.86	6/1/2000	9.10			40.8
	49.86	7/28/2000	9.30			40.6
	49.86	8/30/2000	12.09			37.81
	49.86	9/19/2000	13.70			36.2
	49.86	10/27/2000	10.69			39.21
	49.86	11/21/2000	10.49			39.41
	49.86	5/1/2001	8.64			41.26
	49.86	10/1/2001	8.93			40.97
	49.86	3/11/2002	5.30			44.6
	49.86	9/23/2002	5.19			44.71
	49.86	3/10/2003	4.43			45.43
	49.86	9/23/2003	5.31			44.55
	49.86	3/15/2004	4.69			45.17
	49.86	9/13/2004	10.30			39.56
	49.86	7/18/2005	5.57			44.29
	49.86	1/4/2006	9.68			40.18
	49.86	7/27/2006	5.01			44.85
	49.86	1/23/2007	4.29			45.57
	49.86	3/7/2007	4.13			45.73
	49.86	7/27/2007	6.03			43.83
	49.86	1/28/2008	4.22			45.64
	49.86	7/16/2008	9.31			40.55
49.86	1/22/2009	8.27			41.59	
49.86	7/24/2009	NM				
49.86	1/8/2010	4.64			45.22	
49.86	7/12/2010	5.23			44.63	
49.82	1/12/2011	5.72			44.10	
49.82	7/13/2011	11.96			37.86	
49.82	7/12/2011	12.07			37.75	
49.82	1/27/2012	4.88			44.94	
49.82	7/10/2013	12.07			37.75	
49.82	1/8/2014	7.33			42.49	
49.82	7/2/2014	8.92			40.90	
49.82	1/7/2015	4.26			45.56	
49.82	8/10/2015	6.02			43.80	
49.83	1/12/2016	4.41			45.42	
49.83	7/7/2016	7.36			42.47	
49.83	1/12/2017	6.69			43.14	
49.83	7/12/2017	8.23			41.60	
49.83	1/3/2018	8.63			41.20	
MW-10B	49.94	9/28/1994	8.77			41.2
	49.94	10/13/1994	9.45			40.52
	49.94	1/24/1995	4.72			45.25
	49.94	4/11/1995	4.72			45.25
	49.94	7/11/1995	7.13			42.84
	49.94	1/23/1996	7.84			42.13
	49.94	7/19/1996	10.27			39.7
	49.94	9/17/1996	10.64			39.33
49.94	10/31/1996	8.01			41.96	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-10B	49.94	11/22/1996	10.93			39.04
	49.94	12/27/1996	7.99			41.98
	49.94	1/22/1997	5.72			44.25
	49.94	2/21/1997	4.78			45.19
	49.94	3/25/1997	5.13			44.84
	49.94	4/23/1997	6.52			43.45
	49.94	4/24/1997	6.71			43.26
	49.94	5/13/1997	5.09			44.88
	49.94	6/20/1997	7.21			42.76
	49.94	6/25/1997	4.71			45.26
	49.94	7/1/1997	6.27			43.7
	49.94	7/24/1997	9.15			40.82
	49.94	8/16/1997	10.19			39.78
	49.94	8/22/1997	10.92			39.05
	49.94	9/25/1997	8.69			41.28
	49.94	10/22/1997	7.18			42.79
	49.94	11/25/1997	7.21			42.76
	49.94	12/19/1997	6.56			43.41
	49.94	1/20/1998	5.25			44.72
	49.94	3/3/1998	5.00			44.97
	49.94	3/18/1998	4.79			45.18
	49.94	4/24/1998	8.95			41.02
	49.94	5/21/1998	9.30			40.67
	49.94	7/30/1998	10.30			39.67
	49.94	8/25/1998	9.20			40.77
	49.94	9/21/1998	7.06			42.91
	49.94	10/26/1998	8.31			41.66
	49.94	11/23/1998	6.25			43.72
	49.94	1/29/1999	5.71			44.26
	49.94	2/26/1999	5.76			44.21
	49.94	3/16/1999	6.05			43.92
	49.94	4/29/1999	6.10			43.87
	49.94	6/1/1999	6.10			43.87
	49.94	7/30/1999	7.61			42.36
	49.94	8/27/1999	6.33			43.64
	49.94	9/27/1999	11.90			38.07
	49.94	10/29/1999	12.60			37.37
	49.94	12/29/1999	12.10			37.87
	49.94	2/4/2000	14.29			35.68
	49.94	2/25/2000	11.15			38.82
	49.94	3/27/2000	9.67			40.3
	49.94	4/7/2000	9.32			40.65
	49.94	5/31/2000	9.38			40.59
	49.94	6/1/2000	9.21			40.76
	49.94	7/28/2000	9.33			40.64
	49.94	8/30/2000	12.11			37.86
	49.94	9/19/2000	13.77			36.2
	49.94	10/27/2000	10.63			39.34
	49.94	11/21/2000	10.64			39.33
	49.94	5/1/2001	8.75			41.22
	49.94	10/1/2001	9.12			40.85
	49.94	3/11/2002	5.47			44.5
	49.94	9/23/2002	5.40			44.57
	49.94	3/10/2003	4.59			45.35
	49.94	9/23/2003	5.58			44.36
	49.94	3/15/2004	5.78			44.16
	49.94	9/13/2004	10.41			39.53
	49.94	7/18/2005	5.97			43.97
	49.94	1/4/2006	10.75			39.19
	49.94	7/27/2006	5.73			44.21
	49.94	1/23/2007	4.45			45.49
	49.94	3/7/2007	4.61			45.33
	49.94	7/27/2007	6.15			43.79
	49.94	1/28/2008	4.44			45.5
	49.94	7/16/2008	9.42			40.52
	49.94	1/22/2009	8.39			41.55
	49.94	7/24/2009	NM			

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-10B	49.94	1/8/2010	4.91			45.03
	49.94	7/12/2010	5.33			44.61
	49.95	1/12/2011	5.96			43.99
	49.95	7/13/2011	12.07			37.88
	49.95	1/27/2012	5.02			44.93
	49.95	7/10/2013	12.18			37.77
	49.95	1/8/2014	7.46			42.49
	49.95	7/2/2014	8.96			40.99
	49.95	1/7/2015	4.46			45.49
	49.95	8/10/2015	6.14			43.81
	49.96	1/12/2016	4.64			45.32
	49.96	7/7/2016	7.62			42.34
	49.96	1/12/2017	6.57			43.39
	49.96	7/12/2017	8.33			41.63
	49.96	1/3/2018	8.71			41.25
MW-11A	50.05	9/28/1994	8.66			41.38
	50.05	10/13/1994	9.35			40.69
	50.05	1/24/1995	4.88			45.16
	50.05	4/11/1995	4.81			45.23
	50.05	7/11/1995	6.67			43.37
	50.05	1/23/1996	8.01			42.03
	50.05	7/19/1996	10.09			39.95
	50.05	9/17/1996	10.56			39.48
	50.05	10/31/1996	8.16			41.88
	50.05	11/22/1996	10.98			39.06
	50.05	12/27/1996	8.21			41.83
	50.05	1/22/1997	6.06			43.98
	50.05	2/21/1997	4.98			45.06
	50.05	3/25/1997	5.32			44.72
	50.05	4/23/1997	6.59			43.45
	50.05	4/24/1997	6.77			43.27
	50.05	5/13/1997	5.31			44.73
	50.05	6/20/1997	7.15			42.89
	50.05	6/25/1997	4.88			45.16
	50.05	7/1/1997	6.29			43.75
	50.05	7/24/1997	9.12			40.92
	50.05	8/16/1997	10.11			39.93
	50.05	8/22/1997	10.82			39.22
	50.05	9/25/1997	8.70			41.34
	50.05	10/22/1997	7.40			42.64
	50.05	11/25/1997	7.41			42.63
	50.05	12/19/1997	6.10			43.94
	50.05	1/20/1998	5.49			44.55
	50.05	3/3/1998	5.16			44.88
	50.05	3/18/1998	4.96			45.08
	50.05	4/24/1998	8.98			41.06
	50.05	5/21/1998	9.40			40.64
	50.05	7/30/1998	10.56			39.48
	50.05	8/25/1998	9.32			40.72
	50.05	9/21/1998	7.28			42.76
50.05	10/26/1998	8.43			41.61	
50.05	11/23/1998	6.41			43.63	
50.05	1/29/1999	5.31			44.73	
50.05	2/26/1999	5.39			44.65	
50.05	3/16/1999	6.32			43.72	
50.05	4/29/1999	6.51			43.53	
50.05	6/1/1999	6.57			43.47	
50.05	7/30/1999	8.00			42.04	
50.05	8/27/1999	6.79			43.25	
50.05	9/27/1999	11.73			38.31	
50.05	10/29/1999	12.81			37.23	
50.05	12/29/1999	12.11			37.93	
50.05	2/4/2000	14.33			35.71	
50.05	2/25/2000	11.10			38.94	
50.05	3/27/2000	9.66			40.38	
50.05	4/7/2000	9.40			40.64	
50.05	5/31/2000	9.50			40.54	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-11A	50.05	6/1/2000	9.30			40.74
	50.05	7/28/2000	9.47			40.57
	50.05	8/30/2000	12.44			37.6
	50.05	9/19/2000	13.74			36.3
	50.05	10/27/2000	11.01			39.03
	50.05	11/21/2000	10.69			39.35
	50.05	5/1/2001	8.78			41.26
	50.05	10/1/2001	9.12			40.93
	50.05	3/11/2002	5.59			44.45
	50.05	9/23/2002	5.60			44.44
	50.05	3/10/2003	4.66			45.39
	50.05	9/23/2003	5.73			44.32
	50.05	3/15/2004	4.99			45.06
	50.05	9/13/2004	10.28			39.77
	50.05	7/18/2005	6.66			43.39
	50.05	1/5/2006	10.85			39.2
	50.05	7/27/2006	5.02			45.03
	50.05	1/23/2007	4.54			45.51
	50.05	3/7/2007	4.26			45.79
	50.05	7/27/2007	6.09			43.96
	50.05	1/28/2008	4.46			45.59
	50.05	7/16/2008	9.25			40.8
	50.05	1/22/2009	8.57			41.48
	50.05	7/24/2009	NM			
	50.05	1/8/2010	4.97			45.08
	50.05	7/12/2010	5.51			44.54
	50.07	1/12/2011	6.21			43.86
	50.07	7/12/2011	12.02			38.05
	50.07	1/27/2012	5.31			44.76
	50.07	7/10/2013	12.01			38.06
	50.07	1/8/2014	7.46			42.61
	50.07	7/2/2014	9.02			41.05
	50.07	1/7/2015	4.58			45.49
	50.07	8/10/2015	6.11			43.96
50.16	1/12/2016	4.71			45.45	
50.16	7/7/2016	7.61			42.55	
50.16	1/12/2017	8.47			41.69	
50.16	7/12/2017	8.46			41.70	
50.16	1/3/2018	8.94			41.22	
MW-11B	50.18	9/28/1994	8.92			41.27
	50.18	10/13/1994	9.59			40.6
	50.18	1/24/1995	5.04			45.15
	50.18	4/11/1995	5.01			45.18
	50.18	7/11/1995	7.23			42.96
	50.18	1/23/1996	8.20			41.99
	50.18	7/19/1996	8.92			41.27
	50.18	9/17/1996	10.83			39.36
	50.18	10/31/1996	9.34			40.85
	50.18	11/22/1996	11.23			38.96
	50.18	12/27/1996	8.45			41.74
	50.18	1/22/1997	6.28			43.91
	50.18	2/21/1997	5.16			45.03
	50.18	3/25/1997	5.51			44.68
	50.18	4/23/1997	6.81			43.38
	50.18	4/24/1997	6.99			43.2
	50.18	5/13/1997	5.46			44.73
	50.18	6/20/1997	7.40			42.79
	50.18	6/25/1997	5.06			45.13
	50.18	7/1/1997	6.52			43.67
	50.18	7/24/1997	9.36			40.83
	50.18	8/16/1997	10.36			39.83
	50.18	8/22/1997	11.11			39.08
	50.18	9/25/1997	8.96			41.23
	50.18	10/22/1997	7.61			42.58
	50.18	11/25/1997	7.63			42.56
	50.18	12/19/1997	7.11			43.08
50.18	1/20/1998	5.70			44.49	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-11B	50.18	3/3/1998	5.35			44.84
	50.18	3/18/1998	5.14			45.05
	50.18	4/24/1998	9.19			41
	50.18	5/21/1998	9.61			40.58
	50.18	7/30/1998	10.72			39.47
	50.18	8/25/1998	9.48			40.71
	50.18	9/21/1998	7.49			42.7
	50.18	10/26/1998	8.57			41.62
	50.18	11/23/1998	6.32			43.87
	50.18	2/26/1999	5.32			44.87
	50.18	3/16/1999	6.49			43.7
	50.18	4/29/1999	6.66			43.53
	50.18	6/1/1999	6.66			43.53
	50.18	7/30/1999	8.12			42.07
	50.18	8/27/1999	6.88			43.31
	50.18	9/27/1999	12.04			38.15
	50.18	10/29/1999	13.00			37.19
	50.18	12/29/1999	12.33			37.86
	50.18	2/4/2000	15.61			34.58
	50.18	2/25/2000	11.49			38.7
	50.18	3/27/2000	9.93			40.26
	50.18	4/7/2000	9.54			40.65
	50.18	5/31/2000	9.61			40.58
	50.18	6/1/2000	9.51			40.68
	50.18	7/28/2000	9.60			40.59
	50.18	8/30/2000	12.76			37.43
	50.18	9/19/2000	13.97			36.22
	50.18	10/27/2000	11.23			38.96
	50.18	11/21/2000	10.88			39.31
	50.18	5/1/2001	5.97			44.22
	50.18	10/1/2001	9.33			40.86
	50.18	3/11/2002	5.80			44.39
	50.18	9/23/2002	5.79			44.4
	50.18	3/10/2003	4.85			45.33
	50.18	9/23/2003	5.95			44.23
	50.18	3/15/2004	5.16			45.02
	50.18	9/13/2004	10.53			39.65
	50.18	7/18/2005	5.45			44.73
	50.18	1/4/2006	11.01			39.17
	50.18	7/27/2006	5.26			44.92
50.18	1/23/2007	4.13			46.05	
50.18	3/7/2007	4.42			45.76	
50.18	7/27/2007	6.29			43.89	
50.18	1/28/2008	4.69			45.49	
50.18	7/16/2008	9.49			40.69	
50.18	1/22/2009	8.72			41.46	
50.18	7/24/2009	NM				
50.18	1/8/2010	5.15			45.03	
50.18	7/12/2010	5.67			44.51	
50.23	1/12/2011	6.37			43.86	
50.23	7/12/2011	12.23			38.00	
50.23	1/27/2012	5.38			44.85	
50.23	7/10/2013	12.22			38.01	
50.23	1/8/2014	7.82			42.41	
50.23	7/2/2014	9.14			41.09	
50.23	1/7/2015	4.79			45.44	
50.23	8/10/2015	6.27			43.96	
50.24	1/12/2016	4.99			45.25	
50.24	7/7/2016	7.59			42.65	
50.24	1/12/2017	8.54			41.70	
50.24	7/12/2017	8.49			41.75	
50.24	1/3/2018	9.04			41.20	
MW-12A	49.96	3/25/1997	5.52			44.44
	49.96	4/23/1997	6.51			43.45
	49.96	4/24/1997	6.66			43.3
	49.96	5/13/1997	5.47			44.49
	49.96	6/20/1997	6.81			43.15

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-12A	49.96	9/25/1997	8.08			41.88
	49.96	10/22/1997	7.10			42.86
	49.96	11/25/1997	7.12			42.84
	49.96	12/19/1997	6.96			43
	49.96	1/20/1998	5.69			44.27
	49.96	3/4/1998	4.52			45.44
	49.96	3/18/1998	5.28			44.68
	49.96	4/24/1998	8.70			41.26
	49.96	5/21/1998	9.10			40.86
	49.96	8/25/1998	10.05			39.91
	49.96	9/21/1998	7.11			42.85
	49.96	10/26/1998	9.11			40.85
	49.96	11/23/1998	6.01			43.95
	49.96	1/29/1999	5.44			44.52
	49.96	2/26/1999	5.52			44.44
	49.96	3/16/1999	6.21			43.75
	49.96	4/29/1999	6.38			43.58
	49.96	6/1/1999	6.31			43.65
	49.96	7/30/1999	7.88			42.08
	49.96	8/27/1999	6.56			43.4
	49.96	9/27/1999	11.61			38.35
	49.96	10/29/1999	12.79			37.17
	49.96	11/18/1999	13.18			36.78
	49.96	12/29/1999	12.03			37.93
	49.96	2/4/2000	15.43			34.53
	49.96	2/25/2000	11.34			38.62
	49.96	3/27/2000	9.22			40.74
	49.96	4/7/2000	8.80			41.16
	49.96	5/31/2000	8.84			41.12
	49.96	6/1/2000	8.81			41.15
	49.96	7/28/2000	8.87			41.09
	49.96	8/30/2000	11.76			38.2
	49.96	9/19/2000	13.22			36.74
	49.96	10/27/2000	10.54			39.42
	49.96	11/21/2000	10.16			39.8
	49.96	5/1/2001	8.60			41.36
	49.96	10/1/2001	8.73			41.23
	49.96	3/11/2002	6.01			43.95
	49.96	9/23/2002	5.87			44.09
	49.96	3/10/2003	5.37			44.59
	49.96	9/23/2003	5.96			44
	49.96	3/15/2004	5.54			44.42
	49.96	9/13/2004	10.30			39.66
	49.96	7/18/2005	7.01			42.95
	49.96	1/4/2006	10.57			39.39
	49.96	7/27/2006	6.60			43.36
	49.96	3/7/2007	6.94			43.02
	49.96	7/27/2007	5.79			44.17
	49.96	1/30/2008	5.29			44.67
	49.96	7/15/2008	9.19			40.77
	49.96	2/4/2009	8.81			41.15
	49.96	7/24/2009	9.13			40.83
	49.96	1/8/2010	5.47			44.49
	49.96	7/12/2010	9.72			40.24
	49.96	1/12/2011	5.59			44.37
	49.96	7/12/2011	12.46			37.5
	49.96	1/26/2012	5.78			44.18
	49.96	7/9/2012	5.96			44
	49.96	1/7/2013	9.04			40.92
	49.96	7/22/2013	11.64			38.32
	49.96	1/7/2014	7.38			42.58
	49.96	7/16/2014	9.82			40.14
	49.96	1/5/2015	6.46			43.50
	49.96	8/10/2015	5.26			44.70
	49.96	1/13/2016	4.67			45.29
	49.96	7/6/2016	4.96			45.00
	49.96	1/12/2017	5.67			44.29

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-12A	49.96	7/6/2017	6.03			43.93
	49.96	9/5/2017	5.86			44.10
	49.96	2/11/2018	6.48			43.48
	49.96	3/11/2018	7.12			42.84
	49.96	5/14/2018	8.92			41.04
MW-12B	50.02	3/25/1997	5.60			44.42
	50.02	4/23/1997	6.64			43.38
	50.02	4/24/1997	6.74			43.28
	50.02	5/13/1997	5.55			44.47
	50.02	6/20/1997	7.01			43.01
	50.02	9/25/1997	8.32			41.7
	50.02	10/22/1997	7.25			42.77
	50.02	11/25/1997	7.29			42.73
	50.02	12/19/1997	6.86			43.16
	50.02	1/20/1998	5.88			44.14
	50.02	3/4/1998	5.64	44.08	1.72	44.38
	50.02	3/18/1998	5.38	44.07	1.73	44.64
	50.02	4/9/1998	7.87		0.98	42.15
	50.02	4/16/1998	8.31		1.35	41.71
	50.02	4/24/1998	8.72	43.82	1.98	41.3
	50.02	5/8/1998	NM		0.50	
	50.02	5/12/1998	NM		0.50	
	50.02	5/21/1998	10.48			39.54
	50.02	5/25/1998	NM		1.00	
	50.02	6/9/1998	NM		1.00	
	50.02	6/16/1998	NM		1.20	
	50.02	6/26/1998	NM		1.50	
	50.02	7/2/1998	NM		1.50	
	50.02	7/10/1998	NM		2.00	
	50.02	7/14/1998	NM		2.00	
	50.02	7/23/1998	NM		2.00	
	50.02	8/5/1998	NM		2.00	
	50.02	8/13/1998	NM		2.00	
	50.02	8/18/1998	NM		2.00	
	50.02	8/25/1998	10.22			39.8
	50.02	9/15/1998	NM		2.00	
	50.02	9/21/1998	7.73			42.29
	50.02	9/30/1998	NM		4.00	
	50.02	10/8/1998	NM		4.00	
	50.02	10/16/1998	NM		4.00	
	50.02	10/26/1998	8.88			41.14
	50.02	11/6/1998	NM		4.00	
	50.02	11/13/1998	NM		1.49	
	50.02	11/19/1998	NM		4.00	
	50.02	11/23/1998	6.11			43.91
	50.02	12/16/1998	NM		4.00	
	50.02	1/7/1999	NM		4.00	
	50.02	1/15/1999	NM		4.00	
	50.02	1/22/1999	NM		4.00	
	50.02	1/26/1999	NM		4.00	
	50.02	1/29/1999	5.70			44.32
	50.02	2/4/1999	NM		4.00	
50.02	2/9/1999	NM		3.00		
50.02	2/26/1999	5.83	39.95	5.85	44.19	
50.02	3/16/1999	6.30	43.60	2.20	43.72	
50.02	4/29/1999	6.44	38.90	6.90	43.58	
50.02	5/21/1999	7.40	36.90	8.90	42.62	
50.02	5/27/1999	7.38	36.90	8.90	42.64	
50.02	6/1/1999	6.40	37.90	7.90	43.62	
50.02	6/10/1999	7.36	36.90	8.90	42.66	
50.02	7/30/1999	7.98			42.04	
50.02	8/27/1999	6.61	38.90	6.90	43.41	
50.02	9/27/1999	11.71	42.34	3.46	38.31	
50.02	10/29/1999	12.76	41.84	3.96	37.26	
50.02	11/18/1999	13.22			36.8	
50.02	12/29/1999	12.01	41.84	3.96	38.01	
50.02	2/4/2000	13.22	41.84	3.96	36.8	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-12B	50.02	2/25/2000	11.44	41.84	3.96	38.58
	50.02	3/27/2000	NM			
	50.02	4/7/2000	8.73	41.81	3.99	41.29
	50.02	5/31/2000	8.77	41.81	3.99	41.25
	50.02	6/1/2000	8.73	41.81	3.99	41.29
	50.02	7/28/2000	8.77	41.89	3.91	41.25
	50.02	8/30/2000	11.66	41.82	3.98	38.36
	50.02	9/19/2000	13.33	40.89	4.91	36.69
	50.02	10/27/2000	11.75	41.80	4.00	38.27
	50.02	11/21/2000	10.64	43.48	2.32	39.38
	50.02	5/1/2001	8.71	43.46	2.34	41.31
	50.02	10/1/2001	8.37		15.00	41.65
	50.02	3/14/2002	6.37	36.99	8.81	43.65
	50.02	9/23/2002	6.10	40.03	5.77	43.92
	50.02	3/10/2003	5.45			44.57
	50.02	9/24/2003	6.29	39.85	5.95	43.73
	50.02	3/15/2004	5.63			44.39
	50.02	9/13/2004	10.44	38.72	7.08	39.58
	50.02	7/18/2005	7.14	38.40	7.40	42.88
	50.02	1/4/2006	10.75	35.98	9.82	39.27
	50.02	7/27/2006	6.07	35.74	10.06	43.95
	50.02	3/7/2007	6.96	34.60	11.20	43.06
	50.02	7/27/2007	5.36	33.45	12.35	44.66
	50.02	1/31/2008	5.75	33.34	12.46	44.27
	50.02	7/15/2008	9.38	38.88	6.92	40.64
	50.02	2/4/2009	8.89	38.14	7.66	41.13
	50.02	7/24/2009	9.18	38.51	7.29	40.84
	50.02	1/8/2010	6.81	37.46	8.34	43.21
	50.02	5/27/2010	7.29	39.5	6.30	42.73
	50.02	6/28/2010	7.39	44.1	1.70	42.63
	50.02	7/12/2010	7.47	44.25	1.55	42.55
	50.02	8/31/2010	7.26	45.42	0.38	42.76
	50.02	1/12/2011	7.01	45.39	0.41	43.01
	50.02	7/12/2011	10.09	45.39	0.41	39.93
	50.02	3/8/2012	6.87	40.2	5.60	43.15
	50.02	7/9/2012	7.16	40.1	5.70	42.86
	50.02	1/7/2013	9.17	39.86	5.94	40.85
	50.02	7/22/2013	11.16	39.04	6.76	38.86
	50.02	1/7/2014	11.34	45.12	0.68	38.68
	50.02	7/15/2014	10.59	44.89	0.91	39.43
	50.02	1/5/2015	10.06	44.91	1.29	39.96
50.02	8/10/2015	7.39	46.1	0.10	42.63	
50.02	1/13/2016	6.06	45.79	0.41	43.96	
50.02	7/6/2016	6.29	45.72	0.48	43.73	
50.02	1/12/2017	7.02	45.81	0.39	43.00	
50.02	7/6/2017	7.01	45.71	1.89	43.01	
50.02	9/5/2017	7.03	45.6	2.00	42.99	
50.02	2/7/2018	7.13	45.87	0.33	42.89	
50.02	3/11/2018	7.42	45.96	0.24	42.6	
50.02	5/14/2018	8.59	45.91	0.29	41.43	
MW-12C	50.14	5/13/1997	39.34			10.8
	50.14	6/20/1997	38.94			11.2
	50.14	9/25/1997	36.70			13.44
	50.14	10/22/1997	36.09			14.05
	50.14	11/25/1997	36.13			14.01
	50.14	12/19/1997	35.34			14.8
	50.14	1/20/1998	32.60			17.54
	50.14	3/4/1998	31.56			18.58
	50.14	3/18/1998	31.64			18.5
	50.14	4/24/1998	31.06			19.08
	50.14	5/21/1998	38.20			11.94
	50.14	8/25/1998	31.00			19.14
	50.14	9/21/1998	29.86			20.28
	50.14	10/26/1998	30.12			20.02
	50.14	11/23/1998	28.38			21.76
	50.14	1/29/1999	27.61			22.53
	50.14	2/26/1999	27.69			22.45

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-12C	50.14	3/16/1999	28.00			22.14
	50.14	4/29/1999	28.21			21.93
	50.14	6/1/1999	28.20			21.94
	50.14	7/30/1999	29.80			20.34
	50.14	8/27/1999	28.41			21.73
	50.14	9/27/1999	29.20			20.94
	50.14	10/29/1999	29.78			20.36
	50.14	11/18/1999	30.17			19.97
	50.14	12/29/1999	29.09			21.05
	50.14	2/4/2000	29.66			20.48
	50.14	2/25/2000	30.32			19.82
	50.14	3/27/2000	28.91			21.23
	50.14	4/7/2000	27.40			22.74
	50.14	5/31/2000	27.44			22.7
	50.14	6/1/2000	27.43			22.71
	50.14	7/28/2000	27.45			22.69
	50.14	8/30/2000	33.61			16.53
	50.14	9/19/2000	30.03			20.11
	50.14	10/27/2000	33.94			16.2
	50.14	11/21/2000	29.12			21.02
	50.14	5/1/2001	26.85			23.29
	50.14	10/1/2001	26.85			23.29
	50.14	3/11/2002	25.59			24.55
	50.14	9/23/2002	26.57			23.57
	50.14	3/10/2003	24.85			25.29
	50.14	9/23/2003	26.06			24.08
	50.14	3/15/2004	24.31			25.83
	50.14	9/13/2004	26.15			23.99
	50.14	7/18/2005	26.23			23.91
	50.14	1/4/2006	22.26			27.88
	50.14	7/27/2006	25.28			24.86
	50.14	3/7/2007	23.78			26.36
	50.14	7/27/2007	22.05			28.09
	50.14	1/30/2008	22.69			27.45
	50.14	7/15/2008	24.41			25.73
	50.14	2/4/2009	24.59			25.55
	50.14	7/24/2009	24.91			25.23
	50.14	1/8/2010	23.03			27.11
	50.14	7/12/2010	23.91			26.23
	50.14	1/12/2011	23.76			26.38
	50.14	7/12/2011	25.98			24.16
	50.14	1/26/2012	25.76			24.38
	50.14	7/9/2012	24.59			25.55
50.14	1/7/2013	26.04			24.1	
50.14	7/22/2013	27.09			23.05	
50.14	1/7/2014	26.52			23.62	
50.14	7/16/2014	25.15			24.99	
50.14	1/5/2015	26.01			24.13	
50.14	8/10/2015	24.26			25.88	
50.14	1/13/2016	23.83			26.31	
50.14	7/6/2016	24.13			26.01	
50.14	1/12/2017	24.49			25.65	
50.14	7/6/2017	24.88			25.26	
50.14	9/5/2017	24.84			25.30	
50.14	2/11/2018	25.13			25.01	
50.14	3/11/2018	24.04			26.1	
50.14	4/14/2018	25.96			24.18	
MW-13	50.65	3/25/1997	9.43			41.22
	50.65	4/23/1997	9.87			40.78
	50.65	4/24/1997	9.92			40.73
	50.65	5/13/1997	9.30			41.35
	50.65	6/20/1997	10.11			40.54
	50.65	9/25/1997	10.75			39.9
	50.65	10/22/1997	10.09			40.56
	50.65	11/25/1997	10.11			40.54
	50.65	12/19/1997	10.01			40.64
	50.65	1/20/1998	9.32			41.33

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-13	50.65	3/4/1998	9.23			41.42
	50.65	3/18/1998	8.90			41.75
	50.65	4/24/1998	10.74			39.82
	50.65	5/21/1998	12.11			38.54
	50.65	8/25/1998	12.00			38.56
	50.65	9/21/1998	10.13			40.43
	50.65	10/26/1998	11.15			39.41
	50.65	11/23/1998	9.22			41.34
	50.65	1/29/1999	8.00			42.65
	50.65	2/26/1999	8.11			42.54
	50.65	3/16/1999	9.51			41.14
	50.65	4/29/1999	9.79			40.86
	50.65	6/1/1999	9.70			40.95
	50.65	7/30/1999	11.01			39.64
	50.65	8/27/1999	9.96			40.69
	50.65	9/27/1999	12.84			37.81
	50.65	10/29/1999	13.88			36.77
	50.65	11/17/1999	14.00			36.65
	50.65	12/29/1999	13.08			37.57
	50.65	2/4/2000	15.61			35.04
	50.65	2/25/2000	12.17			38.48
	50.65	3/27/2000	10.95			39.7
	50.65	4/7/2000	10.51			40.14
	50.65	5/31/2000	10.57			40.08
	50.65	6/1/2000	10.51			40.14
	50.65	7/28/2000	10.54			40.11
	50.65	8/30/2000	13.63			37.02
	50.65	9/19/2000	14.57			36.08
	50.65	10/27/2000	11.11			39.54
	50.65	11/21/2000	11.44			39.21
	50.65	5/1/2001	10.70			39.95
	50.65	10/1/2001	10.31			40.34
	50.65	3/11/2002	9.62			41.03
	50.65	9/23/2002	9.17			41.48
	50.65	3/10/2003	9.17			41.48
	50.65	9/23/2003	9.14			41.51
	50.65	3/15/2004	9.30			41.35
	50.65	9/13/2004	11.98			38.67
	50.65	7/18/2005	10.25			40.4
	50.65	1/4/2006	12.03			38.62
	50.65	7/27/2006	8.82			41.83
	50.65	3/7/2007	9.95			40.7
	50.65	7/27/2007	8.90			41.75
	50.65	1/30/2008	8.85			41.8
	50.65	7/15/2008	10.89			39.76
	50.65	2/4/2009	10.59			40.06
	50.65	7/23/2009	11.07			39.58
	50.65	1/8/2010	9.22			41.43
	50.65	7/12/2010	11.12			39.53
	50.65	1/12/2011	8.89			41.76
	50.65	7/12/2011	12.96			37.69
	50.65	1/26/2012	9.31			41.34
	50.65	7/9/2012	9.14			41.51
	50.65	1/7/2013	10.68			39.97
	50.65	7/22/2013	12.13			38.52
	50.65	1/7/2014	10.13			40.52
	50.65	7/16/2014	11.04			39.61
	50.65	1/5/2015	9.34			41.31
	50.65	8/10/2015	7.67			42.98
	50.65	1/13/2016	7.01			43.64
	50.65	7/6/2016	7.39			43.26
	50.65	1/12/2017	7.81			42.84
	50.65	7/6/2017	7.96			42.69
	50.65	9/5/2017	9.01			41.64
	50.65	2/11/2018	9.58			41.07
	50.65	3/11/2018	10.09			40.56
	50.65	5/14/2018	10.96			39.69

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-14	50.66	3/25/1997	7.71			42.95
	50.66	4/23/1997	8.31			42.35
	50.66	4/24/1997	8.34			42.32
	50.66	5/13/1997	7.83			42.83
	50.66	6/20/1997	8.64			42.02
	50.66	9/25/1997	9.95			40.71
	50.66	10/22/1997	8.89			41.77
	50.66	11/25/1997	8.86			41.8
	50.66	12/19/1997	8.62			42.04
	50.66	1/20/1998	8.08			42.58
	50.66	3/4/1998	7.72			42.94
	50.66	3/18/1998	7.66			43
	50.66	4/24/1998	9.75			40.91
	50.66	5/21/1998	11.00			39.66
	50.66	8/25/1998	12.00			38.66
	50.66	9/21/1998	9.41			41.25
	50.66	10/26/1998	11.10			39.56
	50.66	11/23/1998	8.08			42.58
	50.66	1/29/1999	7.10			43.56
	50.66	2/26/1999	7.21			43.45
	50.66	3/16/1999	8.74			41.92
	50.66	4/29/1999	8.93			41.73
	50.66	6/1/1999	8.92			41.74
	50.66	7/30/1999	10.44			40.22
	50.66	8/27/1999	9.21			41.45
	50.66	9/27/1999	12.56			38.1
	50.66	10/29/1999	13.56			37.1
	50.66	11/17/1999	13.63			37.03
	50.66	12/29/1999	12.88			37.78
	50.66	2/4/2000	14.22			36.44
	50.66	2/25/2000	11.73			38.93
	50.66	3/27/2000	10.54			40.12
	50.66	4/7/2000	10.14			40.52
	50.66	5/31/2000	10.17			40.49
	50.66	6/1/2000	10.13			40.53
	50.66	7/28/2000	10.17			40.49
	50.66	8/30/2000	13.22			37.44
	50.66	9/19/2000	14.27			36.39
	50.66	10/27/2000	11.56			39.1
	50.66	11/21/2000	11.17			39.49
	50.66	5/1/2001	9.71			40.95
	50.66	10/1/2001	10.64			40.02
	50.66	3/11/2002	8.45			42.21
	50.66	9/23/2002	7.90			42.76
	50.66	3/10/2003	8.59			42.07
	50.66	9/23/2003	7.70			42.96
	50.66	3/15/2004	7.96			42.7
	50.66	9/13/2004	11.05			39.61
	50.66	7/18/2005	9.55			41.11
	50.66	1/4/2006	11.83			38.83
	50.66	7/27/2006	7.80			42.86
	50.66	3/7/2007	8.96			41.7
	50.66	7/27/2007	8.01			42.65
	50.66	1/30/2008	7.66			43
	50.66	7/15/2008	10.41			40.25
	50.66	2/4/2009	10.27			40.39
	50.66	7/23/2009	10.67			39.99
	50.66	1/8/2010	8.24			42.42
	50.66	7/12/2010	10.54			40.12
	50.66	1/12/2011	18.09			32.57
	50.66	7/12/2011	12.93			37.73
	50.66	1/26/2012	8.57			42.09
	50.66	7/9/2012	8.61			42.05
	50.66	1/7/2013	10.46			40.2
	50.66	7/22/2013	11.91			38.75
	50.66	1/7/2014	9.39			41.27
	50.66	7/16/2014	10.58			40.08

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-14	50.66	1/5/2015	8.79			41.87
	50.66	8/10/2015	6.34			44.32
	50.66	1/13/2016	5.79			44.87
	50.66	7/6/2016	6.06			44.60
	50.66	1/12/2017	6.59			44.07
	50.66	7/6/2017	6.92			43.74
	50.66	9/5/2017	6.83			43.83
	50.66	2/11/2018	8.66			42.00
	50.66	3/11/2018	8.99			41.67
	50.66	5/14/2018	10.09			40.57
MW-15A	50.41	3/25/1997	8.22			42.19
	50.41	4/23/1997	8.28			42.13
	50.41	4/24/1997	8.51			41.9
	50.41	5/13/1997	8.06			42.35
	50.41	6/20/1997	8.64			41.77
	50.41	9/25/1997	9.75			40.66
	50.41	10/22/1997	9.09			41.32
	50.41	11/25/1997	9.13			41.28
	50.41	12/19/1997	8.89			41.52
	50.41	1/20/1998	8.35			42.06
	50.41	3/4/1998	8.09			42.32
	50.41	3/18/1998	7.98			42.43
	50.41	4/24/1998	9.57			40.84
	50.41	5/21/1998	11.10			39.31
	50.41	8/25/1998	11.78			38.63
	50.41	9/21/1998	9.59			40.82
	50.41	10/26/1998	10.69			39.72
	50.41	11/23/1998	8.46			41.95
	50.41	1/29/1999	7.11			43.3
	50.41	2/26/1999	7.23			43.18
	50.41	3/16/1999	9.17			41.24
	50.41	4/29/1999	9.29			41.12
	50.41	6/1/1999	9.29			41.12
	50.41	7/30/1999	10.83			39.58
	50.41	8/27/1999	9.39			41.02
	50.41	9/27/1999	12.02			38.39
	50.41	10/29/1999	13.11			37.3
	50.41	11/17/1999	13.44			36.97
	50.41	12/29/1999	12.49			37.92
	50.41	2/4/2000	15.71			34.7
	50.41	2/25/2000	11.34			39.07
	50.41	3/27/2000	10.66			39.75
	50.41	4/7/2000	10.20			40.21
	50.41	5/31/2000	10.23			40.18
	50.41	6/1/2000	10.22			40.19
	50.41	7/28/2000	10.23			40.18
	50.41	8/30/2000	13.34			37.07
	50.41	9/19/2000	14.01			36.4
	50.41	10/27/2000	11.77			38.64
	50.41	11/21/2000	11.09			39.32
	50.41	5/1/2001	9.85			40.56
	50.41	10/1/2001	9.73			40.68
	50.41	3/11/2002	8.81			41.6
50.41	9/23/2002	8.21			42.2	
50.41	3/10/2003	7.76			42.65	
50.41	9/23/2003	7.87			42.54	
50.41	3/15/2004	7.94			42.47	
50.41	9/13/2004	10.72			39.69	
50.41	7/18/2005	9.33			41.08	
50.41	1/4/2006	11.66			38.75	
50.41	7/27/2006	7.92			42.49	
50.41	3/7/2007	9.19			41.22	
50.41	7/27/2007	7.88			42.53	
50.41	1/30/2008	8.02			42.39	
50.41	7/15/2008	10.26			40.15	
50.41	2/4/2009	10.59			39.82	
50.41	7/23/2009	11.01			39.4	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-15A	50.41	1/8/2010	8.64			41.77
	50.41	7/12/2010	10.81			39.6
	50.41	1/12/2011	8.77			41.64
	50.41	7/12/2011	12.78			37.63
	50.41	1/26/2012	9.29			41.12
	50.41	7/9/2012	5.92			44.49
	50.41	1/7/2013	10.77			39.64
	50.41	7/22/2013	12.21			38.2
	50.41	1/7/2014	9.85			40.56
	50.41	7/16/2014	10.65			39.76
	50.41	1/5/2015	9.07			41.34
	50.41	8/10/2015	6.49			43.92
	50.41	1/13/2016	5.79			44.62
	50.41	7/6/2016	6.21			44.20
	50.41	1/12/2017	6.82			43.59
	50.41	7/6/2017	7.47			42.94
	50.41	9/5/2017	7.43			42.98
	50.41	2/11/2018	8.89			41.52
50.41	3/11/2018	9.23			41.18	
50.41	5/14/2018	10.18			40.23	
MW-15B	50.20	1/26/2012	10.13			40.07
	50.20	7/9/2012	8.32			41.88
	50.20	1/7/2013	10.71			39.49
	50.20	7/22/2013	11.97			38.23
	50.20	1/7/2014	9.81			40.39
	50.20	7/15/2014	10.36			39.84
	50.20	1/5/2015	9.26			40.94
	50.20	8/10/2015	7.29			42.91
	50.20	1/13/2016	6.81			43.39
	50.20	7/6/2016	7.56			42.64
	50.20	1/12/2017	8.09			42.11
	50.20	7/6/2017	8.61			41.59
	50.20	9/5/2017	8.56			41.64
	50.20	2/11/2018	8.74			41.46
50.20	3/11/2018	9.09			41.11	
50.20	5/14/2018	9.91			40.29	
MW-15C	50.01	5/13/1997	33.46			16.55
	50.01	6/20/1997	34.18			15.83
	50.01	9/25/1997	33.77			16.24
	50.01	10/22/1997	32.89			17.12
	50.01	11/25/1997	32.95			17.06
	50.01	12/19/1997	32.01			18
	50.01	1/20/1998	29.90			20.11
	50.01	3/4/1998	28.56			21.45
	50.01	3/18/1998	28.53			21.48
	50.01	4/24/1998	28.46			21.55
	50.01	5/21/1998	35.00			15.01
	50.01	8/25/1998	29.30			20.71
	50.01	9/21/1998	28.15			21.86
	50.01	10/26/1998	28.11			21.9
	50.01	11/23/1998	26.50			23.51
	50.01	1/29/1999	25.44			24.57
	50.01	2/26/1999	25.51			24.5
	50.01	3/16/1999	26.11			23.9
	50.01	4/29/1999	26.33			23.68
	50.01	6/1/1999	26.39			23.62
	50.01	7/30/1999	27.99			22.02
	50.01	8/27/1999	26.51			23.5
	50.01	9/27/1999	27.46			22.55
	50.01	10/29/1999	28.26			21.75
	50.01	11/17/1999	28.55			21.46
	50.01	12/29/1999	27.61			22.4
	50.01	2/4/2000	28.11			21.9
	50.01	2/25/2000	28.23			21.78
	50.01	3/27/2000	27.45			22.56
	50.01	4/7/2000	26.11			23.9
50.01	5/31/2000	26.13			23.88	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-15C	50.01	6/1/2000	26.03			23.98
	50.01	7/28/2000	26.14			23.87
	50.01	8/30/2000	29.11			20.9
	50.01	9/19/2000	28.67			21.34
	50.01	10/27/2000	27.64			22.37
	50.01	11/21/2000	27.56			22.45
	50.01	5/1/2001	25.24			24.77
	50.01	10/1/2001	25.40			24.61
	50.01	3/11/2002	24.17			25.84
	50.01	9/23/2002	25.35			24.66
	50.01	3/10/2003	23.52			26.49
	50.01	9/23/2003	24.88			25.13
	50.01	3/15/2004	22.97			27.04
	50.01	9/13/2004	24.80			25.21
	50.01	7/18/2005	25.17			24.84
	50.01	1/4/2006	26.23			23.78
	50.01	7/27/2006	24.31			25.7
	50.01	3/7/2007	22.76			27.25
	50.01	7/27/2007	21.03			28.98
	50.01	1/30/2008	21.80			28.21
	50.01	7/15/2008	23.63			26.38
	50.01	2/4/2009	23.73			26.28
	50.01	7/23/2009	23.96			26.05
	50.01	1/8/2010	21.88			28.13
	50.01	7/12/2010	23.08			26.93
	50.01	1/12/2011	23.04			26.97
	50.01	7/12/2011	25.09			24.92
	50.01	1/26/2012	24.37			25.64
	50.01	7/9/2012	24.41			25.6
	50.01	1/7/2013	25.21			24.8
	50.01	7/22/2013	26.10			23.91
	50.01	1/7/2014	25.26			24.75
	50.01	7/16/2014	24.15			25.86
	50.01	1/5/2015	25.34			24.67
	50.01	8/10/2015	22.74			27.27
	50.01	1/13/2016	21.92			28.09
	50.01	7/6/2016	22.26			27.75
	50.01	1/12/2017	22.69			27.32
	50.01	7/6/2017	23.31			26.70
	50.01	9/5/2017	23.29			26.72
50.01	2/11/2018	23.63			26.38	
50.01	3/11/2018	22.47			27.54	
50.01	5/14/2018	23.33			26.68	
MW-16	51.51	3/25/1997	7.41			44.1
	51.51	4/23/1997	8.44			43.07
	51.51	4/24/1997	8.52			42.99
	51.51	5/13/1997	8.29			43.22
	51.51	6/20/1997	8.41			43.1
	51.51	9/25/1997	10.71			40.8
	51.51	10/22/1997	9.53			41.98
	51.51	11/25/1997	9.55			41.96
	51.51	12/19/1997	9.10			42.41
	51.51	1/20/1998	8.60			42.91
	51.51	3/4/1998	8.13			43.38
	51.51	3/18/1998	8.59			42.92
	51.51	4/24/1998	9.96			41.55
	51.51	5/21/1998	11.43			40.08
	51.51	7/30/1998	12.56			38.95
	51.51	8/25/1998	11.53			39.98
	51.51	9/21/1998	9.81			41.7
	51.51	10/26/1998	10.44			41.07
	51.51	11/23/1998	8.98			42.53
	51.51	1/29/1999	7.12			44.39
	51.51	2/26/1999	7.23			44.28
	51.51	3/16/1999	10.06			41.45
	51.51	4/29/1999	10.16			41.35
	51.51	6/1/1999	10.16			41.35

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-16	51.51	7/30/1999	11.76			39.75
	51.51	8/27/1999	10.33			41.18
	51.51	9/27/1999	11.79			39.72
	51.51	10/29/1999	12.93			38.58
	51.51	11/17/1999	13.71			37.8
	51.51	12/29/1999	12.20			39.31
	51.51	2/4/2000	15.11			36.4
	51.51	2/25/2000	11.10			40.41
	51.51	3/27/2000	11.48			40.03
	51.51	4/7/2000	11.09			40.42
	51.51	5/31/2000	11.11			40.4
	51.51	6/1/2000	11.00			40.51
	51.51	7/28/2000	11.11			40.4
	51.51	8/30/2000	13.10			38.41
	51.51	9/19/2000	14.83			36.68
	51.51	10/27/2000	11.66			39.85
	51.51	11/21/2000	11.29			40.22
	51.51	5/1/2001	9.92			41.59
	51.51	10/1/2001	9.93			41.58
	51.51	3/11/2002	9.12			42.39
	51.51	9/23/2002	8.65			42.86
	51.51	3/10/2003	7.74			43.77
	51.51	9/23/2003	8.48			43.03
	51.51	3/15/2004	8.09			43.42
	51.51	9/13/2004	10.38			41.13
	51.51	7/18/2005	10.42			41.09
	51.51	1/4/2006	12.48			39.03
	51.51	7/27/2006	9.37			42.14
	51.51	3/7/2007	9.66			41.85
	51.51	7/27/2007	7.85			43.66
	51.51	1/31/2008	8.42	25.40	3.40	43.09
	51.51	7/15/2008	10.16			41.35
	51.51	2/5/2009	11.93			39.58
51.51	7/23/2009	12.67			38.84	
51.51	1/8/2010	8.66			42.85	
51.51	7/12/2010	10.31			41.2	
51.51	1/12/2011	9.89			41.62	
51.51	7/12/2011	12.98			38.53	
51.51	1/26/2012	9.92			41.59	
51.51	7/9/2012	9.68			41.83	
51.51	1/7/2013	11.41			40.1	
51.51	7/22/2013	12.39			39.12	
51.51	1/7/2014	12.02			39.49	
51.51	7/15/2014	9.69			41.82	
51.51	1/5/2015	11.07			40.44	
51.51	8/10/2015	9.42			42.09	
MW-17	50.92	3/25/1997	9.97			40.95
	50.92	4/23/1997	10.41			40.51
	50.92	4/24/1997	10.51			40.41
	50.92	5/13/1997	10.32			40.6
	50.92	6/20/1997	11.07			39.85
	50.92	9/25/1997	12.39			38.53
	50.92	10/22/1997	11.19			39.73
	50.92	11/25/1997	11.21			39.71
	50.92	12/19/1997	11.01			39.91
	50.92	1/20/1998	10.25			40.67
	50.92	3/4/1998	9.93			40.99
	50.92	3/18/1998	9.94			40.98
	50.92	4/9/1998	11.32			39.6
	50.92	4/16/1998	11.52			39.4
	50.92	4/24/1998	11.80			39.12
	50.92	5/8/1998	NM			
	50.92	5/12/1998	NM			
	50.92	5/21/1998	13.30			37.62
	50.92	5/25/1998	NM			
	50.92	6/9/1998	NM			
50.92	6/16/1998	NM				

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-17	50.92	6/26/1998	NM			
	50.92	7/2/1998	NM			
	50.92	7/10/1998	NM			
	50.92	7/14/1998	NM			
	50.92	7/23/1998	NM			
	50.92	8/5/1998	NM			
	50.92	8/13/1998	NM			
	50.92	8/25/1998	13.78			37.14
	50.92	9/15/1998	NM			
	50.92	9/21/1998	11.49			39.43
	50.92	9/30/1998	NM			
	50.92	10/8/1998	NM			
	50.92	10/16/1998	NM			
	50.92	10/26/1998	12.22			38.7
	50.92	11/6/1998	NM			
	50.92	11/13/1998	NM			
	50.92	11/19/1998	NM			
	50.92	11/23/1998	10.21			40.71
	50.92	12/16/1998	NM			
	50.92	1/7/1999	NM			
	50.92	1/15/1999	NM			
	50.92	1/22/1999	NM			
	50.92	1/26/1999	NM			
	50.92	1/29/1999	10.88			40.04
	50.92	2/4/1999	NM			
	50.92	2/9/1999	NM			
	50.92	2/26/1999	10.93			39.99
	50.92	3/16/1999	11.18			39.74
	50.92	4/29/1999	11.00			39.92
	50.92	5/21/1999	11.25			39.67
	50.92	5/27/1999	11.31			39.61
	50.92	6/1/1999	11.07			39.85
	50.92	6/10/1999	11.28			39.64
	50.92	7/30/1999	12.67			38.25
	50.92	8/27/1999	11.27			39.65
	50.92	9/27/1999	14.67			36.25
	50.92	10/29/1999	15.11			35.81
	50.92	11/17/1999	16.08			34.84
	50.92	12/29/1999	14.43			36.49
	50.92	2/4/2000	17.21			33.71
	50.92	2/25/2000	13.63			37.29
	50.92	3/27/2000	13.08	32.60	0.70	37.84
	50.92	4/7/2000	12.63	32.30	1.00	38.29
	50.92	5/31/2000	12.67	32.30	1.00	38.25
	50.92	6/1/2000	12.61	32.30	1.00	38.31
	50.92	7/28/2000	12.69	32.30	1.00	38.23
	50.92	8/30/2000	15.56			35.36
	50.92	9/19/2000	16.24	32.20	1.10	34.68
	50.92	10/27/2000	14.10			36.82
	50.92	11/21/2000	13.12			37.8
	50.92	5/1/2001	11.82	32.44	0.86	39.1
	50.92	10/1/2001	12.55	32.30	1.00	38.37
	50.92	3/14/2002	10.91	31.79	1.51	40.01
	50.92	9/23/2002	10.48			40.44
	50.92	3/10/2003	9.76			41.16
	50.92	9/24/2003	10.59	32.85	0.45	40.33
	50.92	3/15/2004	10.15			40.77
	50.92	9/13/2004	13.09			37.83
	50.92	7/18/2005	12.06	32.90	0.40	38.86
	50.92	1/4/2006	13.90	32.90	0.40	37.02
	50.92	7/27/2006	10.71	33.28	0.02	40.21
	50.92	3/7/2007	10.91	33.00	0.30	40.01
	50.92	7/27/2007	9.33	33.02	0.28	41.59
	50.92	1/31/2008	10.00	31.17	2.13	40.92
	50.92	7/15/2008	12.95	33.08	0.23	37.97
	50.92	2/4/2009	12.64	Trace	Trace	38.28
	50.92	7/12/2010	12.96			37.96

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-17	50.92	1/8/2010	10.62			40.3
	50.92	7/12/2010	12.96			37.96
	50.92	1/12/2011	11.06			39.86
	50.92	7/12/2011	14.93			35.99
	50.92	1/26/2012	11.2			39.72
	50.92	7/9/2012	11.02			39.9
	50.92	1/7/2013	13.14			37.78
	50.92	7/22/2013	14.62			36.3
	50.92	1/7/2014	12.36			38.56
	50.92	7/15/2014	12.54			38.38
	50.92	1/5/2015	11.71			39.21
	50.92	8/10/2015	9.61			41.31
	50.92	1/13/2016	9.02			41.90
	50.92	7/6/2016	9.47			41.45
	50.92	1/12/2017	10.06			40.86
	50.92	7/6/2017	10.62			40.30
	50.92	9/5/2017	10.51			40.41
	50.92	2/11/2018	10.76			40.16
	50.92	3/11/2018	11.21			39.71
	50.92	5/14/2018	12.21			38.71
MW-17C	50.17	3/15/2004	22.75			27.42
	50.17	9/13/2004	24.56			25.61
	50.17	7/18/2005	25.02			25.15
	50.17	1/4/2006	26.07			24.1
	50.17	7/27/2006	24.15			26.02
	50.17	3/7/2007	22.51			27.66
	50.17	7/27/2007	20.93			29.24
	50.17	1/30/2008	21.74			28.43
	50.17	7/15/2008	23.65			26.52
	50.17	2/4/2009	23.72			26.45
	50.17	7/23/2009	24.08			26.09
	50.17	1/8/2010	21.98			28.19
	50.17	7/12/2010	23.03			27.14
	50.17	1/12/2011	23.16			27.01
	50.17	7/12/2011	25.11			25.06
	50.17	1/26/2012	24.27			25.9
	50.17	7/9/2012	24.32			25.85
	50.17	1/7/2013	24.76			25.41
	50.17	7/22/2013	25.89			24.28
	50.17	1/7/2014	25.06			25.11
	50.17	7/15/2014	23.98			26.19
	50.17	1/5/2015	24.62			25.55
	50.17	8/10/2015	22.47			27.70
	50.17	1/13/2016	21.81			28.36
	50.17	7/6/2016	22.16			28.01
	50.17	1/12/2017	22.67			27.50
	50.17	7/6/2017	23.09			27.08
	50.17	9/5/2017	23.01			27.16
50.17	2/11/2018	23.11			27.06	
50.17	3/11/2018	22.21			27.96	
50.17	5/14/2018	23.02			27.15	
MW-18A	51.57	3/25/1997	15.41			36.16
	51.57	4/23/1997	15.80			35.77
	51.57	5/13/1997	14.92			36.65
	51.57	6/20/1997	16.02			35.55
	51.57	9/25/1997	15.15			36.42
	51.57	10/22/1997	16.38			35.19
	51.57	11/25/1997	16.37			35.2
	51.57	12/19/1997	16.11			35.46
	51.57	1/20/1998	15.49			36.08
	51.57	3/4/1998	15.19			36.38
	51.57	3/18/1998	14.28			37.29
	51.57	4/24/1998	17.53			34.04
	51.57	5/21/1998	18.41			33.16
	51.57	7/30/1998	18.59			32.98
	51.57	8/25/1998	16.95			34.62
	51.57	9/21/1998	16.39			35.18

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)	
MW-18A	51.57	10/26/1998	15.77			35.8	
	51.57	11/23/1998	16.26			35.31	
	51.57	1/29/1999	17.02			34.55	
	51.57	2/26/1999	17.11			34.46	
	51.57	4/29/1999	16.01			35.56	
	51.57	6/1/1999	16.11			35.46	
	51.57	7/30/1999	17.55			34.02	
	51.57	8/27/1999	16.39			35.18	
	51.57	9/27/1999	19.13			32.44	
	51.57	10/29/1999	20.50			31.07	
	51.57	11/17/1999	21.63			29.94	
	51.57	12/29/1999	19.83			31.74	
	51.57	2/4/2000	23.71			27.86	
	51.57	2/25/2000	18.80			32.77	
	51.57	3/27/2000	17.98			33.59	
	51.57	4/7/2000	17.61			33.96	
	51.57	5/31/2000	17.65			33.92	
	51.57	6/1/2000	17.60			33.97	
	51.57	7/28/2000	17.67			33.9	
	51.57	8/30/2000	20.30			31.27	
	51.57	9/19/2000	19.54			32.03	
	51.57	10/27/2000	18.75			32.82	
	51.57	11/21/2000	16.52			35.05	
	51.57	5/1/2001	17.91		27.85	7.94	33.66
	51.57	10/1/2001	17.47			34.1	
	51.57	3/11/2002	16.68			34.89	
	51.57	9/23/2002	15.30			36.27	
	51.57	3/10/2003	15.77			35.8	
	51.57	9/23/2003	25.08			26.49	
	51.57	3/15/2004	15.58			35.99	
	51.57	9/13/2004	18.32			33.25	
	51.57	7/18/2005	14.88			36.69	
	51.57	1/4/2006	17.96			33.61	
	51.57	7/27/2006	14.15			37.42	
	51.57	3/7/2007	17.32			34.25	
	51.57	7/27/2007	15.22			36.35	
	51.57	1/30/2008	15.63			35.94	
	51.57	7/15/2008	17.43			34.14	
	51.57	2/5/2009	18.67			32.9	
	51.57	7/23/2009	19.03			32.54	
	51.57	1/8/2010	16.51			35.06	
	51.57	7/12/2010	18.11			33.46	
	51.57	1/12/2011	15.82			35.75	
	51.57	7/12/2011	19.02			32.55	
	51.57	1/26/2012	16.9			34.67	
	51.57	7/9/2012	15.06			36.51	
	51.57	1/7/2013	18.39			33.18	
51.57	7/22/2013	18.74			32.83		
51.57	1/7/2014	18.06			33.51		
51.57	7/16/2014	18.14			33.43		
51.57	1/5/2015	17.39			34.18		
51.57	8/10/2015	15.02			36.55		
51.57	1/13/2016	14.36			37.21		
51.57	7/6/2016	14.71			36.86		
51.57	1/12/2017	15.09			36.48		
51.57	7/6/2017	15.59			35.98		
51.57	9/5/2017	15.49			36.08		
51.57	2/11/2018	16.62			34.95		
51.57	3/11/2018	17.12			34.45		
51.57	5/14/2018	17.71			33.86		
MW-18C	51.47	5/13/1997	29.45			22.02	
	51.47	6/20/1997	30.37			21.1	
	51.47	9/25/1997	31.53			19.94	
	51.47	10/22/1997	30.71			20.76	
	51.47	11/25/1997	30.75			20.72	
	51.47	12/19/1997	30.10			21.37	
	51.47	1/20/1998	28.30			23.17	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-18C	51.47	3/4/1998	27.03			24.44
	51.47	3/18/1998	26.81			24.66
	51.47	4/9/1998	27.04			24.43
	51.47	4/16/1998	27.03			24.44
	51.47	4/24/1998	27.25			24.22
	51.47	5/8/1998	NM			
	51.47	5/12/1998	NM			
	51.47	5/21/1998	27.68			23.79
	51.47	5/25/1998	NM			
	51.47	6/9/1998	NM			
	51.47	6/16/1998	NM			
	51.47	6/26/1998	NM			
	51.47	7/2/1998	NM			
	51.47	7/10/1998	NM			
	51.47	7/14/1998	NM			
	51.47	7/23/1998	NM			
	51.47	7/30/1998	28.40			23.07
	51.47	8/5/1998	NM			
	51.47	8/13/1998	NM			
	51.47	8/25/1998	28.88			22.59
	51.47	9/15/1998	NM			
	51.47	9/21/1998	27.94			23.53
	51.47	9/30/1998	NM			
	51.47	10/8/1998	NM			
	51.47	10/16/1998	NM			
	51.47	10/26/1998	27.62			23.85
	51.47	11/6/1998	NM			
	51.47	11/11/1998	26.85		0.67	24.62
	51.47	11/19/1998	NM			
	51.47	11/23/1998	26.21			25.26
	51.47	12/16/1998	NM			
	51.47	1/7/1999	NM			
	51.47	1/15/1999	NM			
	51.47	1/22/1999	NM			
	51.47	1/26/1999	NM			
	51.47	1/29/1999	25.36			26.11
	51.47	2/4/1999	NM			
	51.47	2/9/1999	NM			
	51.47	2/26/1999	25.41			26.06
	51.47	4/29/1999	26.33			25.14
	51.47	5/21/1999	25.75			25.72
	51.47	5/27/1999	25.76			25.71
	51.47	6/1/1999	26.38			25.09
	51.47	6/10/1999	25.68			25.79
	51.47	7/30/1999	25.61			25.86
	51.47	8/27/1999	26.51			24.96
	51.47	9/27/1999	27.28			24.19
	51.47	10/29/1999	27.95			23.52
	51.47	11/17/1999	28.42			23.05
	51.47	12/29/1999	27.26			24.21
	51.47	2/4/2000	27.84			23.63
	51.47	2/25/2000	27.83			23.64
	51.47	3/27/2000	27.48			23.99
	51.47	4/7/2000	25.80			25.67
	51.47	5/31/2000	25.83			25.64
	51.47	6/1/2000	25.81			25.66
	51.47	7/28/2000	25.86			25.61
	51.47	8/30/2000	28.42			23.05
	51.47	9/19/2000	28.77	80.44	0.97	22.7
	51.47	10/27/2000	28.69			22.78
	51.47	11/21/2000	27.67			23.8
	51.47	5/1/2001	25.20			26.27
	51.47	10/1/2001	25.59			25.8
	51.47	3/14/2002	24.35			27.12
	51.47	9/25/2002	25.45			26.02
	51.47	3/10/2003	23.60			27.87
	51.47	9/24/2003	25.15			26.32

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-18C	51.47	3/15/2004	24.23			27.24
	51.47	9/13/2004	25.12	78.22	1.70	26.35
	51.47	7/18/2005	25.50	66.20	0.30	25.97
	51.47	1/4/2006	26.71			24.76
	51.47	7/27/2006	24.80			26.67
	51.47	3/7/2007	23.11			28.36
	51.47	7/27/2007	24.80			26.67
	51.47	1/30/2008	22.64			28.83
	51.47	7/15/2008	24.43			27.04
	51.47	2/5/2009	24.34			27.13
	51.47	7/23/2009	24.61			26.86
	51.47	1/8/2010	22.56			28.91
	51.47	7/12/2010	23.77			27.7
	51.47	7/12/2011	25.87			25.6
	51.47	1/26/2012	26.82			24.65
	51.47	1/12/2011	24.03			27.44
	51.47	7/9/2012	24.82			26.65
	51.47	1/7/2013	25.61			25.86
	51.47	7/22/2013	26.76			24.71
	51.47	1/7/2014	25.68			25.79
	51.47	7/16/2014	24.60			26.87
	51.47	1/5/2015	25.02			26.45
	51.47	8/10/2015	23.41			28.06
	51.47	1/13/2016	22.76			28.71
	51.47	7/6/2016	23.12			28.35
	51.47	1/12/2017	23.73			27.74
	51.47	7/6/2017	24.13			27.34
	51.47	9/5/2017	24.08			27.39
	51.47	2/11/2018	23.7			27.77
	51.47	3/11/2018	22.88			28.59
51.47	5/14/2018	23.47			28.00	
MW-19C	53.05	11/23/1998	28.84			24.21
	53.05	1/29/1999	28.21			24.84
	53.05	2/26/1999	28.28			24.77
	53.05	3/16/1999	28.31			24.74
	53.05	4/29/1999	28.56			24.49
	53.05	6/1/1999	28.48			24.57
	53.05	7/30/1999	30.00			23.05
	53.05	8/27/1999	28.61			24.44
	53.05	9/27/1999	29.72			23.33
	53.05	10/29/1999	30.46			22.59
	53.05	11/17/1999	30.76			22.29
	53.05	12/29/1999	29.44			23.61
	53.05	2/4/2000	30.22			22.83
	53.05	2/25/2000	29.93			23.12
	53.05	3/27/2000	29.80			23.25
	53.05	4/7/2000	28.40			24.65
	53.05	5/31/2000	28.44			24.61
	53.05	6/1/2000	28.33			24.72
	53.05	7/28/2000	28.37			24.68
	53.05	8/30/2000	29.99			23.06
	53.05	9/19/2000	30.97			22.08
	53.05	10/27/2000	28.49			24.56
	53.05	11/21/2000	29.88			23.17
	53.05	5/1/2001	27.61	71.55	3.56	25.44
	53.05	10/1/2001	27.84			25.21
	53.05	3/11/2002	26.68			26.37
	53.05	9/23/2002	27.66			25.39
	53.05	3/10/2003	25.77			27.28
	53.05	9/23/2003	27.21			25.84
	53.05	3/15/2004	25.36			27.69
53.05	9/13/2004	27.20			25.85	
53.05	7/18/2005	27.71			25.34	
53.05	1/4/2006	28.78			24.27	
53.05	7/27/2006	26.91			26.14	
53.05	3/7/2007	25.22			27.83	
53.05	7/27/2007	23.71			29.34	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-19C	53.05	1/31/2008	24.57			28.48
	53.05	7/15/2008	26.38			26.67
	53.05	2/4/2009	26.44			26.61
	53.05	7/23/2009	26.81			26.24
	53.05	1/9/2010	24.47			28.58
	53.05	7/12/2010	25.67			27.38
	53.05	1/12/2011	25.86			27.19
	53.05	7/12/2011	27.81			25.24
	53.05	1/26/2012	26.74			26.31
	53.05	7/9/2012	27.26			25.79
	53.05	1/7/2013	27.73			25.32
	53.05	7/22/2013	28.58			24.47
	53.05	1/7/2014	27.71			25.34
	53.05	7/15/2014	26.65			26.40
	53.05	1/5/2015	27.34			25.71
	53.05	8/10/2015	25.21			27.84
	53.05	1/13/2016	24.68			28.37
	53.05	7/6/2016	NM			
	53.05	2/11/2018	21.74			31.31
	53.05	3/11/2018	24.74			28.31
53.05	5/14/2018	25.72			27.33	
MW-20A	50.43	11/23/1998	8.31			42.116
	50.43	1/29/1999	8.70			41.726
	50.43	2/26/1999	8.81			41.616
	50.43	3/16/1999	9.26			41.166
	50.43	4/29/1999	9.33			41.096
	50.43	6/1/1999	9.30			41.126
	50.43	7/30/1999	10.91			39.516
	50.43	8/27/1999	9.56			40.866
	50.43	9/27/1999	10.79			39.636
	50.43	10/29/1999	11.96			38.466
	50.43	11/17/1999	13.06			37.366
	50.43	12/29/1999	11.11			39.316
	50.43	2/4/2000	14.89			35.536
	50.43	2/25/2000	10.33			40.096
	50.43	3/27/2000	10.79			39.636
	50.43	4/7/2000	10.41			40.016
	50.43	5/31/2000	10.46			39.966
	50.43	6/1/2000	10.41			40.016
	50.43	7/28/2000	10.47			39.956
	50.43	8/30/2000	12.56			37.866
	50.43	9/19/2000	13.68			36.746
	50.43	10/27/2000	11.01			39.416
	50.43	11/21/2000	10.64			39.786
	50.43	5/1/2001	9.40			41.03
	50.43	10/1/2001	10.42			40.01
	50.43	3/11/2002	8.59			41.836
	50.43	9/23/2002	8.51			41.916
	50.43	3/10/2003	7.42			43.006
	50.43	9/23/2003	7.95			42.476
	50.43	3/15/2004	7.72			42.706
	50.43	9/13/2004	10.22			40.206
	50.43	7/18/2005	9.88			40.546
	50.43	1/4/2006	11.72			38.706
	50.43	7/27/2006	8.59			41.836
	50.43	3/7/2007	8.91			41.516
	50.43	7/27/2007	7.63			42.796
	50.43	1/30/2008	7.91			42.516
	50.43	7/15/2008	10.05			40.376
	50.43	2/4/2009	10.18			40.246
	50.43	7/23/2009	10.47			39.956
50.43	1/9/2010	8.23			42.196	
50.43	7/12/2010	10.62			39.806	
50.43	1/12/2011	8.76			41.666	
50.43	7/12/2011	12.53			37.896	
50.43	1/26/2012	11.61			38.816	
50.43	7/9/2012	9.18			41.246	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-20A	50.43	1/7/2013	10.66			39.766
	50.43	7/22/2013	12.17			38.256
	50.43	1/7/2014	11.62			38.806
	50.43	7/15/2014	9.83			40.60
	50.43	1/5/2015	11.09			39.34
	50.43	8/10/2015	9.34			41.09
	50.43	7/6/2017	8.12			42.31
	50.43	9/6/2017	8.06			42.37
	50.43	2/11/2018	9.22			41.21
	50.43	3/11/2018	9.03			41.396
50.43	5/14/2018	9.89			40.536	
MW-21C	49.05	11/23/1998	27.83			21.223
	49.05	1/29/1999	27.11			21.943
	49.05	2/26/1999	27.26			21.793
	49.05	3/16/1999	27.42			21.633
	49.05	4/29/1999	27.99			21.063
	49.05	6/1/1999	27.80			21.253
	49.05	7/30/1999	29.00			20.053
	49.05	8/27/1999	27.99			21.063
	49.05	9/27/1999	28.43			20.623
	49.05	10/29/1999	29.12			19.933
	49.05	11/18/1999	29.25			19.803
	49.05	12/29/1999	10.89			38.163
	49.05	2/4/2000	28.94			20.113
	49.05	2/25/2000	11.43			37.623
	49.05	3/27/2000	28.13			20.923
	49.05	4/7/2000	26.79			22.263
	49.05	5/31/2000	26.83			22.223
	49.05	6/1/2000	26.83			22.223
	49.05	7/28/2000	26.88			22.173
	49.05	8/30/2000	29.91			19.143
	49.05	9/19/2000	29.15			19.903
	49.05	10/27/2000	30.21			18.843
	49.05	11/21/2000	28.33			20.723
	49.05	5/1/2001	26.01			23.04
	49.05	10/1/2001	26.05			23
	49.05	3/11/2002	24.80			24.253
	49.05	9/23/2002	25.50			23.553
	49.05	3/10/2003	23.82			25.233
	49.05	9/23/2003	25.08			23.973
	49.05	3/15/2004	23.48			25.573
	49.05	9/13/2004	25.44			23.613
	49.05	7/18/2005	25.33			23.723
	49.05	1/4/2006	26.44			22.613
	49.05	7/27/2006	24.55			24.503
	49.05	3/7/2007	22.91			26.143
	49.05	7/27/2007	21.29			27.763
	49.05	1/29/2008	22.09			26.963
	49.05	7/15/2008	23.31			25.743
	49.05	2/4/2009	24.03			25.023
	49.05	7/24/2009	24.29			24.763
	49.05	1/9/2010	21.89			27.163
	49.05	7/12/2010	23.01			26.043
	49.05	1/12/2011	23.21			25.843
49.05	7/12/2011	25.09			23.963	
49.05	1/26/2012	24.48			24.573	
49.05	7/9/2012	23.39			25.663	
49.05	1/7/2013	25.17			23.883	
49.05	7/22/2013	26.49			22.563	
49.05	1/7/2014	25.94			23.113	
49.05	7/15/2014	24.61			24.44	
49.05	1/5/2015	25.31			23.74	
49.05	8/10/2015	23.37			25.68	
49.05	1/13/2016	22.71			26.34	
49.05	7/6/2016	23.04			26.01	
49.05	1/12/2017	23.59			25.46	
49.05	7/6/2017	24.02			25.03	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-21C	49.05	9/5/2017	23.96			25.09
	49.05	2/11/2018	24.08			24.97
	49.05	3/11/2018	23.07			25.98
	49.05	5/14/2018	23.97			25.08
MW-22A	46.07	11/23/1998	NM			
	46.07	1/29/1999	2.10			43.969
	46.07	2/26/1999	2.21			43.859
	46.07	3/16/1999	2.65			43.419
	46.07	4/29/1999	2.71			43.359
	46.07	6/1/1999	2.68			43.389
	46.07	7/30/1999	4.12			41.949
	46.07	8/27/1999	2.81			43.259
	46.07	9/27/1999	8.53			37.539
	46.07	10/29/1999	10.23			35.839
	46.07	11/18/1999	9.92			36.149
	46.07	12/29/1999	9.56			36.509
	46.07	2/4/2000	12.31			33.759
	46.07	2/25/2000	8.72			37.349
	46.07	3/27/2000	6.30			39.769
	46.07	4/7/2000	6.03			40.039
	46.07	5/31/2000	6.12			39.949
	46.07	6/1/2000	6.00			40.069
	46.07	7/28/2000	6.13			39.939
	46.07	8/30/2000	9.09			36.979
	46.07	9/19/2000	10.12			35.949
	46.07	10/27/2000	8.64			37.429
	46.07	11/21/2000	7.69			38.379
	46.07	5/1/2001	5.15			40.92
	46.07	10/1/2001	5.49			40.58
	46.07	3/11/2002	2.34			43.729
	46.07	9/23/2002	2.11			43.959
	46.07	3/10/2003	1.68			44.389
	46.07	9/23/2003	2.30			43.769
	46.07	3/15/2004	2.05			44.019
	46.07	9/14/2004	6.89			39.179
	46.07	7/18/2005	3.65			42.419
	46.07	1/6/2006	7.29			38.779
	46.07	7/27/2006	1.65			44.419
	46.07	3/7/2007	NM			
	46.07	7/27/2007	2.84			43.229
46.07	1/29/2008	1.05			45.019	
46.07	7/14/2008	5.33			40.739	
46.07	2/3/2009	5.24			40.829	
46.07	7/23/2009	5.91			40.159	
46.07	1/9/2010	1.32			44.749	
46.07	7/12/2010	6.52			39.549	
46.07	1/12/2011	3.21			42.859	
46.07	7/11/2011	8.39			37.679	
46.07	1/27/2012	0.98			45.089	
46.07	7/10/2012	1.74			44.326	
46.07	1/8/2013	3.09			42.979	
46.07	7/22/2013	NM				
46.07	1/7/2014	3.81			42.26	
46.07	7/15/2014	3.22			42.85	
46.07	1/5/2015	NM				
46.07	8/10/2015	NM				
46.07	1/13/2016	NM				
46.07	7/6/2016	NM				
46.07	1/12/2017	NM				
46.07	7/6/2017	NM				
46.07	9/5/2017	NM	REPLACED			
MW-22AR	45.56	2/11/2018	3.43			42.13
	45.56	3/11/2018	2.24			43.32
	45.56	5/14/2018	4.41			41.15
MW-22B	45.86	11/23/1998	2.25			43.606
	45.86	1/29/1999	2.28			43.576
	45.86	2/26/1999	2.34			43.516

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-22B	45.86	3/16/1999	2.42			43.436
	45.86	4/29/1999	2.56			43.296
	45.86	6/1/1999	2.60			43.256
	45.86	7/30/1999	4.31			41.546
	45.86	8/27/1999	2.83			43.026
	45.86	9/27/1999	8.45			37.406
	45.86	10/29/1999	10.11			35.746
	45.86	11/18/1999	9.75			36.106
	45.86	12/29/1999	9.43			36.426
	45.86	2/4/2000	12.56			33.296
	45.86	2/25/2000	8.63			37.226
	45.86	3/27/2000	6.00			39.856
	45.86	4/7/2000	5.64			40.216
	45.86	5/31/2000	5.69			40.166
	45.86	6/1/2000	5.61			40.246
	45.86	7/28/2000	5.67			40.186
	45.86	8/30/2000	8.57			37.286
	45.86	9/19/2000	9.94			35.916
	45.86	10/27/2000	7.03			38.826
	45.86	11/21/2000	7.63			38.226
	45.86	5/1/2001	4.93			40.93
	45.86	10/1/2001	5.40			40.46
	45.86	3/11/2002	1.75			44.106
	45.86	9/23/2002	2.11			43.746
	45.86	3/10/2003	1.02			44.836
	45.86	9/23/2003	2.99			42.866
	45.86	3/15/2004	1.20			44.656
	45.86	9/14/2004	NM			
	45.86	7/18/2005	NM			
	45.86	1/6/2006	7.05			38.806
	45.86	7/27/2006	1.58			44.276
	45.86	3/7/2007	NM			
	45.86	7/27/2007	2.85			43.006
	45.86	1/29/2008	0.85			45.006
	45.86	7/14/2008	5.45			40.406
	45.86	2/3/2009	4.78			41.076
	45.86	7/23/2009	5.39			40.466
	45.86	1/9/2010	3.27			42.586
	45.86	7/12/2010	6.21			39.646
	45.86	1/12/2011	0.37			45.486
45.86	7/11/2011	8.32			37.536	
45.86	1/27/2012	0.06			45.796	
45.86	7/10/2012	1.27			44.586	
45.86	1/8/2013	NM				
45.86	7/22/2013	NM				
45.86	1/7/2014	4.14			41.716	
45.86	7/15/2014	3.79			42.07	
45.86	1/5/2015	3.87			41.99	
45.86	8/10/2015	2.62			43.24	
45.86	1/13/2016	2.09			43.77	
45.86	7/6/2016	NM				
45.86	1/12/2017	NM				
45.86	7/6/2017	NM				
45.86	9/5/2017	NM		REPLACED		
MW-22BR	45.71	2/11/2018	4.14			41.57
	45.71	3/12/2018	3.29			42.42
	45.71	5/14/2018	5.27			40.44
MW-23C	51.91	11/23/1998	27.41			24.504
	51.91	1/29/1999	26.80			25.114
	51.91	2/26/1999	26.88			25.034
	51.91	3/16/1999	26.93			24.984
	51.91	4/29/1999	27.09			24.824
	51.91	6/1/1999	27.00			24.914
	51.91	7/30/1999	29.55			22.364
	51.91	8/27/1999	27.29			24.624
	51.91	9/27/1999	28.40			23.514
	51.91	10/29/1999	29.11			22.804
MW-23C	51.91	11/17/1999	29.49			22.424
	51.91	12/29/1999	28.46			23.454
	51.91	2/4/2000	28.96			22.954
	51.91	2/25/2000	28.96			22.954

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
	51.91	3/27/2000	28.61			23.304
	51.91	4/7/2000	27.10			24.814
	51.91	5/31/2000	27.15			24.764
	51.91	6/1/2000	27.11			24.804
	51.91	7/28/2000	27.15			24.764
	51.91	8/30/2000	29.96			21.954
	51.91	9/19/2000	29.77			22.144
	51.91	10/27/2000	28.44			23.474
	51.91	11/21/2000	28.61			23.304
	51.91	5/1/2001	26.26			25.65
	51.91	10/1/2001	26.50		0.60	25.41
	51.91	3/11/2002	25.33			26.584
	51.91	9/23/2002	26.43			25.484
	51.91	3/10/2003	24.53			27.384
	51.91	9/23/2003	25.95			25.964
	51.91	3/15/2004	24.15			27.764
	51.91	9/13/2004	25.97			25.944
	51.91	7/18/2005	26.46			25.454
	51.91	1/4/2006	27.53			24.384
	51.91	3/7/2007	23.96			27.954
	51.91	7/27/2007	22.41			29.504
	51.91	1/31/2008	23.22	75.98	1.71	28.694
	48.89 ¹	2/4/2009	22.11	72.05	1.47	26.78
	48.89 ¹	7/23/2009	22.93	73.01	0.51	25.961
	48.89 ¹	1/9/2010	20.29	71.8	1.72	28.601
	48.89 ¹	5/27/2010	22.81	71.5	2.02	26.081
	48.89 ¹	6/28/2010	22.93	72.15	1.37	25.961
	48.89 ¹	7/12/2010	21.41	72.4	1.12	27.481
	48.89 ¹	8/31/2010	21.61	72.65	0.87	27.281
	48.89 ¹	1/12/2011	21.7	71.25	1.45	27.191
	48.89	7/12/2011	23.11	70.65	2.05	25.782
	48.89	1/26/2012	22.81	71.57	1.13	26.082
	48.89	7/9/2012	22.31	71.45	1.25	26.582
	48.89	1/7/2013	23.32	71.06	1.64	25.572
	48.89	7/22/2013	24.38			24.512
	48.89	1/7/2014	23.51	70.8	2.30	25.38
	48.89	7/15/2014	24.06	70.96	2.14	24.83
	48.89	1/5/2015	22.47	71.72	1.08	26.42
	48.89	8/10/2015	19.34	72.17	0.63	29.55
	48.89	1/13/2016	23.16	71.91	0.89	25.73
	48.89	7/6/2016	23.09	71.56	1.24	25.80
	48.89	1/12/2017	23.74	71.81	0.99	25.15
	48.89	7/6/2017	23.61	77.27	0.53	25.28
	48.89	9/5/2017	23.67	77.29	0.51	25.22
	48.89	2/7/2018	23.86	77.46	0.34	25.03
	48.89	3/11/2018	23.99	77.41	0.39	24.9
	48.89	5/14/2018	25.02	77.49	0.31	23.87
MW-24A	45.79	3/27/2000	7.87			37.92
	45.79	4/7/2000	7.63			38.16
	45.79	5/31/2000	7.65			38.14
	45.79	6/1/2000	7.43			38.36
	45.79	7/28/2000	7.60			38.19
	45.79	8/30/2000	10.44			35.35
	45.79	9/19/2000	10.57			35.22
	45.79	10/27/2000	NM			NM
	45.79	11/21/2000	7.09			38.7
	45.79	5/1/2001	6.72			39.07
	45.79	10/1/2001	7.81			37.98
	45.79	3/11/2002	3.91			41.88
	45.79	9/23/2002	5.04			40.75
	45.79	3/10/2003	2.76			43.03
	45.79	9/23/2003	4.66			41.13
	45.79	3/15/2004	3.10			42.69
MW-24A	45.79	9/14/2004	8.24			37.55
	45.79	7/18/2005	6.03			39.76
	45.79	1/6/2006	8.93			36.86
	45.79	7/27/2006	4.21			41.58
	45.79	3/7/2007	3.86			41.93
	45.79	1/30/2008	NM			NM
MW-24AR	45.65	2/5/2009	5.18			40.47
	45.65	7/23/2009	7.36			38.29

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
	45.65	1/9/2010	3.72			41.93
	45.65	7/12/2010	4.29			41.36
	45.65	1/13/2011	3.58			42.07
	45.65	7/11/2011	6.38			39.27
	45.65	1/27/2012	4.59			41.06
	45.65	7/10/2012	4.38			41.27
	45.65	1/8/2013	5.59			40.06
	45.65	7/23/2013	10.14	71.06		35.51
	45.65	1/8/2014	7.11			38.54
	45.65	1/5/2015	NM			NM
	45.65	7/6/2016	NM			NM
MW-24B	46.06	3/27/2000	11.91			34.15
	46.06	4/7/2000	11.60			34.46
	46.06	5/31/2000	11.63			34.43
	46.06	6/1/2000	11.51			34.55
	46.06	7/28/2000	11.69			34.37
	46.06	8/30/2000	13.91			32.15
	46.06	9/19/2000	14.72			31.34
	46.06	10/27/2000	12.44			33.62
	46.06	11/21/2000	11.38			34.68
	46.06	5/1/2001	10.71			35.35
	46.06	10/1/2001	11.75			34.31
	46.06	3/11/2002	9.01			37.05
	46.06	9/23/2002	9.69			36.37
	46.06	3/10/2003	7.83			38.23
	46.06	9/23/2003	8.98			37.08
	46.06	3/15/2004	7.33			38.73
	46.06	9/14/2004	9.24			36.82
	46.06	7/18/2005	9.54			36.52
	46.06	1/6/2006	11.86			34.2
	46.06	7/27/2006	10.50			35.56
	46.06	3/7/2007	8.88			37.18
	46.06	7/27/2007	9.85			36.21
	46.06	1/28/2008	7.37			38.69
	46.06	7/14/2008	11.41			34.65
	46.06	2/3/2009	11.18			34.88
	46.06	7/23/2009	12.26			33.8
	46.06	1/9/2010	9.89			36.17
	46.06	7/12/2010	12.82			33.24
	46.06	1/13/2011	11.1			34.96
	46.06	7/11/2011	14.09			31.97
	46.06	1/27/2012	11.36			34.7
	46.06	7/10/2012	10.49			35.57
	46.06	1/8/2013	12.96			33.1
	46.06	7/23/2013	8.49			37.57
	46.06	1/5/2015	NM			NM
MW-24C	46.05	3/27/2000	25.77			20.28
	46.05	4/7/2000	24.27			21.78
	46.05	5/31/2000	24.30			21.75
	46.05	6/1/2000	24.22			21.83
	46.05	7/28/2000	24.26			21.79
	46.05	8/30/2000	27.34			18.71
	46.05	9/19/2000	26.59			19.46
	46.05	10/27/2000	27.64			18.41
	46.05	11/21/2000	25.43			20.62
	46.05	5/1/2001	23.90			22.15
	46.05	10/1/2001	23.71			22.34
	46.05	3/11/2002	22.40			23.65
	46.05	9/23/2002	23.04			23.01

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-24C	46.05	3/10/2003	21.71			24.34
	46.05	9/23/2003	23.04			23.01
	46.05	3/15/2004	21.45			24.6
	46.05	9/14/2004	22.45			23.6
	46.05	7/18/2005	22.19			23.86
	46.05	1/6/2006	23.57			22.48
	46.05	7/27/2006	22.61			23.44
	46.05	3/7/2007	21.07			24.98
	46.05	7/27/2007	19.62			26.43
	46.05	1/28/2008	19.43			26.62
	46.05	7/14/2008	20.63			25.42
	46.05	2/3/2009	21.68			24.37
	46.05	7/23/2009	23.07			22.98
	46.05	1/9/2010	20.46			25.59
	46.05	7/12/2010	20.44			25.61
	46.05	1/13/2011	20.26			25.79
	46.05	7/11/2011	21.59			24.46
	46.05	1/27/2012	21.23			24.82
	46.05	7/10/2012	20.81			25.24
	46.05	1/8/2013	22.42			23.63
46.05	7/23/2013	23.81			22.24	
46.05	1/5/2015	NM				
MW-25A	44.65	3/27/2000	9.15			35.5
	44.65	4/7/2000	8.79			35.86
	44.65	5/31/2000	8.81			35.84
	44.65	6/1/2000	8.86			35.79
	44.65	7/28/2000	8.84			35.81
	44.65	8/30/2000	11.43			33.22
	44.65	9/19/2000	11.12			33.53
	44.65	10/27/2000	10.09			34.56
	44.65	11/21/2000	8.10			36.55
	44.65	5/1/2001	8.94			35.71
	44.65	10/1/2001	8.81			35.84
	44.65	3/11/2002	7.23			37.42
	44.65	9/23/2002	5.65			39
	44.65	3/10/2003	5.84			38.81
	44.65	9/23/2003	5.35			39.3
	44.65	3/15/2004	5.75			38.9
	44.65	9/14/2004	7.00			37.65
	44.65	7/18/2005	6.42			38.23
	44.65	1/6/2006	9.29			35.36
	44.65	7/27/2006	5.10			39.55
	44.65	3/7/2007	4.76			39.89
	44.65	7/27/2007	4.22			40.43
	44.65	1/28/2008	4.25			40.4
	44.65	7/14/2008	8.59			36.06
	44.65	2/3/2009	8.90			35.75
	44.65	7/23/2009	8.71			35.94
	44.65	1/9/2010	6.84			37.81
	44.65	7/12/2010	7.78			36.87
	44.65	1/12/2011	6.26			38.39
	44.65	7/11/2011	10.22			34.43
	44.65	1/27/2012	5.24			39.41
	44.65	7/10/2012	4.56			40.09
	44.65	1/8/2013	8.62			36.03
44.65	7/23/2013	9.37			35.28	
44.65	1/8/2014	8.92			35.73	
44.65	7/16/2014	8.61			36.04	
44.65	1/5/2015	8.71			35.94	
44.65	8/10/2015	6.94			37.71	
44.65	1/13/2016	6.07			38.58	
44.65	7/6/2016	6.62			38.03	
44.65	1/12/2017	6.98			37.67	
44.65	7/6/2017	7.31			37.34	
44.65	9/5/2017	7.16			37.49	
44.65	2/11/2018	5.71			38.94	
44.65	3/12/2018	6.06			38.59	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-25A	44.65	5/14/2018	7.49			37.16
MW-25C	44.49	3/27/2000	19.92			24.57
	44.49	4/7/2000	19.50			24.99
	44.49	5/31/2000	19.56			24.93
	44.49	6/1/2000	19.51			24.98
	44.49	7/28/2000	19.54			24.95
	44.49	8/30/2000	22.14			22.35
	44.49	9/19/2000	21.30	66.73	0.90	23.19
	44.49	10/27/2000	20.63			23.86
	44.49	11/21/2000	27.63			16.86
	44.49	5/1/2001	18.14			26.35
	44.49	10/1/2001	18.29		0.40	26.2
	44.49	3/14/2002	17.39	64.32	4.13	27.1
	44.49	9/23/2002	17.81	61.41	6.00	26.68
	44.49	3/10/2003	16.73			27.76
	44.49	9/23/2003	22.35			22.14
	44.49	3/15/2004	16.15			28.34
	44.49	9/14/2004	17.00	60.14	2.56	27.49
	44.49	7/18/2005	15.57			28.92
	44.49	1/6/2006	18.49			26
	44.49	7/27/2006	15.32	60.64	2.03	29.17
	44.49	3/7/2007	15.87	59.82	2.18	28.62
	44.49	7/27/2007	14.25	60.61	1.04	30.24
	44.49	1/28/2008	14.91	60.88	0.67	29.58
	44.49	7/14/2008	17.24	60.95	0.60	27.25
	44.49	2/3/2009	15.97	TRACE	TRACE	28.52
	44.49	7/23/2009	16.39			28.1
	44.49	1/9/2010	13.68	61.45	0.65	30.81
	44.49	5/27/2010	16.09			28.4
	44.49	6/28/2010	16.26			28.23
	44.49	7/12/2010	16.05			28.44
	44.49	8/31/2010	16.21			28.28
	44.49	1/12/2011	16.29			28.2
	44.49	7/11/2011	18.81			25.68
	44.49	1/27/2012	17.29			27.2
	44.49	7/10/2012	16.53			27.96
	44.49	1/8/2013	18.34			26.15
	44.49	7/23/2013	18.74			25.75
	44.49	1/8/2014	18.23			26.26
	44.49	7/16/2014	18.66			25.83
	44.49	1/5/2015	17.81			26.68
	44.49	8/10/2015	16.09			28.40
	44.49	1/13/2016	15.61			28.88
	44.49	7/6/2016	16.02			28.47
	44.49	1/12/2017	16.64			27.85
	44.49	7/5/2017	16.84			27.65
	44.49	9/5/2017	16.81			27.68
	44.49	2/11/2018	15.27			29.22
	44.49	3/12/2018	15.63			28.86
	44.49	5/14/2018	16.02			28.47
MW-26A	44.62	3/27/2000	7.40			37.22
	44.62	4/7/2000	6.99			37.63
	44.62	5/31/2000	7.10			37.52
	44.62	6/1/2000	7.00			37.62
	44.62	7/28/2000	7.11			37.51
	44.62	8/30/2000	9.69			34.93
	44.62	9/19/2000	11.43			33.19
	44.62	10/27/2000	8.11			36.51
	44.62	11/21/2000	8.24			36.38
	44.62	5/1/2001	6.01			38.61
	44.62	10/1/2001	6.34			38.28
	44.62	3/11/2002	4.05			40.57
	44.62	9/23/2002	4.29			40.33
	44.62	3/10/2003	2.84			41.78
	44.62	9/23/2003	4.84			39.78
	44.62	3/15/2004	3.30			41.32
	44.62	9/14/2004	6.80			37.82

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-26A	44.62	7/18/2005	6.72			37.9
	44.62	1/6/2006	9.34			35.28
	44.62	7/27/2006	4.42			40.2
	44.62	3/7/2007	4.70			39.92
	44.62	7/27/2007	3.98			40.64
	44.62	1/29/2008	2.37			42.25
	44.62	7/14/2008	7.87			36.75
	44.62	2/3/2009	6.89			37.73
	44.62	7/23/2009	7.88			36.74
	44.62	1/9/2010	4.31			40.31
	44.62	7/12/2010	8.12			36.5
	44.62	1/13/2011	2.38			42.24
	44.62	7/11/2011	10.27			34.35
	44.62	1/27/2012	3.09			41.53
	44.62	7/10/2012	2.77			41.85
	44.62	1/8/2013	7.27			37.35
	44.62	7/23/2013	9.72			34.9
	44.62	1/8/2014	6.33			38.29
	44.62	7/16/2014	7.64			36.98
	44.62	1/5/2015	5.74			38.88
	44.62	8/10/2015	4.03			40.59
	44.62	1/13/2016	3.41			41.21
	44.62	7/6/2016	3.72			40.90
	44.62	1/12/2017	4.92			39.70
44.62	7/5/2017	5.34			39.28	
44.62	9/5/2017	5.27			39.35	
44.62	2/11/2018	4.43			40.19	
44.62	3/12/2018	4.77			39.85	
44.62	5/14/2018	6.61			38.01	
MW-27A	44.90	5/1/2001	6.41			38.49
	44.90	10/1/2001	5.31			39.59
	44.90	3/11/2002	4.21			40.69
	44.90	9/23/2002	3.31			41.59
	44.90	3/10/2003	4.05			40.85
	44.90	9/23/2003	3.24			41.66
	44.90	3/15/2004	2.99			41.91
	44.90	9/14/2004	5.09			39.81
	44.90	7/18/2005	4.45			40.45
	44.90	1/6/2006	4.55			40.35
	44.90	7/27/2006	4.26			40.64
	44.90	3/7/2007	3.01			41.89
	45.04	7/27/2007	2.12			42.92
	45.04	1/28/2008	1.88			43.16
	45.04	7/14/2008	4.57			40.47
	45.04	2/3/2009	4.27			40.77
	45.04	7/23/2009	4.36			40.68
	45.04	1/9/2010	3.69			41.35
	45.04	7/12/2010	5.31			39.73
	45.04	1/12/2011	3.76			41.28
	45.04	7/12/2011	6.72			38.32
	45.04	1/26/2012				NM
	45.04	7/10/2012	well covered			NM
	45.04	1/7/2013	well covered			NM
	45.04	7/23/2013	NM			NM
	45.04	8/10/2015	NM			NM
	45.04	2/11/2018	4.21			40.83
45.04	3/12/2018	4.59			40.45	
45.04	5/14/2018	5.06			39.98	
MW-27C	45.04	5/1/2001	17.82			27.22
	45.04	10/1/2001	17.82			27.22
	45.04	3/11/2002	16.36			28.68
	45.04	9/23/2002	16.49			28.55
	45.04	3/10/2003	18.68			26.36
	45.04	9/23/2003	16.89			28.15
	45.04	3/15/2004	14.35			30.69
	45.04	9/14/2004	14.49			30.55
45.04	7/18/2005	16.12			28.92	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-27C	45.04	1/6/2006	18.07			26.97
	45.04	7/27/2006	17.13			27.91
	45.04	3/7/2007	15.47			29.57
	44.90	7/27/2007	14.85			30.05
	45.04	1/28/2008	14.31			30.73
	45.04	7/14/2008	17.51			27.53
	45.04	2/3/2009	15.76			29.28
	45.04	7/23/2009	16.38			28.66
	45.04	1/9/2010	14.82			30.22
	45.04	7/12/2010	16.12			28.92
	45.04	1/12/2011	15.84			29.2
	45.04	7/11/2011	18.17			26.87
	45.04	1/27/2012	17.14			27.9
	45.04	7/10/2012	16.56			28.48
	45.04	1/8/2013	17.04			28
	45.04	7/23/2013	18.61			26.43
	45.04	1/8/2014	18.12			26.92
	45.04	7/16/2014	16.94			28.10
	45.04	1/5/2015	17.74			27.30
	45.04	8/10/2015	15.71			29.33
	45.04	1/13/2016	15.04			30.00
	45.04	7/6/2016	15.32			29.72
	45.04	1/12/2017	15.91			29.13
	45.04	7/5/2017	16.39			28.65
	45.04	9/5/2017	16.36			28.68
	45.04	2/11/2018	16.59			28.45
45.04	3/12/2018	16.97			28.07	
45.04	5/14/2018	15.89			29.15	
MW-28A	43.86	5/1/2001	7.45			36.41
	43.86	10/1/2001	8.26			35.6
	43.86	3/11/2002	4.90			38.96
	43.86	9/23/2002	5.71			38.15
	43.86	3/10/2003	3.11			40.75
	43.86	9/23/2003	5.81			38.05
	43.86	9/14/2004	9.34			34.52
	43.86	7/18/2005	7.52			36.34
	43.86	1/6/2006	9.32			34.54
	43.86	7/27/2006	5.54			38.32
	43.86	3/7/2007	5.06			38.8
	43.86	7/27/2007	2.86			41
	43.86	1/29/2008	2.61			41.25
	43.86	7/14/2008	8.74			35.12
	43.86	2/3/2009	8.36			35.5
	43.86	7/23/2009	8.94			34.92
	43.86	1/9/2010	4.54			39.32
	43.86	7/12/2010	8.66			35.2
	43.86	1/12/2011	3.87			39.99
	43.86	7/11/2011	11.43			32.43
	43.86	1/27/2012	2.66			41.2
	43.86	7/10/2012	4.52			39.34
	43.86	1/8/2013	8.11			35.75
	43.86	7/23/2013	10.78			33.08
	43.86	1/8/2014	7.71			36.15
	43.86	7/16/2014	8.19			35.67
43.86	1/5/2015	7.21			36.65	
43.86	8/10/2015	5.72			38.14	
43.86	1/13/2016	5.09			38.77	
43.86	7/6/2016	5.42			38.44	
43.86	1/12/2017	5.89			37.97	
43.86	7/5/2017	6.13			37.73	
43.86	9/5/2017	6.06			37.80	
43.86	2/11/2018	5.31			38.55	
43.86	3/12/2018	5.61			38.25	
43.86	5/14/2018	6.02			37.84	
MW-28C	43.96	5/1/2001	17.14			26.82
	43.96	10/1/2001	17.51			26.45
	43.96	3/11/2002	16.29			27.67

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-28C	43.96	9/23/2002	17.75			26.21
	43.96	3/10/2003	15.84			28.12
	43.96	9/23/2003	17.48			26.48
	43.96	3/15/2004	15.56			28.4
	43.96	9/14/2004	17.20			26.76
	43.96	7/18/2005	16.60			27.36
	43.96	1/6/2006	17.61			26.35
	43.96	7/27/2006	17.73			26.23
	43.96	3/7/2007	15.59			28.37
	43.96	7/27/2007	12.90			31.06
	43.96	1/29/2008	14.35			29.61
	43.96	7/14/2008	16.26			27.7
	43.96	2/3/2009	16.03			27.93
	43.96	7/23/2009	16.53			27.43
	43.96	1/9/2010	14.89			29.07
	43.96	7/12/2010	15.89			28.07
	43.96	1/12/2011	18.37			25.59
	43.96	7/11/2011	18.16			25.8
	43.96	1/27/2012	16.12			27.84
	43.96	7/10/2012	16.79			27.17
	43.96	1/8/2013	17.62			26.34
	43.96	7/23/2013	18.87			25.09
	43.96	1/8/2014	17.59			26.37
	43.96	7/16/2014	16.98			26.98
	43.96	1/5/2015	16.84			27.12
	43.96	8/10/2015	14.39			29.57
	43.96	1/13/2016	13.72			30.24
	43.96	7/6/2016	14.03			29.93
	43.96	1/12/2017	14.64			29.32
	43.96	7/5/2017	14.88			29.08
43.96	9/5/2017	14.89			29.07	
43.96	2/11/2018	17.33			26.63	
43.96	3/12/2018	14.73			29.23	
43.96	5/14/2018	16.59			27.37	
MW-29A	46.59	5/1/2001	5.01			41.58
	46.59	10/1/2001	5.38			41.21
	46.59	3/11/2002	1.51			45.08
	46.59	9/23/2002	1.65			44.94
	46.59	3/10/2003	1.42			45.17
	46.59	9/23/2003	1.50			45.09
	46.59	3/15/2004	1.85			44.74
	46.59	9/14/2004	6.35			40.24
	46.59	7/18/2005	3.12			43.47
	46.59	1/6/2006	6.57			40.02
	46.59	7/27/2006	1.44			45.15
	46.59	3/7/2007	1.95			44.64
	46.59	7/27/2007	2.49			44.1
	46.59	1/28/2008	1.28			45.31
	46.59	7/14/2008	4.14			42.45
	46.59	2/3/2009	3.50			43.09
	46.59	7/23/2009	4.09			42.5
	46.59	1/9/2010	1.76			44.83
	46.59	7/12/2010	3.62			42.97
	46.59	1/13/2011	3.07			43.52
46.59	7/11/2011	7.14			39.45	
46.59	7/10/2012	4.17			42.42	
46.59	1/8/2013	4.91			41.68	
46.59	7/23/2013	--			--	
	Plugged					NM
MW-29B	46.26	5/1/2001	19.01			27.25
	46.26	10/1/2001	19.41			26.85
	46.26	3/11/2002	18.04			28.22
	46.26	9/23/2002	18.82			27.44
	46.26	3/10/2003	17.21			29.05
	46.26	9/23/2003	18.09			28.17
	46.26	3/15/2004	17.10			29.16
46.26	9/14/2004	17.76			28.5	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-29B	46.26	7/18/2005	18.11			28.15
	46.26	1/6/2006	18.83			27.43
	46.26	7/27/2006	18.41			27.85
	46.26	3/7/2007	17.21			29.05
	46.26	7/27/2007	15.49			30.77
	46.26	1/28/2008	15.32			30.94
	46.26	7/14/2008	18.23			28.03
	46.26	2/3/2009	17.72			28.54
	46.26	7/23/2009	16.19			30.07
	46.26	1/9/2010	16.02			30.24
	46.26	7/12/2010	19.29			26.97
	46.26	1/13/2011	17.73			28.53
	46.26	7/11/2011	20.06			26.2
	46.26	7/10/2012	9.71			36.55
	46.26	1/8/2013	9.92			36.34
	Plugged					
MW-29C	46.46	5/1/2001	25.51			20.95
	46.46	10/1/2001	25.04			21.42
	46.46	3/11/2002	23.51			22.95
	46.46	9/23/2002	24.10			22.36
	46.46	3/10/2003	22.71			23.75
	46.46	9/23/2003	23.48			22.98
	46.46	3/15/2004	22.24			24.22
	46.46	9/14/2004	24.12			22.34
	46.46	7/18/2005	23.75			22.71
	46.46	1/6/2006	25.12			21.34
	46.46	7/27/2006	23.35			23.11
	46.46	3/7/2007	22.38			24.08
	46.46	7/27/2007	20.42			26.04
	46.46	1/28/2008	21.08			25.38
	46.46	7/14/2008	22.38			24.08
	46.46	2/3/2009	22.86			23.6
	46.46	7/23/2009	22.81			23.65
	46.46	1/9/2010	20.71			25.75
	46.46	7/12/2010	21.32			25.14
	46.46	1/13/2011	20.39			26.07
46.46	7/11/2011	23.17			23.29	
46.46	7/10/2012	20.69			25.77	
46.46	1/8/2013	21.27			25.19	
46.46	7/23/2013	--			--	
	Plugged					
MW-30A	50.45	3/15/2004	9.71			40.74
	50.45	9/13/2004	12.76			37.69
	50.45	7/18/2005	11.80			38.65
	50.45	1/4/2006	13.52			36.93
	50.45	7/27/2006	10.45			40
	50.45	3/7/2007	10.98			39.47
	50.45	7/27/2007	9.49			40.96
	50.45	1/30/2008	9.62			40.83
	50.45	7/15/2008	12.52			37.93
	50.45	2/4/2009	13.01			37.44
	50.45	7/23/2009	13.71			36.74
	50.45	1/9/2010	10.87			39.58
	50.45	7/12/2010	12.61			37.84
	50.45	1/12/2011	10.06			40.39
	50.45	7/12/2011	14.76			35.69
	50.45	1/26/2012	10.78			39.67
	50.45	7/9/2012	11.13			39.32
	50.45	1/8/2013	12.91			37.54
50.45	7/23/2013	14.16			36.29	
50.45	1/8/2014	13.81			36.64	
50.45	7/15/2014	12.10			38.35	
50.45	1/5/2015	13.22			37.23	
50.45	8/10/2015	12.16			38.29	
MW-31A	52.08	3/15/2004	10.97			41.11
	52.08	9/13/2004	13.00			39.08
	52.08	7/18/2005	13.05			39.03

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-31A	52.08	1/4/2006	14.77			37.31
	52.08	7/27/2006	11.83			40.25
	52.08	3/7/2007	12.43			39.65
	52.08	7/27/2007	10.83			41.25
	52.08	1/31/2008	10.99			41.09
	52.08	7/15/2008	13.68			38.4
	52.08	2/4/2009	14.23			37.85
	52.08	7/23/2009	14.73			37.35
	52.08	1/9/2010	12.31			39.77
	52.08	7/12/2010	14.06			38.02
	52.08	1/12/2011	11.62			40.46
	52.08	7/12/2011	15.92			36.16
	52.08	1/26/2012	12.24			39.84
	52.08	7/9/2012	12.79			39.29
	52.08	1/8/2013	14.14			37.94
	52.08	7/23/2013	16.24			35.84
	MW-32A	43.77	3/15/2004	1.00		
43.77		9/14/2004	6.03	29.00	3.48	37.74
43.77		7/18/2005	5.82	26.56	5.92	37.95
43.77		1/6/2006	6.93	24.92	7.57	36.84
43.77		7/27/2006	12.96	25.71	6.74	30.81
43.77		3/7/2007	4.03	25.26	7.19	39.74
43.77		7/27/2007	1.95	30.76	1.70	41.82
43.77		1/28/2008	2.18			41.59
43.77		7/14/2008	6.14	26.25	6.20	37.63
43.77		2/3/2009	5.71	26.29	6.16	38.06
43.77		7/23/2009	6.29	26.51	5.94	37.48
43.77		1/9/2010	3.55	25.41	7.04	40.22
43.77		5/27/2010	5.86	26.2	6.25	37.91
43.77		6/28/2010	6.02	29.1	3.35	37.75
43.77		7/12/2010	6.12	29.45	3.00	37.65
43.77		8/31/2010	5.43	30.67	1.78	38.34
43.77		1/13/2011	2.63	29.15	3.30	41.14
43.77	7/11/2011	5.92	28.82	3.63	37.85	
	Plugged					37.85
MW-32AR	44.56	1/27/2012	3.22			41.34
	44.56	7/10/2012	3.73			40.83
	44.56	1/8/2013	6.64			37.92
	44.56	7/23/2013	9.42			35.14
	44.56	1/8/2014	5.64			38.92
	44.56	7/16/2014	6.74			37.82
	44.56	1/5/2015				
	44.56	8/10/2015	3.18			41.38
	44.56	1/13/2016	2.66			41.90
	44.56	7/6/2016	3.14			41.42
	44.56	1/12/2017	3.67			40.89
	44.56	7/5/2017	4.16			40.40
	44.56	9/6/2017	4.03			40.53
	44.56	2/11/2018	4.06			40.50
44.56	3/12/2018	5.02			39.54	
44.56	5/14/2018	5.91			38.65	
MW-32B	44.41	1/27/2012	3.11	30.52	5.77	41.3
	44.41	7/10/2012	3.81	30.16	6.13	40.6
	44.41	1/8/2013	6.34	30.02	6.38	38.07
	44.41	7/23/2013	7.14			37.27
	44.41	1/8/2014	6.72	34.82	1.58	37.69
	44.41	7/16/2014	6.72	34.29	2.11	37.69
	44.41	1/5/2015	6.02	35.77	0.63	38.39
	44.41	8/10/2015	4.41	36.09	0.31	40.00
	44.41	1/13/2016	3.61	36.07	0.33	40.80
	44.41	7/6/2016	3.91	35.96	0.44	40.50
	44.41	1/12/2017	4.83	36.02	0.38	39.58
	44.41	7/5/2017	4.86	36.13	0.27	39.55

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-32B	44.41	9/6/2017	4.78	36.24	3.67	39.63
	44.41	2/7/2018	5.16	36.21	0.19	39.25
	44.41	3/12/2018	5.41	36.13	0.27	39.00
	44.41	5/15/2018	6.47	36.21	0.19	37.94
MW-33A	44.25	3/15/2004	3.90			40.35
	44.25	9/14/2004	7.85			36.4
	44.25	7/18/2005	6.35			37.9
	44.25	1/6/2006	8.00			36.25
	44.25	7/27/2006	4.73			39.52
	44.25	3/7/2007	5.22			39.03
	44.25	7/27/2007	3.48			40.77
	44.25	1/29/2008	3.34			40.91
	44.25	7/14/2008	7.42	25.19	0.03	36.83
	44.25	2/3/2009	7.28			36.97
	44.25	7/23/2009	7.63			36.62
	44.25	1/9/2010	4.79			39.46
	44.25	7/12/2010	7.61			36.64
	44.25	1/13/2011	3.19			41.06
	44.25	7/11/2011	9.87			34.38
	44.25	1/27/2012	2.69			41.56
	44.25	7/10/2012	3.86			40.39
	44.25	1/8/2013	6.76			37.49
	44.25	7/23/2013	9.83			34.42
	44.25	1/8/2014	6.71			37.54
	44.25	7/16/2014	7.09			37.16
	44.25	1/5/2015	5.02			39.23
	44.25	8/10/2015	4.09			40.16
	44.25	1/13/2016	3.51			40.74
44.25	7/6/2016	3.89			40.36	
44.25	1/12/2017	5.01			39.24	
44.25	7/5/2017	5.59			38.66	
44.25	9/6/2017	5.51			38.74	
44.25	2/11/2018	4.38			39.87	
44.25	3/12/2018	4.86			39.39	
44.25	5/14/2018	6.42			37.83	
MW-33B	44.35	3/7/2007	4.21			40.04
	44.35	7/27/2007	3.72			40.53
	44.35	1/29/2008	2.37	39.12	3.37	41.88
	44.35	7/14/2008	5.74	37.44	5.05	38.51
	44.35	2/3/2009	9.28	36.91	5.58	34.97
	44.35	7/23/2009	NM			NM
	44.35	1/9/2010	4.61	35.21	7.28	39.74
	44.35	5/27/2010	6.82			37.53
	44.35	6/28/2010	6.91			37.44
	44.35	7/12/2010	7.02			37.33
	44.35	8/31/2010	7.22			37.13
	44.35	1/13/2011	3.11	29.7	0.30	41.24
	44.35	7/11/2011	10.19	29.75	0.25	34.16
	44.35	1/5/2015	NM			NM
MW-33BR	44.35	1/27/2012	4.07			40.28
	44.35	7/10/2012	2.59			41.76
	44.35	1/8/2013	3.86			40.49
	44.35	7/23/2013	9.68			34.67
	44.35	1/8/2014	7.41			36.94
	44.35	7/16/2014	6.72			37.63
	44.35	1/5/2015	5.22			39.13
	44.35	8/10/2015	3.96			40.39
	44.35	1/13/2016	3.22			41.13
	44.35	7/6/2016	3.71			40.64
	44.35	1/12/2017	4.74			39.61
	44.35	7/5/2017	5.19			39.16
	44.35	9/6/2017	4.99			39.36
	44.35	2/11/2018	4.74			39.61
	44.35	3/12/2018	5.19			39.16
44.35	5/14/2018	6.03			38.32	
MW-34C	45.31	3/15/2004	17.40			27.91
	45.31	9/14/2004	18.82			26.49

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-34C	45.31	7/18/2005	19.41	65.29	7.19	25.9
	45.31	1/6/2006	20.54	65.27	8.38	24.77
	45.31	7/27/2006	18.55	63.84	8.61	26.76
	45.31	4/9/2007	16.34	62.06	10.39	28.97
	45.31	7/27/2007	NM			
	45.31	1/29/2008	16.32			28.99
	45.31	7/15/2008	18.13	43.49	29.01	27.18
	45.31	2/5/2009	18.08	61.79	10.71	27.23
	45.31	7/23/2009	NM			
	45.31	1/9/2010	16.41	69.20	3.30	28.9
	45.31	7/12/2010	NM			
	45.31	1/12/2011	16.41	64.90		28.9
	45.31	7/11/2011	19.08	65.26		26.23
	45.31	2/8/2012	18.41			26.9
	45.31	7/10/2012	NM			
	45.31	1/8/2013	NM			
45.31	7/23/2013	NM				
MW-34CR	46.47	7/16/2014	19.17			27.30
	46.47	1/5/2015	19.01			27.46
	46.47	8/10/2015	17.39			29.08
	46.47	1/13/2016	15.99			30.48
	46.47	7/6/2016	16.06			30.41
	46.47	1/12/2017	16.94			29.53
	46.47	7/5/2017	17.01			29.46
	46.47	9/6/2017	17.11			29.36
	46.47	2/11/2018	18.19			28.28
	46.47	3/12/2018	18.52			27.95
	46.47	5/14/2018	18.26			28.21
MW-35A	45.31	3/7/2007	3.49			41.82
	45.31	7/27/2007	3.05			42.26
	45.31	1/29/2008	1.82			43.49
	45.31	7/14/2008	6.21			39.1
	45.31	2/3/2009	5.54			39.77
	45.31	7/23/2009	5.76			39.55
	45.31	1/9/2010	4.14			41.17
	45.31	7/12/2010	6.04			39.27
	45.31	1/13/2011	2.46			42.85
	45.31	7/11/2011	8.44			36.87
	45.31	1/27/2012	1.35			43.96
	45.31	7/10/2012	2.33			42.98
	45.31	1/8/2013	5.37			39.94
	45.31	7/23/2013	9.18			36.13
	45.31	1/8/2014	5.06			40.25
	45.31	7/15/2014	6.51			38.80
	45.31	1/5/2015	4.22			41.09
	45.31	8/10/2015	3.68			41.63
	45.31	1/13/2016	3.08			42.23
	45.31	7/6/2016	3.34			41.97
	45.31	1/12/2017	3.87			41.44
45.31	7/5/2017	4.41			40.90	
45.31	9/6/2017	NM				
45.31	2/11/2018	3.69			41.62	
45.31	3/11/2018	4.06			41.25	
45.31	5/14/2018	8.71			36.60	
MW-35B	44.83	3/7/2007	3.31			41.52
	44.83	7/27/2007	3.29			41.54
	44.83	1/29/2008	1.95			42.88
	44.83	7/14/2008	6.40			38.43
	44.83	2/3/2009	5.79			39.04
	44.83	7/23/2009	6.42			38.41
	44.83	1/9/2010	3.51			41.32
	44.83	7/12/2010	6.39			38.44
	44.83	1/13/2011	2.96			41.87
	44.83	7/11/2011	8.67			36.16
	44.83	1/27/2012	1.59			43.24
	44.83	7/10/2012	2.74			42.09
	44.83	1/8/2013	6.09			38.74

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-35B	44.83	7/23/2013	9.22			35.61
	44.83	1/8/2014	5.31			39.52
	44.83	7/15/2014	6.75			38.08
	44.83	1/5/2015	4.81			40.02
	44.83	8/10/2015	3.97			40.86
	44.83	1/13/2016	3.26			41.57
	44.83	7/6/2016	3.57			41.26
	44.83	1/12/2017	4.06			40.77
	44.83	7/5/2017	4.66			40.17
	44.83	9/6/2017	NM			
	44.83	2/11/2018	4.06			40.77
	44.83	3/11/2018	4.31			40.52
	44.83	5/14/2018	6.11			38.72
	MW-36A	44.53	3/7/2007	8.71		
44.53		7/27/2007	6.54			37.99
44.53		1/29/2008	5.59			38.94
44.53		7/14/2008	9.33			35.2
44.53		2/3/2009	10.69			33.84
44.53		7/23/2009	12.03			32.5
44.53		1/9/2010	9.23			35.3
44.53		7/12/2010	9.14			35.39
44.53		1/13/2011	8.62			35.91
44.53		7/11/2011	12.16			32.37
44.53		1/27/2012	6.82			37.71
44.53		7/10/2012	6.68			37.85
44.53		1/8/2013	7.61			36.92
44.53		7/23/2013	11.36			33.17
44.53		1/8/2014	9.23			35.3
44.53		7/16/2014	8.62			35.91
44.53		1/5/2015	8.67			35.86
44.53		8/10/2015	6.47			38.06
44.53		1/13/2016	5.79			38.74
44.53		7/6/2016	6.13			38.40
44.53		1/12/2017	6.58			37.95
44.53	7/5/2017	7.01			37.52	
44.53	9/6/2017	6.92			37.61	
44.53	2/11/2018	7.77			36.76	
44.53	3/11/2018	8.06			36.47	
44.53	5/14/2018	8.92			35.61	
MW-36B	44.07	7/12/2010	1.32			42.75
	44.07	1/13/2011	9.71			34.36
	44.07	7/11/2011	11.57			32.5
	44.07	1/27/2012	0.46			43.61
	44.07	7/10/2012	6.64			37.43
	44.07	1/8/2013	6.71			37.36
	44.07	7/23/2013	9.39			34.68
	44.07	1/8/2014	4.09			39.98
	44.07	7/16/2014	3.61			40.46
	44.07	1/5/2015	3.21			40.86
	44.07	8/10/2015	1.46			42.61
	44.07	1/13/2016	1.06			43.01
	44.07	7/6/2016	4.06			40.01
	44.07	1/12/2017	4.59			39.48
	44.07	7/5/2017	4.72			39.35
	44.07	9/6/2017	4.41			39.66
	44.07	2/11/2018	0.32			43.75
44.07	3/11/2018	1.81			42.26	
44.07	5/14/2018	1.62			42.45	
MW-36D	44.33	7/12/2010	85.39			-41.06
	44.33	1/13/2011	85.03			-40.7
	44.33	7/11/2011	85.33			-41
	44.33	1/27/2012	85.62			-41.29
	44.33	7/10/2012	85.17			-40.84
	44.33	1/8/2013	85.37			-41.04
	44.33	7/23/2013	85.93			-41.6
	44.33	1/8/2014	85.32			-40.99
44.33	7/16/2014	84.77			-40.44	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-36D	44.33	1/5/2015	85.01			-40.68
	44.33	8/10/2015	84.67			-40.34
	44.33	1/13/2016	84.29			-39.96
	44.33	7/6/2016	84.42			-40.09
	44.33	1/12/2017	84.73			-40.40
	44.33	7/5/2017	84.89			-40.56
	44.33	9/6/2017	84.86			-40.53
	44.33	2/11/2018	82.59			-38.26
	44.33	3/11/2018	82.77			-38.44
	44.33	5/14/2018	83.09			-38.76
MW-38A	46.39	3/7/2007	3.26			43.13
	46.39	7/27/2007	3.08			43.31
	46.39	1/29/2008	1.85			44.54
	46.39	7/14/2008	5.84			40.55
	46.39	2/3/2009	5.15			41.24
	46.39	7/23/2009	5.06			41.33
	46.39	1/9/2010	2.27			44.12
	46.39	7/12/2010	6.42			39.97
	46.39	1/13/2011	1.76			44.63
	46.39	7/11/2011	8.16			38.23
	46.39	1/27/2012	1.8			44.59
	46.39	7/10/2012	2.52			43.87
	46.39	1/8/2013	4.62			41.77
	46.39	7/23/2013	8.34			38.05
	46.39	1/8/2014	4.77			41.62
	46.39	7/15/2014	6.20			40.19
	46.39	1/5/2015	4.16			42.23
	46.39	8/10/2015	3.61			42.78
	46.39	1/13/2016	3.02			43.37
	46.39	7/6/2016	3.42			42.97
	46.39	1/12/2017	4.01			42.38
	46.39	7/5/2017	4.21			42.18
	46.39	9/6/2017	4.12			42.27
46.39	2/11/2018	2.61			43.78	
46.39	3/11/2018	4.12			42.27	
46.39	5/14/2018	5.41			40.98	
MW-38B	45.51	3/15/2004	1.07			44.44
	45.51	9/14/2004	6.10			39.41
	45.51	7/18/2005	2.41			43.1
	45.51	1/6/2006	6.33			39.18
	45.51	7/27/2006	1.27			44.24
	45.51	3/7/2007	2.38			43.13
	45.51	7/27/2007	2.25			43.26
	45.51	1/29/2008	0.61			44.9
	45.51	7/14/2008	4.86			40.65
	45.51	2/3/2009	4.33			41.18
	45.51	7/23/2009	4.47			41.04
	45.51	1/9/2010	1.44			44.07
	45.51	7/12/2010	5.72			39.79
	45.51	1/13/2011	0.68			44.83
	45.51	7/11/2011	7.82			37.69
	45.51	1/27/2012	0.85			44.66
	45.51	7/10/2012	0.74			44.77
	45.51	1/8/2013	3.97			41.54
	45.51	7/23/2013	7.51			38
	45.51	1/8/2014	3.47			42.04
	45.51	7/15/2014	5.50			40.01
	45.51	1/5/2015	3.07			42.44
	45.51	8/10/2015	2.17			43.34
	45.51	1/13/2016	2.41			43.10
	45.51	7/6/2016	2.96			42.55
	45.51	1/12/2017	3.81			41.70
	45.51	7/5/2017	4.07			41.44
45.51	9/6/2017	3.91			41.60	
45.51	2/11/2018	2.02			43.49	
45.51	3/11/2018	3.22			42.29	
45.51	5/14/2018	4.62			40.89	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-39B	49.58	3/15/2004	5.48			44.1
	49.58	9/13/2004	10.02			39.56
	49.58	7/18/2005	7.21			42.37
	49.58	1/4/2006	10.37			39.21
	49.58	7/27/2006	6.08			43.5
	49.58	3/7/2007	6.91			42.67
	49.58	7/27/2007	5.74			43.84
	49.58	1/30/2008	6.34			43.24
	49.58	7/15/2008	8.96			40.62
	49.58	2/4/2009	8.60			40.98
	49.58	7/24/2009	9.13			40.45
	49.58	1/8/2010	5.61			43.97
	49.58	7/12/2010	9.31			40.27
	49.58	1/12/2011	5.64			43.94
	49.58	7/12/2011	11.97			37.61
	49.58	1/26/2012	5.84			43.74
	49.58	7/9/2012	5.77			43.81
	49.58	1/7/2013	8.68			40.9
	49.58	7/22/2013	11.17			38.41
	49.58	1/7/2014	7.23			42.35
	49.58	7/16/2014	9.46			40.12
	49.58	1/5/2015	6.71			42.87
	49.58	8/10/2015	4.82			44.76
	49.58	1/13/2016	4.17			45.41
	49.58	7/6/2016	4.26			45.32
	49.58	1/12/2017	5.61			43.97
	49.58	7/5/2017	5.87			43.71
	49.58	9/6/2017	5.66			43.92
49.58	2/11/2018	6.09			43.49	
49.58	3/11/2018	7.04			42.54	
49.58	5/14/2018	8.73			40.85	
MW-40B	49.59	3/15/2004	5.46			44.13
	49.59	9/13/2004	9.72			39.87
	49.59	7/18/2005	7.19			42.4
	49.59	1/4/2006	10.25			39.34
	49.59	7/27/2006	6.18			43.41
	49.59	3/7/2007	6.81			42.78
	49.59	7/27/2007	5.00			44.59
	49.59	1/30/2008	5.23			44.36
	49.59	7/15/2008	8.76			40.83
	49.59	2/4/2009	8.57			41.02
	49.59	7/24/2009	9.06			40.53
	49.59	1/8/2010	5.37			44.22
	49.59	7/12/2010	9.17			40.42
	49.59	1/12/2011	5.81			43.78
	49.59	7/12/2011	11.46			38.13
	49.59	1/26/2012	5.68			43.91
	49.59	7/9/2012	5.74			43.85
	49.59	1/7/2013	8.63			40.96
	49.59	7/22/2013	11.06			38.53
	49.59	1/7/2014	7.24			42.35
	49.59	7/16/2014	9.27			40.32
	49.59	1/5/2015	7.02			42.57
	49.59	8/10/2015	5.02			44.57
	49.59	1/13/2016	4.39			45.20
	49.59	7/6/2016	4.67			44.92
	49.59	1/12/2017	5.22			44.37
	49.59	7/5/2017	5.77			43.82
	49.59	9/6/2017	5.71			43.88
49.59	2/11/2018	6.21			43.38	
49.59	3/11/2018	6.82			42.77	
49.59	5/14/2018	8.44			41.15	
MW-41B	49.37	3/15/2004	4.66			44.71
	49.37	9/13/2004	9.76	35.01	9.80	39.61
	49.37	7/18/2005	5.96	32.23	12.58	43.41
	49.37	1/4/2006	10.03	32.21	12.60	39.34
	49.37	7/27/2006	5.65	29.55	15.26	43.72

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-41B	49.37	3/7/2007	4.41	29.13	15.68	44.96
	49.37	7/27/2007	5.27	12.00	32.81	44.1
	49.37	2/22/2008	5.04	25.14	19.67	44.7
	49.37	7/15/2008	8.87	25.09	19.72	40.5
	49.37	2/4/2009	8.93	23.79	21.02	40.44
	49.37	7/24/2009	9.46	23.91	20.90	39.91
	49.37	1/8/2010	5.92	23.65	21.16	43.45
	49.37	5/27/2010	6.13	25.45	19.36	43.24
	49.37	6/28/2010	6.21	38.2	6.61	43.16
	49.37	7/12/2010	6.32	38.45	6.36	43.05
	49.37	8/31/2010	6.26	39.22	5.59	43.11
	49.37	1/12/2011	6.02	39.6	5.21	43.35
	49.37	7/12/2011	8.86	39.75	5.06	40.51
	49.37	3/8/2012	6.31	20.67	24.14	43.06
	49.37	7/9/2012	8.23			41.14
	49.37	1/7/2013	9.09	41.13	3.68	40.28
	49.37	7/22/2013	10.31	39.29	5.52	39.06
	49.37	1/7/2014	9.06	39.17	5.64	40.31
	49.37	7/15/2014	8.62	37.86	6.95	40.75
	49.37	1/5/2015	8.26	39.02	5.79	41.11
	49.37	8/10/2015	6.01	40.39	4.42	43.36
	49.37	1/13/2016	5.51	39.91	4.90	43.86
	49.37	7/6/2016	5.72	40.01	4.80	43.65
	49.37	1/12/2017	6.39	40.56	4.25	42.98
	49.37	7/6/2017	6.34	40.57	1.73	43.03
	49.37	9/6/2017	6.36	40.62	1.68	43.01
49.37	2/7/2018	6.97	40.76	1.54	42.40	
49.37	3/11/2018	7.21	40.63	1.67	42.16	
49.37	5/14/2018	8.71	40.82	1.48	40.66	
MW-42B	50.52	3/7/2007	7.31			43.21
	50.52	7/27/2007	5.74			44.78
	50.52	1/30/2008	6.62			43.9
	50.52	7/15/2008	8.73			41.79
	50.52	2/4/2009	9.32			41.2
	50.52	7/24/2009	9.61			40.91
	50.52	1/8/2010	6.02			44.5
	50.52	7/12/2010	7.13			43.39
	50.52	1/12/2011	6.33			44.19
	50.52	7/12/2011	11.76			38.76
	50.52	1/26/2012	6.62			43.9
	50.52	7/9/2012	6.81			43.71
	50.52	1/7/2013	9.23			41.29
	50.52	7/22/2013	11.08			39.44
	50.52	1/7/2014	8.02			42.5
	50.52	7/15/2014	7.37			43.15
	50.52	1/5/2015	7.31			43.21
	50.52	8/10/2015	5.67			44.85
	50.52	1/13/2016	4.92			45.60
	50.52	7/6/2016	5.36			45.16
	50.52	1/12/2017	5.94			44.58
50.52	7/6/2017	6.27			44.25	
50.52	9/6/2017	6.39			44.13	
50.52	2/11/2018	6.84			43.68	
50.52	3/11/2018	7.12			43.40	
50.52	5/14/2018	8.76			41.76	
MW-44A	45.11	3/7/2007	10.86			34.25
	45.11	7/27/2007	7.46			37.65
	45.11	1/30/2008	8.44			36.67
	45.11	7/14/2008	10.75			34.36
	45.11	2/3/2009	12.55			32.56
	45.11	7/23/2009	12.76			32.35
	45.11	1/9/2010	10.23			34.88
	45.11	7/12/2010	11.24			33.87
	45.11	1/12/2011	9.63			35.48
	45.11	7/11/2011	12.59			32.52
	45.11	1/27/2012	9.27			35.84
45.11	7/10/2012	10.11			35	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-44A	45.11	1/8/2013	11.01			34.1
	45.11	7/23/2013	12.24			32.87
	45.11	1/8/2014	11.91			33.2
	45.11	7/16/2014	11.32			33.79
	45.11	1/5/2015	11.27			33.84
	45.11	8/10/2015	9.71			35.40
	45.11	1/13/2016	9.11			36.00
	45.11	7/6/2016	9.26			35.85
	45.11	1/12/2017	9.71			35.40
	45.11	7/5/2017	10.06			35.05
	45.11	9/6/2017	9.94			35.17
	45.11	2/11/2018	8.79			36.32
	45.11	3/11/2018	9.83			35.28
	45.11	5/14/2018	9.91			35.20
MW-44C	45.03	3/15/2004	17.54			27.49
	45.03	9/14/2004	18.35			26.68
	45.03	7/18/2005	18.90	64.77	5.35	26.13
	45.03	1/6/2006	20.03	66.50	5.37	25
	45.03	7/27/2006	18.47	63.35	6.75	26.56
	45.03	3/7/2007	16.02	62.30	7.75	29.01
	45.03	7/27/2007	14.83	65.45	5.50	30.2
	45.03	1/29/2008	15.95			29.08
	45.03	7/14/2008	17.91	64.95	6.18	27.12
	45.03	2/3/2009	16.72	64.15	6.98	28.31
	45.03	7/23/2009	17.12	64.05	6.75	27.91
	45.03	1/9/2010	15.57	63.81	6.99	29.46
	45.03	5/27/2010	16.67	64.7	6.10	28.36
	45.03	6/28/2010	16.77	67.85	2.95	28.26
	45.03	7/12/2010	16.91	70.35	0.45	28.12
	45.03	8/31/2010	16.89	70.63	0.17	28.14
	45.03	1/12/2011	16.77	70.05	0.75	28.26
	45.03	7/11/2011	19.31	70.05	0.75	25.72
	45.03	1/27/2012	17.91	63.88	6.92	27.12
	45.03	7/10/2012	17.61	63.7	7.10	27.42
	45.03	1/8/2013	19.02	62.94	7.86	26.01
	45.03	7/23/2013	20.36	70.26	0.54	24.67
	45.03	1/8/2014	19.67	70.42	0.38	25.36
	45.03	7/16/2014	18.72	69.31	1.49	26.31
	45.03	1/5/2015	18.67	69.82	0.98	26.36
	45.03	8/10/2015	16.31	70.29	0.51	28.72
	45.03	1/13/2016	16.26	69.93	0.87	28.77
	45.03	7/6/2016	16.47	69.71	1.09	28.56
	45.03	1/12/2017	17.22	70.11	0.69	27.81
	45.03	7/5/2017	17.33	70.34	0.46	27.70
45.03	9/6/2017	17.36	70.43	-0.87	27.67	
45.03	2/8/2018	17.77	70.34	0.46	27.26	
45.03	5/15/2018	NM				
MW-45C	44.73	3/15/2004	17.15			27.58
	44.73	9/14/2004	17.82	61.66	9.02	26.91
	44.73	7/18/2005	18.38	60.76	9.89	26.35
	44.73	1/6/2006	19.51	62.87	8.87	25.22
	44.73	7/27/2006	17.92	61.64	8.94	26.81
	44.73	3/7/2007	15.95	60.81	9.79	28.78
	44.73	7/27/2007	14.38			30.35
	44.73	1/29/2008	14.86	61.39	9.46	29.87
	44.73	7/14/2008	17.22	61.25	9.88	27.51
	44.73	2/3/2009	17.00	61.24	9.61	27.73
	44.73	7/23/2009	17.46	61.30	9.55	27.27
	44.73	1/9/2010	14.98	61.56	9.29	29.75
	44.73	5/27/2010	16.31	61.1	9.75	28.42
	44.73	6/28/2010	16.42	63.45	7.40	28.31
	44.73	7/12/2010	16.61	68.8	2.05	28.12
	44.73	8/31/2010	16.46	69.62	1.23	28.27
	44.73	1/12/2011	16.31	69.1	1.75	28.42
	44.73	7/11/2011	18.29	69.3	1.55	26.44
	44.73	3/8/2012	16.31	70.6	0.25	28.42
	44.73	7/10/2012	20.69	70.21	0.64	24.04

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-45C	44.73	1/8/2013	21.39	69.91	0.69	23.34
	44.73	7/23/2013	22.72	70.39	0.21	22.01
	44.73	1/8/2014	22.13	70.35	0.25	22.6
	44.73	7/16/2014	21.32	69.91	0.69	23.41
	44.73	1/5/2015	20.19	70.55	0.05	24.54
	44.73	8/10/2015	18.61			26.12
	44.73	1/13/2016	17.49			27.24
	44.73	7/6/2016	17.62			27.11
	44.73	1/12/2017	18.22			26.51
	44.73	7/5/2017	17.96			26.77
	44.73	9/6/2017	18.16			26.57
	44.73	2/8/2018	18.62	70.6	0.00	26.11
	44.73	3/11/2018	18.83			25.9
	44.73	5/15/2018	19.61			25.12
MW-46C	44.94	3/15/2004	16.16	ND	ND	28.78
	44.94	9/14/2004	17.97	ND	ND	26.97
	44.94	7/18/2005	18.50	69.05	3.78	26.44
	44.94	1/13/2006	19.66	70.20	3.22	25.28
	44.94	7/27/2006	17.96	68.89	3.90	26.98
	44.94	3/7/2007	16.01	69.32	3.43	28.93
	44.94	7/27/2007	14.54	69.31	3.59	30.4
	44.94	1/30/2008	15.68	70.81	2.00	29.26
	44.94	7/14/2008	17.38	69.97	2.84	27.56
	44.94	2/3/2009	16.78	69.28	3.53	28.16
	44.94	7/23/2009	17.59	69.35	3.55	27.35
	44.94	1/9/2010	14.53	68.74	4.16	30.41
	44.94	5/27/2010	16.26	69.4	3.50	28.68
	44.94	6/28/2010	16.39	70.85	2.05	28.55
	44.94	7/12/2010	16.29	72.25	0.65	28.65
	44.94	8/31/2010	16.13	72.46	0.44	28.81
	44.94	1/12/2011	15.96	71.75	1.15	28.98
	44.94	7/11/2011	18.07	71.65	1.25	26.87
	44.94	1/26/2012	16.54	ND	ND	28.4
	44.94	7/10/2012	20.34	72.8	0.10	24.6
	44.94	1/8/2013	21.18	71.31	1.59	23.76
	44.94	7/23/2013	21.96	72.16	0.74	22.98
	44.94	1/8/2014	21.81	72.55	0.35	23.13
	44.94	7/16/2014	20.86	71.39	1.51	24.08
	44.94	1/5/2015	20.47	72.06	0.84	24.47
	44.94	8/10/2015	18.39	72.42	0.48	26.55
	44.94	1/13/2016	18.24	72.59	0.31	26.70
	44.94	7/6/2016	18.54	72.49	0.41	26.40
	44.94	1/12/2017	19.27	72.46	0.44	25.67
	44.94	7/5/2017	19.12	72.34	0.56	25.82
44.94	9/6/2017	19.29	72.34	0.56	25.65	
44.94	2/8/2018	19.96	72.46	0.44	24.98	
44.94	3/11/2018	20.04	72.32	0.58	24.90	
44.94	5/15/2018	21.02	72.59	0.31	23.92	
MW-47C	45.61	7/27/2007	16.62			28.99
	45.61	1/29/2008	16.04			29.57
	45.61	7/14/2008	18.15			27.46
	45.61	2/4/2009	18.39			27.22
	45.61	7/23/2009	18.61			27
	45.61	1/9/2010	16.46			29.15
	45.61	7/12/2010	18.33			27.28
	45.61	1/12/2011	17.86			27.75
	45.61	7/11/2011	19.94			25.67
	45.61	1/26/2012	18.77			26.84
	45.61	7/9/2012	18.17			27.44
	45.61	1/8/2013	19.47			26.14
	45.61	7/23/2013	20.61			25
	45.61	1/8/2014	19.57			26.04
	45.61	7/16/2014	19.02			26.59
	45.61	1/5/2015	19.07			26.54
	45.61	8/10/2015	17.41			28.20
45.61	1/13/2016	16.83			28.78	
45.61	7/6/2016	17.01			28.60	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-47C	45.61	1/12/2017	17.59			28.02
	45.61	7/5/2017	NM			
	45.61	9/6/2017	NM			
MW-48C	44.68	3/15/2004	17.31			27.37
	44.68	9/14/2004	18.60			26.08
	44.68	7/18/2005	19.17			25.51
	44.68	1/6/2006	20.33			24.35
	44.68	7/27/2006	18.73			25.95
	44.68	3/7/2007	16.52			28.16
	44.68	7/27/2007	15.22			29.46
	44.68	1/29/2008	16.32			28.36
	44.68	7/14/2008	17.63			27.05
	44.68	2/4/2009	17.97			26.71
	44.68	7/24/2009	18.39			26.29
	44.68	1/9/2010	15.81			28.87
	44.68	7/12/2010	17.42			27.26
	44.68	1/12/2011	17.52			27.16
	44.68	7/11/2011	19.58			25.1
	44.68	1/26/2012	18.52			26.16
	44.68	7/9/2012	17.12			27.56
	44.68	1/8/2013	18.26			26.42
	44.68	7/23/2013	20.17			24.51
	44.68	1/8/2014	19.19			25.49
	44.68	7/16/2014	18.38			26.30
	44.68	1/5/2015	18.76			25.92
	44.68	8/10/2015	16.34			28.34
	44.68	1/13/2016	15.72			28.96
	44.68	7/6/2016	16.16			28.52
	44.68	1/12/2017	16.71			27.97
44.68	7/5/2017	17.17			27.51	
44.68	9/6/2017	17.15			27.53	
44.68	2/11/2018	17.36			27.32	
44.68	3/11/2018	16.74			27.94	
44.68	5/14/2018	17.33			27.35	
MW-49A	46.18	3/7/2007	12.91			33.27
	46.18	7/27/2007	8.86			37.32
	46.18	1/31/2008	12.02			34.16
	46.18	7/15/2008	12.99			33.19
	46.18	2/4/2009	13.29			32.89
	46.18	7/24/2009	13.71			32.47
	46.18	1/9/2010	11.07			35.11
	46.18	7/12/2010	11.62			34.56
	46.18	1/12/2011	10.82			35.36
	46.18	7/11/2011	12.31			33.87
	46.18	1/26/2012	9.48			36.7
	46.18	7/9/2012	9.79			36.39
	46.18	1/8/2013	11.31			34.87
	46.18	7/23/2013	11.92			34.26
	46.18	1/8/2014	11.56			34.62
	46.18	7/16/2014	10.57			35.61
	46.18	1/5/2015	16.12			30.06
	46.18	8/10/2015	9.61			36.57
	46.18	1/13/2016	9.34			36.84
	46.18	7/6/2016	9.57			36.61
	46.18	1/12/2017	10.03			36.15
46.18	7/5/2017	10.32			35.86	
46.18	9/6/2017	10.24			35.94	
46.18	2/11/2018	10.29			35.89	
46.18	3/11/2018	10.56			35.62	
46.18	5/14/2018	12.34			33.84	
MW-49B	46.22	2/4/2009	11.65			34.57
	46.22	7/24/2009	11.93			34.29
	46.22	1/9/2010	9.73			36.49
	46.22	7/12/2010	11.36			34.86
	46.22	1/12/2011	8.04			38.18
	46.22	7/11/2011	12.29			33.93
	46.22	1/26/2012	10.74			35.48

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-49B	46.22	7/9/2012	7.38			38.84
	46.22	1/8/2013	11.27	33.56	1.19	34.95
	46.22	7/23/2013	11.83	33.91	0.84	34.39
	46.22	1/8/2014	11.24			34.98
	46.22	7/16/2014	9.62			36.60
	46.22	1/5/2015	10.74			35.48
	46.22	8/10/2015	8.17			38.05
	46.22	1/13/2016	7.74			38.48
	46.22	7/6/2016	8.02			38.20
	46.22	1/12/2017	8.46			37.76
	46.22	7/5/2017	8.72			37.50
	46.22	9/6/2017	8.67			37.55
	46.22	2/11/2018	10.03			36.19
	46.22	3/11/2018	10.64			35.58
	46.22	5/14/2018	13.27			32.95
MW-50A	46.96	3/7/2007	8.16			38.8
	46.96	7/27/2007	4.70			42.26
	46.96	1/31/2008	5.68			41.28
	46.96	7/16/2008	7.99			38.97
	46.96	2/4/2009	9.31			37.65
	46.96	7/24/2009	9.49			37.47
	46.96	1/9/2010	7.02			39.94
	46.96	7/12/2010	8.74			38.22
	46.96	1/12/2011	5.61			41.35
	46.96	7/11/2011	9.86			37.1
	46.96	1/26/2012	7.21			39.75
	46.96	7/9/2012	4.63			42.33
	46.96	1/8/2013	5.91			41.05
	46.96	7/23/2013	7.13			39.83
	46.96	1/8/2014	6.71			40.25
	46.96	7/16/2014	6.29			40.67
	46.96	1/5/2015	6.22			40.74
	46.96	8/10/2015	5.01			41.95
	46.96	1/13/2016	4.06			42.90
	46.96	7/6/2016	4.71			42.25
46.96	1/12/2017	5.21			41.75	
46.96	7/5/2017	5.63			41.33	
46.96	9/6/2017	5.51			41.45	
46.96	2/11/2018	4.39			42.57	
46.96	3/11/2018	4.81			42.15	
46.96	5/15/2018	5.27			41.69	
MW-51A	47.80	3/7/2007	6.96			40.84
	47.80	7/27/2007	5.45			42.35
	47.80	1/31/2008	5.92			41.88
	47.80	7/15/2008	NM			
	47.80	2/4/2009	9.98			37.82
	47.80	7/24/2009	10.34			37.46
	47.80	1/9/2010	7.83			39.97
	47.80	7/12/2010	9.16			38.64
	47.80	1/12/2011	8.56			39.24
	47.80	7/11/2011	12.74			35.06
	47.80	1/26/2012	7.33			40.47
	47.80	7/9/2012	7.26			40.54
	47.80	1/8/2013	7.62			40.18
	47.80	7/23/2013	10.54			37.26
	47.80	1/8/2014	10.21			37.59
	47.80	7/16/2014	8.51			39.29
	47.80	1/5/2015	9.87			39.29
	47.80	8/10/2015	7.96			39.84
	47.80	1/13/2016	7.13			40.67
	47.80	7/6/2016	7.29			40.51
	47.80	1/12/2017	7.63			40.17
	47.80	7/5/2017	7.74			40.06
	47.80	9/6/2017	7.63			40.17
	47.80	2/11/2018	5.92			41.88
	47.80	3/12/2018	6.41			41.39
47.80	5/15/2018	7.16			40.64	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-51C	47.48	7/16/2014	22.21			25.27
	47.48	1/5/2015	NM			
	47.48	8/10/2015	18.79			28.69
	47.48	1/13/2016	18.06			29.42
	47.48	7/6/2016	18.26			29.22
	47.48	1/12/2017	18.68			28.80
	47.48	7/5/2017	19.12			28.36
	47.48	9/6/2017	19.02			28.46
	47.48	2/11/2018	17.63			29.85
	47.48	3/12/2018	18.03			29.45
47.48	5/15/2018	20.83			26.65	
MW-52A	51.91	3/7/2007	13.66			38.25
	51.91	7/27/2007	11.76			40.15
	51.91	1/31/2008	12.60			39.31
	51.91	7/15/2008	14.42			37.49
	51.91	2/5/2009	15.52			36.39
	51.91	7/23/2009	16.39			35.52
	51.91	1/9/2010	12.57			39.34
	51.91	7/12/2010	14.19			37.72
	51.91	1/12/2011	9.06			42.85
	51.91	7/12/2011	16.53			35.38
	51.91	1/26/2012	12.99			38.92
	51.91	7/9/2012	12.43			39.48
	51.91	1/7/2013	14.94			36.97
	51.91	7/22/2013	16.29			35.62
	51.91	1/7/2014	16.01			35.9
	51.91	7/15/2014	15.39			36.52
	51.91	1/5/2015	15.37			36.54
	51.91	8/10/2015	13.61			38.30
51.91	1/13/2016	12.96			38.95	
51.91	7/6/2016	NM			NM	
MW-53C	45.49	3/7/2007	16.12			29.37
	45.49	7/27/2007	14.55			30.94
	45.49	1/29/2008	15.12			30.37
	45.49	7/14/2008	16.86			28.63
	45.49	2/3/2009	16.69			28.8
	45.49	7/23/2009	17.62			27.87
	45.49	1/9/2010	15.19			30.3
	45.49	7/12/2010	15.71			29.78
	45.49	1/12/2011	16.58			28.91
	45.49	7/11/2011	18.61			26.88
	45.49	1/27/2012	17.54			27.95
	45.49	7/10/2012	17.73			27.76
	45.49	1/8/2013	18.14			27.35
	45.49	7/23/2013	19.28			26.21
	45.49	1/8/2014	21.12			24.37
	45.49	7/16/2014	17.37			28.12
	45.49	1/5/2015	20.71			24.78
	45.49	8/10/2015	18.72			26.77
	45.49	1/13/2016	18.06			27.43
	45.49	7/6/2016	18.42			27.07
45.49	1/12/2017	18.89			26.60	
45.49	7/5/2017	19.16			26.33	
45.49	9/6/2017	19.13			26.36	
45.49	2/11/2018	16.43			29.06	
45.49	3/11/2018	15.54			29.95	
45.49	5/14/2018	16.56			28.93	
MW-54C	44.99	3/7/2007	15.74			29.25
	44.99	7/27/2007	14.63			30.36
	44.99	1/28/2008	15.28			29.71
	44.99	7/14/2008	16.68			28.31
	44.99	2/3/2009	16.87			28.12
	44.99	7/23/2009	17.84			27.15
	44.99	1/9/2010	15.46			29.53
	44.99	7/12/2010	16.49			28.5
	44.99	1/12/2011	16.46			28.53
44.99	7/11/2011	18.23			26.76	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-54C	44.99	1/27/2012	17.42			27.57
	44.99	7/10/2012	17.36			27.63
	44.99	1/8/2013	17.81			27.18
	44.99	7/23/2013	18.89			26.1
	44.99	1/8/2014	18.14			26.85
	44.99	7/16/2014	17.49			27.50
	44.99	1/5/2015	17.86			27.13
	44.99	8/10/2015	16.02			28.97
	44.99	1/13/2016	15.33			29.66
	44.99	7/6/2016	15.66			29.33
	44.99	1/12/2017	16.17			28.82
	44.99	7/5/2017	16.61			28.38
	44.99	9/6/2017	16.59			28.40
	44.99	2/11/2018	15.4			29.59
	44.99	3/11/2018	15.68			29.31
44.99	5/14/2018	16.31			28.68	
MW-55A	52.01	2/4/2009	13.79			38.22
	52.01	7/23/2009	14.06			37.95
	52.01	1/9/2010	10.83			41.18
	52.01	7/12/2010	12.72			39.29
	52.01	1/12/2011	10.13			41.88
	52.01	7/12/2011	15.18			36.83
	52.01	1/26/2012	11.71			40.3
	52.01	7/9/2012	12.29			39.72
	52.01	1/7/2013	13.34			38.67
	52.01	7/22/2013	14.19			37.82
	52.01	1/7/2014	12.73			39.28
	52.01	7/15/2014	11.30			40.71
	52.01	1/5/2015	12.51			39.50
	52.01	8/10/2015	10.79			41.22
	MW-55B	52.04	1/26/2012	13.28		
52.04		7/9/2012	13.93			38.11
52.04		1/7/2013	13.73			38.31
52.04		7/22/2013	14.59			37.45
52.04		1/7/2014	12.89			39.15
52.04		7/15/2014	12.49			39.55
52.04		1/5/2015	12.41			39.63
52.04		8/10/2015	10.19			41.85
MW-57A	47.72	2/5/2009	12.73		0.00	34.99
	47.72	7/23/2009	12.91		0.00	34.81
	47.72	1/9/2010	9.78		0.00	37.94
	47.72	7/12/2010	8.56	24.55	2.55	39.16
	47.72	1/12/2011	9.83	22.76	4.14	37.89
	47.72	7/12/2011	13.88	22.79	4.11	33.84
	47.72	1/26/2012	10.54	22.78	4.12	37.18
	47.72	7/9/2012	9.72	22.65	4.25	38
	47.72	1/7/2013	10.61	22.14	4.76	37.11
	47.72	7/22/2013	13.21	23.05	3.85	34.51
	47.72	1/7/2014	11.79	26.15	0.75	35.93
	47.72	7/15/2014	10.42	26.09	0.81	37.30
	47.72	1/5/2015	10.13	26.75	0.15	37.59
	47.72	8/10/2015	7.46	26.9	0.00	40.26
	47.72	7/6/2016	7.39			40.33
	47.72	1/12/2017	8.07			39.65
	47.72	7/6/2017	8.41			39.31
	47.72	9/6/2017	8.46			39.26
	47.72	2/7/2018	8.98			38.74
	47.72	3/11/2018	9.24			38.48
47.72	5/14/2018	9.67			38.05	
MW-57B	50.90	1/26/2012	28.83	42.51	0.44	22.07
	50.90	7/9/2012	27.93	42.45	0.50	22.97
	50.90	1/7/2013	28.63	41.36	1.59	22.27
	50.90	7/22/2013	16.34	41.67	1.28	34.56
	50.90	1/7/2014	15.04			35.86
	50.90	7/15/2014	15.71			35.19
	50.90	1/5/2015	14.32			36.58
	50.90	8/10/2015	12.42			38.48

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-57B	50.90	7/6/2016	12.44			38.46
	50.90	1/12/2017	13.24			37.66
	50.90	7/6/2017	13.57			37.33
	50.90	9/6/2017	13.79			37.11
	50.90	2/7/2018	12.42			38.48
	50.90	3/11/2018	12.62			38.28
	50.90	5/14/2018	13.29			37.61
MW-58A	47.76	2/5/2009	14.55			33.21
	47.76	7/23/2009	14.04			33.72
	47.76	1/9/2010	12.29			35.47
	47.76	7/12/2010	14.03			33.73
	47.76	1/12/2011	11.88			35.88
	47.76	7/12/2011	16.16			31.6
	47.76	1/26/2012	12.26			35.5
	47.76	7/9/2012	11.62			36.14
	47.76	1/7/2013	11.91			35.85
	47.76	7/22/2013	13.71			34.05
	47.76	1/7/2014	13.26			34.5
	47.76	7/15/2014	13.06			34.70
	47.76	1/5/2015	13.06			34.70
	47.76	8/10/2015	11.29			36.47
	47.76	7/6/2016	7.46			40.30
	47.76	1/12/2017	8.04			39.72
	47.76	7/6/2017	8.39			39.37
	47.76	9/6/2017	8.33			39.43
	47.76	2/11/2018	6.47			41.29
	47.76	3/11/2018	12.71			35.05
47.76	5/14/2018	12.94			34.82	
MW-59A	44.18	2/5/2009	10.71			33.47
	44.18	7/23/2009	9.96			34.22
	44.18	1/9/2010	8.62			35.56
	44.18	7/12/2010	9.97			34.21
	44.18	1/12/2011	8.06			36.12
	44.18	7/11/2011	10.54			33.64
	44.18	1/26/2012	6.36			37.82
	44.18	7/9/2012	7.63			36.55
	44.18	1/8/2013	9.09			35.09
	44.18	7/23/2013	9.76			34.42
	44.18	1/8/2014	9.34			34.84
	44.18	7/16/2014	9.17			35.01
	44.18	1/5/2015	8.71			35.47
	44.18	8/10/2015	5.76			38.42
	44.18	1/13/2016	5.01			39.17
	44.18	7/6/2016	5.26			38.92
	44.18	1/12/2017	5.81			38.37
	44.18	7/5/2017	6.14			38.04
	44.18	9/6/2017	6.09			38.09
	44.18	2/11/2018	6.26			37.92
44.18	3/12/2018	9.13			35.05	
44.18	5/14/2018	8.81			35.37	
MW-59B	44.36	7/12/2010	7.43			36.93
	44.36	1/12/2011	6.89			37.47
	44.36	7/11/2011	11.03			33.33
	44.36	1/26/2012	4.44			39.92
	44.36	7/9/2012	7.48			36.88
	44.36	1/8/2013	9.36			35
	44.36	7/23/2013	9.94			34.42
	44.36	1/8/2014	9.52			34.84
	44.36	7/16/2014	8.67			35.69
	44.36	1/5/2015	8.92			35.44
	44.36	8/10/2015	5.91			38.45
	44.36	1/13/2016	5.22			39.14
	44.36	7/6/2016	5.39			38.97
	44.36	1/12/2017	5.97			38.39
	44.36	7/5/2017	6.27			38.09
	44.36	9/6/2017	6.06			38.30
44.36	2/11/2018	7.59			36.77	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-59B	44.36	3/12/2018	9.61			34.75
	44.36	5/14/2018	9.09			35.27
MW-59D	44.22	2/5/2009	84.17			-39.95
	44.22	7/23/2009	83.53			-39.31
	44.22	1/9/2010	81.73			-37.51
	44.22	7/12/2010	82.16			-37.94
	44.22	1/12/2011	82.83			-38.61
	44.22	7/11/2011	82.89			-38.67
	44.22	1/26/2012	82.93			-38.71
	44.22	7/9/2012	82.36			-38.14
	44.22	1/8/2013	82.81			-38.59
	44.22	7/23/2013	83.04			-38.82
	44.22	1/8/2014	83.14			-38.92
	44.22	7/16/2014	82.67			-38.45
	44.22	1/5/2015	82.07			-37.85
	44.22	8/10/2015	81.77			-37.55
	44.22	1/13/2016	81.03			-36.81
	44.22	7/6/2016	81.62			-37.40
	44.22	1/12/2017	82.09			-37.87
	44.22	7/5/2017	82.17			-37.95
44.22	9/6/2017	82.16			-37.94	
44.22	2/11/2018	81.09			-36.87	
44.22	3/12/2018	81.17			-36.95	
44.22	5/14/2018	81.79			-37.57	
MW-60A	46.79	2/4/2009	9.56			37.23
	46.79	7/23/2009	9.71			37.08
	46.79	1/9/2010	7.72			39.07
	46.79	7/12/2010	8.61			38.18
	46.79	1/12/2011	5.82			40.97
	46.79	7/11/2011	9.86			36.93
	46.79	1/26/2012	4.34			42.45
	46.79	7/9/2012	5.42			41.37
	46.79	1/8/2013	6.91			39.88
	46.79	7/23/2013	10.42			36.37
	46.79	1/8/2014	8.06			38.73
	46.79	7/16/2014	7.29			39.50
	46.79	1/5/2015	7.39			39.40
	46.79	8/10/2015	6.32			40.47
	46.79	1/13/2016	5.67			41.12
	46.79	7/6/2016	6.13			40.66
	46.79	1/12/2017	--			
	46.79	9/6/2017	NM			
46.79	2/11/2018	3.49			43.30	
46.79	3/12/2018	3.71			43.08	
46.79	5/14/2018	5.19			41.60	
MW-61A	44.67	2/3/2009	8.35			36.32
	44.67	7/23/2009	8.47			36.2
	44.67	1/9/2010	6.49			38.18
	44.67	7/12/2010	8.09			36.58
	44.67	1/12/2011	6.56			38.11
	44.67	7/11/2011	9.67			35
	44.67	1/26/2012	2.48			42.19
	44.67	7/9/2012	4.55			40.12
	44.67	1/8/2013	6.72			37.95
	44.67	7/23/2013	9.16			35.51
	44.67	1/8/2014	7.04			37.63
	44.67	7/16/2014	6.34			38.33
	44.67	1/5/2015	6.52			38.15
	44.67	8/10/2015	4.02			40.65
	44.67	1/13/2016	3.34			41.33
	44.67	7/6/2016	3.97			40.70
	44.67	1/12/2017	4.34			40.33
	44.67	7/5/2017	4.47			40.20
44.67	9/6/2017	4.39			40.28	
44.67	2/11/2018	5.52			39.15	
44.67	3/12/2018	6.62			38.05	
44.67	5/14/2018	6.27			38.40	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-62B	48.16	2/4/2009	6.99			41.17
	48.16	7/24/2009	7.39			40.77
	48.16	1/8/2010	5.13			43.03
	48.16	7/12/2010	5.79			42.37
	48.16	1/12/2011	4.21			43.95
	48.16	7/12/2011	11.06			37.1
	48.16	1/26/2012	3.18			44.98
	48.16	7/9/2012	4.87			43.29
	48.16	1/8/2013	5.92			42.24
	48.16	7/23/2013	7.01			41.15
	48.16	1/8/2014	6.52			41.64
	48.16	7/15/2014	6.06			42.10
	48.16	1/5/2015	6.02			42.14
	48.16	8/10/2015	4.16			44.00
	48.16	1/13/2016	3.64			44.52
	48.16	7/6/2016	4.09			44.07
	48.16	1/12/2017	4.71			43.45
	48.16	7/6/2017	5.09			43.07
	48.16	9/6/2017	4.71			43.45
	48.16	2/11/2018	4.12			44.04
48.16	3/11/2018	5.37			42.79	
48.16	5/14/2018	6.81			41.35	
MW-63B	44.48	2/5/2009	31.54			12.94
	44.48	7/23/2009	9.52			34.96
	44.48	1/9/2010	1.34			43.14
	44.48	7/12/2010	5.71			38.77
	44.48	1/13/2011	7.13			37.35
	44.48	7/11/2011	4.21			40.27
	44.48	1/27/2012	2.96			41.52
	44.48	7/10/2012	1.32			43.16
	44.48	1/8/2013	8.54			35.94
	44.48	7/23/2013	9.43			35.05
	44.48	1/8/2014	7.72			36.76
	44.48	7/16/2014	7.03			37.45
	44.48	1/5/2015	7.09			37.39
	44.48	8/10/2015	5.34			39.14
	44.48	1/13/2016	4.69			39.79
	44.48	7/6/2016	5.01			39.47
	44.48	1/12/2017	5.84			38.64
	44.48	7/5/2017	6.19			38.29
	44.48	9/6/2017	6.12			38.36
	44.48	2/11/2018	5.31			39.17
44.48	3/11/2018	6.39			38.09	
44.48	5/14/2018	7.19			37.29	
MW-64A	48.31	2/4/2009	9.02			39.29
	48.31	7/24/2009	9.13			39.18
	48.31	1/9/2010	6.52			41.79
	48.31	7/12/2010	6.82			41.49
	48.31	1/12/2011	4.77			43.54
	48.31	7/12/2011	8.17			40.14
	48.31	1/26/2012	4.81			43.5
	48.31	7/9/2012	5.93			42.38
	48.31	1/7/2013	7.03			41.28
	48.31	7/22/2013	8.79			39.52
	48.31	1/7/2014	8.39			39.92
	48.31	7/15/2014	7.72			40.59
	48.31	1/5/2015	7.79			40.52
	48.31	8/10/2015	5.71			42.60
	48.31	1/13/2016	5.06			43.25
	48.31	7/6/2016	5.67			42.64
	48.31	1/12/2017	6.07			42.24
	48.31	7/6/2017	6.27			42.04
	48.31	9/6/2017	6.16			42.15
	48.31	2/11/2018	5.46			42.85
48.31	3/12/2018	5.83			42.48	
48.31	5/14/2018	6.39			41.92	
MW-65D	44.55	2/5/2009	86.72			-42.17

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-65D	44.55	7/23/2009	86.47			-41.92
	44.55	1/9/2010	84.39			-39.84
	44.55	7/12/2010	84.39			-39.84
	44.55	1/12/2011	83.96			-39.41
	44.55	7/11/2011	85.81			-41.26
	44.55	1/27/2012	85.76			-41.21
	44.55	1/8/2013	85.81			-41.26
	44.55	7/23/2013	85.83			-41.28
	44.55	1/8/2014	85.78			-41.23
	44.55	7/16/2014	84.91			-40.36
	44.55	1/5/2015	85.31			-40.76
	44.55	8/10/2015	85.06			-40.51
	44.55	1/13/2016	84.81			-40.26
	44.55	7/6/2016	85.09			-40.54
	44.55	1/12/2017	85.52			-40.97
	44.55	7/5/2017	85.72			-41.17
	44.55	9/6/2017	85.7			-41.15
	44.55	2/11/2018	83.42			-38.87
44.55	3/12/2018	83.28			-38.73	
44.55	5/14/2018	83.74			-39.19	
MW-66D	44.55	2/5/2009	86.18			-39.67
	46.51	7/23/2009	85.82			-39.31
	46.51	1/9/2010	84.02			-37.51
	46.51	7/12/2010	84.86			-38.35
	46.51	1/12/2011	NM			
	46.51	7/11/2011	84.93			-38.42
	46.51	1/26/2012	84.88			-38.37
	46.51	7/9/2012	85.02			-38.51
	46.51	1/8/2013	86.09			-39.58
	46.51	7/23/2013	86.42			-39.91
	46.51	1/8/2014	86.09			-39.58
	46.51	7/16/2014	85.26			-38.75
	46.51	1/5/2015	85.42			-38.91
	46.51	8/10/2015	85.21			-38.70
	46.51	1/13/2016	84.71			-38.20
	46.51	7/6/2016	84.86			-38.35
	46.51	1/12/2017	85.26			-38.75
	46.51	7/5/2017	85.66			-39.15
46.51	9/6/2017	85.67			-39.16	
46.51	2/11/2018	83.28			-36.77	
46.51	3/12/2018	83.37			-36.86	
46.51	5/14/2018	84.06			-37.55	
MW-67B	43.93	7/12/2010	5.76			38.17
	43.93	1/13/2011	10.62			33.31
	43.93	7/11/2011	17.64			26.29
	43.93	1/27/2012	9.87			34.06
	43.93	7/10/2012	11.19			32.74
	43.93	1/8/2013	11.72			32.21
	43.93	7/23/2013	10.69			33.24
	43.93	1/8/2014	10.64			33.29
	43.93	7/16/2014	11.22			32.71
	43.93	1/5/2015	10.22			33.71
	43.93	1/13/2016	6.17			37.76
	43.93	7/6/2016	6.39			37.54
	43.93	1/12/2017	7.04			36.89
	43.93	7/5/2017	7.14			36.79
	43.93	9/6/2017	6.97			36.96
43.93	2/11/2018	8.89			35.04	
43.93	3/12/2018	9.13			34.80	
43.93	5/14/2018	10.16			33.77	
MW-68B	44.63	1/27/2012	1.16			43.47
	44.63	7/10/2012	3.82			40.81
	44.63	1/8/2013	6.76			37.87
	44.63	7/23/2013	10.33			34.3
	44.63	1/8/2014	5.82			38.81
	44.63	7/16/2014	7.41			37.22
44.63	1/5/2015	4.32			40.31	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-68B	44.63	8/10/2015	3.56			41.07
	44.63	1/13/2016	2.86			41.77
	44.63	7/6/2016	3.07			41.56
	44.63	1/12/2017	3.86			40.77
	44.63	7/5/2017	3.97			40.66
	44.63	9/6/2017	3.84			40.79
	44.63	2/11/2018	3.07			41.56
	44.63	3/12/2018	4.24			40.39
	44.63	5/14/2018	6.46			38.17
MW-68C	44.80	7/12/2010	16.52			28.28
	44.80	1/13/2011	16.92			27.88
	44.80	7/11/2011	19.34			25.46
	44.80	1/27/2012	17.66			27.14
	44.80	7/10/2012	17.96			26.84
	44.80	1/8/2013	19.39			25.41
	44.80	7/23/2013	19.87			24.93
	44.80	1/8/2014	19.29			25.51
	44.80	7/16/2014	18.39			26.41
	44.80	1/5/2015	18.71			26.09
	44.80	8/10/2015	16.29			28.51
	44.80	1/13/2016	15.74			29.06
	44.80	7/6/2016	15.94			28.86
	44.80	1/12/2017	16.54			28.26
	44.80	7/5/2017	17.02			27.78
	44.80	9/6/2017	17.01			27.79
	44.80	2/11/2018	16.21			28.59
	44.80	3/12/2018	16.88			27.92
44.80	5/14/2018	17.35			27.45	
MW-69A	45.71	7/12/2010	11.81			33.9
	45.71	1/12/2011	11.16			34.55
	45.71	7/11/2011	NM			
	45.71	1/26/2012	10.44			35.27
	45.71	7/9/2012	4.21			41.5
	45.71	1/8/2013	5.31			40.4
	45.71	7/23/2013	7.34			38.37
	45.71	1/8/2014	7.02			38.69
	45.71	7/16/2014	6.34			39.37
	45.71	1/5/2015	6.71			39.00
	45.71	8/10/2015	3.61			42.10
	45.71	1/13/2016	2.91			42.80
	45.71	7/6/2016	3.79			41.92
	45.71	1/12/2017	4.34			41.37
	45.71	7/5/2017	4.59			41.12
	45.71	9/6/2017	4.43			41.28
	45.71	2/11/2018	11.21			34.50
	45.71	3/11/2018	12.58			33.13
45.71	5/14/2018	11.34			34.37	
MW-70B	44.86	1/27/2012	6.51	34.26	1.21	38.35
	44.86	7/10/2012	6.06	34.17	1.30	38.8
	44.86	1/8/2013	6.67	34.02	1.68	38.19
	44.86	7/23/2013	8.22	34.07	1.63	36.64
	44.86	1/8/2014	7.89	35.51	0.14	36.97
	44.86	7/16/2014	6.16	34.71	0.94	38.70
	44.86	1/5/2015	7.07	35.26	0.39	37.79
	44.86	8/10/2015	5.26	35.49	0.16	39.60
	44.86	1/13/2016	4.96	35.39	0.26	39.90
	44.86	7/6/2016	5.34	35.31	0.34	39.52
	44.86	1/12/2017	6.17	35.09	0.56	38.69
	44.86	7/5/2017	6.39	35.14	0.51	38.47
	44.86	9/6/2017	6.56	35.34	0.31	38.30
	44.86	2/8/2018	6.42	35.31	0.34	38.44
	44.86	3/12/2018	6.69	35.21	0.44	38.17
	44.86	5/15/2018	7.52	35.39	0.26	37.34
MW-71B	44.59	1/27/2012	7.08			37.51
	44.59	7/10/2012	8.16			36.43
	44.59	1/8/2013	4.09			40.5

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-71B	44.59	7/23/2013	8.61			35.98
	44.59	1/8/2014	16.36			28.23
	44.59	7/16/2014	16.02			28.57
	44.59	1/5/2015	15.83			28.76
	44.59	8/10/2015	13.76			30.83
	44.59	1/13/2016	13.09			31.50
	44.59	7/6/2016	13.31			31.28
	44.59	1/12/2017	13.94			30.65
	44.59	7/5/2017	14.34			30.25
	44.59	9/6/2017	14.21			30.38
	44.59	1/25/2018	0.76			43.83
	44.59	3/12/2018	1.61			42.98
	44.59	5/14/2018	2.26			42.33
	MW-72B	51.97	1/26/2012	38.76		
51.97		7/9/2012	27.27			24.7
51.97		1/7/2013	20.08			31.89
51.97		7/22/2013	18.39			33.58
51.97		1/7/2014	17.31			34.66
51.97		7/15/2014	16.91			35.06
51.97		1/5/2015	16.74			35.23
51.97		8/10/2015	14.59			37.38
51.97		1/13/2016	13.93			38.04
51.97		7/6/2016	NM			
51.97		2/11/2018	12.26			39.71
51.97		3/12/2018	19.71			32.26
51.97		5/14/2018	20.92			31.05
MW-73B		51.42	1/26/2012	25.48		
	51.42	7/9/2012	25.03			26.39
	51.42	1/7/2013	26.11			25.31
	51.42	7/22/2013	26.87			24.55
	51.42	1/7/2014	26.19			25.23
	51.42	7/15/2014	25.14			26.28
	51.42	1/5/2015	25.81			25.61
	51.42	8/10/2015	22.46			28.96
Plugged and Abandoned						
MW-74B	47.58	1/26/2012	7.63			39.95
	47.58	7/9/2012	7.15			40.43
	47.58	1/8/2013	9.62			37.96
	47.58	7/23/2013	11.72			35.86
	47.58	1/8/2014	9.59			37.99
	47.58	7/16/2014	9.01			38.57
	47.58	1/5/2015	9.07			38.51
	47.58	8/10/2015	7.36			40.22
	47.58	1/13/2016	6.86			40.72
	47.58	7/6/2016	7.39			40.19
	47.58	1/12/2017	7.84			39.74
	47.58	7/5/2017	8.17			39.41
	47.58	9/6/2017	8.02			39.56
	47.58	2/11/2018	6.91			40.67
47.58	3/12/2018	7.22			40.36	
47.58	5/15/2018	8.33			39.25	
MW-75B	46.78	1/26/2012	9.07	35.26	1.84	37.71
	46.78	7/9/2012	9.32	35.2	1.90	37.46
	46.78	1/8/2013	10.16	34.13	2.97	36.62
	46.78	7/23/2013	9.74	35.71	1.39	37.04
	46.78	1/8/2014	10.13	36.72	0.43	36.65
	46.78	7/16/2014	11.41	35.71	1.44	35.37
	46.78	1/5/2015	11.33	36.79	0.36	35.45
	46.78	8/10/2015	8.86	37.07	0.08	37.92
	46.78	1/13/2016	7.81	36.84	0.31	38.97
	46.78	7/6/2016	7.8	36.53	0.62	38.98
	46.78	1/12/2017	8.04	36.36	0.79	38.74
	46.78	7/5/2017	8.04	36.36	0.79	38.74
	46.78	9/6/2017	8.22	36.47	3.15	38.56
	46.78	2/8/2018	8.17	36.91	2.71	38.61
	46.78	3/12/2018	8.37	36.94	2.68	38.41

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-75B	46.78	5/15/2018	9.22	37.03	2.59	37.56
MW-76C	47.84	7/16/2014	22.68			25.16
	47.84	1/5/2015	23.41			24.43
	47.84	8/10/2015	21.19			26.65
	47.84	1/13/2016	20.81			27.03
	47.84	7/6/2016	21.09			26.75
	47.84	1/12/2017	21.67			26.17
	47.84	7/5/2017	21.99			25.85
	47.84	9/6/2017	21.93			25.91
	47.84	2/11/2018	20.74			27.10
	47.84	3/12/2018	21.02			26.82
47.84	5/15/2018	21.46			26.38	
MW-77A	49.05	7/16/2014	6.62			42.43
	49.05	1/5/2015	6.27			42.78
	49.05	8/10/2015	4.34			44.71
	49.05	1/13/2016	3.96			45.09
	49.05	7/6/2016	4.29			44.76
	49.05	1/12/2017	4.73			44.32
	49.05	7/5/2017	4.91			44.14
	49.05	9/6/2017	4.78			44.27
	49.05	2/11/2018	7.62			41.43
	49.05	3/12/2018	8.09			40.96
49.05	5/15/2018	7.06			41.99	
MW-78A	48.68	7/16/2014	8.02	28.72	1.38	40.66
	48.68	1/5/2015	9.17	21.17	8.93	39.51
	48.68	8/10/2015	7.34	23.71	6.39	41.34
	48.68	1/13/2016	6.63	21.77	3.58	42.05
	48.68	7/6/2016	6.71	21.97	3.38	41.97
	48.68	1/12/2017	7.42	22.74	2.61	41.26
	48.68	7/5/2017	7.79	23.59	1.76	40.89
	48.68	9/6/2017	7.81	23.48	6.19	40.87
	48.68	2/11/2018	8.29	23.97	1.38	40.39
	48.68	3/12/2018	8.46	23.91	1.44	40.22
48.68	5/15/2018	9.28	24.07	1.28	39.4	
MW-79A	48.95	7/16/2014	7.26			41.69
	48.95	1/5/2015	5.29			43.66
	48.95	8/10/2015	3.71			45.24
	48.95	1/13/2016	3.06			45.89
	48.95	7/6/2016	3.76			45.19
	48.95	1/12/2017	4.06			44.89
	48.95	7/5/2017	4.31			44.64
	48.95	9/6/2017	4.16			44.79
	48.95	2/11/2018	10.82			38.13
	48.95	3/12/2018	11.26			37.69
48.95	5/15/2018	9.46			39.49	
MW-80B	47.11	7/16/2014	5.29			41.82
	47.11	1/5/2015	6.17			40.94
	47.11	8/10/2015	4.33			42.78
	47.11	1/13/2016	3.96			43.15
	47.11	7/6/2016	4.56			42.55
	47.11	1/12/2017	5.06			42.05
	47.11	7/5/2017	5.34			41.77
	47.11	9/6/2017	5.26			41.85
	47.11	2/11/2018	11.34			35.77
	47.11	3/11/2018	11.77			35.34
47.11	5/15/2018	11.36			35.75	
MW-81B	46.77	7/16/2014	6.47			40.30
	46.77	1/5/2015	7.06			39.71
	46.77	8/10/2015	5.22			41.55
	46.77	1/13/2016	4.77			42.00
	46.77	7/6/2016	5.16			41.61
	46.77	1/12/2017	5.72			41.05
	46.77	7/5/2017	5.96			40.81
	46.77	9/6/2017	5.71			41.06
	46.77	2/11/2018	7.04			39.73
	46.77	3/11/2018	7.51			39.26
46.77	5/15/2018	8.23			38.54	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
MW-82B	44.64	2/11/2018	2.53			42.11
	44.64	3/11/2018	3.44			41.20
	44.64	5/14/2018	5.61			39.03
MW-83B	45.33	2/11/2018	4.06			41.27
	45.33	3/11/2018	4.69			40.64
	45.33	5/14/2018	7.47			37.86
MW-83C	45.42	2/11/2018	17.52			27.90
	45.42	3/11/2018	16.96			28.46
	45.42	5/14/2018	18.11			27.31
MW-84B	44.50	2/11/2018	4.37			40.13
	44.50	3/11/2018	4.93			39.57
	44.50	5/14/2018	7.36			37.14
MW-85C	49.10	2/11/2018	22.51			26.59
	49.10	3/11/2018	22.77			26.33
	49.10	5/15/2018	22.61			26.49
MW-86C	46.61	2/11/2018	20.14			26.47
	46.61	3/11/2018	19.91			26.70
	46.61	5/15/2018	20.26			26.35
MW-87C	44.26	2/11/2018	15.86			28.40
	44.26	3/11/2018	16.29			27.97
	44.26	5/14/2018	16.26			28.00
MW-88C	51.17	2/11/2018	24.7			26.47
	51.17	3/11/2018	23.93			27.24
	51.17	5/14/2018	24.67			26.50
P-10	47.69	9/2/1993	6.87			40.85
	47.69	12/21/1993	3.32			44.4
	47.69	3/24/1994	3.88			43.84
	47.69	6/22/1994	4.98			42.74
	47.69	9/28/1994	6.38			41.34
	47.69	10/13/1994	7.07			40.65
	47.69	1/24/1995	2.67			45.05
	47.69	4/11/1995	2.59			45.13
	47.69	7/11/1995	4.69			43.03
	47.69	1/23/1996	5.84			41.88
	47.69	7/19/1996	10.04			37.68
	47.69	9/17/1996	8.34			39.38
	47.69	10/31/1996	6.97			40.75
	47.69	11/22/1996	8.84			38.88
	47.69	12/27/1996	6.20			41.52
	47.69	1/22/1997	4.10			43.62
	47.69	2/21/1997	2.86			44.86
	47.69	3/25/1997	3.19			44.53
	47.69	4/23/1997	4.42			43.3
	47.69	4/24/1997	4.57			43.15
	47.69	5/13/1997	3.14			44.58
	47.69	6/20/1997	4.94			42.78
	47.69	6/25/1997	2.74			44.98
	47.69	7/1/1997	4.13			43.59
	47.69	7/24/1997	7.91			39.81
	47.69	8/16/1997	7.86			39.86
	47.69	8/22/1997	8.67			39.05
	47.69	9/25/1997	6.54			41.18
	47.69	10/22/1997	5.36			42.36
	47.69	11/25/1997	5.36			42.36
	47.69	12/19/1997	4.72			43
	47.69	1/20/1998	3.40			44.32
	47.69	1/29/1998	3.11			44.61
47.69	3/18/1998	2.84			44.88	
47.69	4/24/1998	6.80			40.92	
47.69	5/21/1998	7.35			40.37	
47.69	7/30/1998	8.23			39.49	
47.69	8/25/1998	7.34			40.38	
47.69	9/21/1998	5.25			42.47	
47.69	10/26/1998	6.11			41.61	
47.69	11/23/1998	4.10			43.62	
47.69	2/26/1999	3.21			44.51	
47.69	3/16/1999	4.21			43.51	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
P-10	47.69	4/29/1999	4.53			43.19
	47.69	6/1/1999	4.53			43.19
	47.69	7/30/1999	6.00			41.72
	47.69	8/27/1999	4.72			43
	47.69	9/27/1999	9.58			38.14
	47.69	10/29/1999	10.61			37.11
	47.69	12/29/1999	11.55			36.17
	47.69	2/4/2000	13.71			34.01
	47.69	2/25/2000	10.44			37.28
	47.69	3/27/2000	7.53			40.19
	47.69	4/7/2000	7.09			40.63
	47.69	5/31/2000	7.14			40.58
	47.69	6/1/2000	7.11			40.61
	47.69	7/28/2000	7.15			40.57
	47.69	8/30/2000	10.15			37.57
	47.69	9/19/2000	11.56			36.16
	47.69	10/27/2000	8.66			39.06
	47.69	11/21/2000	9.64			38.08
	47.69	5/1/2001	6.52			41.2
	47.69	10/1/2001	6.85			40.87
	47.69	3/11/2002	3.41			44.31
	47.69	9/23/2002	3.54			44.18
	47.69	3/10/2003	2.43			45.26
	47.69	9/23/2003	1.61			46.08
	47.69	3/15/2004	2.85			44.84
	47.69	9/13/2004	7.99			39.7
	47.69	7/18/2005	4.20			43.49
	47.69	1/4/2006	8.58			39.11
	47.69	7/27/2006	3.46			44.23
	47.69	1/23/2007	2.36			45.33
	47.69	3/7/2007	NM			
	47.69	7/27/2007	3.75			43.94
	47.69	1/29/2008	2.30			45.39
	47.69	7/16/2008	6.91			40.78
	47.69	1/22/2009	6.35			41.34
	47.69	7/23/2009	NM			
	47.69	1/8/2010	4.06			43.63
	47.69	7/12/2010	2.06			45.63
	47.73	1/12/2011	4.13			43.60
	47.73	7/12/2011	9.84			37.89
47.73	1/27/2012	3.12			44.61	
47.73	7/10/2013	10.79			36.94	
47.73	1/8/2014	5.51			42.22	
47.73	7/2/2014	7.74			39.99	
47.73	1/7/2015	3.96			43.77	
47.73	8/10/2015	5.39			42.34	
47.71	1/12/2016	2.47			45.24	
47.71	7/6/2016	5.18			42.53	
47.71	1/12/2017	4.52			43.19	
47.71	7/12/2017	6.07			41.64	
47.71	1/3/2018	6.71			41.00	
P-11	48.98	9/2/1993	7.87			41.15
	48.98	12/21/1993	4.57			44.45
	48.98	3/24/1994	5.04			43.98
	48.98	6/22/1994	6.19			42.83
	48.98	9/28/1994	7.40			41.62
	48.98	10/13/1994	8.14			40.88
	48.98	1/24/1995	3.90			45.12
	48.98	4/11/1995	3.77			45.25
	48.98	7/11/1995	5.69			43.33
	48.98	1/23/1996	6.81			42.21
	48.98	7/19/1996	7.81			41.21
	48.98	9/17/1996	9.15			39.87
	48.98	10/31/1996	7.52			41.5
	48.98	11/22/1996	9.46			39.56
	48.98	12/27/1996	6.64			42.38
48.98	1/22/1997	4.70			44.32	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
P-11	48.98	2/21/1997	3.88			45.14
	48.98	3/25/1997	4.09			44.93
	48.98	4/23/1997	5.27			43.75
	48.98	4/24/1997	5.41			43.61
	48.98	5/13/1997	4.12			44.9
	48.98	6/20/1997	5.79			43.23
	48.98	6/25/1997	3.83			45.19
	48.98	7/1/1997	5.01			44.01
	48.98	7/24/1997	7.56			41.46
	48.98	8/16/1997	8.74			40.28
	48.98	8/22/1997	9.37			39.65
	48.98	9/25/1997	7.24			41.78
	48.98	10/22/1997	5.98			43.04
	48.98	11/25/1997	6.00			43.02
	48.98	12/19/1997	5.52			43.5
	48.98	1/20/1998	4.30			44.72
	48.98	3/4/1998	4.08			44.94
	48.98	3/18/1998	3.92			45.1
	48.98	4/24/1998	7.61			41.41
	48.98	5/21/1998	8.10			40.92
	48.98	7/30/1998	9.21			39.81
	48.98	8/25/1998	8.44			40.58
	48.98	9/21/1998	5.91			43.11
	48.98	10/26/1998	7.59			41.43
	48.98	11/23/1998	5.41			43.61
	48.98	1/29/1999	4.11			44.91
	48.98	2/26/1999	4.22			44.8
	48.98	3/16/1999	4.96			44.06
	48.98	4/29/1999	5.15			43.87
	48.98	6/1/1999	5.15			43.87
	48.98	7/30/1999	6.66			42.36
	48.98	8/27/1999	5.23			43.79
	48.98	9/27/1999	10.49			38.53
	48.98	10/29/1999	11.91			37.11
	48.98	12/29/1999	11.12			37.9
	48.98	2/4/2000	12.13			36.89
	48.98	2/25/2000	10.46			38.56
	48.98	3/27/2000	8.32			40.7
	48.98	4/7/2000	7.91			41.11
	48.98	5/31/2000	7.96			41.06
	48.98	6/1/2000	7.93			41.09
	48.98	7/28/2000	7.97			41.05
	48.98	8/30/2000	10.88			38.14
	48.98	9/19/2000	12.32			36.7
	48.98	10/27/2000	10.94			38.08
	48.98	11/21/2000	9.77			39.25
	48.98	5/1/2001	7.48			41.54
	48.98	10/1/2001	7.74			41.28
	48.98	3/11/2002	4.51			44.51
	48.98	9/23/2002	4.46			44.56
	48.98	3/10/2003	3.69			45.29
	48.98	9/23/2003	4.54			44.44
	48.98	3/15/2004	4.51			44.47
	48.98	9/13/2004	9.14			39.84
	48.98	7/18/2005	5.27			43.71
	48.98	1/4/2006	9.56			39.42
	48.98	7/27/2006	4.54			44.44
	48.98	3/7/2007	NM			
	48.98	7/27/2007	4.61			44.37
	48.98	1/30/2008	2.71			46.27
	48.98	7/15/2008	7.93			41.05
	48.98	2/4/2009	7.82			41.16
	48.98	7/24/2009	7.74			41.24
	48.98	1/8/2010	5.67			43.31
	48.98	7/12/2010	6.78			42.2
	48.98	1/12/2011	4.21			44.77
	48.98	7/12/2011	11.51			37.47

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
P-11	48.98	1/26/2012	4.25			44.73
	48.98	1/7/2013	7.96			41.02
	48.98	7/22/2013	10.96			38.02
	48.98	1/7/2014	6.52			42.46
	48.98	7/16/2014	8.87			40.11
	48.98	1/5/2015	5.61			43.37
	48.98	8/10/2015	3.86			45.12
	48.98	1/13/2016	3.26			45.72
	48.98	7/6/2016	3.74			45.24
	48.98	1/12/2017	4.36			44.62
	48.98	7/6/2017	4.62			44.36
	48.98	9/6/2017	4.62			44.36
	48.98	2/11/2018	5.09			43.89
	48.98	3/11/2018	5.54			43.44
	48.98	5/14/2018	7.14			41.84
P-12	48.78	9/2/1993	7.02			41.8
	48.78	12/21/1993	4.30			44.52
	48.78	3/24/1994	4.45			44.37
	48.78	6/22/1994	5.06			43.76
	48.78	9/28/1994	6.46			42.36
	48.78	10/13/1994	7.19			41.63
	48.78	1/24/1995	3.63			45.19
	48.78	4/11/1995	3.25			45.57
	48.78	7/11/1995	4.62			44.2
	48.78	1/23/1996	6.62			42.2
	48.78	7/19/1996	8.64			40.18
	48.78	9/17/1996	8.12			40.7
	48.78	10/31/1996	6.81			42.01
	48.78	11/22/1996	8.70			40.12
	48.78	12/27/1996	6.57			42.25
	48.78	1/22/1997	4.93			43.89
	48.78	2/21/1997	3.61			45.21
	48.78	3/25/1997	3.70			45.12
	48.78	4/23/1997	4.58			44.24
	48.78	4/24/1997	4.74			44.08
	48.78	5/13/1997	3.69			45.13
	48.78	6/20/1997	4.86			43.96
	48.78	6/25/1997	3.35			45.47
	48.78	7/1/1997	4.11			44.71
	48.78	7/24/1997	6.58			42.24
	48.78	8/16/1997	7.80			41.02
	48.78	8/22/1997	8.22			40.6
	48.78	9/25/1997	6.54			42.28
	48.78	10/22/1997	5.66			43.16
	48.78	11/25/1997	5.70			43.12
	48.78	12/19/1997	5.13			43.69
	48.78	1/20/1998	4.15			44.67
	48.78	3/4/1998	3.78			45.04
	48.78	3/18/1998	3.61			45.21
	48.78	4/24/1998	6.90			41.92
	48.78	5/21/1998	7.80			41.02
	48.78	7/30/1998	8.15			40.67
	48.78	8/25/1998	8.31			40.51
	48.78	9/21/1998	5.64			43.18
	48.78	10/26/1998	7.66			41.16
48.78	11/23/1998	5.65			43.17	
48.78	1/29/1999	4.20			44.62	
48.78	2/26/1999	4.31			44.51	
48.78	3/16/1999	4.99			43.83	
48.78	4/29/1999	5.10			43.72	
48.78	6/1/1999	5.10			43.72	
48.78	7/30/1999	6.75			42.07	
48.78	8/27/1999	5.34			43.48	
48.78	9/27/1999	9.36			39.46	
48.78	10/29/1999	10.11			38.71	
48.78	12/29/1999	9.44			39.38	
48.78	2/4/2000	12.10			36.72	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
P-12	48.78	2/25/2000	8.63			40.19
	48.78	3/27/2000	7.76			41.06
	48.78	4/7/2000	7.35			41.47
	48.78	5/31/2000	7.39			41.43
	48.78	6/1/2000	7.34			41.48
	48.78	7/28/2000	7.37			41.45
	48.78	8/30/2000	10.66			38.16
	48.78	9/19/2000	11.45			37.37
	48.78	10/27/2000	10.94			37.88
	48.78	11/21/2000	8.93			39.89
	48.78	5/1/2001	6.70			42.12
	48.78	10/1/2001	6.93			41.89
	48.78	3/11/2002	4.15			44.67
	48.78	9/23/2002	3.90			44.92
	48.78	3/10/2003	3.13			45.65
	48.78	9/23/2003	3.86			44.92
	48.78	3/15/2004	NM			
	48.78	9/13/2004	7.93			40.85
	48.78	7/18/2005	5.06			43.72
	48.78	1/4/2006	8.98			39.8
	48.78	7/27/2006	4.35			44.43
	48.78	1/22/2007	3.19			45.59
	48.78	3/7/2007	NM			
	48.78	7/27/2007	4.22			44.56
	48.78	1/29/2008	3.03			45.75
	48.78	7/16/2008	6.78			42
	48.78	1/22/2009	6.99			41.79
	48.78	7/24/2009	NM			
	48.78	1/8/2010	4.13			44.65
	48.78	7/12/2010	3.93			44.85
	48.80	1/12/2011	4.83			43.97
	48.80	7/12/2011	10.02			38.78
	48.80	1/27/2012	4.52			44.28
	48.80	7/9/2012	5.15			43.65
	48.80	7/10/2013	9.73			39.07
	48.80	1/8/2014	6.41			42.39
	48.80	7/2/2014	6.46			42.34
	48.80	1/7/2015	3.19			45.61
	48.80	8/10/2015	4.06			44.74
	48.76	1/12/2016	3.26			45.50
48.76	7/6/2016	5.09			43.67	
48.76	1/12/2017	5.11			43.65	
48.76	7/12/2017	6.39			42.37	
48.76	1/3/2018	7.14			41.62	
TW-41B	49.67	2/4/2009	8.44			41.23
	49.67	7/24/2009	8.34			41.33
	49.67	1/8/2010	4.86			44.81
	49.67	7/12/2010	6.12			43.55
	49.67	1/12/2011	5.17			44.5
	49.67	7/12/2011	12.02			37.65
	49.67	1/26/2012	5.27			44.4
	49.67	7/9/2012	6.23			43.44
	49.67	1/7/2013	8.54			41.13
	49.67	7/22/2013	11.53			38.14
49.67	1/7/2014	7.32			42.35	

**Table 5D
GROUNDWATER MEASUREMENTS
UPRR Houston Wood Preserving Works**

Well ID	TOC Elevation (ft)	Date	Depth to Water (ft)	Depth to DNAPL (ft BTOC)	DNAPL Thickness (ft)	GW Elevation (ft)
TW-41B	49.67	7/16/2014	9.65			40.02
	49.67	1/5/2015	NM			
	49.67	8/10/2015	4.96			44.71
	49.67	1/13/2016	4.13			45.54
	49.67	7/6/2016	4.31			45.36
	49.67	1/12/2017	4.93			44.74
	49.67	7/6/2017	5.32			44.35
	49.67	9/6/2017	5.26			44.41
	49.67	2/11/2018	5.86			43.81
	49.67	3/11/2018	6.69			42.98
49.67	5/14/2018	8.67			41.00	
TW-55A	49.67	7/9/2012	13.44			36.23
TW-56A	51.89	2/5/2009	17.48			34.41
	51.89	7/23/2009	17.17			34.72
	51.89	1/8/2010	14.53			37.36
	51.89	7/12/2010	15.78			36.11
	51.89	1/12/2011	14.09			37.8
	51.89	7/12/2011	17.89			34
	51.89	1/26/2012	15.06			36.83
	51.89	1/7/2013	16.92			34.97
	51.89	7/22/2013	18.12			33.77
	51.89	1/7/2014	NM			
	51.89	7/15/2014	16.05			35.84
	51.89	1/5/2015	NM			
	51.89	8/10/2015	6.39			45.5

Attachment A-2

Table 5B-1 through 5B-8 – Summaries of Groundwater Sampling Results

**Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works**

Constituent	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-03		MW-04		MW-05		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
					1/24/2018	3/27/2018	5/17/2018	1/24/2018	3/23/2018	5/25/2018								
Volatile Organic Compounds																		
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8280	5.00E-03	5.00E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	108-90-7	8280	1.00E-01	1.00E-01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8280	7.00E-01	7.00E-01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	75-09-2	8280	5.00E-03	5.00E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8280	1.00E+00	1.00E+00	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Vinyl chloride	75-01-4	8280	2.00E-01	2.00E-01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes (total)	1330-20-7	8280	1.00E+01	1.00E+01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Semi-Volatile Organic Compounds																		
1,2-Diphenylhydrazine	122-86-7	8270	1.10E-03	2.00E-03	<2.1E-05	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.00E-01	1.50E+00	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<5.8E-05	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058
2,6-Dinitrotoluene	605-20-2	8270	1.30E-03	3.00E-03	<4.2E-05	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.00E+00	<2.1E-05	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
2-Methylnaphthalene	91-57-6	8270	9.00E-02	2.90E-01	<1.9E-05	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
4-Nitrophenol	534-52-1	8270	2.40E-03	7.30E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4-Nitro-2-methylphenol	100-02-7	8270	4.90E-02	1.50E-01	<4.7E-05	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.00E+00	<2.7E-05	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
Acenaphthylene	208-96-8	8270	1.50E+00	4.00E+00	<1.5E-05	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<1.4E-05	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bis(2-Chloroethyl)amine	111-81-1	8270	8.90E-04	1.90E-03	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	8.3E-05 J	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037
Chrysene	218-01-9	8270	8.10E-01	2.00E+00	<2.1E-05	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
Dibenzofuran	132-64-9	8270	9.00E-02	2.90E-01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Fluorene	208-44-0	8270	9.00E-01	2.90E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	86-73-7	8270	9.00E-01	2.90E+00	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<2.4E-05	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.00E-01	4.20E-01	<2.6E-05	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<7.9E-05	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079
Phenanthrene	95-01-8	8270	7.30E-01	2.20E+00	<2.1E-05	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<3.5E-05	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<1.9E-05	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April 2018 sampling event, MW-25A and MW-25C were most likely mislabeled and have been switched.

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	Ct Assessment Level mg/L	MW-13												
					2/4/2009	1/19/2010	6/22/2010	1/18/2011	7/26/2011	2/2/2012	7/16/2012	2/5/2013	7/31/2013	1/14/2014	07/25/2014	1/23/2015	3/18/2015
Volatile Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	100-41-4	8260	7.00E-03	7.00E-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.00E-03	2.60E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2,4-Dimethylphenol	105-67-9	8270	4.00E-01	1.50E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2,6-Dinitrotoluene	605-20-2	8270	1.30E-03	3.00E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-Chloronaphthalene	91-58-7	8270	2.00E-02	5.00E-01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-Methylnaphthalene	91-57-6	8270	9.00E-02	2.90E-01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
4,6-Dinitro-2-methylphenol	534-52-1	8270	2.40E-03	7.30E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Acenaphthylene	208-98-8	8270	1.50E+00	4.40E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Anthracene	120-12-7	8270	7.30E+00	2.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Benzo(a)anthracene	56-55-3	8270	8.10E-03	2.00E-02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.90E-04	1.90E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bis(2-Ethoxyethyl)phthalate	117-81-7	8270	6.00E-03	5.00E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dibenzofuran	132-64-9	8270	9.80E-02	2.80E-01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fluoranthene	206-44-0	8270	9.80E-01	2.80E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fluorene	86-73-7	8270	9.80E-01	2.80E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Penta-chlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Pyrene	123-00-0	8270	7.30E-01	2.20E+00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Notes:

1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > PCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level. Cf = Commercial/Industrial
6. J = Estimated value. < = Compound not detected at the specified detection limit.
7. During the March/April 2019 sampling event, MW-25A and MW-25C were most likely mislabeled as

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level		CI Assessment Level		MW-15A																
			mg/L	mg/L	mg/L	mg/L	2/4/2009	1/18/2010	5/23/2010	1/17/2011	7/13/2011	2/2/2012	7/19/2012	10/20/2013	7/6/2013	1/14/2014	8/7/2014	1/23/2015	3/18/2015	5/15/2018			
Volatiles Organic Compounds																							
1,2-Dichloroethane	107-062-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Methylene chloride	75-08-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Semi-Volatile Organic Compounds																							
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	1.10E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2,4-Dimethylphenol	105-57-9	8270	4.90E-01	4.90E-01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	1.30E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	1.30E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-Chloronaphthalene	91-58-7	8270	2.00E+00	2.00E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-Methylnaphthalene	91-57-6	8270	9.90E-02	9.90E-02	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
4,6-Dinitro-2-methylphenol	534-52-1	8270	2.40E-03	2.40E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
4-Nitrophenol	100-02-7	8270	4.90E-02	4.90E-02	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Acenaphthene	83-32-9	8270	1.50E+00	1.50E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Acenaphthylene	208-96-6	8270	1.50E+00	1.50E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Anthracene	120-12-7	8270	7.30E+00	7.30E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Benz(a)anthracene	56-55-3	8270	9.10E-03	9.10E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	8.30E-04	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bis(2-Ethylhexyl)phthalate	117-91-7	8270	6.00E-03	6.00E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chrysene	218-01-9	8270	8.10E-01	8.10E-01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dibenzofuran	132-64-9	8270	9.90E-02	9.90E-02	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Di-n-butylphthalate	84-74-2	8270	2.40E+00	2.40E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fluoranthene	206-44-0	8270	9.90E-01	9.90E-01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fluorene	86-73-7	8270	9.90E-01	9.90E-01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Naphthalene	91-20-3	8270	4.90E-01	4.90E-01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nitrobenzene	98-95-3	8270	4.90E-02	4.90E-02	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	1.90E-01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phenanthrene	85-01-8	8270	7.30E-01	7.30E-01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phenol	108-95-2	8270	7.30E+00	7.30E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Pyrene	129-00-0	8270	7.30E-01	7.30E-01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAG §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, CI = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April 2018 sampling event, MW-25A and MW-25C were most likely mislabeled a

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level	C/I Assessment Level	MM-17												
					2/4/2009	1/18/2010	6/23/2010	1/17/2011	7/13/2011	2/1/2012	7/12/2012	4/17/2013	7/30/2013	1/13/2014	8/17/2014	1/20/2015	3/18/2015
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0025	<0.0025	<0.001	<0.005	<0.007	<0.014	<0.007	<0.007	<0.0028	<0.0062	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.85	0.59	0.85	0.31	0.45	0.24	0.48	0.435	0.474	0.324	0.576	0.47	0.55
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0025	<0.001	<0.005	<0.005	<0.006	<0.012	<0.006	<0.0024	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.26	0.26	0.2	0.21	0.23	0.23	0.21	0.279	0.251	0.209	0.26	0.19	0.23
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	0.0056J	<0.0025	<0.0013	<0.0065	<0.01	<0.0075	0.11500	<0.0075	0.0187J	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	1.1	1	0.88	0.87	0.85	0.74	0.81	0.878	0.68	0.931	0.83	0.87	0.83
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	0.55000	0.72000	0.61000	0.64000	0.54000	0.63000	0.69000	0.70200	0.69900	0.72400	0.641	0.81	0.47
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	2.00E-03	2.00E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dimethylphenol	105-67-9	8270	1.50E+00	1.50E+00	2.6	3.7	13.0	3.9	2.7	3.0	4.0	11.3	3.19	6.75	13.9	4.3	7.7
2,4-Dinitrophenol	121-14-2	8270	1.30E-03	1.30E-03	<0.0009	<0.0009	<0.0009	0.0009	0.0005	<0.0005	0.0005J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,6-Dinitrophenol	605-20-2	8270	1.30E-03	1.30E-03	<0.0007	<0.0007	<0.0007	0.0007	0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
2-Chloronaphthalene	91-58-7	8270	5.00E+00	5.00E+00	<0.0012	<0.0011	<0.0011	<0.0011	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
2-Methylnaphthalene	91-57-6	8270	9.00E-02	9.00E-02	0.27	0.56	0.39	0.87	0.75	0.29	0.51000	1.04	1.04	0.857	0.636	0.3	0.38
4,6-Dinitro-2-methylphenol	534-52-1	8270	2.40E-03	2.40E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	1.50E-01	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthene	83-32-9	8270	1.50E+00	1.50E+00	0.084	0.17	0.71	0.52	0.22	0.13	0.14	0.36	0.353	0.315	0.185	0.064	0.13
Acenaphthylene	208-86-8	8270	1.50E+00	1.50E+00	0.0410	0.0670	0.0300	0.0600	0.0690	0.0560	0.0500	<0.0231	0.0147J	<0.0288	0.0029	<0.0015	0.0041
Anthracene	120-12-7	8270	7.30E+00	7.30E+00	0.0090	0.01300	0.00750	0.12000	0.01400	0.00960	0.01400	<0.0192	0.0233J	0.0276J	0.0202J	0.0665	0.011
Benz(a)anthracene	56-55-3	8270	9.10E-03	9.10E-03	0.0040	<0.0007	<0.0007	0.0033	0.0047	<0.0005	0.0016J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Benz(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	0.00014J	<0.0008	<0.0008	<0.0008	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	8.30E-04	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	5.00E-03	5.00E-03	<0.0002	<0.0002	<0.0002	<0.0002	0.0022	0.00644	<0.001	0.00027	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chrysene	218-01-9	8270	2.00E+00	2.00E+00	0.0032	<0.0007	<0.0007	0.02500	0.0047	<0.0005	0.00011J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Dibenzofuran	132-64-9	8270	9.80E-02	9.80E-02	0.0790	0.1900	0.06500	0.470	0.1900	0.09300	0.13000	0.275	0.253	0.211J	0.148	0.071	0.092
Dibutylphthalate	84-74-2	8270	2.40E+00	2.40E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluoranthene	206-44-0	8270	9.80E-01	9.80E-01	0.0035	0.0037	0.0022	0.17	0.0039	0.0026	0.0034	<0.0269	0.00667	<0.0337	<0.0429	0.002	0.003
Fluorene	86-73-7	8270	9.80E-01	9.80E-01	0.04700	0.07600	0.03900	0.42000	0.12000	0.05900	0.08200	0.148J	0.16500	0.16J	0.0943	0.04	0.057
Naphthalene	81-20-3	8270	4.90E-01	4.90E-01	9.7	16	15	16	19	10	14	25.2	25.6	21.3	15.4	7.4	12
Nitrobenzene	98-95-3	8270	1.50E-01	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Nitrosodiphenylamine	86-30-6	8270	4.20E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pentaachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	85-01-8	8270	7.30E-01	7.30E-01	0.03000	0.06000	0.03300	0.91000	0.07800	0.04200	0.06300	0.124J	0.12300	0.0983J	0.0725	0.034	0.044
Phenol	108-95-2	8270	7.30E+00	7.30E+00	5.50000	7.7	19.0	3.60000	3.10000	3.70000	6.10000	22.2	1.54	6.46	18.1	7.1	38
Pyrene	129-00-0	8270	2.20E+00	2.20E+00	0.002	0.0021	0.0012J	0.12	0.0019	0.0018J	0.0016	<0.0423	<0.0534	<0.0529	<0.0519	<0.0024	0.0015

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §50, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April 2018 sampling event, MW-25A and MW-25C were most likely mislabeled at

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	MM-24AR												
			25/5/08	11/4/010	6/8/010	12/5/011	7/1/011	2/6/012	7/25/012	2/12/013	8/6/013	12/3/014			
Residential Assessment Level	CAS	Method	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatiles Organic Compounds															
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03
Benzene	71-43-2	8260	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01	7.00E-01
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03
Toluene	108-88-3	8260	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03	2.00E-03
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01
Semi-Volatiles Organic Compounds															
1,2-Diphenylhydrazine	122-86-7	8270	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01	4.90E-01
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03
2-Chloronaphthalene	91-59-7	8270	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00	2.00E+00
2-Methylnaphthalene	91-57-9	8270	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02	8.80E-02
2-Methylnaphthalene	534-52-1	8270	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03	2.40E-03
4-Nitrophenol	100-02-7	8270	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02
Acenaphthene	83-32-9	8270	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00
Acenaphthylene	208-96-8	8270	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00	1.50E+00
Anthracene	120-12-7	8270	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00
Benzo(a)anthracene	56-55-3	8270	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03	9.10E-03
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04	2.00E-04
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04	8.30E-04
Bis(2-Ethoxyethyl)phthalate	117-91-7	8270	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03	5.00E-03
Chrysene	218-01-9	8270	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01	8.10E-01
Dibenzofuran	132-64-9	8270	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02	9.90E-02
Di-n-butylphthalate	84-74-2	8270	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00	2.40E+00
Fluoranthene	206-44-0	8270	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01
Fluorene	86-73-7	8270	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01	9.80E-01
Naphthalene	91-20-3	8270	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02
Nitrobenzene	98-95-3	8270	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.50E-01
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01	1.90E-01
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03
Phenanthrene	85-01-8	8270	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01
Phenol	108-95-2	8270	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00	7.30E+00
Pyrene	129-00-0	8270	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01	7.30E-01

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > PCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, CI = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April 2018 sampling event, MM-25A and MM-25C were most likely mislabeled at.

Table 5B-2
Summary of Groundwater Sampling Results - B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	MW-25A													
			2/3/2009	1/15/2010	6/30/2010	1/26/2011	7/20/2011	2/8/2012	7/18/2012	2/6/2013	8/6/2013	1/22/2014	07/28/2014	1/31/2018	3/26/2018	5/31/2018
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorobenzene	108-90-7	8260	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	0.0028J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-09-2	8260	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-88-3	8260	0.00074J	<0.0005	0.00050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8260	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	1330-20-7	8260	0.0047J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Non-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-56-7	8270	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-87-9	8270	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
2,4-Dinitrotoluene	121-14-2	8270	<0.0009	<0.0009	0.00666	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	606-20-2	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	<0.0012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-Methylnaphthalene	534-52-1	8270	0.02400	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4,6-Dinitro-2-methylphenol	91-57-6	8270	<0.0008	<0.0008	0.00226	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Acenaphthene	83-32-9	8270	0.0040	<0.0007	0.0034	<0.0007	<0.0007	0.0063J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthylene	208-96-8	8270	0.0050	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Anthracene	120-12-7	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Benzo(a)anthracene	56-55-3	8270	<0.0008	<0.0008	0.0012J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Benzo(a)pyrene	50-32-8	8270	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Bis(2-Chloroethoxy)methane	111-91-1	8270	0.0033	<0.002	0.0036	<0.002	0.0023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Chrysene	218-01-9	8270	0.018	<0.0008	0.0034	<0.0008	<0.0008	0.0013	0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Di-n-butylphthalate	84-74-2	8270	0.0057	0.00084J	0.00092J	<0.0007	<0.0007	0.0014J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluoranthene	206-44-0	8270	0.049	<0.0007	<0.0007	<0.0007	<0.0007	0.0016J	0.0011J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluorene	86-73-7	8270	0.45	<0.0001	0.0024	0.0016J	<0.0009	<0.0005	0.0017J	0.00038	0.0007J	<0.0008	0.000817	<0.00029	0.0002	0.0006
Naphthalene	91-20-3	8270	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Nitrobenzene	98-95-3	8270	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
N-Nitrosodiphenylamine	86-30-6	8270	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Pentachlorophenol	87-86-5	8270	<0.0008	<0.0008	0.0033	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Phenanthrene	85-01-8	8270	0.00340	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Phenol	108-95-2	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Pyrene	129-00-0	8270	0.0036	0.0047	0.0015J	<0.0007	0.009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

- Notes:
- Sampling locations shown on Figure 1
 - Concentrations > RAL and non-detects are bold type.
 - Concentrations > cPCL and non-detects are highlighted.
 - TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 - RAL = Residential Assessment Level, CI = Commercial/Industrial
 - J = Estimated value, < = Compound not detected at the specified detection limit.
 - During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and have been switched.

Table 5B-2
Summary of Groundwater Sampling Results - B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level	C1 Assessment Level	MW-25A																
					2/9/2009	1/13/2010	6/25/2010	1/24/2011	7/19/2011	8/25/2011	#####	2/15/2012	7/17/2012	2/6/2013	8/7/2013	#####	1/22/2014	07/24/2014	1/28/2018	3/21/2018	6/5/2018
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Volatiles Organic Compounds																					
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	0.031	0.04200	0.004J	<0.0014	0.0097	0.00391	0.000434J	0.000189J	<0.0002	<0.0002	<0.0002	<0.0002	
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0013	<0.0013	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	<0.001	<0.001	0.0045J	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Non-Volatile Organic Compounds																					
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	1.10E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	0.0054	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.00240	<0.0007	<0.0007	0.00031	0.00039	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.90E-03	0.00089J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.015	0.0097	0.005	0.0039	0.12	0.0095	0.0087	0.0481	0.141	0.0599	0.0663	0.0073	<0.00028	<0.00028	<0.00028	<0.00028	
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	0.0014J	<0.0007	<0.0007	0.00047	0.0013J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.0079	<0.0007	0.0020	0.00098J	0.0260	0.0025	0.0027	<0.0024	0.00228	0.00136	0.00141	0.00012	0.00015	0.00015	0.00015	0.00015	
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.00168J	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Benzo(e)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Bis(2-Ethylhexyl)phthalate	117-91-7	8270	6.00E-03	6.00E-03	0.00042	0.00026	0.00045	0.00043	0.00031	<0.0001	0.002J	<0.0178	<0.0037	<0.00037	<0.00037	7.6E-05 J	<0.00038	<0.00038	<0.00038	<0.00038	
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.0018J	<0.0007	0.0003	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Dibenzoturan	132-64-9	8270	9.80E-02	2.90E-01	0.0026	0.00078	0.00033	0.00038	0.021	0.0014	0.00084	0.00416J	0.0151	<0.00008	0.00154	<0.00016	0.000086J	0.0001	0.0001	0.0001	
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.0091	0.0003	0.0004	0.00036	0.0048	0.0049	0.0092	<0.0037	0.062	0.00306	0.00465	0.00084	0.00051	0.00051	0.00051	0.00051	
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.0016	0.00028	0.00034	0.00017J	0.00570	0.0006	0.00041	<0.00337	0.00611	0.0031	0.00245	0.00044	0.00031	0.00031	0.00031	0.00031	
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0074	0.00051	<0.0001	0.0043	0.0019	0.001J	0.00027	<0.00385	0.066	0.00006J	0.000419J	<0.00014	<0.00002	<0.00002	<0.00002	<0.00002	
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	0.00023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.00300	0.00021	0.00017J	0.00011J	0.00029	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.000147J	0.000155J	<0.00021	<0.00021	<0.00021	<0.00021	
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0069	0.000092J	0.0002J	0.00013J	0.0031	0.00024	0.00051	<0.00529	<0.00011	<0.00011	0.00159	0.0022	<0.00043	<0.00043	<0.00043	<0.00043	

Notes:

1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are highlighted.
3. Concentrations > gPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C1 = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely m1

Table 5B-2
Summary of Groundwater Sampling Results - B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	CII Assessment Level mg/L	MW-33A												
					2/9/2009	1/13/2010	6/29/2010	1/24/2011	7/19/2011	2/15/2012	7/17/2012	2/12/2013	8/7/2013	1/23/2014	08/28/2014	1/30/2018	3/27/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.00071J	0.0025J	0.0016J	0.0065	0.009	0.054	0.0782	0.165	0.273	0.273	0.00236	<0.0002	<0.0002
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	0.0015J	0.0033J	0.075	0.0033J	0.0222	0.108	0.135	0.0014	<0.0003	<0.0003	
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	0.0016J	<0.0031	<0.11	<0.0015	0.00223J	0.17200	0.188	0.00653J	<0.0003	<0.0003	
mi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-86-7	8270	1.10E-03	2.80E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.90E+00	<0.0008	<0.0008	0.00340	0.0290	0.0623	0.888	1.44	0.0212	0.0212	<0.0002	<0.0004	<0.0004	
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00058	
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
2-Chloronaphthalene	91-59-7	8270	2.00E+00	5.80E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021	
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.0066	0.0090	0.0092	0.0070	0.0220	0.0300	0.015	0.0345	0.195	0.263J	0.0216	<0.00019	
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0002	
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00047	
Acenaphthene	85-32-9	8270	1.50E+00	4.40E+00	0.013	0.028	0.012	0.014	0.037	0.048	0.0279	0.157	0.288J	0.046	0.0005	<0.00027	
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	0.00015J	<0.0007	0.00014J	0.00018J	0.0030	<0.0005	<0.0006	<0.0006	0.0041J	0.00022J	<0.00015	
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.002J	0.0028	0.0021	0.0072	0.0130	0.0082	0.0260	<0.00075	0.0049J	0.0132	<1.4E-05	<0.00014	
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.0002J	0.00017J	0.00014J	0.00025	0.00019J	0.0001J	0.00043	0.000174J	<0.000377	0.000288J	0.000077J	<0.00005	
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00027J	
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	
Bis(2-Ethylhexyl)phthalate	117-91-7	8270	6.00E-03	6.00E-03	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	<0.000377	<0.000377	<0.000377	<0.000377	
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.00012J	0.00012J	0.00009J	0.00016J	0.0001J	0.00061J	0.00033	0.000114J	<0.000377	<0.000377	<0.000377	<0.000377	
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.00078	0.0019	0.014	0.027	0.068	0.019	0.0049	0.00262	0.0728	0.148J	0.0164	0.00042J	
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.00067J	0.0015J	0.0012J	0.00270	0.00880	0.01500	0.0056J	0.00641	0.06880	0.145J	0.0146	0.00033	
Florentene	86-73-7	8270	9.80E-01	2.90E+00	0.00067J	0.0015J	0.0012J	0.00270	0.00880	0.01500	0.0056J	0.00641	0.06880	0.145J	0.0146	0.00033	
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0028	0.02	0.0082	0.095	0.31	0.96	0.017	0.112	4.88	5.82	0.489	<0.00033	
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00024	
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00025	
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00079	
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.00037	0.00032	0.00065	0.00480	0.00460	0.00380	0.00580	0.0049	0.0232J	0.18J	0.00427	<0.00021	
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00035	
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0024	0.0019	0.0016	0.0035	0.0025	0.0021	0.0035	0.00283	<0.000519	<0.104	0.0043	0.00028	

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, CII = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mi

Table 5B-2
Summary of Groundwater Sampling Results - B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level	CFL Assessment Level	MW-35A												
					2/3/2009	1/14/2010	6/30/2010	1/27/2011	7/20/2011	2/15/2012	7/18/2012	2/7/2013	8/8/2013	1/24/2014	07/24/2014	1/25/2018	3/22/2018
Volatile Organic Compounds																	
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Benzene	71-43-2	8280	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Chlorobenzene	108-90-7	8280	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003
Ethylbenzene	100-41-4	8280	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003
Methylene chloride	75-09-2	8280	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001
Toluene	108-88-3	8280	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Vinyl chloride	75-01-4	8280	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Xylenes (total)	1330-20-7	8280	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0003
mi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-85-7	8270	1.10E-03	2.50E-03	<0.0001	0.0003	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00058
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021	<0.00021
2-Methylnaphthalene	594-52-1	8270	9.80E-02	7.30E-03	<0.0007	0.0061	<0.0007	<0.0007	<0.0005	<0.0005	0.063	0.00239J	<0.0007	0.00035J	0.00151J	0.019	0.00099J
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.0035	0.017	0.0077	0.0069	0.0081	0.0041	0.0072	0.0196	0.0181	0.0551	0.0294	0.0076	0.0064
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	0.0011J	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00088J
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	0.0043	<0.0007	<0.0007	<0.0005	<0.0005	0.00130	0.003388J	<0.0005	0.00111	0.00601	0.00038	0.00022
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	0.00030	<0.0008	<0.0008	<0.0008	<0.0008	0.00054J	<0.00005
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00002
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00003
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.0024	0.0045	0.0048	0.004	0.0089	0.0013J	0.0014J	<0.0007	<0.0007	<0.0007	<0.0007	0.0011J	<0.00037
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	0.0007	<0.0007	<0.0007	<0.0005	<0.0005	0.0027	<0.0008	<0.0008	<0.0008	<0.0008	0.00065J	<0.000021
Dibenzofuran	132-54-9	8270	9.80E-02	2.90E-01	0.0014	0.005	0.0026	0.0011J	0.0013J	0.0008J	0.0043	0.000429J	0.00141J	0.00177	0.00115	0.0047	0.0011
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	0.00092J	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.0034	0.011	0.0048	0.0021	0.0053	0.0007J	0.0027	0.00109J	0.000365J	0.00484	0.000782	0.00065	0.00019
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.0052	0.028	0.014	0.00095J	0.0012J	<0.0005	0.0029	<0.0007	0.002	0.0149	0.0071	0.0024	0.00061
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	<0.001	0.19	0.0017	0.0028	<0.0005	0.0027	0.05	0.00286J	0.000557J	0.00968	0.00283	0.13	0.0075
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	0.0009J	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	0.00039	<0.0007	<0.0007	<0.0005	<0.0005	0.00680	0.001104J	<0.0006	<0.0006	<0.0006	0.00448J	0.0016
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00028
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0025	0.0092	0.0031	<0.0007	0.0029	<0.0005	0.0016	0.000305J	0.000252J	0.000376J	0.000548	0.00055	<0.000035

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > gPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, CFL = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mi

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-36A												
					2/3/2009	1/13/2010	6/29/2010	12/20/2011	7/19/2011	2/7/2012	7/17/2012	1/31/2013	8/6/2013	1/16/2014	7/25/2014	1/25/2018	3/21/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	0.00050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	0.00100	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	0.00100	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0003	<0.0003
non-Volatiles Organic Compounds																	
1,2-Diphenylhydrazine	122-86-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004	<0.00004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00058	<0.00058
2,6-Dinitrotoluene	608-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.00042	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021	<0.00021	
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<0.0007	0.00030	0.00023	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00022	<0.00022	
4,6-Dinitro-2-methylphenol	91-57-5	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.00019	
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00047	<0.00047	
Acenaphthene	85-32-9	8270	1.50E+00	4.40E+00	<0.0009	0.00036	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00059	<0.00059	
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00061	<0.00061	
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00066	<0.00066	
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00015	<0.00015	
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00064	<0.00064	
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003	
Bis(2-Ethylhexyl)phthalate	117-91-7	8270	6.00E-03	6.00E-03	0.0045	0.0033	0.0061	0.0048	0.0025	<0.001	<0.00037	<0.00037	<0.00037	<0.00037	0.000068J	0.00013J	
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021	<0.00021	
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0008	0.0003	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003	
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00012	<0.00012	
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.0007	0.00024	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00034	<0.00034	
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0006	0.0013	0.0023	0.0023	<0.001	<0.0005	0.0003	0.000211J	<0.0008	0.0101	<0.0002	<0.0002	
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00024	<0.00024	
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00025	<0.00025	
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00079	<0.00079	
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	0.00039	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	8.61E-05J	0.000065J	0.00011	
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004	<0.00004	<0.00004	
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.00015J	0.00021	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00011	<0.00011	<0.00011	

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (50 TAC §560, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and have been switched.

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	C/I Assessment mg/L	MMW-38A												
					2/3/2009	1/14/2010	6/29/2010	1/25/2011	7/19/2011	8/25/2011	2/15/2012	7/19/2012	9/8/2013	1/21/2014	07/25/2014	1/26/2018	3/25/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Chlorobenzene	106-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003
Ethylbenzene	106-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0013	<0.0013	<0.0013	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.001	<0.001
Toluene	106-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	<0.001	<0.001	<0.0031	<0.0031	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.0031	<0.0031	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0002	<0.0002
Non-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021	<0.00021
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00059	<0.00059
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.00042	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.60E+00	<0.0012	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00021	<0.00021
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.0044	<0.0007	0.0016J	0.00065J	<0.0005	<0.0005	0.00031	<0.0007	0.00115J	<0.0007	<0.0007	<1.9E-05	0.00014
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00047	<0.00047
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	<0.0006	<0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	0.00061
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<1.9E-05	0.00053J
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	0.0001J	0.0001J	<0.0005	0.00013J	7.12E-05J	<0.0005	0.00103J	8.16E-05J	<1.4E-05	0.00026
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00051	<0.0005
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.0042	0.0049	0.0044	0.0064	0.0084	0.0160	0.0023	<0.0037	<0.0037	<0.0037	<0.0037	<3.7E-05	<0.0001
Chrysene	218-01-9	8270	8.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0022	<0.0022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00037	<0.0001
Dibenzofuran	132-64-9	8270	9.80E-01	2.90E-01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	0.00055J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0002	0.00017J
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	0.00034	0.00014J	<0.0005	0.00017J	<0.0007	0.000164J	<0.0007	<0.0007	0.00023	0.00032J
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	0.00014J	<0.0007	<0.0007	<0.0007	<0.0007	0.00016	0.00016
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0660	<0.001	<0.001	0.0059	0.0026	<0.0005	0.0100	<0.0008	0.0192J	0.00086J	<0.0008	<0.0002	0.00071
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00024	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00025	<0.00025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.00067J	<0.00067J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00029	<0.00029
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	0.0001J	<0.0005	0.00011J	0.00032	<0.0006	<0.0006	<0.0006	<0.0006	<2.1E-05	0.00033
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	0.0001J	<0.0007	0.0021	0.00018J	<0.0005	0.00016J	<0.0011	0.000176J	<0.0011	<0.0011	<1.9E-05	0.00021

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MMW-25A and MMW-25C were most likely mis

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-44A											
					2/3/2009	1/13/2010	6/30/2010	1/26/2011	7/20/2011	2/15/2012	7/25/2012	2/12/2013	8/5/2013	1/17/2014	08/28/2014	1/31/2018
Volatile Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0014	<0.0002	<0.0014	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.003J	<0.0005	0.0026J	0.0042J	0.0044J	0.00206	0.00849	0.00727	0.0042	<0.0002	<0.0002	<0.0002
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0012	<0.0018	<0.0013	<0.0003	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0011	<0.0011	<0.0005	0.000624J	0.00172	0.00067	0.000344J	<0.0003	<0.0003	<0.0003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0013	<0.0013	<0.001	<0.0015	<0.00022	<0.00015	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.001	<0.001	<0.0005	0.000252J	0.000706J	0.000418J	0.000323J	<0.0002	<0.0002	<0.0002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0013J	<0.001	0.0025J	<0.001	<0.001	0.0052J	0.0033J	0.00468	0.02070	0.00805	0.00561	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0013J	<0.001	0.0025J	<0.001	<0.001	0.0052J	0.0033J	0.00468	0.02070	0.00805	0.00561	<0.0002
mi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	1.60E-03	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0001	<0.0011	<0.0001	<0.0011	<2.1E-05	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.60E+00	<0.0008	<0.0008	0.00081	<0.0005	<0.0005	<0.0003	<0.0031	<0.0031	<0.0003	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0013	<0.0013	<0.0013	<0.0013	0.0017J	<0.000359	<0.00058
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.001	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<2.1E-05	<0.00021	<0.00021
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.00097	0.0012J	0.00400	<0.0007	0.00480	0.00950	<0.0007	0.10900	0.10900	<8.3E-05	<0.00019	<0.00019
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0083	<0.0083	<0.0083	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0056	<0.0056	<0.0056	<4.7E-05	<0.00048	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.12000	0.13000	0.20000	0.23000	0.21000	0.22000	0.07000	0.54600	0.39400	0.197	0.062	0.09
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.01200	0.00079	0.00096	0.01140	0.01100	0.01130	0.00276J	<0.0006	<0.0006	0.0014	0.00078	<0.00013
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.00460	0.00770	0.00670	0.00550	0.00680	0.00400	<0.0005	0.01700	0.17000	0.08668	0.00666	0.0024
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0002	<0.0002	<0.0002
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0013	<0.0013	<0.0013	0.0014J	<0.0003	<0.0003	<0.0003
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	<0.0007	<0.0007	0.00046	0.00075	0.0011J	<0.001	<0.0037	<0.0037	<0.0037	<0.0001	<0.0001	<0.0001
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<2.1E-05	<0.00021	<0.00021
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.05400	0.00870	0.00430	0.00072	0.00140	0.00310	<0.0008	0.13500	0.10700	0.0159	0.00019	0.00029
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<0.0002	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.00320	0.00550	0.00600	0.00140	0.00950	0.00650	0.00257J	0.01370	0.01540	0.00749	0.0067	0.0095
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.05600	0.05900	0.09700	0.09400	0.11000	0.09100	0.00495	0.17200	0.0987	0.024	0.03	0.039
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.02100	0.01110	0.16000	0.00335	0.04200	0.39000	0.00941J	1.72000	0.235J	0.163	<0.00028	0.00038
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<2.4E-05	<0.00026	<0.00026
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<2.5E-05	<0.000025	<0.000025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0061	<0.0061	<0.0061	<0.0061	<7.9E-05	<0.000061	<0.000061
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.02000	0.00550	0.00250	<0.0007	0.00470	0.00730	0.00640	0.04160	0.04360	0.0012	0.0012	0.0018
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	0.00062J	<0.0004	<0.0004	<0.0004	<3.5E-05	<0.00004	<0.00004
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.00160	0.00320	0.00300	0.00100	0.00460	0.00540	0.00380	0.00732	0.00530	0.0041	0.0037	0.0069

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-49A												
					2/4/2009	1/21/2010	6/25/2010	1/20/2011	7/22/2011	2/7/2012	7/26/2012	2/7/2013	8/1/2013	1/15/2014	07/15/2014	1/29/2018	4/1/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.24000	0.20000	0.29000	0.20000	0.20000	0.05700	0.05700	0.05700	0.05700	0.05700	0.05700	0.05700	0.05700
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	0.06530	0.0024J	<0.0005	0.0094J	<0.001	<0.0005	0.0037J	0.29900	0.47600	0.30400	0.211	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.08400	0.08500	0.14000	0.04J	0.09400	<0.055	0.03700	0.03210	0.04980	0.03310	0.0701	0.01	0.0067
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0212	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.07700	0.08300	0.13000	0.021J	0.11000	<0.05	0.03100	0.03430	0.03470	0.02960	0.0593	0.003	0.0065
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	0.20000	0.21000	0.34000	<0.005	<0.001	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0001	<0.0001	<0.0001	0.0793J	0.20000	<0.16	0.08200	0.07770	0.10600	0.06980	0.157	0.023	0.015
Non-Volatile Organic Compounds																	
1,2-Diethylhydrazine	122-86-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	6.80000	0.86000	3.70000	0.18000	3.00000	0.18000	0.18000	1.42000	0.93000	2.10000	1.23	0.097	0.033
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2-Methylnaphthalene	534-52-1	8270	9.90E-02	2.90E-01	0.60000	0.35000	0.44000	0.13000	0.27000	0.13000	0.13000	0.21800	0.21600	0.26700	0.293	0.000078J	0.0079
4,5-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.03200	0.20000	0.21000	0.13000	0.13000	0.13000	0.13000	0.13000	0.12600	0.16000	0.126	0.0036	0.0049
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.00390	0.00320	0.00520	0.00180	0.00290	0.00005	0.00062	<0.00028	<0.000571	0.00528J	<0.006	0.0012	0.00015
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.01000	0.00710	0.00990	0.00960	0.01100	<0.0005	0.00076	0.00624J	0.0118J	0.0132J	<0.005	0.00028	0.00035
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.0066	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
50-32-8	50-32-8	8270	2.00E-04	2.00E-04	0.00024	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Chloroethoxy)methane	111-91-1	8270	1.90E-03	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.0090	0.00150	<0.0002	0.00029	<0.0001	0.0001J	0.0001J	<0.00176	<0.00176	<0.00175	<0.00175	<0.00175	<0.00175
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.00860	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	9.90E-02	2.90E-01	0.210	0.140	0.160	0.07500	0.09000	0.09000	0.09000	0.08510	0.08120	0.09020	0.0941	0.0021	0.0029
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluoranthene	206-44-0	8270	9.90E-01	2.90E+00	0.05800	0.00250	0.00340	0.00380	0.00330	<0.0005	0.00180	<0.00333	<0.00652	0.00521J	<0.007	0.00035	0.00049
Fluorene	86-73-7	8270	9.90E-01	2.90E+00	0.15000	0.11000	0.13000	0.07300	0.09200	<0.0005	0.01500	0.07170	0.06620	0.06640	0.0651	0.0025	0.0027
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	9.00000	5.10000	10.00000	1.80000	7.40000	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	5.86000	5.13	<0.0016
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Penta-chlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.09600	0.07200	0.09600	0.06200	0.07000	<0.0005	0.02000	0.04550	0.06840	0.05640	0.0519	0.0066	0.0055
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	0.00077	0.00110	0.00580	0.00950	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0460	0.00170	0.00180	0.00200	0.00160	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > C/I and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-1
 Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-52A				
					7/18/2010	7/14/2011	7/12/2012	7/12/2013	
mg/L					mg/L	mg/L	mg/L	mg/L	
Volatiles Organic Compounds									
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.001	<0.0005	<0.0005	<0.00014
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.0047J	0.0025J	0.0017J	0.00530	0.00461
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.001	<0.001	<0.001	<0.0005	<0.00012
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.014J	0.01100	0.00530	0.00990	0.00677
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0013	<0.001	<0.00015	<0.00015
Toluene	106-88-3	8260	1.00E+00	1.00E+00	0.012J	0.00680	0.0034J	0.00840	0.00679
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	<0.001	<0.0005	0.000661J	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	0.044J	0.02500	0.011J	0.02100	0.01470
mi-Volatile Organic Compounds									
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.00005	<0.00005	<0.00005	<0.00524
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	0.00460	0.00450	0.00340	0.02900	0.04790
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.00009	<0.00005	<0.00005	<0.00005	<0.00005
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.00007	<0.00006	<0.00006	<0.00006	<0.00381
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0001	<0.00005	<0.00005	<0.00005	<0.00381
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.54000	0.33000	0.09600	0.16000	0.16500
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.00008	<0.00006	<0.00008	<0.00008	<0.0395
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.00007	<0.00005	<0.00005	<0.00005	<0.0267
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.36000	0.28000	0.19000	0.15000	0.27100
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.00450	0.00400	0.00240	0.00250	<0.00286
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.02200	0.04100	0.03600	0.02100	0.0231J
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.00047	0.00063	0.00031	0.00022	<0.00381
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	0.00013J	0.00017J	0.000066J	<0.00005	<0.00381
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.00009	<0.00005	<0.00005	<0.00005	<0.00519
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00032	0.00042	0.00043	<0.0001	<0.0176
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.00041	0.00060	0.00033	0.00028	<0.00381
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.28000	0.20000	0.14000	0.13000	0.17800
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.00007	<0.00005	<0.00005	<0.00005	<0.00524
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.01500	0.02400	0.01300	0.01700	0.02450
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.23000	0.18000	0.12000	0.11000	0.16700
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	3.90	1.90	0.77	0.83	0.88
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.00009	<0.00005	<0.00005	<0.00005	<0.00524
N-Nitrosodiphenylamine	86-30-8	8270	1.90E-01	4.20E-01	<0.00009	<0.00005	<0.00005	<0.00005	<0.00476
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.00008	<0.00005	<0.00005	<0.00005	<0.029
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.24000	0.22000	0.08100	0.12000	0.22600
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.00007	0.000066J	0.000052J	0.00015J	<0.0019
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.00660	0.01100	0.00540	0.00710	0.0124J

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-1
 Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-55A									
					2/4/2009	1/18/2010	7/14/2011	2/9/2012	7/12/2012	1/30/2013	7/30/2013	1/14/2014	07/17/2014	
Volatile Organic Compounds														
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.001	<0.01	<0.05	<0.0028	<0.014	<0.007	<0.0028	<0.00519
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.19000	0.07000	0.15000	0.17000	0.13300	0.14500	0.07150	0.0881	0.07150	0.0881
Chlorobenzene	106-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.001	<0.01	<0.005	<0.0024	<0.012	<0.006	<0.0024	<0.006	<0.0024
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.15000	0.20000	0.20000	0.24000	0.22800	0.26000	0.20000	0.368	0.20000	0.368
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0013	<0.01	<0.003	0.0854J	<0.0075	0.0175J	<0.0075	0.0175J
Toluene	106-88-3	8260	1.00E+00	1.00E+00	0.44000	0.29000	0.24000	0.41000	0.39000	0.38500	0.43100	0.31100	0.43100	0.409
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	0.35000	0.47000	0.42000	0.48000	0.52000	0.57500	<0.011	0.48500	0.57500	0.869
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01										
mi-Volatile Organic Compounds														
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.50E-03	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0011	<0.00534	<0.0529	<0.00534	<0.00519
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	1.20000	0.28000	0.48000	1.80000	0.96000	<0.0031	0.55600	0.51900	0.55600	0.463
2,6-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.0013	<0.00631	<0.0625	<0.00613	<0.00631	<0.00613
2-Chloronaphthalene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0006	<0.0006	<0.0008	<0.00388	<0.0385	<0.00377	<0.00388	<0.00377
2-Methylnaphthalene	81-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.0005	<0.0005	<0.0008	<0.00388	<0.0385	<0.00377	<0.00388	<0.00377
4,6-Dinitro-2-methylphenol	534-52-1	8270	9.80E-02	2.90E-02	0.63000	0.39000	0.33000	0.25000	0.31000	<0.0007	0.46800	0.46300	0.46800	0.486
4-Nitrophenol	100-02-7	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.00403	<0.399	<0.0392	<0.00403	<0.399
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0272	<0.289	<0.0284	<0.0005	<0.0284
Acenaphthylene	206-96-8	8270	1.50E+00	4.40E+00	0.03370	0.02280	0.06300	0.0118J	0.01170	0.00210	<0.00291	<0.0289	<0.00291	<0.00283
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.04700	0.02100	0.01600	0.01600	0.00750	0.00662	0.03360	0.063J	0.00662	0.032
Benzofuran	56-55-3	8270	1.00E-03	2.00E-02	0.01000	0.01800	<0.0005	0.00034	<0.00034	<0.00008	<0.00388	<0.0385	<0.00008	<0.00377
Benzofluorene	50-32-8	8270	2.00E-04	2.00E-04	0.00690	0.00084	0.00062	<0.0005	0.000081J	<0.00008	<0.00388	<0.0385	<0.00008	<0.00377
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0013	<0.00631	<0.0625	<0.0013	<0.00613
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00073	0.00310	<0.0001	<0.001	<0.001	<0.00037	<0.018	<0.178	<0.00037	<0.0175
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.00990	0.00170	0.00140	<0.0005	0.00025	<0.00008	<0.00388	<0.0385	<0.00008	<0.00377
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-02	0.20000	0.13000	0.08400	0.07800	0.02850	<0.00388	0.15J	0.14	<0.00388	0.14
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0011	<0.00534	<0.0529	<0.00534	<0.00519	<0.00519
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.05200	0.00810	0.00900	0.00440	0.00420	0.00459J	0.0146J	0.0595J	0.00459J	0.0175J
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.16000	0.08300	0.08000	0.05700	0.04800	0.00213	0.09960	0.172J	0.00213	0.1
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	17.00	11.00	8.60	9.90	9.70	0.00227J	13.8	11.7	0.00227J	11.6
Nitrobenzene	99-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0011	<0.00534	<0.0529	<0.0011	<0.00519
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0001	<0.00485	<0.0481	<0.0001	<0.00472
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	0.00053	<0.0008	<0.0005	<0.0005	<0.0005	<0.00051	<0.0295	<0.293	<0.00051	<0.0288
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.20000	0.08400	0.09300	0.04700	0.04500	<0.00006	0.07800	0.174J	<0.00006	0.0893
Phenol	106-95-2	8270	7.30E+00	2.20E+01	0.15000	0.02500	0.00380	0.07900	0.04600	<0.00004	<0.00194	<0.0192	<0.00004	<0.00189
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.03200	0.00520	0.00610	0.00410	0.00210	0.000223J	0.00729J	<0.0529	0.000223J	0.0101J

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-1
 Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-57A											
					2/5/2009	1/20/2010	6/23/2010	1/18/2011	7/22/2011	7/24/2012	2/11/2013	7/31/2013	1/15/2014	07/29/2014		
Volatiles Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.26000	0.17000	0.47000	0.23000	0.08400	0.14000	0.06400	0.13800	0.13700	0.10900	0.0414	
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.000465J	0.000625J	
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.34000	0.32000	0.45000	0.13000	0.29000	0.17000	0.24000	0.28300	0.19800	0.19800	0.274	
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	0.014J	<0.0005	<0.0013	<0.013	<0.001	0.00367J	<0.0075	<0.00022	<0.00015	
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.63000	0.13000	0.36000	0.38000	0.05500	0.23000	0.10000	0.24400	0.30800	0.19800	0.0355	
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.01	0.0016J	<0.0011	<0.0055	0.00154		
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	0.92000	0.60000	1.20000	0.68000	0.19000	0.40000	0.33000	0.59100	<0.0055	0.00154	0.455	
mi-Volatiles Organic Compounds																
1,2-Diphenylhydrazine	122-55-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00011	
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	1.80000	3.00000	2.70000	2.00000	1.00000	1.70000	0.20000	1.62000	0.99400	7.91000	0.0443J	
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.00045	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00013	
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.00035	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.00008	
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.0001	<0.0005	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00008	
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.73	0.89	3.50	3.50	13.00	1.90	3.10	13.90	1.50	6.24	0.616	
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.00083	
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.00035	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00056	
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.24000	0.31000	2.00000	1.90000	0.60000	1.20000	1.80000	0.56000	0.99700	5.69000	0.335	
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.05560	0.0610	0.02000	0.02200	0.09100	0.14000	0.02400	<0.0409	<0.0146	<0.0142	0.0779	
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.04400	0.02200	0.90000	0.62000	0.40000	0.34000	0.55000	3.09000	0.33700	2.02000	0.0557	
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.01100	0.00051	0.150	0.120	0.450	0.047	0.074	0.60500	0.0521J	0.36100	0.0072	
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	0.00450	0.00012J	0.037	0.028	0.160	0.014	0.024	0.165J	<0.0194	0.0962J	0.00385	
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.80E-03	<0.0009	<0.0009	<0.00035	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00011	
Bis(2-Ethylhexyl)phthalate	117-91-7	8270	6.00E-03	6.00E-03	0.00200	0.00040	<0.0004	<0.0002	<0.0001	0.0016J	<0.001	<0.252	<0.0898	<0.0873	0.00037	
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.00940	0.00034	0.14000	0.11000	0.53000	0.04600	0.08900	0.60200	0.0462J	0.360	0.00625	
Dibenzofuran	132-54-9	8270	9.80E-02	2.90E-01	0.21	0.17	1.90	1.70	8.60	0.86	1.70	7.28	0.80	4.69	0.257	
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.00045	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00011	
Fluorene	205-44-0	8270	9.80E-01	2.90E+00	0.0540	0.0063	1.4	1.0	6.0	0.48	0.74	4.98	0.4120	3.190	0.0561	
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.0830	0.1100	1.6	1.4	7.9	0.72	1.40	6.54	0.7130	4.160	0.21	
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	18.0	7.4	20.0	18.0	71.0	9.2	22.0	60.7	13.5	56.900	7.27	
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.00035	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00011	
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.001	<0.0009	<0.0005	<0.0005	<0.0005	<0.0682	<0.0243	<0.0236	<0.0001	
Penta-chlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.00045	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00051	
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.22000	0.09800	4.00000	3.50000	13.00000	2.00000	3.00000	17.00000	1.61000	13.10000	0.271	
Phenol	108-95-2	8270	7.30E+00	2.20E+01	0.05200	0.00990	0.04200	0.02000	<0.0005	0.00890	<0.0005	<0.0273	<0.00971	<0.00943	<0.00004	
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.03800	0.00370	0.84000	0.67000	3.30000	0.34000	0.42000	3.12000	0.26400	2.29000	0.0308J	

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > GPC and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	CI/ Assessment Level	MW-58A												
					2/5/2009	1/20/2010	6/23/2010	1/19/2011	7/27/2011	2/3/2012	7/24/2012	2/11/2013	8/6/2013	1/29/2014	08/28/2014	1/31/2018	3/19/2018
Volatile Organic Compounds																	
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.0025	<0.0005	<0.0025	<0.0001	<0.0005	<0.0014	<0.0005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.05200	0.03800	0.07500	0.03400	<0.001	0.12000	0.16000	0.09430	8.07E-05J	0.0048	0.0048	0.012	0.012
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0025	0.0093J	0.01J	0.0028J	<0.001	<0.01	0.0018J	0.00295	<0.00012	<0.0012	<0.0003	0.00054J	<0.0015
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.07900	0.06300	0.11000	0.03000	<0.001	0.08500	0.09900	0.06480	<0.00011	0.0066	0.0066	0.038	0.035
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0025	<0.0005	0.0065J	<0.0013	<0.013	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.001	<0.001	<0.001
Toluene	108-98-3	8260	1.00E+00	1.00E+00	0.022J	0.02J	0.04500	0.0059J	<0.001	0.043J	0.04100	0.01760	<0.00015	0.135	0.00891J	0.00063J	0.027J
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.001	<0.001	0.01100	0.00281	<0.0011	<0.0011	0.0101J	<0.0002	<0.0002	<0.001
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	0.10000	0.04J	0.15000	0.029J	<0.0031	0.23000	0.31000	0.12200	<0.00026	0.352	0.012	0.068	0.015
Non-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0011	<0.0005	<0.0011	<0.0011	<0.00021	<0.00021	<0.00021	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	0.047	0.097	0.610	0.680	<0.0005	1.10000	2.40000	0.95000	<0.0031	0.0015J	0.0015J	0.00053	<0.0004
2,4-Dinitrophenol	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0116	<0.0013	<0.0013	<0.0013	<0.0058	<0.00058	<0.00058	<0.00058
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.00727	<0.0008	<0.0008	<0.0008	<0.0042	<0.00042	<0.00042	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.00727	<0.0008	<0.0021	<0.00021	<0.00021	<0.00021
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.220	0.100	0.210	0.057	<0.0005	0.08200	0.0760	0.24300	<0.0007	0.373	0.038	0.045	0.14
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.00755	<0.00083	<0.0002	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0599	<0.0056	<0.0056	<0.0056	<0.0047	<0.00047	<0.00047	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.31000	0.18000	0.28000	0.12000	<0.0005	0.16000	0.05700	0.20500	<0.0008	0.221	0.1	0.17	0.19
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.0120	0.0130	0.0150	0.0072	<0.0005	0.0110	0.00110	<0.00545	<0.0006	0.0096J	0.0012	0.001	0.0017
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.0450	0.00980	0.01700	0.00510	0.0039	0.06500	0.06900	0.0245J	<0.0005	0.0126J	0.0055	0.008	0.011
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	0.0072	<0.00727	<0.0008	<0.00392	<0.0005	0.00083J	0.000083J
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	0.0027	<0.00727	<0.0008	<0.00392	<0.0002	<0.0002	<0.0002
Bis(2-Chloroethoxy)methane	111-91-1	8270	6.00E-03	6.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	0.0321J	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.00727	<0.0008	<0.00392	<0.0003	<0.0003	<0.0003
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	0.0110	<0.00727	<0.0008	<0.00392	<0.00021	0.000083J	0.000083J
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.23000	0.14000	0.23000	0.07900	0.0170	0.13000	0.09800	0.12800	<0.0008	0.136	0.036	0.08	0.091
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	0.0120	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.01	<0.0011	<0.0011	<0.0002	<0.0002	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.0250	0.0580	0.09800	0.04900	0.0100	0.03600	0.09900	0.0102J	<0.0007	<0.00343	0.0065	0.074	0.067
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.15000	0.12000	0.16000	0.06500	0.08000	0.02700	0.12000	<0.0007	<0.0007	0.084	0.084	0.096	0.12
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	2.40000	0.67000	1.50000	0.45000	<0.0005	2.20000	0.66800	2.96J	0.00036J	0.0037	0.0037	0.0037	0.0037
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.01	<0.0011	<0.0011	<0.00024	<0.00024	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.00909	<0.001	<0.0049	<0.00025	<0.00025	<0.00025
Penta-chlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	0.00017J	<0.0555	<0.0061	<0.0079	<0.00079	<0.00079	<0.00079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.04100	0.04900	0.06100	0.03700	<0.0005	0.03900	0.03600	0.05630	<0.0006	0.0702	0.024	0.042	0.038
Phenol	108-95-2	8270	7.30E+00	2.20E+01	0.00229	0.00740	0.00650	0.00037	0.00077J	0.00380	0.00074	<0.00364	<0.0004	<0.0054J	<0.00054J	<0.00054J	<0.00054J
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0120	0.0340	0.0420	0.0220	0.0073	0.0220	0.00680	<0.01	<0.0011	<0.0059	0.0031	0.0039	0.0036

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, CI = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-1
 Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level	MW-64A												
					2/4/2009	1/21/2010	7/14/2010	1/27/2011	7/27/2011	2/8/2012	7/25/2012	4/7/2013	9/6/2013	1/29/2014	07/29/2014	1/31/2018	3/25/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Non-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Methylnaphthalene	534-52-1	8270	9.90E-02	2.90E-01	0.00014J	<0.0007	<0.0007	<0.0005	0.00053J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthene	88-32-9	8270	1.50E+00	4.40E+00	0.0029	<0.0009	<0.0009	<0.0005	0.0960	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	<0.0007	<0.0007	<0.0005	0.0050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	0.0036	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(e)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Bis(2-Chloroethoxy)methane	111-91-1	8270	6.00E-03	6.00E-03	0.0040	0.0160	0.0220	0.0049	0.0076	0.0013J	0.0021	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	0.0200	<0.0007	<0.0007	<0.0007	<0.0005	0.00084J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.0076	<0.0007	<0.0007	0.0057	0.0021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.00382	<0.001	<0.001	<0.0005	0.0063	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pentaachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.0055	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	0.00077J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0063	<0.0007	<0.0007	0.0042	0.0013J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > C/I and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-1
 Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-69A											
					7/15/2010	1/19/2011	7/21/2011	2/8/2012	7/24/2012	8/6/2013	1/24/2014	07/16/2014	1/28/2015	3/20/2018		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.001	<0.001	<0.005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.002	<0.002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.001	<0.001	<0.005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.002	<0.002
Chlorobenzene	106-90-7	8260	1.00E-01	1.00E-01	<0.005	<0.005	<0.001	<0.001	<0.005	<0.0012	<0.0012	<0.0012	<0.0012	<0.003	<0.003	<0.003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.005	<0.005	<0.001	<0.001	<0.005	<0.0011	<0.0011	<0.0011	<0.0011	<0.003	<0.003	<0.003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.001	<0.001	<0.005	<0.0013	<0.0013	<0.0013	<0.0013	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.005	<0.005	<0.001	<0.001	<0.005	<0.0015	<0.0015	<0.0015	<0.0015	<0.002	<0.002	<0.002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	<0.001	<0.001	<0.001	<0.005	<0.0011	<0.0011	<0.0011	<0.0011	<0.002	<0.002	<0.002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.0031	<0.0031	<0.0015	<0.0026	<0.0026	<0.0026	<0.0026	<0.003	<0.003	<0.003
mi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	1.10E-03	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<2.1E-05	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	4.90E-01	0.00360	0.00360	<0.00078J	<0.00078J	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	1.30E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0013	<0.0013	<0.0013	<0.0013	<5.8E-05	<0.00058	<0.00058
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	1.30E-03	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<4.2E-05	<0.00042	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	2.00E+00	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<2.1E-05	<0.00021	<0.00021
2-Methylnaphthalene	534-52-1	8270	9.00E-02	9.00E-02	0.00390	0.00390	0.00074J	0.00074J	0.0005	0.0009	0.0009	0.0009	0.0009	<1.9E-05	<0.00019	<0.00019
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	2.40E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0083	<0.0083	<0.0083	<0.0083	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	4.90E-02	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0056	<0.0056	<0.0056	<0.0056	<4.7E-05	<0.00047	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	1.50E+00	0.00370	0.00370	<0.0005	<0.0005	<0.0005	0.0092	0.0092	0.0092	0.0092	<2.7E-05	<0.00027	<0.00027
Acenaphthylene	208-96-8	8270	1.50E+00	1.50E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	0.0047	0.0047	0.0047	0.0047	<1.4E-05	<0.00014	<0.00014
Anthracene	120-12-7	8270	7.30E+00	7.30E+00	0.0039	0.0039	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<1.4E-05	<0.00014	<0.00014
Benz(a)anthracene	56-55-3	8270	9.10E-03	9.10E-03	0.0049	0.0049	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	0.0013J	0.0013J	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	8.30E-04	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0013	<0.0013	<0.0013	<0.0013	<0.0003	<0.0003	<0.0003
Bis(2-Ethylhexyloxy)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00590	0.00590	0.00081	0.00081	0.0096	0.0018J	0.0030	0.0037	0.0037	0.0038	0.0038	0.0038
Chrysene	218-01-9	8270	9.10E-01	9.10E-01	0.0032	0.0032	0.0011J	0.0011J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<2.1E-05	<0.00021	<0.00021
Dibenzofuran	132-64-9	8270	9.00E-02	9.00E-02	0.0030	0.0030	0.0022	0.0022	<0.0005	0.0071	0.0071	0.0071	0.0071	<0.0002	<0.0002	<0.0002
Di-n-butylphthalate	84-74-2	8270	2.40E+00	2.40E+00	0.02609	0.02609	0.0011J	0.0011J	<0.0005	0.0400	0.0400	0.0400	0.0400	<0.0002	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	9.80E-01	0.0250	0.0250	0.0067	0.0067	0.00056J	0.0045	0.0045	0.0045	0.0045	<0.0001	<0.0001	<0.0001
Fluorene	86-73-7	8270	9.80E-01	9.80E-01	0.00330	0.00330	0.00036	0.00036	<0.0005	0.0085	0.0085	0.0085	0.0085	<0.0003	<0.0003	<0.0003
Naphthalene	91-20-3	8270	4.90E-01	4.90E-01	0.02609	0.02609	0.0011J	0.0011J	<0.0005	0.0029	0.0029	0.0029	0.0029	<0.0002	<0.0002	<0.0002
Nitrobenzene	98-95-3	8270	4.90E-02	4.90E-02	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<2.4E-05	<0.00024	<0.00024
N-Nitrosodiphenylamine	96-30-6	8270	1.90E-01	1.90E-01	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.00025	<0.00025	<0.00025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00079	<0.00079	<0.00079
Phenanthrene	85-01-8	8270	7.30E-01	7.30E-01	0.00830	0.00830	0.0120	0.0120	<0.0005	0.0220	0.0220	0.0220	0.0220	<0.0006	<0.0006	<0.0006
Phenol	108-95-2	8270	7.30E+00	7.30E+00	0.00690	0.00690	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004	<0.0004	<0.0004
Pyrene	129-00-0	8270	7.30E-01	7.30E-01	0.00220	0.00220	0.00037	0.00037	<0.0005	0.0033	0.0033	0.0033	0.0033	<1.9E-05	<0.00019	<0.00019

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (GO TAC §350, Tables 1, 2, and 3), last updated April 27, 2016.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-1
Summary of Groundwater Sampling Results - A-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level	MW-77A		MW-78A		MW-79A		TW-56A			
					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatiles Organic Compounds														
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.00014	<0.0002	<0.0002	<0.0007	<0.0002	<0.0002	0.023J	<0.001	<0.0005	<0.0014
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.00008	0.054	0.063	0.0571	0.0485	1	0.3	0.27000	0.15000	0.26000
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.00012	<0.0003	<0.0003	<0.0006	<0.0006	<0.0003	<0.001	<0.001	<0.001	<0.0025
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.00011	0.069	0.063	0.0637	0.0215	0.18	0.12	0.14	0.06900	0.14000
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.00015	<0.001	<0.001	<0.00075	<0.001	<0.001	<0.001	<0.0013	<0.0013	<0.0015
Toluene	108-98-3	8260	1.00E+00	1.00E+00	<0.00015	0.011	0.011	0.1	0.076	0.99	0.44	0.48	0.32000	0.14000
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.00011			<0.00055					<0.0005	0.0693J
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.00026	0.1	0.11	0.158	0.0763	0.48	0.31	0.41	0.98000	0.51000
Ph-Volatiles Organic Compounds														
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.80E-03	<0.00021	<0.00021	<0.00021	<0.00259	<0.00539	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0146	0.014	0.015	6.66	6.11	11	11	20	2.9	6.8
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.00013	<0.00058	<0.00058	<0.0307	<0.0637	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.00377	<0.00042	<0.00042	<0.0169	<0.0392	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.00377	<0.00021	<0.00021	<0.0189	<0.0392	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
2-Methylnaphthalene	534-52-1	8270	9.90E-02	2.90E-01	0.0571	0.2	0.28	0.879	0.654	0.17	0.42	0.44	0.15	0.16
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0392	<0.0002	<0.0002	<0.196	<0.0407	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0264	0.0044J	<0.00047	<0.132	<0.0275	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.0456	0.2	0.23	0.497	0.427	0.13	0.17	0.16	0.07700	0.18000
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.00283	0.0032	0.0035	0.105J	0.0673	0.0057	0.0092	0.0084	0.00350	0.02100
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.00236	0.0034	0.0062	0.036J	0.00985J	<0.0005	<0.0005	<0.0005	0.00099	0.00140
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.00377	<0.0005	<0.0005	<0.0189	<0.0392	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.00377	<0.0002	<0.0002	<0.0189	<0.0392	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.00175	<0.00037	<0.00037	<0.0873	<0.0181	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	<0.00377	<0.00037	<0.00037	<0.0037	<0.0181	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.00377	<0.00021	<0.00021	0.0248J	0.00948J	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
Dibenzoturan	132-84-9	8270	9.80E-02	2.90E-01	0.0293	0.086	0.19	0.411	0.342	0.097	0.14	0.092	0.04300	0.09000
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.00519	<0.0002	<0.0002	<0.0259	<0.00539	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0033	0.0014	0.0013	0.165	0.0713	0.0036	0.0051	0.0023	0.01000	0.02100
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.024	0.076	0.083	0.382	0.291	0.063	0.081	0.056	0.03300	0.05000
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.884	7.8	6	7.18	6.89	7.9	8.5	15	2.50	2.30
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.00519	<0.00024	<0.00024	<0.0259	<0.00539	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.00472	<0.00025	<0.00025	<0.0236	<0.0049	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0288	<0.00079	<0.00079	<0.144	<0.0299	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.0262	0.026	0.035	0.604	0.355	0.038	0.049	0.039	0.06000	0.17000
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.00189	<0.00035	<0.00035	0.192	1.13	2.6	4	4.2	0.01400	<0.00005
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.00519	0.00068J	0.001	0.0967J	0.0434	0.022	0.038	0.022	0.00670	0.01200

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mis

Table 5B-2
Summary of Groundwater Sampling Results - B-CZ/B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-14												
					2/4/2009	1/19/2010	6/22/2010	1/17/2011	7/26/2011	2/2/2012	7/16/2012	2/5/2013	7/31/2013	1/14/2014	07/19/2014	1/23/2018	3/18/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.002	<0.002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.002	<0.002
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.0012	<0.0012	<0.0012	<0.0012	<0.003	<0.003	<0.003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.005	<0.005	<0.011	<0.011	<0.011	<0.005	0.00012J	0.00011	0.00011	0.00011	<0.003	<0.003	<0.003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.003	<0.003	<0.003	<0.001	<0.0015	<0.0015	<0.0015	<0.0015	<0.001	<0.001	<0.001
Toluene	109-88-3	8260	1.00E+00	1.00E+00	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.0015	<0.0015	<0.0015	<0.0015	<0.002	<0.002	<0.002
Vinyl chloride	75-01-4	8260	2.00E+03	2.00E+03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.0011	<0.0011	<0.0011	<0.0011	<0.002	<0.002	<0.002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.0026	<0.0026	<0.0026	<0.0026	<0.003	<0.003	<0.003
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-65-7	8270	1.10E-03	2.60E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<2.1E-05	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0031	<0.0031	<0.0031	<0.0031	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0013	<0.0013	<0.0013	<0.0013	<5.8E-05	<0.00058	<0.00058
2,6-Dinitrotoluene	505-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	0.0788	<4.2E-05	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<2.1E-05	<0.00021	<0.00021
2-Methylnaphthalene	534-52-1	8270	9.60E-02	2.90E-01	0.00075	0.00064	0.00049	0.00039	0.00034	6.4E-05J	0.00030	0.0004J	0.0003J	0.00032J	0.00034J	0.00019	<0.00019
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0056	<0.0056	<0.0056	<0.0056	<4.7E-05	<0.00047	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.00047	0.00043	0.00041	0.00033	0.00032	0.00030	0.00060	0.00055	0.00055	0.00055	0.000619	0.00027	<0.00027
Acenaphthylene	209-96-9	8270	1.50E+00	4.40E+00	<0.0006	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0006	<0.0006	<0.0006	<0.0006	<1.5E-05	<0.000015	<0.00015
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	6.9E-05J	0.00028J	0.0002J	0.0005J	6.7E-05J	0.00052J	<0.00014
Benzofluoranthrene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0002	<0.0002	<0.0002
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0013	<0.0013	<0.0013	<0.0013	<0.0003	<0.0003	<0.0003
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00081	0.00540	0.00077	0.00029	0.00047	<0.0001	0.00011J	<0.00037	<0.00037	<0.00037	<9.1E-05	<0.00037	<0.00037
Chrysene	219-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<2.1E-05	<0.00021	<0.00021
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.00045	0.00040	0.00037	0.00030	0.00031	0.0002J	0.00047J	0.00037J	0.00044J	0.00024	<0.00025	<0.0002	<0.0002
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0016J	<0.0016J	<0.0016J	<0.0016J	<0.0002	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0024	5.9E-05J	7.9E-05J	7.4E-05J	<0.0007	2.8E-05J	0.000025J	<0.00001
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.0007	0.00013J	<0.0007	7.9E-05J	<0.0005	<0.0005	<0.0007	<0.0007	<0.0007	<0.0007	8E-05J	<0.0003	0.000094J
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.00320	0.00300	0.00220	0.00240	0.00140	0.00033	0.00150	0.00215J	0.00215J	0.0008J	0.00143	0.00067	<0.00057
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<2.4E-05	<0.00024	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<2.5E-05	<0.00025	<0.00025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<7.9E-05	<0.00079	<0.00079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.00035	0.00044	0.00044	0.00030	0.00033	0.00011J	0.00039	0.00048	0.00066	0.00066	0.00056	0.00032	<0.00032
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	0.0004J	<0.0004	<0.0004	<3.8E-05	<0.00035	<0.00035
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	0.00029	<0.0005	<0.0005	<0.0005	<1.9E-05	<0.00019	<0.00019

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > gPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit

Table 5B-2
Summary of Groundwater Sampling Results - B-CZ/B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Chemical Name	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-22B			MW-24B			MW-32B							
					2/8/2018	3/25/2018	5/31/2018	2/3/2019	1/14/2020	6/29/2020	1/25/2021	7/21/2021	2/8/2022	7/25/2022	2/12/2023	8/9/2023	2/9/2024	7/16/2024
Volatile Organic Compounds																		
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0003	<0.0003	<0.0003	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.00034J	<0.0003	<0.0003	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-88-3	8260	1.00E-00	1.00E-00	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E-01	1.00E-01	0.00082J	<0.0003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Semi-Volatile Organic Compounds																		
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<2.1E-05	<0.00021	<0.00021	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0004	<0.00041	<0.0004	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<5.9E-05	<0.00059	<0.00058	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<4.2E-05	<0.00043	<0.00042	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.00E+00	<2.1E-05	<0.00021	<0.00021	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2-Methylnaphthalene	594-52-1	8270	9.80E-02	2.90E-01	0.00056	0.00067	0.00071	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.90E-03	<0.0002	<0.0002	<0.0002	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<4.7E-05	<0.00048	<0.00047	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.034	0.044	0.047	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<1.5E-05	0.00096	0.00041	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Anthracene	120-12-7	8270	7.90E+00	2.20E+01	0.00039	0.00062	0.0013	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<5.1E-05	<0.00051	<0.0005	0.00015J	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0002	<0.0002	<0.0002	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0002	<0.00021	<0.00023	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	<3.7E-05	<0.00038	<0.00037	0.00046	0.00210	0.00774	<0.002	0.0014J	0.00011J	0.00015J	0.00037	<0.001	<0.00079	<0.00037
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<2.1E-05	<0.00021	<0.00021	0.00015J	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.0086	0.0049	0.0011	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Dih-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0002	<0.0002	<0.0002	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.0098	0.0011	0.0028	<0.0011J	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.002	0.0017	0.0046	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0038	0.008	0.0044	<0.001	<0.001	0.0083	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<2.4E-05	<0.00024	<0.00024	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<2.5E-05	<0.00026	<0.00025	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.00008	<0.00081	<0.00079	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Phenanthrene	85-01-8	8270	7.90E-01	2.20E+00	0.0081	0.0018	0.0039	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Phenol	108-95-2	8270	7.90E+00	2.20E+01	<3.5E-05	<0.00036	<0.00035	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Prene	129-00-0	8270	7.30E-01	2.20E+00	0.0062	0.0017	0.0015	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §550, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

**Table 5B-2
Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
UPRR Houston Wood Preserving Works**

chemical_name	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-366												
					7/15/2010	1/20/2011	7/19/2011	2/6/2012	7/17/2012	1/31/2013	8/6/2013	1/16/2014	07/28/2014	1/25/2018	3/21/2018	5/31/2018	
Volatile Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.002	<0.002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.005	0.0018J	0.0014J	<0.001	<0.001	<0.005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.002	<0.002
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.0012	<0.0012	<0.0012	<0.0012	<0.003	<0.003	<0.003
Ethylbenzene	100-11-4	8260	7.00E-01	7.00E-01	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.0011	<0.0011	<0.0011	<0.0011	<0.003	<0.003	<0.003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.0015	<0.0015	<0.0015	<0.0015	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.0015	<0.0015	<0.0015	<0.0015	<0.002	<0.002	<0.002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.0011	<0.0011	<0.0011	<0.0011	<0.002	<0.002	<0.002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.0026	<0.0026	<0.0026	<0.0026	<0.003	<0.003	<0.003
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<2.1E-05	<0.00021	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<5.9E-05	<0.00058	<0.00058
2,6-Dinitrotoluene	806-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<4.2E-05	0.0073	0.0073
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<2.1E-05	<0.00021	<0.00021
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	0.0076	0.0076	0.0076	0.0076	0.0076	<1.9E-05	<0.00019	<0.00019
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	1.50E-01	1.50E-01	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<4.7E-05	<0.00047	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.00E+00	<0.0009	0.0023	0.0014J	0.0023	0.0016J	<0.0008	<0.0008	<0.0008	<0.0008	0.0046J	0.0014	<0.00027	0.0014
Acenaphthylene	208-96-8	8270	1.50E+00	4.00E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<1.5E-05	<0.00015	<0.00015
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<1.4E-05	<0.00014	<0.00014
Benzo(a)anthracene	96-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0035J	<0.0005	<0.0005	<0.0005
Benzo(e)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<5.1E-05	<0.00051	<0.00051
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0003	<0.0003	<0.0003
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.01000	0.00048	0.00068	0.00033	0.00021	<0.0021	<0.0037	<0.0037	<0.0037	0.0044J	0.0015J	<0.00037	<0.00037
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0015J	<0.0008	<0.0008	<0.0008
Dibenzofuran	132-64-9	8270	9.80E-01	2.90E-01	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	0.0012J	0.0012J	0.0012J	0.0012J	0.0008J	<0.0002	<0.0002	<0.0002
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0002	<0.0002	<0.0002
Fluoranthene	205-44-0	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0007	<0.0007	<0.0007	<0.0007	0.0076	<0.0007	<0.0007	<0.0007
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0007	<0.0007	<0.0007	<0.0007	0.0043J	<0.0007	<0.0007	<0.0007
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	<0.001	<0.001	<0.0005	<0.0005	<0.0005	0.0094	9E-05J	0.0094	9E-05J	0.0094J	<0.0008	<0.0008	<0.0008
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<2.4E-05	<0.00024	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<2.5E-05	<0.00025	<0.00025
Pentaclorophenol	81-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.00079	<0.00079	<0.00079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0005	<0.0005	0.0027	<0.0006	<0.0006	<0.0006	<0.0006	0.0193	<0.0006	<0.0006	<0.0006
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	8.9E-05J	<0.0005	0.0026	<0.0005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<3.5E-05	<0.00035	<0.00035
Pyrene	123-00-0	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	0.0046J	<0.0011	<0.0011	<0.0011

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are **bold** type.
 3. Concentrations > cPCL and non-detects are highlighted
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-398												
					2/4/2008	1/19/2010	6/22/2010	1/18/2011	7/26/2011	2/17/2012	7/19/2012	2/6/2013	7/31/2013	1/14/2014	07/25/2014	11/23/2018	3/19/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-08-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-65-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-8	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<0.0007	<0.0007	<0.0007	8.6E-05J	<0.0005	6.9E-05J	<0.0007	<0.0007	<0.0007	0.00007J	8.1E-05J	<0.00019	<0.00008
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.00022	0.00014J	0.00340	0.00039	0.00028	0.00110	0.00040	0.00076	0.00115J	0.0012	0.00083	0.001	0.00054
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	<0.0007	<0.0007	<0.0007	5.3E-05J	<0.0005	<0.0005	0.00011J	6.8E-05J	<0.0006	6.2E-05J	<1.5E-05	<0.00015
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.00028	<0.0007	<0.0007	<0.0007	0.00040	<0.0005	0.00011J	0.00090	0.00077	0.00048J	0.000615	5.3E-05J	0.000014
Benz(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	0.00055J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benz(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00046	0.00070	<0.0002	0.00024	0.00032	0.00015J	0.00015J	0.00037	<0.00037	<0.00037	0.00018	0.00013	<0.0001
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluoranthrene	205-44-0	8270	9.80E-01	2.90E+00	0.00140	<0.0007	0.00180	0.00013J	7.9E-05J	0.00110	0.00038	0.00011J	0.00042J	<0.0007	6.05E-05	0.000075J	0.000063J
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.00025	0.00021	0.00048	0.00013J	0.00011J	0.00032	0.00019J	0.00007	0.00022J	<0.0007	0.00031J	0.00011	<0.00002
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.00052	0.00018J	0.00076	0.00034	0.00005	0.00034	0.00018J	0.00043J	<0.0008	<0.0008	0.00008	<0.0002	<0.0003
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0008	<0.0008	<0.0008	<0.0008	5.4E-05J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	85-01-9	8270	7.30E-01	2.20E+00	<0.0007	0.00025	<0.0007	0.00018J	<0.0005	<0.0005	0.00016J	<0.0006	9.1E-05J	<0.0006	<0.00021	0.000056J	<0.000035
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.00130	0.00018J	0.00220	<0.0007	0.00130	0.00052	0.00013J	0.00056	<0.0011	0.000818	0.00015	0.000074J	0.000064J

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > PCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZ/B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level mg/L	CII Assessment Level mg/L	MW-4CB											
					2/14/2009	1/19/2010	6/22/2010	1/18/2011	7/14/2011	2/3/2012	7/19/2012	2/6/2013	7/31/2013	1/14/2014	07/19/2014	1/24/2018
Volatiles Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.001	<0.01	<0.005	<0.00014	<0.0014	<0.0007	<0.0014	<0.0002	<0.001
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.02600	0.02800	0.01900	0.016J	0.015J	0.015J	0.0150	0.01090	0.0103	0.0091	0.0066	0.014
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.001	<0.01	<0.005	<0.00012	<0.0012	<0.0006	<0.0006	<0.0003	<0.0003	<0.0015
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.10000	0.12000	0.13000	0.08100	0.08000	0.08700	0.07900	0.08400	0.0825	0.049	0.059	0.08
Methylene chloride	75-08-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.013	<0.013	<0.01	<0.00015	<0.0015	<0.00075	<0.0015	<0.001	<0.005
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.05000	0.05400	0.05900	0.04500	0.019J	0.028J	0.01700	0.01470	0.0154	0.0081	0.0049	0.019
Vinyl chloride	75-01-4	8260	2.00E+03	2.00E+03	0.20000	0.22000	0.21000	0.12J	0.13J	0.14J	0.11600	0.12700	0.12000	0.066	0.044	0.11
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Semi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-66-7	8270	1.15E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.011	<0.00524	<0.0212	<0.011	<2.1E-05	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	0.01100	0.01400	0.00440	0.00033	0.00340	0.00400	0.00390	<0.031	<0.0148	<0.0586	<0.0004	0.00034
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.013	<0.00619	<0.025	<0.0013	<5.9E-05
2,6-Dinitrotoluene	605-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.008	<0.00381	<0.0154	<0.0008	<4.2E-05
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.00E+00	<0.0012	<0.001	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.008	<0.00381	<0.0154	<0.0008	<2.1E-05
2-Methylnaphthalene	594-52-1	8270	9.80E-02	2.90E-01	0.59000	0.49000	0.41000	0.27000	0.24000	0.20000	0.28000	0.30200	0.30900	0.35000	0.263	0.13
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.063	<0.0395	<0.16	<0.0063	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.056	<0.0267	<0.108	<0.056	<4.7E-05	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.35000	0.39000	0.27000	0.25000	0.17000	0.20000	0.23000	0.31500	0.35000	0.40200	0.236	0.16
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.00270	0.00250	0.00310	0.00250	0.00190	0.00220	0.00190	<0.06	<0.00286	<0.0115	0.00335J	<1.5E-05
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.01600	0.00950	0.01700	0.01700	0.00970	0.01900	0.0163J	0.016J	0.0247J	0.0142	0.016	0.0082
Benz(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.00028	0.0001J	<0.0007	0.00016J	<0.0005	9.5E-05J	<0.0005	<0.008	<0.00381	<0.0154	<0.0008	<5.1E-05
Benz(b)fluorene	50-32-8	8270	2.00E-04	2.00E-04	0.0002J	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.008	<0.00381	<0.0154	<0.0008	<0.0005
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.013	<0.00619	<0.025	<0.0003	<0.0003
Bi(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00047	0.00350	<0.002	0.00075	0.00033	0.00016J	0.00016J	<0.037	<0.0176	<0.0712	<0.0037	<0.00037
Chrysene	219-01-9	8270	9.10E-01	2.00E+00	0.00023	0.00011J	<0.0007	0.00013J	<0.0005	0.00011J	<0.0005	<0.008	<0.00381	<0.0154	<0.0008	<2.1E-05
Dibenzodioxin	132-64-9	8270	9.90E-02	2.90E-01	0.260	0.170	0.220	0.092	0.130	0.150	0.170	0.206	0.242	0.252	0.178	0.16
Dn-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.011	<0.00524	<0.0212	<0.011	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.90E-01	2.90E+00	0.00820	0.00670	0.00640	0.00680	0.04900	0.04200	0.0310	<0.07	0.104J	<0.0135	0.00562	0.0081
Fluorene	86-73-7	8270	9.90E-01	2.90E+00	0.20000	0.15000	0.17000	0.09300	0.13000	0.13000	0.15000	0.17500	0.21200	0.21700	0.183	0.096
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	8.70	8.00	6.80	6.10	4.00	4.20	6.00	6.78	7.73	6.07	4.24	1.5
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.011	<0.00524	<0.0212	<0.011	<2.4E-05	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.01	<0.00476	<0.0192	<0.001	<2.5E-05	<0.00025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.061	<0.029	<0.117	<0.0081	<0.00008	<0.00079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.16000	0.12000	0.15000	0.08300	0.11000	0.08000	0.10000	0.13700	0.15800	0.19700	0.111	0.14
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.004	<0.0019	<0.00769	<0.004	<3.5E-05	<0.00035
Pyrene	129-00-0	8270	0.00430	0.00330	0.00330	0.00330	0.00210	0.00330	0.00190	0.00330	0.00190	<0.011	<0.00524	<0.0212	0.00242J	0.0036

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > ePCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2016.
 5. RAL = Residential Assessment Level, CII = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical name	CAS	Method	Residential Assessment Level	CI Assessment Level	MW-42B												
					1/19/2010	7/14/2011	2/3/2012	7/19/2012	2/5/2013	8/1/2013	1/15/2014	07/18/2014	12/24/2014	3/19/2016	5/16/2018		
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.005	<0.001	<0.001	<0.001	<0.0025	<0.00014	<0.00014	<0.0002	<0.00014	<0.0002	<0.0002	<0.0002	<0.001
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.005	<0.001	<0.001	<0.0025	<0.00008	<0.00008	<0.00008	<0.0002	<0.00008	<0.0002	<0.0002	<0.0002	<0.001
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.005	<0.001	<0.001	<0.0025	<0.00012	<0.00012	<0.00018	<0.0002	<0.00012	<0.0002	<0.0002	<0.0003	<0.0015
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.005	<0.001	<0.001	<0.0025	0.00011J	<0.00011	<0.00019	0.00021J	<0.00019	0.00021J	<0.0003	<0.0003	<0.0015
Methylene chloride	75-08-2	8260	5.00E-03	5.00E-03	<0.005	<0.001	<0.001	0.0097J	<0.00015	<0.00015	<0.00022	<0.00015	<0.00022	<0.00015	<0.00015	<0.00015	<0.0005
Toluene	108-98-3	8260	1.00E+00	1.00E+00	<0.005	<0.001	<0.001	<0.0025	<0.00015	<0.00015	<0.00017	<0.00015	<0.00017	<0.00015	<0.0002	<0.0002	<0.001
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	<0.001	<0.001	<0.0025	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.0025	<0.00026	<0.00026	<0.00058	<0.00026	<0.00058	<0.00026	<0.00058	<0.00026	<0.0015
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-65-7	8270	1.10E-03	1.10E-03	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00021
2,4-Dimethylphenol	105-67-9	8270	1.50E+00	1.50E+00	<0.0008	0.00013J	<0.0005	<0.0005	<0.00031	<0.00031	0.00092	0.000577	<0.00031	0.000577	<0.00031	<0.00031	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	1.30E-03	<0.0009	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	1.30E-03	<0.0007	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
2-Chloronaphthalene	91-56-7	8270	2.00E+00	2.00E+00	<0.001	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
2-Methylnaphthalene	534-52-1	8270	8.00E-02	2.90E-01	<0.0007	<0.0005	8.9E-05J	0.00015J	0.0002J	0.00014J	0.00032J	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	1.50E-01	1.50E-01	<0.0007	<0.0005	<0.0005	<0.0005	<0.00056	<0.00056	<0.00056	<0.00056	<0.00056	<0.00056	<0.00056	<0.00056	<0.00056
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.0021	0.0024	0.00170	0.00081	0.00036J	<0.0008	0.00036J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0007	<0.0005	<0.0005	<0.0005	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	0.00036	<0.0005	<0.0005	<0.0009	0.00019J	0.00012J	0.00047J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Benzo(e)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0007	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0005	<0.0005	<0.0005	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.0028	0.0060	<0.001	0.0022	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0037	0.0005J	0.0016J	6.2E-05J	0.0022J	0.00013J	0.00021J	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0005	<0.0005	<0.0005	<0.0011	0.00011J	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0059	0.0024	0.0085	0.0041	0.0064	0.0028J	0.00034J	<0.0007	<0.0007	0.0024	0.00014	0.00016J	<0.00016J
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.0016J	0.0026	0.0050	0.0016J	<0.0007	0.00013J	0.0002J	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0035	0.0046	0.0063	0.0180	0.0048	0.0024J	0.0024J	0.0043J	0.0043J	0.0043J	0.0043J	0.0043J	<0.0006
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Pentaclorophenol	81-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0005	<0.0005	<0.0005	<0.00261	<0.00261	<0.00261	<0.00261	<0.00261	<0.00261	<0.00261	<0.00261	<0.00261
Phenanthrene	85-01-9	8270	7.30E-01	2.20E+00	<0.0007	0.0015J	0.0012J	<0.0005	0.00036J	0.00012J	0.00050	<0.00036J	0.00012J	0.00050	7.7E-05J	<0.00021	<0.00039J
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0005	<0.0005	<0.0005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Pyrene	125-00-0	8270	7.30E-01	2.20E+00	0.0035	0.0014J	0.0044	0.0023	0.0037J	0.00013J	0.00023J	<0.00011	0.0023	0.00014	0.0023	<0.00011	<0.00011

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, CI = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
 Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	MM-598														
			7/15/2010	1/20/2011	7/18/2011	2/6/2012	7/27/2012	1/31/2013	8/1/2013	1/16/2014	07/30/2014	1/29/2015	3/20/2015	5/25/2015			
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorobenzene	108-90-7	8260	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-08-2	8260	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-98-3	8260	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8260	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xlenes (total)	1330-20-7	8260	<0.001	<0.001	<0.003	<0.003	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dimethylphenol	105-67-9	8270	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	121-14-2	8270	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	606-20-2	8270	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
91-95-7	8270	2.00E+00	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Chloronaphthalene	534-52-1	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Methylnaphthalene	91-57-6	8270	<0.0008	<0.0008	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
4,6-Dinitro-2-methylphenol	100-02-7	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
4-Nitrophenol	83-32-9	8270	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthene	208-96-8	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthylene	120-12-7	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Anthracene	56-55-3	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benz[a]anthracene	50-32-8	8270	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benz[a]pyrene	111-91-1	8270	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Chloroethoxy)methane	117-81-7	8270	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Ethylhexyl)phthalate	218-01-9	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chrysene	132-64-9	8270	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	84-74-2	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Di-n-butylphthalate	205-44-0	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluoranthene	86-73-7	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluorene	91-20-3	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Naphthalene	98-95-3	8270	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nitrobenzene	98-30-6	8270	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Nitrosodiphenylamine	87-86-5	8270	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pentachlorophenol	85-01-8	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	108-95-2	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenol	129-00-0	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pyrene		8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > ePCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, CII = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical name	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level	MW-52B												
					2/4/2009	1/21/2010	7/14/2010	1/27/2011	7/27/2011	8/25/2011	2/6/2012	7/26/2012	2/11/2013	8/2/2013	1/29/2014	07/29/2014	1/24/2018
Volatile Organic Compounds																	
1,2-Dichloroethane	8260	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	0.0043J	<0.0005	0.002J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	0.04100	<0.0005	0.0021J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	109-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	0.00950	<0.0005	0.0072J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	133-20-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	0.02500	<0.0005	0.0533J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
2-Chloronaphthalene	91-59-7	8270	2.00E+00	5.00E+00	<0.0012	<0.0011	<0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.0012J	0.0160	0.00684	<0.0007	<0.0005	<0.0005	0.0006J	0.0017J	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Acenaphthene	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthylene	83-32-9	8270	1.50E+00	4.40E+00	0.00780	0.03900	0.00041	<0.0009	0.21000	0.02800	0.06500	0.00024J	<0.0009	<0.0009	0.00024J	0.00063J	0.023
Anthracene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	0.00666	<0.0007	<0.0007	0.00260	0.00130	0.00684	0.00011J	<0.0006	<0.0006	0.00006	6.1E-05J	0.00663
Benz(a)anthracene	120-12-7	8270	9.10E-03	2.00E-02	0.0024	0.0110	<0.0007	<0.0007	0.01300	<0.0005	0.00320	0.00072	<0.0005	<0.0005	7E-05J	0.00036	0.00051
Benz(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.0041	0.0098	0.0160	0.0022	0.0042	0.0029	0.0013J	<0.0037	<0.0037	<0.0037	0.00026	0.00018J	<0.00013
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.00240	0.01300	0.00034	<0.0008	0.15	0.0012J	0.03800	0.00017J	<0.0009	<0.0009	9.2E-05J	<0.0002	0.031
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	0.00065	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	7.8E-05J	<0.0011J	<0.0011J	<0.0011J	<0.0002	<0.0002	<0.0002
Fluoranthene	205-44-0	8270	9.80E-01	2.90E+00	0.0012J	0.0110	<0.0007	0.0014J	0.0780	0.0053	0.00400	0.00033J	<0.0007	<0.0007	0.00007	0.00052	0.015
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.00120	0.01500	0.0016J	<0.0007	0.08000	0.0020	0.00870	<0.0007	<0.0007	<0.0007	0.00013J	0.00015	0.047
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.00270	0.0028	0.00960	<0.001	0.05000	0.00021	0.00560	0.00129J	<0.0008	<0.0008	<0.0008	<0.0002	0.038
Nitrobenzene	99-85-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.00087	0.00250	0.00025	<0.0007	0.03500	0.0014J	0.00260	0.00047	<0.0006	<0.0006	0.00014J	<0.0002	0.083
Phenol	108-95-2	8270	7.30E-00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	5.3E-05J	<0.0005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	0.0047	<0.0007	7.7E-05J	0.00330	0.0037	0.00210	0.00039J	<0.0011	<0.0011	0.00039	0.00077	0.002

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Chemical Name	CAS	Method	Residual Assessment Level	CfI Assessment Level	MW-53B												
					1/13/2010	6/30/2010	1/27/2011	7/18/2011	2/9/2012	7/18/2012	2/7/2013	8/7/2013	1/22/2014	07/24/2014	1/28/2018	3/26/2018	5/8/2018
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.2100	0.0150	0.0190	0.0190	<0.001	0.0015	0.0052	0.0690	0.0760	0.106	0.033	0.0026	0.048
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.2000	0.0720	0.0710	0.0410	0.0012	0.0012	0.0160	0.0410	0.0410	0.151	0.012	0.0059	0.048
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.0150	0.0165	0.0181	0.0171	<0.001	0.0038	0.0024	0.0004	0.0043	0.0025	<0.0002	<0.0002	0.0093
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	0.0820	0.0200	0.0160	0.0131	<0.0031	<0.0015	0.0062	0.0113	0.0150	0.0535	0.0046	0.0016	0.011
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-65-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	5.6E-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.1100	0.0310	0.0250	0.0140	0.0029	0.0034	0.0104	0.0024	0.0075	0.0302	5.9E-05	<0.0001	0.0016
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.0280	0.0130	0.0170	0.0930	0.0230	0.0023	0.0093	0.0027	0.0074	0.0754	0.0086	<0.0002	0.0027
Acenaphthylene	208-98-8	8270	1.50E+00	4.40E+00	0.0051	0.0018	<0.0007	6.6E-05	0.0017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Anthracene	120-12-7	8270	7.30E+00	2.00E+01	0.0068	0.0039	0.0110	0.0011	0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benz(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	0.0087	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	0.0027	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.0036	0.0036	0.0066	0.0066	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	0.0079	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.0220	0.0060	0.0130	0.0410	0.0240	0.0028	0.0076	0.0104	0.021	0.0663	0.0065	<0.0002	0.02
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	0.0018	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0009	<0.0009	0.0042	<0.0005	9.1E-05	0.0013	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Fluorene	85-73-7	8270	9.80E-01	2.90E+00	0.0078	0.0041	0.0054	0.0190	0.0093	0.0011	<0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Naphthalene	91-20-3	8270	4.80E-01	1.50E+00	3.1000	0.6700	0.7600	0.3600	0.0270	0.0440	0.2510	0.1480	0.3740	1.69	<0.0066	<0.0002	0.29
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
N-Nitrosodiphenylamine	96-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.0340	0.0076	0.0044	0.0075	0.0072	0.0100	<0.0028	<0.0006	0.0013	<0.0006	<0.0006	<0.0006	<0.0006
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	0.0029	<0.0005	6.3E-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, CfI = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Chemical Name	CAS	Method	Residential Assessment Level (mg/L)	C/I Assessment Level (mg/L)	MW-71B								
					2/8/2012 (mg/L)	7/18/2012 (mg/L)	2/7/2013 (mg/L)	8/7/2013 (mg/L)	1/24/2014 (mg/L)	07/28/2014 (mg/L)	1/25/2018 (mg/L)	3/26/2018 (mg/L)	5/6/2018 (mg/L)
Volatiles Organic Compounds													
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.0001	<0.0005	<0.00014	<0.00014	<0.00014	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.01200	0.0014J	0.01240	0.10300	0.03900	0.00155	<0.0002	<0.0002	0.0042
Chlorobenzene	108-90-7	8280	1.00E-01	1.00E-01	<0.001	<0.0005	<0.00012	<0.00012	<0.00018	<0.00012	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.0045J	0.00750	0.00541	0.03540	0.00793	<0.00011	<0.0003	0.00065J	0.0055
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0013	<0.001	<0.00015	<0.00015	<0.00022	<0.00015	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.00770	0.00780	0.01040	0.03550	0.00918	0.00423	<0.0002	0.00094J	0.0033
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03									
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	0.01600	0.03300	0.01430	0.06150	0.02020	0.0126	<0.0003	0.0044	0.013
Semi-Volatile Organic Compounds													
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.00005	<0.00005	<0.00011	<0.00019	<0.00011	<0.00011	<2.1E-05	<0.00021	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	0.00340	<0.00005	<0.00003	<0.0146	0.02250	<0.00031	<4.1E-05	<0.00041	0.00044
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.00005	<0.00005	<0.00013	<0.00613	<0.00013	<0.00013	<5.9E-05	<0.000059	<0.000058
2,6-Dinitrotoluene	605-20-2	8270	1.30E-03	3.00E-03	<0.00006	<0.00006	<0.00008	<0.00377	<0.00008	<0.00008	<4.3E-05	<0.000043	<0.000042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.00E+00	<0.00005	<0.00005	<0.00008	<0.00377	<0.00008	<0.00008	<2.1E-05	<0.000021	<0.000021
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.00760	0.0040	0.000377J	0.11400	0.04760	<0.00007	<1.9E-05	0.0017	0.00031
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.00008	<0.00008	<0.00083	<0.0392	<0.00083	<0.00083	<0.00002	<0.00002	<0.00002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.00005	<0.00005	<0.00056	<0.0264	<0.00056	<0.00056	<4.8E-05	<0.000048	<0.000047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.00390	0.00017J	0.00440	0.03460	0.02120	0.00785	<2.8E-05	0.0043	0.0023
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.00019J	<0.00005	0.000135J	<0.0283	0.00122	<0.00006	<1.5E-05	0.000066J	0.00011
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.00066	0.00005J	0.000452J	0.00383J	0.00198	<0.00005	0.000064J	0.0022	0.00041
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.000081J	0.00011J	<0.00008	<0.00377	<0.00008	<0.00008	0.00015	0.00067	0.00013
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	0.00012J	0.00014J	<0.00008	<0.00377	<0.00008	<0.00008	0.0002	0.00029	0.00018
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.00005	<0.00005	<0.00013	<0.00613	<0.00013	<0.00013	<3.1E-05	<0.000031	<0.00003
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00130	0.00012J	<0.00037	<0.0175	<0.00037	<0.00037	0.00018J	0.000081J	<0.000056
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.000089J	0.00015J	<0.00008	<0.00377	<0.00008	<0.00008	0.00023	0.00077	0.00025
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.00310	0.00016J	0.00244	0.02920	0.01750	<0.00008	<0.00002	0.004	0.0019
Dih-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.00005	<0.00005	<0.00011	<0.00519	0.00011J	<0.00011	<0.00002	<0.00002	<0.00002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.00063	0.00026	0.000387J	<0.0033	0.00071	0.000148J	0.00033	0.0043	0.0005
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.02000	0.00023	0.00168	0.0127J	0.01040	<0.00007	<3.1E-05	0.0032	0.0013
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.05100	0.00190	9.37E-05J	2.07000	0.50400	0.000471J	<0.00002	0.00048	0.00011
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.00005	<0.00005	<0.00011	<0.00519	<0.00011	<0.00011	<2.4E-05	<0.000024	<0.000024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.00005	<0.00005	<0.0001	<0.00472	<0.0001	<0.0001	<2.6E-05	<0.000026	<0.000025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	0.00022	<0.00005	<0.00061	<0.0288	<0.00061	<0.00061	<8.1E-05	<0.000081	<0.000079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.00037	0.00034	0.00127	0.0124J	0.00677	<0.00006	0.00012	0.012	0.0016
Phenol	108-95-2	8270	7.30E+00	2.20E+01	0.00037	<0.00005	<0.00004	<0.00189	<0.00004	<0.00004	<3.6E-05	<0.000036	<0.000035
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.00057	0.00026	0.00253J	<0.00519	0.000353J	<0.00011	0.00031	0.0028	0.00064

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZ/B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-72B				MW-73B								
					7/12/2012	2/7/2013	7/29/2013	1/15/2014	2/8/2016	3/19/2016	5/16/2018	2/2/2012	7/16/2012	1/30/2013	7/30/2013	1/15/2014	07/18/2014
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.005	<0.007	<0.014	<0.002	0.018	<0.002	<0.001	<0.001	<0.001	<0.0005	<0.00014	<0.0002	<0.00014
Benzene	71-43-2	8260	5.00E-03	5.00E-03	1.40	1.45	1.23	0.93	0.8	1.1	1.2	1.2	1.2	0.00970	0.000218J	0.000156J	<0.00039
Chlorobenzene	106-90-7	8260	1.00E-01	1.00E-01	<0.005	<0.006	<0.012	0.00028J	0.00033J	<0.003	<0.0015	<0.0015	<0.0015	<0.001	<0.00012	<0.00012	<0.00012
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.31000	0.32100	0.33200	0.22400	0.26	0.31	0.34	0.34	0.34	0.00580	<0.00011	0.000437J	<0.00011
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.01	<0.0075	0.291	<0.0022	<0.001	<0.001	<0.0015	<0.0015	<0.0015	<0.0013	<0.00015	<0.00015	<0.00015
Toluene	106-98-3	8260	1.00E+00	1.00E+00	1.10	1.18	1.12	0.72400	0.72	0.99	0.95	0.95	0.95	0.01500	<0.0005	0.000336J	<0.00015
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	0.88000	0.96000	0.92800	0.66100	0.67	0.94	1.1	1.1	1.1	0.0559J	<0.0015	<0.00026	0.00133J
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01													
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0005	<0.0524	<0.0287	<0.156	<0.0021	<0.0021	<0.00021	<0.00021	<0.00021	<0.0005	<0.00011	<0.00011	<0.00011
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	20.0	98.1	29.9	182.0	19	16	14	14	14	0.00700	0.00280	<0.00031	0.00095
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.005	<0.0619	<0.0316	<0.184	<0.0058	<0.0058	<0.00058	<0.00058	<0.00058	<0.0005	<0.00013	<0.00013	<0.00013
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0006	<0.0381	<0.0194	<0.113	<0.0042	<0.0042	<0.00042	<0.00042	<0.00042	<0.0006	<0.00008	<0.00008	<0.00008
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0005	<0.0381	<0.0194	<0.113	<0.0021	<0.0021	<0.00021	<0.00021	<0.00021	<0.0005	<0.00008	<0.00008	<0.00008
2-Methylnaphthalene	834-52-1	8270	9.80E-02	2.90E-01	0.74	1.39	1.19	3.37	0.33	0.42	0.23	0.23	0.23	0.00055J	0.00011J	<0.00007	8.78E-05J
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.395	<0.201	<1.17	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0008	<0.00008	<0.00008	<0.00008
4-Nitrophenol	100-02-7	8270	1.50E-01	1.50E-01	<0.0005	<0.267	<0.136	<0.792	<0.0047	<0.0047	<0.00047	<0.00047	<0.00047	<0.0005	<0.00005	<0.00005	<0.00005
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.23000	0.58400	0.47600	1.60000	0.07	0.15	0.12	0.12	0.12	0.01200	0.00016J	0.000185J	0.000118J
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.00730	<0.0286	<0.0146	<0.0849	0.0021	<0.00015	0.003	0.003	0.003	0.0013J	<0.00005	8.96E-05J	<0.00006
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.01700	0.0646J	0.033J	0.179J	0.0085	0.02	<0.00014	<0.00014	<0.00014	<0.0005	0.00012J	0.000186J	0.000245J
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0005	<0.0381	<0.0194	<0.113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.000057J	<0.00008	0.00009
Bis(2-Chloroethoxy)methane	50-32-8	8270	2.00E-04	2.00E-04	<0.0005	<0.0381	<0.0194	<0.113	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.00008	<0.00008	0.00035J
Bis(2-Ethylhexyl)phthalate	111-91-1	8270	6.00E-03	6.00E-03	<0.001	<0.176	<0.0898	<0.524	<0.0037	<0.0037	<0.00037	<0.00037	<0.00037	<0.001	0.00012J	<0.00037	0.0015J
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0005	<0.0381	<0.0194	<0.113	<0.0021	<0.0021	<0.00021	<0.00021	<0.00021	<0.0005	0.000096J	<0.00008	0.00119
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.18	0.36	0.35	1.21	0.06	0.13	0.082	0.082	0.082	0.00078J	0.000067J	<0.00008	0.01020
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0005	<0.0524	<0.0267	<0.156	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.00005	<0.00005	<0.00005
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.00340	<0.0333	<0.017	<0.0991	<0.001	0.0015	0.00095J	0.00095J	0.00095J	0.01000	0.000059J	0.000138J	0.00007
Fluorene	96-73-7	8270	9.80E-01	2.90E+00	0.11000	0.25300	0.22400	0.7J	0.32	0.69	0.51	0.51	0.51	0.00410	0.00021	<0.00007	8.05E-05J
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	16.0	88.5	25.0	82.8	7.5	13	12	12	12	0.0014J	0.00064	0.000436J	0.000674J
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0005	<0.0524	<0.0267	<0.156	<0.0024	<0.0024	<0.00024	<0.00024	<0.00024	<0.0005	<0.00005	<0.00011	<0.00011
N-Nitrosodiphenylamine	96-30-5	8270	1.90E-01	4.20E-01	<0.0005	<0.0476	<0.0243	<0.142	<0.0025	<0.0025	<0.00025	<0.00025	<0.00025	<0.0005	<0.00005	<0.0001	<0.0001
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0005	<0.29	<0.148	<0.863	<0.0079	<0.0079	<0.00079	<0.00079	<0.00079	<0.0005	<0.00005	<0.00005	<0.00005
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.079	0.264	0.182	0.760	0.02	0.084	0.045	0.045	0.045	0.00087J	0.000089J	<0.00006	0.000228J
Phenol	106-95-2	8270	7.30E+00	2.20E+01	3.400	7.510	6.310	31.4	4.2	4.2	2.3	2.3	2.3	0.00530	0.00015J	<0.00004	0.00052
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0019J	<0.0524	<0.0267	<0.156	<0.0019	0.0012	0.00074J	0.00074J	0.00074J	0.00770	<0.00005	<0.00011	0.00725

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2016.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
 Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Chemical Name	CAS	Method	Residential Assessment Level	Cil Assessment Level	MW-74B									
					2/9/2012	7/26/2012	4/2/2013	1/29/2014	08/28/2014	1/30/2018	3/28/2018	6/7/2018		
Volatile Organic Compounds														
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.01	<0.005	<0.0028	<0.0007	<0.0028	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.71000	0.55200	0.79500	0.652	0.47	0.58	0.71	0.58	0.71	0.71
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.01	<0.005	<0.0024	<0.0006	<0.0025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.06600	0.14000	0.14700	0.20300	0.2	0.25	0.17	0.12	0.17	0.17
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.013	<0.01	<0.003	<0.00075	0.003	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.32000	0.56000	0.53300	0.77400	0.741	0.75	0.56	0.56	0.74	0.74
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	0.25000	0.38000	0.42700	0.55300	0.558	0.53	0.33	0.33	0.51	0.51
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0005	<0.0005	<0.106	<0.208	<0.216	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
Semi-Volatile Organic Compounds														
1,2-Diphenylhydrazine	122-66-7	8270	2.50E-03	2.50E-03	55	41.0	56.9	525	70.6	59	30	57	57	57
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0005	<0.0005	<0.125	<0.254	<0.255	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0006	<0.0006	<0.0769	<0.151	<0.157	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0005	<0.0005	<0.0769	<0.151	<0.157	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	0.39000	0.43000	0.67300	5.52	0.95J	0.3	2.4	0.99	0.99	0.99
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<0.0008	<0.0008	<0.798	<1.57	<1.53	<0.002	<0.002	<0.002	<0.002	<0.002
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0005	<0.0005	<0.538	<1.06	<1.1	0.033J	<0.0047	<0.0047	<0.0047	<0.0047
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	0.29000	0.21000	0.31J	2.40	4.13J	0.31	1.4	0.33	0.33	0.33
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.00580	0.0620	<0.077	<0.113	<0.118	0.012	0.019	0.098J	0.098J	0.098J
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.03700	0.02400	<0.0481	0.282J	<0.098	0.027	0.58	0.034	0.034	0.034
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0005	0.00220	<0.0769	<0.151	<0.157	<0.005	0.22	<0.005	<0.005	<0.005
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0005	0.00085J	<0.0769	<0.151	<0.157	<0.002	0.064	<0.002	<0.002	<0.002
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0005	<0.0005	<0.125	<0.245	<0.255	<0.003	<0.003	<0.003	<0.003	<0.003
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.001	<0.001	<0.356	<0.698	<0.725	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	<0.001	<0.001	<0.0769	<0.151	<0.157	<0.0021	0.23	<0.0021	<0.0021	<0.0021
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0005	0.0018J	<0.0769	<0.151	<0.157	<0.0021	0.23	<0.0021	<0.0021	<0.0021
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.25000	0.19000	0.252J	1.84	<0.157	0.24	1.4	0.24	0.24	0.24
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0005	<0.0005	<0.106	<0.208	<0.216	<0.002	<0.002	<0.002	<0.002	<0.002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.00440	0.01800	<0.0673	<0.132	<0.137	0.015	1.4	0.017	0.017	0.017
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	1.7000	0.14000	0.196J	1.34	0.263J	0.19	1.4	0.19	0.19	0.19
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	16.00	10.00	13.90	139.00	17.90	18	21	19	19	19
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0005	<0.0005	<0.106	<0.208	<0.216	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0005	<0.0005	<0.0962	<0.189	<0.196	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0005	<0.0005	<0.587	<0.189	<1.2	<0.0079	<0.0079	<0.0079	<0.0079	<0.0079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.15000	0.15000	0.169J	1.28	0.307J	0.16	3.7	0.17	0.17	0.17
Phenol	108-95-2	8270	7.30E+00	2.20E+01	43.0	38.0	63.2	420.0	53.3	56	25	39	39	39
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.00500	0.01000	<0.106	<0.208	<0.216	0.0079J	0.83	0.0077J	0.83	0.0077J

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, Cil = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
 Summary of Groundwater Sampling Results - B-CZ/B-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Chemical Name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-75B			MW-80B			MW-81B					
					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Volatiles Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.01	<0.0025	<0.0028	<0.0007	<0.0014	<0.0014	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.61000	0.45000	0.36900	0.50200	0.298	0.298	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00021
Chlorobenzene	106-90-7	8260	1.00E-01	1.00E-01	<0.01	<0.0025	<0.0024	<0.0006	<0.0012	<0.0012	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00056
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.13000	0.10000	0.06900	0.07730	0.0737	0.0737	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.013	<0.005	<0.003	<0.00775	<0.0015	<0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.51000	0.50000	0.28200	0.32800	0.273	0.273	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	0.41000	0.33000	0.24700	0.27600	0.255	0.255	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	0.41000	0.33000	0.24700	0.27600	0.255	0.255	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
Semi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0005	<0.0005	<0.0012	<0.0519	<0.00214	<0.00214	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
2,4-Dimethylphenol	105-67-9	8270	1.50E-01	1.50E+00	0.18000	0.64000	0.69500	6.35000	0.6602	0.6602	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.005	<0.0005	<0.0025	<0.0613	<0.00252	<0.00252	<0.0013	<0.00058	<0.00058	<0.00058	<0.00058	0.00079
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.006	<0.0006	<0.00154	<0.0377	<0.00155	<0.00155	<0.00008	<0.00042	<0.00042	<0.00042	<0.00042	0.001
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.00E+00	<0.0005	<0.0005	<0.00154	<0.0377	<0.00155	<0.00155	<0.00008	<0.00042	<0.00042	<0.00042	<0.00042	0.0018
2-Methylnaphthalene	534-52-1	8270	9.00E-02	2.90E-01	0.82	0.60	0.10	3.18	0.546	0.546	0.00158	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.016	<0.392	<0.0161	<0.0161	<0.00063	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0005	<0.0005	<0.0108	<0.264	<0.0109	<0.0109	<0.00056	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.34000	0.26000	0.08970	2.57000	0.429	0.429	8.95E-05	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.01300	0.00580	<0.00115	0.0672	0.0121	0.0121	<0.00005	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.03600	0.04500	0.0948	0.69500	0.0626	0.0626	<0.00005	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.00064	0.00470	<0.00154	0.0667	0.00748	0.00748	<0.00008	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0005	<0.0005	<0.0025	<0.0613	<0.00252	<0.00252	<0.00008	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Bis(2-Chloroethoxy)methane	111-91-1	8270	3.00E-04	1.90E-03	<0.001	<0.001	<0.00712	<0.175	<0.00718	<0.00718	<0.00106	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00062	0.00420	<0.00154	0.0704	0.0067	0.0067	<0.00008	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.29000	0.23000	0.05330	1.56000	0.214	0.214	<0.00008	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Dibenzofuran	132-64-9	8270	9.00E-02	2.90E-01	0.19000	0.17000	0.04250	1.59	0.218	0.218	0.00107	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0005	<0.0005	<0.00212	<0.0519	<0.00214	<0.00214	<0.00011	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Fluoranthene	206-44-0	8270	9.00E-01	2.90E+00	0.01600	0.04000	0.01030	0.70800	0.0914	0.0914	<0.00007	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Fluorene	86-73-7	8270	9.00E-01	2.90E+00	0.19000	0.17000	0.04250	1.59	0.218	0.218	0.00107	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.890	0.930	0.21100	27.10	5.7	5.7	0.00157	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0005	<0.0005	<0.00212	<0.0519	<0.00214	<0.00214	<0.00011	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
N-Nitrosodiphenylamine	96-30-6	8270	1.00E-01	4.20E-01	<0.0005	<0.0005	<0.00192	<0.0472	<0.00194	<0.00194	<0.00011	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0005	<0.0005	<0.0117	<0.288	<0.0118	<0.0118	<0.00061	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.24000	0.27000	0.06680	2.13000	0.238	0.238	7.92E-05	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
Phenol	108-95-2	8270	7.30E+00	2.20E+01	0.00660	0.00270	0.0066	0.108	<0.00078	<0.00078	0.00018	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.00980	0.02600	0.0067	0.41500	0.0537	0.0537	<0.00011	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (90 TAC §350, Tables 1, 2, and 3), last updated April 27, 2016.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZIB-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-82B		MW-83B		MW-84B	
					2/1/2018 mg/L	3/22/2018 mg/L	2/8/2018 mg/L	3/27/2018 mg/L	2/8/2018 mg/L	3/27/2018 mg/L
Volatiles Organic Compounds										
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0002	<0.0002	0.018	0.019	0.0097	0.0066
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0003	<0.0003	0.08	0.1	0.039	0.037
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0002	<0.0002	0.055	0.046	0.025	0.0099
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0003	<0.0003	0.1	0.11	0.035	0.031
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0003	<0.0003	<0.0002	<0.0002	<0.0002	<0.0002
Semi-Volatile Organic Compounds										
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<2.1E-05	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<4.2E-05	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.00E+00	<1.7E-05	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<1.9E-05	<0.0001	0.15	0.75	0.55	0.58
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<4.7E-05	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<2.7E-05	<0.0002	0.098	0.33	0.22	0.27
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<1.5E-05	<0.0001	0.0086	0.016	0.003	0.0032
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<1.4E-05	0.0006	0.011	0.011	0.02	0.092
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.0011	<0.0003	<0.0003	<0.0003	0.00056	<0.0003
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<2.1E-05	<0.0002	<0.0002	<0.0002	0.00056	<0.0002
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0002	<0.0002	0.043	0.17	0.13	0.22
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0001	<0.0001	0.0035	0.043	0.039	0.0069
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.0003	<0.0003	0.046	0.072	0.074	0.076
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0019	<0.0002	2.6	14	2.4	2.2
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<2.4E-05	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<2.5E-05	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<7.9E-05	<0.0001	0.0008	<0.0008	<0.0008	<0.0008
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<2.1E-05	<0.0002	0.04	0.071	0.088	0.072
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<3.5E-05	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<1.9E-05	<0.0001	0.0029	0.0023	0.0025	0.0018

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > C/I and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
 Summary of Groundwater Sampling Results - B-CZ/B-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

chemical name	CAS	Method	Residential Assessment Level	C/I Assessment Level	P-10												
					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Volatile Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	1/22/2009	7/22/2009	1/22/2010	7/14/2010	1/12/2011	7/12/2011	1/31/2012	7/11/2012	1/10/2013	7/10/2013	1/9/2014	7/02/2014	1/4/2018
Benzene	71-43-2	8260	5.00E-03	5.00E-03													
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01													
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01													
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03													
Toluene	108-88-3	8260	1.00E+00	1.00E+00													
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03													
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01													
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-56-7	8270	1.10E-03	2.80E-03													
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00													
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03													
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03													
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00													
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01													
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03													
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01													
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00													
Acenaphthylene	209-96-8	8270	1.50E+00	4.40E+00													
Anthracene	120-12-7	8270	7.30E+00	2.20E+01													
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02													
Benzo(e)pyrene	50-32-8	8270	2.00E-04	2.00E-04													
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03													
Bis(2-Ethylhexyl)phthalate	117-91-7	8270	6.00E-03	6.00E-03													
Chrysene	218-01-9	8270	9.10E-01	2.00E+00													
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01													
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00													
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00													
Fluorene	86-73-7	8270	9.80E-01	2.90E+00													
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00													
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01													
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01													
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03													
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00													
Phenol	108-95-2	8270	7.30E+00	2.20E+01													
Pyrene	129-00-0	8270	7.30E-01	2.20E+00													

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are **bold** type.
 3. Concentrations > rPCL and non-detects are **bold** type.
 4. TRRP PCLs (90 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6, J = Estimated value, < = Compound not detected at the specified detection limit.

**Table 5B-2
Summary of Groundwater Sampling Results - B-CZ/B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works**

chemical name	CAS	Method	Residential Assessment Level	C/I Assessment Level	P-12													
					1/22/2009	7/22/2009	1/22/2010	7/14/2010	1/12/2011	7/12/2011	1/31/2012	7/11/2012	1/9/2013	7/11/2013	1/9/2014	7/02/2014	1/4/2018	
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Volatiles Organic Compounds																		
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03														
Benzene	71-43-2	8260	5.00E-03	5.00E-03														
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01														
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01														
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03														
Toluene	108-88-3	8260	1.00E+00	1.00E+00														
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03														
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01														
Semi-Volatile Organic Compounds																		
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03														
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00														
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03														
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03														
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00														
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01														
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03														
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01														
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00														
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00														
Anthracene	120-12-7	8270	7.30E-03	2.20E-01														
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02														
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04														
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03														
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03														
Chrysene	218-01-9	8270	9.10E-01	2.00E+00														
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01														
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00														
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00														
Fluorene	86-73-7	8270	9.80E-01	2.90E+00														
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00														
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01														
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01														
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03														
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00														
Phenol	108-95-2	8270	7.30E+00	2.20E+01														
Pyrene	129-00-0	8270	7.30E-01	2.20E+00														

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-2
Summary of Groundwater Sampling Results - B-CZ/B-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Chemical Name	CAS	Method	Residential Assessment Level	C/I Assessment Level	TW-41B											
					1/19/2010	7/27/2011	2/1/2012	7/28/2012	2/5/2013	7/31/2013	1/16/2014	07/25/2014	1/24/2018	3/20/2018	5/16/2018	
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatile Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	0.00750	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0036	0.0029
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0013	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	0.0033J	<0.001	<0.0005	<0.0005	<0.0005	0.00015J	<0.00017	<0.00016	<0.0002	0.0066J	0.0012
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.001	0.0052J	<0.0031	<0.0015	<0.0028	0.000386J	<0.00058	0.0101	0.0079	0.013	0.015	0.015
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Semi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0005	<0.0005	0.00140	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Methylnaphthalene	534-52-1	8270	9.00E-02	2.90E-01	<0.0007	0.01500	<0.0005	<0.0005	<0.0007	0.000256J	0.0007J	0.0125	0.0003	0.011	0.026	<2.1E-05
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.0009	0.04100	<0.0005	<0.0005	<0.0005	<0.0005	0.02520	<0.00008	0.142	0.087	0.072	0.08
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0007	0.00053	<0.0005	0.00041	7.51E-05J	0.000498J	9.28E-05J	0.00185	0.0019	0.0017	0.0016	0.0016
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	0.00220	<0.0005	<0.0005	<0.0005	0.0016J	0.00098	0.00161	0.00093	0.00697	0.0016	0.0034
Benzo(a)anthracene	55-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	8.79E-05J	<0.00008	<0.00008	<0.00008	<0.00008	<0.00005	<0.00005
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.00110	0.00022	0.00023	<0.0001	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0008	0.02900	<0.0005	0.01600	<0.0008	0.01040	<0.00008	0.0845	0.022	0.026	0.034	0.034
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0005	<0.0005	0.0001J	<0.0005	0.00011	0.000138J	0.000116J	<0.00011	<0.00011	<0.00011	<0.00011
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0007	0.00220	<0.0005	0.00150	<0.0007	0.00153	0.000206J	0.00475	0.0019	0.0026	0.0022	0.022
Fluorene	86-73-7	8270	4.90E-01	1.50E+00	0.00014J	0.04900	<0.0005	0.00540	9.17E-05J	0.00386	<0.00007	0.00007	0.035	0.037	0.045	0.045
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.00014J	0.04900	<0.0005	0.00540	9.17E-05J	0.00386	<0.00007	0.00007	0.035	0.037	0.045	0.045
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Nitrosodiphenylamine	85-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	0.01900	<0.0005	<0.0005	<0.0005	<0.0005	0.00066	0.00066	0.0573	0.00048	0.0069	0.013
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0005	0.000657J	0.00160	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	0.00085	<0.0005	<0.0005	<0.0005	<0.0005	0.000223J	0.00209	0.00083	0.0011	0.001	0.001

- Notes:
- Sampling locations shown on Figure 1
 - Concentrations > RAL and non-detects are bold type.
 - Concentrations > cPCL and non-detects are highlighted.
 - TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 - RAL = Residential Assessment Level, CI = Commercial/Industrial
 - J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level	MW-12C											
					2/4/2009	1/19/2010	6/22/2010	1/18/2011	7/25/2011	2/1/2012	7/19/2012	2/5/2013	7/31/2013	1/14/2014	07/25/2014	1/23/2018
Volatiles Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0002
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	<0.0003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0003
Semi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0003
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0004	<0.0004
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0004	<0.0004
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.0045	0.0024	0.0011	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0002
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.0052	0.0019	0.0009	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0006	<0.0006
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-04	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0003	<0.0003
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	0.0003	0.0007	0.0009	0.0002	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Chrysene	218-01-9	8270	8.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0003	<0.0003
Dibenzoturan	132-84-9	8270	9.80E-02	2.90E-01	0.0004	0.0014	0.0008	0.0011	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0001	<0.0001
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.0037	0.0014	0.0007	0.0009	0.0011	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.003	0.0017	0.0046	0.0099	0.0048	0.0054	0.0052	0.00729	0.00585	0.0008	0.0003	0.0003
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Pentachlorophenol	87-85-5	8270	1.00E-03	1.00E-03	0.00048	0.00008	0.00008	0.00015	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and have been switched.

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-15C												
					2/4/2008	1/18/2010	6/23/2010	1/17/2011	7/13/2011	2/2/2012	7/19/2012	1/30/2013	7/30/2013	1/14/2014	07/17/2014	1/23/2018	3/18/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.00096J	0.0012J	0.00096J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	106-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.00068J	0.00058J	<0.0005	<0.001	0.0017J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	106-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	605-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.00E+00	<0.0012	<0.0011	<0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.00064J	<0.0007	<0.0007	<0.0005	0.00095J	0.00022	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.034	0.097	0.13	0.042	0.041	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
Acenaphthylene	206-96-8	8270	1.50E+00	4.40E+00	0.0062	0.0041	0.0062	0.0011	0.0012	0.0011	0.0012	0.0011	0.0012	0.0011	0.0012	0.0011	0.0012
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.0078	0.0031	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)anthracene	96-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.034	0.075	0.095	0.027	0.021	0.027	0.021	0.027	0.021	0.027	0.021	0.027	0.021
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.006	0.0029	0.0029	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.0027	0.0011	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
Naphthalene	81-20-3	8270	4.90E-01	1.50E+00	0.0016	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Penta-chlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenol	106-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0027	0.0012J	0.0011J	0.00015J	0.00015J	0.00015J	0.00015J	0.00015J	0.00015J	0.00015J	0.00015J	0.00015J	0.00015J

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-17C													
					2/4/2009	1/18/2010	6/23/2010	1/17/2011	7/13/2011	2/1/2012	7/12/2012	4/1/2013	7/30/2013	1/13/2014	07/17/2014	1/31/2018	3/18/2018	5/16/2018
Volatiles Organic Compounds					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.03	0.083	0.024	0.023	0.01	0.016J	0.013	0.014	0.0162	0.00939	0.0132	0.014	0.0067	0.0099
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.17	0.063	0.2	0.21	0.021	0.19	0.17	0.161	0.225	0.123	0.0374	0.042	0.16	0.12
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.00786J	<0.00075	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	106-96-3	8260	1.00E+00	1.00E+00	0.008	0.042J	0.0071	0.0081	0.0046J	0.0067J	0.0057	0.0045J	0.00743J	0.00471J	0.0073	0.0097	0.0038	0.0069
Vinyl chloride	75-01-4	8260	2.00E+03	2.00E+03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	0.25	0.046	0.33	0.42	0.029	0.22	0.21	0.217	0.27	0.141	0.0482	0.071	0.1	0.094
Semi-Volatile Organic Compounds					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	0.0028	0.044	0.0018	0.0035	1.5	<0.0005	0.039	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.00012	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2-Methylnaphthalene	534-52-1	8270	9.00E-02	2.90E-01	0.086	0.063	0.099	0.075	0.0073	0.062	0.1	0.176	0.151	0.144	0.0203J	0.094	0.12	1.1
4,8-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.14	0.13	0.14	0.18	0.021	0.097	0.14	0.216	0.239	0.218	0.0299	0.043	0.15	1.4
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.0012	0.0013	0.0016	0.0017	0.0028	0.0011	0.0018	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.0084	0.0057	0.0071	0.015	0.0016	0.0048	0.008	0.011	0.0144J	0.0156J	0.00236	0.0017	0.01	0.0088
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.00018J	0.00013J	0.00016J	0.0012	0.00017J	0.00081J	0.0022	0.00016J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	<0.0002	0.0039	0.0018	0.0015	0.012	0.0001	0.0046	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.00017J	0.00012J	0.00017J	0.0011	<0.00005	0.00013J	0.00016J	0.000167J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.13	0.11	0.13	0.19	0.021	0.096	0.14	0.185	0.199	0.184	0.0255	0.039	0.13	0.099
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007
Fluoranthene	206-44-0	8270	9.80E-01	2.80E+00	0.007	0.044	0.005	0.019	0.0018	0.002	0.048	0.00784	0.007941J	0.00707J	<0.0033	0.00073J	0.0056	0.0044
Fluorene	98-73-7	8270	9.80E-01	2.80E+00	0.062	0.055	0.069	0.083	0.009	0.054	0.066	0.0989	0.103	0.0907	0.0118J	0.019	0.066	0.06
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	3.4	2.2	3.4	4.1	0.37	3.3	4	5.9	4.4	6.24	0.772	1.8	4.8	53
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.078	0.059	0.08	0.076	0.014	0.081	0.076	0.12	0.12	0.11	0.0122J	0.014	0.071	0.07
Phenol	106-95-2	8270	7.30E+00	2.20E+01	0.0013	0.014	<0.00007	0.00078	0.025	0.00014J	0.0002J	<0.00004	<0.004	<0.004	8.33	0.0025	0.0036	0.0022
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0033	0.028	0.0026	0.009	0.00098	0.0025	0.0028	0.00356	<0.011	<0.011	<0.00519	0.00031J	0.0031	0.0025

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (90-TAC \$360, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

Table 5B-3
 Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-18C												
					2/5/2008	1/19/2010	5/24/2010	1/7/2011	7/13/2011	2/1/2012	7/11/2012	1/31/2013	7/29/2013	1/13/2014	07/16/2014	1/25/2018	3/19/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.005	<0.0005	<0.0025	<0.0025	<0.001	<0.005	<0.005	<0.007	<0.014	<0.007	<0.0028	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	1.4	1.5	1	1.3	1.2	1.3	1.2	1.51	1.23	1.51	1.45	1.4	1.3
Chlorobenzene	106-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0025	<0.001	<0.005	<0.005	<0.006	<0.012	<0.006	<0.0024	<0.0003	0.00052J	<0.003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.26	0.21	0.13	0.16	0.16	0.19	0.15	0.203	0.22	0.245	0.309	0.35	0.29
Methylene chloride	75-08-2	8260	5.00E-03	5.00E-03	<0.005	<0.0005	<0.0025	<0.0013	<0.0065	<0.01	<0.0075	0.0688J	<0.0075	0.0161J	<0.001	<0.001	<0.01
Toluene	108-88-3	8260	1.00E+00	1.00E+00	1	0.96	0.72	0.83	0.8	0.83	0.72	0.899	0.899	1.07	0.986	1.1	0.96
Vinyl chloride	75-01-4	8260	2.00E+03	2.00E+03	<0.005	<0.0025	<0.001	<0.005	<0.001	<0.005	<0.005	<0.011	<0.0055	<0.0022	0.0018	0.0026	<0.002
Xylenes (total)	1336-20-7	8260	1.00E+01	1.00E+01	1.1	1	1	0.9	0.9	0.82	0.84	1.01	0.881	1.02	1.36	1	0.93
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00534	<0.00534	<0.01	<0.00519	<0.00021	<0.00021
2,4-Dinitrophenol	105-67-9	8270	4.90E-01	1.50E+00	0.084	0.081	0.0078	0.012	0.0031	0.01	0.0021	<0.0153	<0.0153	0.0325	<0.0004	<0.0004	0.082
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	<0.0005	<0.00644	<0.00644	<0.013	<0.00613	<0.00058	<0.00058
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0035	<0.0007	<0.0006	<0.0006	<0.0006	<0.0396	<0.0396	<0.00377	<0.00042	<0.00042	<0.00042
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.001	<0.0005	<0.0001	<0.0005	<0.0005	<0.0005	<0.0396	<0.0396	<0.00377	<0.00021	<0.00021	<0.00021
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.95	0.46	0.2	0.31	0.34	0.16	0.46	0.977	0.871	1.06	0.778	0.41	0.44
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.411	<0.403	<0.083	<0.0392	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0035	<0.0007	<0.0005	<0.0005	<0.0005	<0.277	<0.272	<0.056	<0.0264	<0.00047	<0.00047
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.19	0.17	0.82	0.14	0.12	0.62	0.13	0.32	0.265	0.317	0.246	0.15	0.15
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	0.036	0.023	0.0015	0.0019	0.0023	0.0018J	0.0019	0.0297	<0.0291	<0.006	<0.00283	0.0025	0.0035
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.017	0.014	0.0076	0.015	0.013	0.012	0.008	0.0401J	0.0284	0.0414J	0.028	0.017	0.02
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	0.0039	<0.0007	<0.00035	<0.0007	<0.0005	<0.0005	0.0014J	<0.0396	<0.0396	<0.00377	0.0013	<0.0005	<0.0005
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	0.0013J	<0.0008	<0.0004	0.00035	0.00015J	<0.0005	<0.0005	<0.0388	<0.0388	<0.00377	<0.0002	<0.0002	<0.0002
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.00045	<0.0009	<0.0005	<0.0005	<0.0005	<0.0644	<0.0631	<0.013	<0.00613	<0.0003	<0.0003
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	0.0023	<0.0002	<0.001	<0.0002	<0.0001	<0.001	<0.0001	<0.183	<0.181	<0.037	<0.0175	<0.00037	<0.00037
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	0.0033	<0.0007	<0.00035	<0.0007	<0.0005	<0.0005	0.0001J	<0.0396	<0.0396	<0.00377	0.008J	<0.00021	0.00038 J
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.16	0.091	0.077	0.13	0.11	0.06	0.14	0.288	0.225	0.276	0.207	0.14	0.15
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0035	<0.0007	<0.0005	<0.0005	<0.0005	<0.0534	<0.0534	<0.011	<0.00519	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.0047	0.0035	0.0023	0.0059	0.0042	0.0018J	0.0023	<0.0347	0.0085J	0.0191J	0.00957J	0.0096	0.0071
Fluorene	86-75-7	8270	9.80E-01	2.90E+00	0.081	0.052	0.034	0.051	0.052	0.028	0.055	0.132J	0.114	<0.007	0.116	0.056	0.073
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	21	12	6.2	13	12	9.7	13	20.2	20.9	20.3	14.7	14	12
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0045	<0.0009	<0.0005	<0.0005	<0.0005	<0.0545	<0.0534	<0.011	<0.00519	<0.00024	<0.00024
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0045	<0.0009	<0.0005	<0.0005	<0.0005	<0.0495	<0.0485	<0.01	<0.00472	<0.00025	<0.00025
Pentachlorophenol	67-86-5	8270	1.00E-03	1.00E-03	0.026	0.041	0.02	0.064	0.076	0.085	0.075	<0.302	<0.296	0.188	0.164	0.024	0.041
Phenanthrene	85-01-6	8270	7.30E+00	2.20E+00	0.076	0.052	0.032	0.055	0.052	0.027	0.055	0.165J	0.127	0.177	0.122	0.086	0.078
Phenol	108-95-2	8270	7.30E+00	2.20E+01	0.031	0.059	0.026	0.043	0.048	0.027	0.075	0.0601J	0.0205J	0.0184J	0.0285	0.0042	0.0067
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0025	0.002	0.0012	0.0028	0.0017	0.001J	0.0011	<0.0545	<0.0534	<0.011	0.00571J	0.0055	0.0049

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled anc

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level mg/L	C/I Assessment Level mg/L	MW-25C											
					2/4/2009	1/18/2010	6/23/2010	1/19/2011	7/22/2011	2/2/2012	7/12/2012	2/11/2013	7/31/2013	1/15/2014	08/28/2014	
Volatiles Organic Compounds																
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.0005	0.017	0.012	0.0095J	0.0072J	<0.001	<0.01	<0.0005	<0.00014	<0.0014	<0.0002	<0.0014
Benzene	71-43-2	8250	5.00E-03	5.00E-03	0.001J	0.01	<0.005	<0.001	<0.001	<0.01	<0.01	0.0071	0.0111	0.0138	0.0126	0.00596J
Chlorobenzene	108-90-7	8250	1.00E-01	1.00E-01	0.13	0.074	0.12	0.13	0.1	0.1	0.17	0.151	0.165	0.165	0.15	0.15
Ethylbenzene	100-41-4	8250	7.00E-01	7.00E-01	<0.0005	0.0005	0.0092J	<0.005	<0.0013	<0.013	<0.013	<0.00015	<0.00015	<0.00022	<0.0015	<0.0015
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	0.0023J	0.0012J	<0.005	<0.005	<0.001	<0.01	<0.01	0.0023J	0.00433	0.00819J	0.00728	0.00378J
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.073	0.044	0.069J	0.059J	0.048J	0.039J	0.11	0.0884	0.0988	0.0959	0.0915	0.0915
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Semi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	2.6	0.75	2.7	1.2	1.3	0.65	28	1.38	1.16	1.16	4.52	18.3
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4,5-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	3.4	1.2	3.4	1.6	2	0.89	39	1.78	1.58	7.79	25.9	25.9
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.017	0.01	0.03	0.012	0.015	0.068	0.45	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	1.2	0.36	1.2	0.4	1.7	0.25	16	0.641	0.31	1.49	8.74	8.74
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.31	0.12	0.3	0.12	0.15	0.046	4.8	0.104	0.0905	0.5	2.63	2.63
Benzo(a)anthracene	56-55-3	8270	2.00E-04	2.00E-04	0.072	0.029	0.093	0.04	0.044	0.016	1.2	0.0283	0.0235J	0.119	0.73	0.73
Benz(e)lapyrene	50-32-8	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
bis(2-Chloroethoxy)methane	111-91-1	8270	6.00E-03	6.00E-03	0.002	0.0011	<0.0035	0.0014	0.0019	<0.001	0.042	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	0.28	0.093	0.27	0.099	0.21	0.044	4.3	0.103	0.0819	0.476	2.24	2.24
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	3.5	1.2	3.6	1.6	2.7	0.85	46	1.82	1.48	5.45	25.7	25.7
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	3	0.77	3	0.89	1.8	0.48	34	1.09	0.812	4.42	20.4	20.4
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	2.5	0.82	2.6	0.88	2	0.57	32	1.19	0.874	3.78	20.5	20.5
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	9.9	3.9	8.9	8.5	7.5	7.8	83	12.2	13.2	43.8	57.9	57.9
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	8.8	2.7	8.2	3.6	3.8	1.9	130	3.48	2.8	18.2	59.4	59.4
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	1.6	0.59	1.9	0.6	1.1	0.35	21	0.754	0.515	3.04	13.3	13.3

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > dPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled anc

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-25C												
					1/15/2010	1/26/2011	7/20/2011	2/8/2012	7/18/2012	2/6/2013	8/6/2013	1/22/2014	07/29/2014	1/28/2018	3/27/2018	5/31/2018	
Volatile Organic Compounds																	
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0007	<0.0002	<0.0007	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.11J	0.092	0.076	0.039J	0.03J	0.0304	0.022	0.0119	0.0089J	0.0089J	0.00047J	0.0013	0.0013
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.00653J	<0.0006	0.00034J	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.47	0.5	0.37	0.34	0.33	0.324	0.32	0.298	0.042	0.042	0.043	0.036	0.036
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0013	<0.013	<0.01	<0.003	<0.00075	<0.00022	<0.00075	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.52	0.53	0.4	0.31	0.31	0.291	0.264	0.261	0.207	0.015	0.015	0.015	0.013
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0001	<0.001	<0.001	<0.005	<0.005	<0.0022	<0.00055	<0.00018	<0.00055	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	1.2	1.2	1	0.98	0.96	1.03	0.575	1.01	0.29	0.29	0.32	0.28	0.28
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	1.10E-03	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.11	<0.011	<0.011	<0.00011	<0.00011	<2.1E-05	<0.00021	<0.00021
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	4.90E-01	<0.0008	<0.0008	0.0051	<0.0005	<0.0005	<0.31	<0.031	0.372	<0.00031	0.00061	0.0033	0.0075	0.0075
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	1.30E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.13	<0.013	<0.013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	1.30E-03	<0.0007	<0.0007	<0.0006	<0.0006	<0.08	<0.008	<0.008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
2-Chloronaphthalene	91-59-7	8270	2.00E+00	2.00E+00	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.08	<0.008	<0.008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
2-Methylnaphthalene	534-52-1	8270	9.80E-02	9.80E-02	0.76	1.4	1.3	0.92	0.9	0.8	1.32	1.46	0.943	0.46	0.69	0.71	0.71
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	2.40E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.83	<0.083	<0.083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083
4-Nitrophenol	100-02-7	8270	4.90E-02	4.90E-02	<0.0007	<0.0007	<0.0005	<0.0005	<0.56	<0.056	<0.056	<0.00056	<0.00056	<0.00056	<0.00056	<0.00056	<0.00056
Acenaphthene	83-32-9	8270	1.50E+00	1.50E+00	0.21	0.55	0.29	0.26	0.21	0.261J	0.391	0.416	0.284	0.17	0.21	0.23	0.23
Acenaphthylene	208-96-8	8270	1.50E+00	1.50E+00	0.0027	0.0041	0.0029	0.0021	0.0021	<0.06	<0.006	<0.006	0.00316	0.0017	0.023	0.028	0.028
Anthracene	120-12-7	8270	7.30E+00	7.30E+00	0.95	0.19	0.031	0.021	0.019	<0.05	0.0377J	0.0372J	0.0209	0.015	0.019	0.024	0.024
Benzo(a)anthracene	56-55-3	8270	9.10E-03	9.10E-03	0.0027	0.047	0.0014	0.00054	0.00086	<0.08	<0.008	<0.008	0.000813	0.00079	0.0011	0.0012	0.0012
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	0.0014	0.013	0.00043	0.00017J	0.0002	<0.08	<0.008	<0.008	0.00044J	0.00028	<0.0002	0.00042J	0.00042J
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	8.30E-04	<0.0009	<0.0009	<0.0005	<0.0005	<0.13	<0.013	<0.013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	<0.0002	<0.0002	0.002	<0.0001	0.00012J	<0.37	<0.037	<0.037	0.000674	0.00006J	<0.00037	<0.00037	<0.00037
Chrysene	218-01-9	8270	9.10E-01	9.10E-01	0.0025	0.048	0.0012	0.00052	0.00086	<0.08	<0.008	<0.008	0.000957	0.00077	0.0013	0.0014	0.0014
Dibenzofuran	132-64-9	8270	9.80E-02	9.80E-02	0.22	0.52	0.29	0.26	0.22	0.174J	0.353	<0.008	0.276	0.18	0.2	0.21	0.21
Di-n-butylphthalate	84-74-2	8270	2.40E+00	2.40E+00	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.11	<0.011	<0.011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Fluoranthene	206-44-0	8270	9.80E-01	9.80E-01	0.41	0.32	0.02	0.011	0.0088	<0.07	0.0148J	0.018J	0.0127	0.0092	0.014	0.015	0.015
Fluorene	86-73-7	8270	9.80E-01	9.80E-01	0.12	0.34	0.14	0.13	0.086	0.102J	0.153	<0.007	0.129	0.086	0.091	0.11	0.11
Naphthalene	91-20-3	8270	4.90E-01	4.90E-01	9.8	16	19	15	13	10.7	19.7	19	10.7	3	5.9	5.6	5.6
Nitrobenzene	98-95-3	8270	4.90E-02	4.90E-02	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.11	<0.011	<0.011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	1.90E-01	<0.0009	<0.0009	<0.0005	<0.0005	<0.1	<0.01	<0.01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Penachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0005	<0.0005	<0.61	<0.061	<0.061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
Phenanthrene	85-01-8	8270	7.30E-01	7.30E-01	0.19	0.7	0.18	0.14	0.12	0.147J	0.187	0.222	0.14	0.089	0.15	0.16	0.16
Phenol	108-95-2	8270	7.30E+00	7.30E+00	<0.0007	<0.0007	0.003	0.0045	0.004	0.12	<0.004	0.00177	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Pyrene	129-00-0	8270	7.30E-01	7.30E-01	0.22	0.24	0.092	0.0047	0.0063	<0.11	<0.011	<0.011	<0.00011	0.00769	0.0062	0.011	0.011

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, CI = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-27C												
					2/3/2009	1/14/2010	6/30/2010	1/27/2011	7/20/2011	2/9/2012	7/25/2012	2/12/2013	8/8/2013	1/24/2014	07/25/2014	1/31/2018	3/26/2018
Volatiles Organic Compounds					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8260	2.00E+03	2.00E+03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Semi-Volatile Organic Compounds					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2-Methylnaphthalene	534-52-1	8270	9.90E-02	2.90E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	0.0026	0.0015J	0.0028	0.0011J	0.0011J	0.0011J	0.0011J	0.0011J	0.0011J	0.0011J	0.0011J	0.0011J	0.0011J
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	0.0038	0.0016	0.0015	0.0047	0.0095	0.0014J	0.0021	0.0065J	0.0037	0.0007J	0.0007J	0.0007J	0.0007J
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Dibenzofuran	132-64-9	8270	9.90E-02	2.90E-01	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluoranthene	206-44-0	8270	9.90E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluorene	96-73-7	8270	9.90E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
N-Nitrosodiphenylamine	86-30-5	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Phenol	108-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (80 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

**Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works**

chemical_name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-34C		MW-34CR		MW-44C	
					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatiles Organic Compounds										
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.001	<0.0014	<0.0002	<0.0002	<0.001	<0.0014
Benzene	71-43-2	8280	5.00E-03	5.00E-03	0.0014J	0.00154J	<0.0002	<0.0002	<0.001	<0.0014
Chlorobenzene	108-90-7	8280	1.00E-01	1.00E-01	<0.001	<0.0012	<0.0003	<0.0003	<0.001	<0.0012
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	0.0038J	<0.0011	<0.0003	<0.0003	<0.0011	0.32
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0013	<0.0015	<0.001	<0.001	<0.0013	<0.0015
Toluene	108-88-3	8280	1.00E+00	1.00E+00	0.0041J	<0.0015	<0.0002	<0.0002	<0.001	0.16
Vinyl chloride	75-01-4	8280	2.00E-03	2.00E-03	0.0077J	<0.00026	<0.0003	<0.0003	<0.0031	0.84
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0005	<0.0011	<2.1E-05	<2.1E-05	<0.0005	<0.0011
Semi-Volatile Organic Compounds										
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0005	<0.0008	<0.0002	<0.0002	<0.0005	<0.0008
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	0.0022	<0.0031	<0.0004	<0.0004	<0.0005	<0.0005
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0005	<0.0013	<5.8E-05	<5.8E-05	<0.0005	<0.0013
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0006	<0.0008	0.0001J	<4.2E-05	<0.0006	<0.0008
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0005	<0.0008	<2.1E-05	<2.1E-05	<0.0005	<0.0008
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	0.0011J	0.00255J	<1.9E-05	<1.9E-05	<0.0005	62
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0002	<0.0002	<0.0008	<0.0012
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0005	<0.0006	<4.7E-05	<4.7E-05	<0.0005	<0.0006
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.0005	<0.0008	<2.7E-05	<2.7E-05	<0.0005	<0.0008
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0005	<0.0006	<1.5E-05	<1.5E-05	0.00012J	31
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0005	<0.0006	<1.4E-05	<1.4E-05	0.00087J	19
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0005	<0.0008	<0.0005	<0.0005	0.00017J	3.5
Benzo(e)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0005	<0.0008	<0.0002	<0.0002	0.00022	0.87
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0005	<0.0013	<0.0003	<0.0003	<0.0005	<0.0013
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	5.00E-03	6.00E-03	0.0053	0.00799	<3.7E-05	<3.7E-05	0.0087	0.13
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0005	<0.0008	<2.1E-05	<2.1E-05	0.0032	3.3
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.00071J	<0.0008	<0.0002	<0.0002	<0.0005	38
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0005	<0.0011	<0.0002	<0.0002	<0.0005	0.453J
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.0017J	<0.0007	<0.0001	<0.0001	<0.0005	<0.0016J
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.0011J	<0.0007	<0.0003	<0.0003	<0.0005	26
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0043	0.00282	<0.00017	<0.0002	0.0016J	230
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0005	<0.0011	<2.4E-05	<2.4E-05	<0.0005	<0.0016J
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0005	<0.001	<2.5E-05	<2.5E-05	<0.0005	<0.0016J
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0005	<0.0006	0.0013J	<7.9E-05	<0.0005	<0.0016J
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.0011J	<0.0006	<2.1E-05	<2.1E-05	0.00081J	88
Phenol	108-95-2	8270	7.30E+00	2.20E+01	0.00072J	<0.0004	<3.5E-05	<3.5E-05	<0.0005	<0.0016J
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0021	<0.0011	<1.9E-05	<1.9E-05	0.0013J	19

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (80 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value. < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled anc.

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

Chemical Name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-48C												
					2/4/2009	1/21/2010	6/24/2010	7/15/2010	1/19/2011	7/18/2011	2/6/2012	7/24/2012	1/31/2013	8/1/2013	1/16/2014	07/16/2014	1/28/2018
Volatiles Organic Compounds																	
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8280	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorobenzene	108-90-7	8280	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8280	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-88-3	8280	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8280	2.00E+00	2.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Semi-Volatiles Organic Compounds																	
1,2-Dibenzylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-9	8270	1.30E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.80E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	0.0012	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Benzo(a)anthracene	56-85-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Benzo(e)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	0.00034	0.0018	<0.00035	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	0.00225	<0.0008	0.065	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0052	<0.002J	5	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Pentachlorophenol	87-96-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.0032	<0.0007	0.03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Phenol	108-95-2	8270	1.50E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

**Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works**

chemical_name	CAS	Method	Residential Assessment Level mg/L	C1 Assessment Level mg/L	MW-51C			
					07/24/2014	1/29/2018	3/28/2018	5/24/2018
Volatiles Organic Compounds								
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.00014	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.00104J	<0.0002	<0.0002	<0.0002
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.00012	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.00011	<0.0003	<0.0003	<0.0003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.00015	<0.0002	<0.0002	<0.0002
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.00015	<0.0002	<0.0002	<0.0002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.00011	<0.0002	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.00026	<0.0003	<0.0003	<0.0003
Semi-Volatile Organic Compounds								
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.00011	<2.1E-05	<2.1E-05	<2.1E-05
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.00031	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.00013	<5.8E-05	<5.8E-05	<5.8E-05
2,6-Dinitrotoluene	605-20-2	8270	1.30E-03	3.00E-03	<0.00008	<4.2E-05	<4.2E-05	<4.2E-05
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.00008	<2.1E-05	<2.1E-05	<2.1E-05
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<0.00007	<1.9E-05	<1.9E-05	<1.9E-05
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.00083	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.00056	<4.7E-05	<4.7E-05	<4.7E-05
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.00008	<2.7E-05	<2.7E-05	<2.7E-05
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.00006	<1.5E-05	<1.5E-05	<1.5E-05
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.00005	<1.4E-05	<1.4E-05	<1.4E-05
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.00008	<0.0005	<0.0005	<0.0005
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.00008	<0.0002	<0.0002	<0.0002
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.00013	<0.00003	<0.00003	<0.00003
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	0.00111	<3.7E-05	<3.7E-05	<3.7E-05
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.00008	<2.1E-05	<2.1E-05	<2.1E-05
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.00008	<0.0002	<0.0002	<0.0002
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.00011	<0.00002	<0.00002	<0.00002
Fluoranthene	205-44-0	8270	9.80E-01	2.90E+00	<0.00007	<0.00001	<0.00001	<0.00001
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.00007	<0.00003	<0.00003	<0.00003
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.000553	<0.0002	<0.00021	0.00029
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.00011	<2.4E-05	<2.4E-05	<2.4E-05
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0001	<2.5E-05	<2.5E-05	<2.5E-05
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.00061	<7.9E-05	<7.9E-05	<7.9E-05
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.00028	<2.1E-05	<2.1E-05	<2.1E-05
Phenol	108-95-2	8270	7.30E+00	2.20E+01	0.000628	<3.5E-05	<3.5E-05	<3.5E-05
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.00011	<1.9E-05	<1.9E-05	<1.9E-05

Notes:

1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPCL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, C1 = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled anc

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-53C												
					2/3/2008	1/13/2010	6/30/2010	1/28/2011	7/20/2011	2/9/2012	7/18/2012	2/6/2013	8/6/2013	1/22/2014	07/25/2014	1/28/2018	3/21/2018
Volatile Organic Compounds					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Methylene chloride	75-08-2	8260	5.00E-03	5.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Semi-Volatile Organic Compounds					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Benzo(b)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
bis(2-Chloroethoxy)methane	111-91-1	8270	6.30E-04	1.90E-03	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	0.0072	0.0024	0.0032	0.0037	0.0014	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluoranthene	205-44-0	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0012	0.0027	0.0001	0.0015	0.0066	0.0048	0.00183	0.00184	0.00002	0.00002	0.00002	0.00002	0.00002
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Phenol	106-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §360, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

Table 5B-3
Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	MW-58C													
			7/15/2010	1/25/2011	7/21/2011	2/16/2012	7/17/2012	2/6/2013	8/7/2013	1/22/2014	07/24/2014	1/29/2018	3/21/2018	6/6/2018		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatle Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.002
Benzene	71-43-2	8260	0.0081J	0.0021J	0.0032J	0.0069	0.0079	0.00134	0.00364	0.00225	0.0073	0.0028	0.0049	<0.002	<0.002	<0.002
Chlorobenzene	108-90-7	8260	<0.005	<0.005	<0.001	<0.001	<0.005	<0.0012J	<0.0012	<0.0018	<0.0012	<0.0012	<0.0003	<0.003	<0.003	<0.003
Ethylbenzene	100-41-4	8260	<0.005	<0.005	<0.001	<0.001	<0.005	0.000363J	0.00517J	0.00224J	<0.0003	0.000419J	<0.0003	<0.003	<0.003	<0.003
Methylene chloride	75-08-2	8260	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001	<0.0015	<0.0015	<0.0022	<0.0015	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	<0.005	0.00067J	0.0011J	0.0019J	0.0023J	0.000652J	0.0016	0.00059	0.00139	<0.0002	<0.0002	<0.002	<0.002	<0.002
Vinyl chloride	75-01-4	8260	<0.001	<0.001	<0.0031	<0.0031	<0.0015	0.000873J	0.000873J	<0.00058	0.000649J	<0.0003	0.00046J	<0.0003	<0.0003	<0.0003
Xylenes (total)	1330-20-7	8260	<0.001	<0.001	<0.0031	<0.0031	<0.0015	0.000873J	0.000873J	<0.00058	0.000649J	<0.0003	0.00046J	<0.0003	<0.0003	<0.0003
Semi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-86-7	8270	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,4-Dimethylphenol	105-67-9	8270	<0.0008	0.00012J	0.00031	0.00095	0.0014	<0.00031	<0.00031	0.000454J	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
2,4-Dinitrotoluene	121-14-2	8270	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	606-20-2	8270	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
2-Chloronaphthalene	91-58-7	8270	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2-Methylnaphthalene	534-52-1	8270	<0.0007	0.00016J	0.00024	0.00011J	0.0025	0.00132	0.000301J	0.00331	0.00188J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4,6-Dinitro-2-methylphenol	91-57-6	8270	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
4-Nitrophenol	100-02-7	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthene	83-32-9	8270	<0.0009	<0.0009	0.00013J	<0.0005	0.0013	0.000647	<0.0009	0.00183	0.000235J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Acenaphthylene	208-96-8	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Anthracene	120-12-7	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)anthracene	56-55-3	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)pyrene	50-32-8	8270	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
bis(2-Chloroethoxy)methane	111-91-1	8270	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
bis(2-Ethylhexylphthalate (DEHP)	117-81-7	8270	0.0098	0.006	0.001	0.0015	0.0018	0.000637	0.00157J	<0.00037	<0.00037	0.00015J	<0.00037	<0.00037	<0.00037	<0.00037
Chrysene	218-01-9	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dibenzofuran	132-64-9	8270	<0.0008	<0.0008	0.0002J	0.00078J	0.0018	0.000166J	<0.0008	0.00276J	<0.0008	0.00192	9.42E-05J	<0.0002	<0.0002	<0.0002
Di-n-butylphthalate	84-74-2	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	0.00011J	<0.00011	0.00104J	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
Fluoranthene	206-44-0	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Fluorene	86-73-7	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Naphthalene	91-20-3	8270	0.0083	0.0014	0.0027	0.0915	0.015	0.0129	0.00643	0.0112	0.00274	0.00088	0.0032	0.00035	0.00035	0.00035
Nitrobenzene	98-95-3	8270	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Nitrosodiphenylamine	86-30-6	8270	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pentachlorophenol	87-86-5	8270	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Phenanthrene	85-01-8	8270	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Phenol	108-95-2	8270	0.005	0.0039	0.0049	0.0074	0.000062J	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Pyrene	129-00-0	8270	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Notes:
1. Sampling locations shown on Figure 1
2. Concentrations > RAL and non-detects are bold type.
3. Concentrations > cPL and non-detects are highlighted.
4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
5. RAL = Residential Assessment Level, CI = Commercial/Industrial
6. J = Estimated value, < = Compound not detected at the specified detection limit.
7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

Table 5B-3
 Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

chemical_name	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-76C			MW-83C			MW-85C					
					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Volatile Organic Compounds																
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.00014	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	0.000149J	<0.0002	0.00021 J	<0.0002	<0.0002	<0.0002	<0.0002	0.013	0.026	0.026	0.026	0.026
Chlorobenzene	106-90-7	8260	1.00E-01	7.00E-01	<0.00012	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.00011	<0.0003	<0.0003	0.00066J	0.0005J	0.0005J	0.0005J	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	75-08-2	8260	5.00E-03	5.00E-03	<0.00015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	0.000156J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.00011	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.00026	<0.0003	<0.0003	<0.0003	0.0914	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Semi-Volatile Organic Compounds																
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<0.00011	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.50E+00	<0.00031	0.0018	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.00013	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05
2,6-Dinitrotoluene	606-20-2	8270	1.30E-03	3.00E-03	<0.00008	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.00E+00	<0.00008	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05
2-Methylnaphthalene	534-52-1	8270	9.90E-02	2.90E-01	0.000392J	0.0001	0.00012	3.2E-05J	0.0015	0.0015	0.0015	8.9E-05 J	0.000049J	0.000049J	6.7E-05 J	6.7E-05 J
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.00083	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.00056	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05
Acenaphthene	83-32-9	8270	1.50E+00	4.00E+00	0.000696	0.0015	0.0023	7.1E-05 J	0.00063	0.001	0.00063	0.001	0.00013	<2.7E-05	<2.7E-05	<2.7E-05
Acenaphthylene	208-96-8	8270	1.50E+00	4.00E+00	<0.00006	0.0002	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05
Anthracene	120-12-7	8270	7.30E+00	2.00E+01	0.000234J	0.0006J	0.00065J	4.8E-05J	0.00034J	0.00068J	<1.4E-05	<1.4E-05	<1.4E-05	<1.4E-05	<1.4E-05	<1.4E-05
Benzofuran	56-55-3	8270	9.10E-03	2.00E-02	<0.00008	<0.0005	<0.0005	<5.1E-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzofluorene	50-32-8	8270	2.00E-04	1.90E-04	<0.00008	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.00013	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
bis(2-Ethylhexyl)phthalate (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	0.000603	<0.00024	0.00015J	<9.6E-05	0.00019J	<3.7E-05	<0.00012	0.000091J	0.0002	0.0002	<0.00013	<0.00013
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.00008	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05
Dibenzofuran	132-64-9	8270	9.90E-02	2.90E-01	0.000507	0.0012	0.0012	5.6E-05 J	0.00061	0.00044	4.8E-05 J	0.000087J	<0.00002	<0.00002	3.6E-05 J	3.6E-05 J
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	<0.00011	<0.0002	<0.0002	0.00004 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	0.000322J	0.00019	0.00018	0.00007 J	0.000044J	0.00001	1.8E-05 J	0.000015J	<0.00001	<0.00001	<0.00001	<0.00001
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.000778	0.00016	0.00014	7.6E-05 J	0.00035	0.00034	6.7E-05 J	0.00011	<0.00001	<0.00001	<0.00001	<0.00001
Naphthalene	81-20-3	8270	4.90E-01	1.50E+00	0.00176	<0.0028	0.0019	0.00036	0.012	0.016	0.00039	0.00059	0.0017	0.0026	0.0026	0.0026
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.00011	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0001	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05
Penta-chlorophenol	87-95-5	8270	1.00E-03	1.00E-03	0.00272	<7.9E-05	<7.9E-05	0.00008	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.00163	0.00051	0.00044	0.00023	0.00044	0.00053	3.8E-05 J	0.0001	<2.1E-05	<2.1E-05	0.0001	0.0001
Phenol	108-95-2	8270	7.30E+00	2.20E+01	0.00284	0.0032	<3.9E-05	<3.9E-05	<3.9E-05	<3.9E-05	<3.9E-05	0.00011J	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.000194J	0.00016	0.00012	4.8E-05 J	0.000027J	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > PCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

Table 5B-3
 Summary of Groundwater Sampling Results - C-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

chemical name	CAS	Method	Residential Assessment Level	CII Assessment Level	MW-86C		MW-87C		MW-88C						
					2/7/2018	3/28/2018	5/25/2018	2/8/2018	3/27/2018	5/7/2018	2/1/2018	3/19/2018	3/20/2018	5/24/2018	
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Volatiles Organic Compounds															
1,2-Dichloroethane	107-06-2	8260	5.00E-03	5.00E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chlorobenzene	108-90-7	8260	1.00E-01	1.00E-01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	75-09-2	8260	5.00E-03	5.00E-03	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	108-88-3	8260	1.00E+00	1.00E+00	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Vinyl chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Semi-Volatile Organic Compounds															
1,2-Diphenylhydrazine	122-66-7	8270	1.10E-03	2.60E-03	<2.1E-05	<2.1E-05	<2.1E-05	0.0028	0.0041	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05
2,4-Dimethylphenol	105-67-9	8270	1.50E+00	1.50E+00	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05	<5.8E-05
2,6-Dinitrotoluene	606-20-7	8270	1.30E-03	3.00E-03	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05	<4.2E-05
2-Chloronaphthalene	91-58-7	8270	2.00E+00	5.80E+00	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<1.9E-05	<1.9E-05	0.0043	0.0014	<1.9E-05	<1.9E-05	0.00052J	0.00052J	<1.9E-05	<1.9E-05	<1.9E-05
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	0.0033J	<4.7E-05	0.0033J	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05	<4.7E-05
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<2.7E-05	<2.7E-05	0.0042	0.0011	<2.7E-05	<2.7E-05	0.00063J	<2.7E-05	<2.7E-05	<2.7E-05	<2.7E-05
Acenaphthylene	208-96-8	8270	1.50E+00	4.40E+00	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05	<1.5E-05
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<1.4E-05	<1.4E-05	0.00081J	<1.4E-05	<1.4E-05	<1.4E-05	<1.4E-05	<1.4E-05	<1.4E-05	<1.4E-05	<1.4E-05
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
bis(2-Ethylhexylphthalate) (DEHP)	117-81-7	8270	6.00E-03	6.00E-03	<3.7E-05	<3.7E-05	0.0003	<3.7E-05	<0.0002	0.00052J	<3.7E-05	<3.7E-05	<3.7E-05	<0.00017	<3.7E-05
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05
Dibenzofuran	132-64-9	8270	2.90E-01	2.90E-01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	0.00051J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00025J	0.00025J	<0.0002	<0.0002	<0.0002
Fluoranthene	206-44-0	8270	9.80E-01	2.90E+00	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	<0.0003	<0.0003	<0.0003	0.0027	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	<0.0002	<0.0002	<0.0002	0.0014	0.0038	<0.0002	0.0011	0.0055	0.0055	0.0011	0.0011
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05	<2.4E-05
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05	<2.5E-05
Perchlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05	<7.9E-05
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	<2.1E-05	<2.1E-05	3.2E-05J	0.0048	0.0015	<2.1E-05	0.0003J	<2.1E-05	<2.1E-05	<2.1E-05	<2.1E-05
Phenol	106-95-2	8270	7.30E+00	2.20E+01	<3.5E-05	<3.5E-05	<3.5E-05	<3.5E-05	<3.5E-05	<3.5E-05	<3.5E-05	<3.5E-05	<3.5E-05	<3.5E-05	<3.5E-05
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05	<1.9E-05

- Notes:
1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > gPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, CII = Commercial/Industrial
 6. J = Estimated value. < = Compound not detected at the specified detection limit.
 7. During the March/April sampling event, MW-25A and MW-25C were most likely mislabeled and

Table 5B-4
 Summary of Groundwater Sampling Results - D-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Constituent	CAS	Method	Residential Assessment Level	C/I Assessment Level	MW-56D												
					2/5/2009	1/20/2010	7/11/2010	7/27/2011	2/14/2012	7/23/2012	4/2/2013	8/5/2013	1/29/2014	08/28/2014	2/7/2016	3/26/2018	5/1/2018
Volatile Organic Compounds																	
1,2-Dichloroethane	107-06-2	8280	5.00E-03	5.00E-03	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.00014	<0.00014	<0.00014	<0.00014	<0.0002	<0.0002	<0.0002
Benzene	71-43-2	8260	5.00E-03	5.00E-03	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.00008	<0.00008	<0.00008	<0.00008	<0.0002	<0.0002	<0.0002
Chlorobenzene	109-90-7	8260	1.00E-01	1.00E-01	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.00012	<0.00012	<0.00012	<0.0003	<0.0003	<0.0003	<0.0003
Ethylbenzene	100-41-4	8260	7.00E-01	7.00E-01	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.00011	<0.00011	<0.00011	<0.0003	<0.0003	<0.0003	<0.0003
Methylene chloride	75-09-2	8280	5.00E-03	5.00E-03	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.00015	<0.00015	<0.00015	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	109-88-3	8260	1.00E+00	1.00E+00	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.00015	<0.00015	<0.00015	<0.0003	<0.0003	<0.0003	<0.0003
Vinyl Chloride	75-01-4	8260	2.00E-03	2.00E-03	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.00015	<0.00015	<0.00015	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes (total)	1330-20-7	8260	1.00E+01	1.00E+01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.00026	<0.00026	<0.00026	<0.0003	<0.0003	<0.0003	<0.0003
Semi-Volatile Organic Compounds																	
1,2-Diphenylhydrazine	122-65-7	8270	1.10E-03	2.80E-03	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.00011	<0.00011	<0.00011	<0.00021	<0.00021	<0.00021	<2.1E-05
2,4-Dimethylphenol	105-67-9	8270	4.90E-01	1.90E+00	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.00031	<0.00031	<0.00031	<0.0004	<0.0004	<0.0004	<4.1E-05
2,4-Dinitrotoluene	121-14-2	8270	1.30E-03	3.00E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.00013	<0.00013	<0.00013	<0.00058	<0.00058	<0.00058	<5.8E-05
2,6-Dinitrotoluene	605-20-2	8270	1.30E-03	3.00E-03	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.00008	<0.00008	<0.00008	<0.00042	<0.00042	<0.00042	<4.2E-05
2-Chloronaphthalene	91-59-7	8270	2.00E+00	5.80E+00	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.00008	<0.00008	<0.00008	<0.00021	<0.00021	<0.00021	<2.1E-05
2-Methylnaphthalene	534-52-1	8270	9.80E-02	2.90E-01	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.00007	<0.00007	<0.00007	<0.00019	<0.00019	<0.00019	<1.9E-05
4,6-Dinitro-2-methylphenol	91-57-6	8270	2.40E-03	7.30E-03	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.00083	<0.00083	<0.00083	<0.0002	<0.0002	<0.0002	<0.0002
4-Nitrophenol	100-02-7	8270	4.90E-02	1.50E-01	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.00056	<0.00056	<0.00056	<0.00047	<0.00047	<0.00047	<4.8E-05
Acenaphthene	83-32-9	8270	1.50E+00	4.40E+00	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.00008	<0.00008	<0.00008	<0.00027	<0.00027	<0.00027	<2.8E-05
Acenaphthylene	209-96-9	8270	1.50E+00	4.40E+00	<0.0006	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0006	<0.0006	<0.0006	<0.00014	<0.00014	<0.00014	<1.5E-05
Anthracene	120-12-7	8270	7.30E+00	2.20E+01	<0.0015	<0.0015	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.00034	<0.00034	<0.00034	<1.4E-05
Benzo(a)anthracene	56-55-3	8270	9.10E-03	2.00E-02	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00011	<0.00011	<0.00011	<0.00041	<0.00041	<0.00041	<5.1E-05
Benzo(a)pyrene	50-32-8	8270	2.00E-04	2.00E-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.00013	<0.00013	<0.00013	<0.00044	<0.00044	<0.00044	<0.00044
bis(2-Chloroethoxy)methane	111-91-1	8270	8.30E-04	1.90E-03	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.00013	<0.00013	<0.00013	<0.0003	<0.0003	<0.0003	<3.1E-05
bis(2-Ethylhexyl)phthalate	117-81-7	8270	6.00E-03	6.00E-03	0.0064	0.0028	0.0096	0.0019	0.0021	0.0032	0.00037	0.00037	0.00037	0.00065	0.00065	0.00065	<0.00019
Chrysene	218-01-9	8270	9.10E-01	2.00E+00	<0.0007	<0.0007	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.00021	<0.00021	<0.00021	<2.1E-05
Dibenzofuran	132-64-9	8270	9.80E-02	2.90E-01	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004	<0.0004	<0.0004	<0.0004
Di-n-butylphthalate	84-74-2	8270	2.40E+00	7.30E+00	0.0044	0.00086J	<0.0007	0.00056J	<0.0005	0.00056J	<0.0008	<0.0008	<0.0008	<0.0002	<0.0002	<0.0002	<0.0002
Fluoranthene	205-44-0	8270	9.80E-01	2.90E+00	0.0026	<0.0007	<0.0007	0.00035	0.00067	0.0019	<0.0007	<0.0007	<0.0007	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	86-73-7	8270	9.80E-01	2.90E+00	0.0033	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0007	<0.0007	<0.0007	<0.0003	<0.0003	<0.0003	<3.1E-05
Naphthalene	91-20-3	8270	4.90E-01	1.50E+00	0.0059	<0.001	0.0002J	<0.0005	<0.0005	0.0004	<0.0008	9.99E-05J	0.000367J	0.00118	<0.0002	<0.0002	<0.0002
Nitrobenzene	98-95-3	8270	4.90E-02	1.50E-01	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.00011	<0.00011	<0.00011	<0.00024	<0.00024	<0.00024	<2.4E-05
N-Nitrosodiphenylamine	86-30-6	8270	1.90E-01	4.20E-01	<0.0009	<0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.00025	<0.00025	<0.00025	<2.5E-05
Pentachlorophenol	87-86-5	8270	1.00E-03	1.00E-03	<0.0008	<0.0008	0.00084J	<0.0005	<0.0005	<0.0005	<0.00061	<0.00061	<0.00061	<0.00079	<0.00079	<0.00079	<8.1E-05
Phenanthrene	85-01-8	8270	7.30E-01	2.20E+00	0.0073	<0.0012J	<0.0007	0.00111J	0.00059	<0.0005	<0.0006	0.00032J	0.000295J	<0.00021	<0.00021	<0.00021	<2.1E-05
Phenol	109-95-2	8270	7.30E+00	2.20E+01	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0004	<0.0004	<0.0004	<0.00035	<0.00035	<0.00035	<3.5E-05
Pyrene	129-00-0	8270	7.30E-01	2.20E+00	0.0017J	<0.0007	<0.0007	0.00036	0.00051	0.0019	<0.00011	<0.00011	<0.00011	0.00118	<0.00019	<0.00019	<1.9E-05

Notes:
 1. Sampling locations shown on Figure 1
 2. Concentrations > RAL and non-detects are bold type.
 3. Concentrations > cPCL and non-detects are highlighted.
 4. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
 5. RAL = Residential Assessment Level, C/I = Commercial/Industrial
 6. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-5
 Summary of Groundwater Arsenic and Lead Results - A-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Residential Assessment C/I Assessment Level	Arsenic (mg/L)						Lead (mg/L)		
	0.01						0.015		
	Jan/Feb 2018	March/April 2018	May/June 2018	Jan/Feb 2018	March/April 2018	May/June 2018	Jan/Feb 2018	March/April 2018	May/June 2018
MW-03	0.000895 J	0.00242	0.00363	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000787 J
MW-04	0.00454	0.00092J	0.00492	0.0016 J	0.00492	0.00201	<0.0006	<0.0006	<0.0006
MW-05	0.00588	0.00255	0.00488	0.00222	0.00488	<0.0006	0.00149J	<0.0006	<0.0006
MW-09	0.00104 J	0.0012J	0.00085 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-12A	0.017	0.00133J	0.00093 J	<0.0006	<0.0006	0.00092J	<0.0006	<0.0006	0.000655 J
MW-13	0.00303	0.00984	0.014	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-15A	0.0264	0.0137	0.019	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-17	0.0444	0.0419	0.0415	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-18A	0.0043	0.0239	0.0291	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-20A	0.0087	0.00568	0.00895	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-22AR	0.000896 J	0.000716J	0.00293	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-25A	0.0171	0.00714	0.00717 J	<0.0006	<0.0006	0.0079	<0.0006	<0.0006	<0.0006
MW-26A	0.032	0.0427	0.0491	<0.0006	<0.0006	0.000908J	<0.0006	<0.0006	<0.0006
MW-27A	0.000978 J	<0.0004	0.00207	<0.0006	<0.0006	0.000601J	<0.0006	<0.0006	<0.0006
MW-28A	0.0076	0.0053	0.0177	<0.0006	<0.0006	0.00381	<0.0006	<0.0006	0.00763
MW-32AR	0.00294	0.0228	0.0441	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-33A	0.0202	0.0201	0.00573	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-35A	0.0166	0.0714	0.0189	0.000985 J	0.00464	<0.0006	<0.0006	<0.0006	<0.0006
MW-36A	0.00108 J	0.00753	0.00117 J	<0.0006	0.0184	0.00204	<0.0006	<0.0006	0.00204
MW-38A	<0.0004	0.0138	0.0124	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-44A	0.0275	0.0169	0.0165	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-49A	0.00163 J	0.00233	0.000922 J	0.000693 J	<0.0006	0.000913 J	<0.0006	<0.0006	<0.0006
MW-50A	0.00205	<0.0004	0.00857	<0.0006	<0.0006	0.00404	<0.0006	<0.0006	<0.0006
MW-51A	<0.0004	<0.0004	<0.0004	0.000748 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-58A	0.000713 J	0.00106J	0.00143 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-59A	0.00181 J	0.00131J	0.0101	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-60A	0.000649 J	0.000706J	0.000636 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-61A	0.000743 J	0.00116J	0.00172 J	<0.0006	<0.0006	0.0012J	<0.0006	<0.0006	<0.0006
MW-64A	0.000419 J	0.0117	0.00111 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00377
MW-69A	0.00916	0.0017J	0.0142	0.00293	<0.0006	0.0145	<0.0006	<0.0006	<0.0006
MW-77A	0.0263	0.0187	0.019	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
MW-79A	0.0184	0.0149	0.0134	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006

Note:

1. Sampling locations shown on Figure 1A
2. Concentrations > RAL are **bold** type.
3. Concentrations > cPCL are highlighted.
4. Non-detected concentrations > RAL or cPCL are **bold** type.
5. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
6. RAL = Residential Assessment Level, C/I = Commercial/Industrial
7. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-6
 Summary of Groundwater Arsenic and Lead Results - B-CZ/B-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

C/I Assessment Level	Arsenic (mg/L)										Lead (mg/L)				
	Jan/Feb 2018	March/April 2018	May/June 2018	July 2018	Jan/Feb 2018	March/April 2018	May/June 2018	July 2018	Jan/Feb 2018	March/April 2018	May/June 2018	July 2018			
MW-14	<0.0004	<0.0004	<0.0004	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-15B	0.00895	0.00329	0.0111	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-22BR	0.0219	0.0159	0.0301	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-33BR	0.00144 J	0.00187 J	0.00294	NS	<0.0006	<0.0006	<0.0006	NS	0.000625 J	<0.0006	<0.0006	NS			
MW-35B	0.00465	0.00595	0.0116	NS	<0.0006	<0.0006	<0.0006	NS	0.000835 J	<0.0006	<0.0006	NS			
MW-36B	0.00116 J	0.000942 J	0.000817 J	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-38B	0.000636 J	0.000972 J	0.0386	NS	<0.0006	<0.0006	<0.0006	NS	0.000962 J	<0.0006	<0.0006	NS			
MW-39B	0.0108	0.00188 J	0.00178 J	NS	0.00121 J	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-40B	0.0679	0.0606	0.0494	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-42B	0.00186 J	0.00108 J	0.00112 J	NS	0.00118 J	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-49B	0.000564 J	0.000746 J	0.00146 J	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-57B	0.0419	0.00179 J	0.00285	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-59B	<0.0004	<0.0004	<0.0004	NS	0.00135 J	<0.0006	<0.0006	NS	0.00135 J	<0.0006	<0.0006	NS			
MW-62B	0.00842	0.0173	0.028	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-63B	0.00114 J	0.00211	0.000818 J	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-67B	0.000751 J	0.000565 J	0.000416 J	NS	0.0022	<0.0006	<0.0006	NS	<0.0006	0.000991 J	0.000661 J	NS			
MW-68B	0.0117	0.014	0.0112	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-71B	0.00174 J	0.00214	0.000851 J	NS	<0.0006	<0.0006	<0.0006	NS	0.00832	<0.0006	0.00428	NS			
MW-72B	0.00127 J	0.000624 J	0.000951 J	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-74B	0.00162 J	0.00142 J	0.00131 J	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-80B	0.00286	0.00187 J	0.00202	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-81B	0.00207	0.00134 J	0.00203	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-82B	0.00271	0.00175 J	0.0103	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			
MW-83B	0.0353	0.0185	0.0673	0.0731	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006			
MW-84B	0.00269	0.00277	<0.0004	<0.0004	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00121 J			
MW-89B	NI	NI	NI	0.00138 J	NI	NI	NI	0.00138 J	NI	NI	NI	<0.0006			
MW-90B	NI	NI	NI	0.00169 J	NI	NI	NI	0.00169 J	NI	NI	NI	<0.0006			
P-11	0.0374	0.016	0.0622	NS	0.00215	<0.0006	<0.0006	NS	0.0015 J	<0.0006	<0.0006	NS			
TW-41B	0.0376	0.0953	0.0976	NS	<0.0006	<0.0006	<0.0006	NS	<0.0006	<0.0006	<0.0006	NS			

Note:

1. Sampling locations shown on Figure 1A
2. Concentrations > RAL are bold type.
3. Concentrations > cPCL are highlighted.
4. Non-detected concentrations > RAL or cPCL are bold type.
5. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
6. RAL = Residential Assessment Level, C/I = Commercial/Industrial
7. J = Estimated value, < = Compound not detected at the specified detection limit.
8. NI = Not Installed / NS = Not Sampled

**Table 5B-7
Summary of Groundwater Arsenic and Lead Results - C-TZ Monitoring Wells
UPRR Houston Wood Preserving Works**

Residential Assessment Level	Arsenic (mg/L)					Lead (mg/L)				
	Jan/Feb 2018	March/April 2018	May/June 2018	Jan/Feb 2018	March/April 2018	May/June 2018	Jan/Feb 2018	March/April 2018	May/June 2018	
C/I Assessment Level	0.01					0.015				
MW-12C	0.0025	0.00184J	0.0017 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-15C	0.000738 J	0.000598J	0.000777 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-17C	0.00112 J	0.00688	0.00479	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-18C	0.00467	0.00327	0.00342	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-19C	0.00158 J	0.00107J	0.00294	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-21C	0.00128 J	0.00109J	0.00116 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-25C	0.00283	0.003	0.00305	0.0079	0.00585	0.00514	0.0079	0.00585	0.00514	
MW-27C	0.00261	<0.0004	0.00212	0.0159	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-28C	0.00206	0.00184J	0.00184 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-34CR	0.00106 J	0.000801J	0.000689 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-48C	0.000831 J	0.000581J	0.000562 J	0.00259	<0.0006	<0.0006	0.00259	<0.0006	<0.0006	
MW-51C	0.000614 J	0.0004J	<0.0004	0.000858 J	<0.0006	<0.0006	0.000858 J	<0.0006	<0.0006	
MW-53C	0.000502 J	0.000443J	0.000694 J	0.000712 J	0.00085J	<0.0006	0.000712 J	0.00085J	<0.0006	
MW-54C	0.00128 J	0.00133J	0.0012 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-68C	<0.0004	0.000618J	<0.0004	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-76C	0.00157 J	0.000631J	0.000527 J	0.00239	<0.0006	<0.0006	0.00239	<0.0006	<0.0006	
MW-83C	0.000609 J	<0.0004	0.00139 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-85C	0.00152 J	0.00287	0.00588	<0.0006	<0.0006	<0.0006	<0.0006	0.00249	<0.0006	
MW-86C	0.00156 J	0.00612	0.00768	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-87C	<0.0004	<0.0004	<0.0004	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
MW-88C	0.000557 J	0.000653J	0.00346	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	

Note:

1. Sampling locations shown on Figure 1A
2. Concentrations > RAL are **bold** type.
3. Concentrations > cPCL are highlighted.
4. Non-detected concentrations > RAL or cPCL are **bold** type.
5. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
6. RAL = Residential Assessment Level, C/I = Commercial/Industrial
7. J = Estimated value, < = Compound not detected at the specified detection limit.

Table 5B-8
 Summary of Groundwater Arsenic and Lead Results - D-TZ Monitoring Wells
 UPRR Houston Wood Preserving Works

Residential Assessment Level C/I Assessment Level	Arsenic (mg/L)				Lead (mg/L)	
	Jan/Feb 2018	March/April 2018	May/June 2018	Jan/Feb 2018	March/April 2018	May/June 2018
MW-36D	0.000773 J	0.00137 J	<0.0004	0.00182 J	0.0206	0.00476
MW-59D	<0.0004	<0.0004	0.00111 J	<0.0006	0.0018	0.00438
MW-65D	<0.0004	0.00761	0.00292	<0.0006	0.0006	<0.0006
MW-66D	0.000711 J	0.00663	0.00223	0.00162 J	0.0006	<0.0006

Note:

1. Sampling locations shown on Figure 1A
2. Concentrations > RAL are **bold type**.
3. Concentrations > cPCL are highlighted.
4. Non-detected concentrations > RAL or cPCL are bold type.
5. TRRP PCLs (30 TAC §350, Tables 1, 2, and 3), last updated April 27, 2018.
6. RAL = Residential Assessment Level, C/I = Commercial/Industrial
7. J = Estimated value, < = Compound not detected at the specified detection limit.

Attachment B
In-well DNAPL Thickness Maps

EXPLANATION

- UPRR Property Boundary
- Fence
- Railroad
- ⊕ Monitoring Well Location
- ⊕ Monitoring Well Location used for DNAPL Recovery
- (0.84) In Well DNAPL Thickness (Ft)
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area
- A-TZ DNAPL In-Well Thickness Contour (Ft)
- B-CZ/B-TZ DNAPL In-Well Thickness Contour (Ft)
- C-TZ DNAPL In-Well Thickness Contour (Ft)



Approx. Scale in Feet
 0 200 400

Source:
 Base map from ERM-Southwest, Inc APAR Addendum,
 Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 1 IN-WELL DNAPL THICKNESS FEBRUARY 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: AUG, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Path: Newmarket\GIS\Projects - Board\3041358-UPRR Wood Preserving\Map\2018\7-17-18\Fig 1 - In-Well DNAPL Thickness July 2018.dwg | File Name: FIG 1 - In-Well DNAPL Thickness July 2018.dwg | Last Edited By: adamford | Date: 2018-08-10 | Time: 12:15:08 PM | Printed By: adamford | Date: 2018-08-10 | Time: 12:16:06 PM



LEGEND

- UPRR PROPERTY BOUNDARY
- - - FENCE
- RAILROAD
- ⊕ MONITORING WELL LOCATION
- ⊕ MONITORING WELL LOCATION USED FOR DNAPL RECOVERY
- (0.84) IN WELL DNAPL THICKNESS (FT)
- ▨ RAILROAD BALLAST CAP AREA
- ASPHALT CAP AREA
- ▨ SOIL CAP AREA
- ▨ CONCRETE CAP AREA
- A-TZ DNAPL IN-WELL THICKNESS CONTOUR (FT)
- B-CZ/B-TZ DNAPL IN-WELL THICKNESS CONTOUR (FT)
- C-TZ DNAPL IN-WELL THICKNESS CONTOUR (FT)

REFERENCE(S)
 BASE MAP FROM ERM-SOUTHEAST, INC APAR ADDENDUM, FIG 3-1, DATED JUNE 2004.



CLIENT
 UNION PACIFIC RAILROAD CO.

PROJECT
 HOUSTON WOOD PRESERVING WORKS

TITLE
 IN-WELL DNAPL THICKNESS
 JULY 2018

CONSULTANT	YYYY-MM-DD	2018-08-09
DESIGNED	AJD	
PREPARED	AJD	
REVIEWED	ECM	
APPROVED	ECM	

PROJECT NO. 30401358 **REV.** 0 **FIGURE** 2

1 in. IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIB

Attachment C

Groundwater COC Concentration Maps

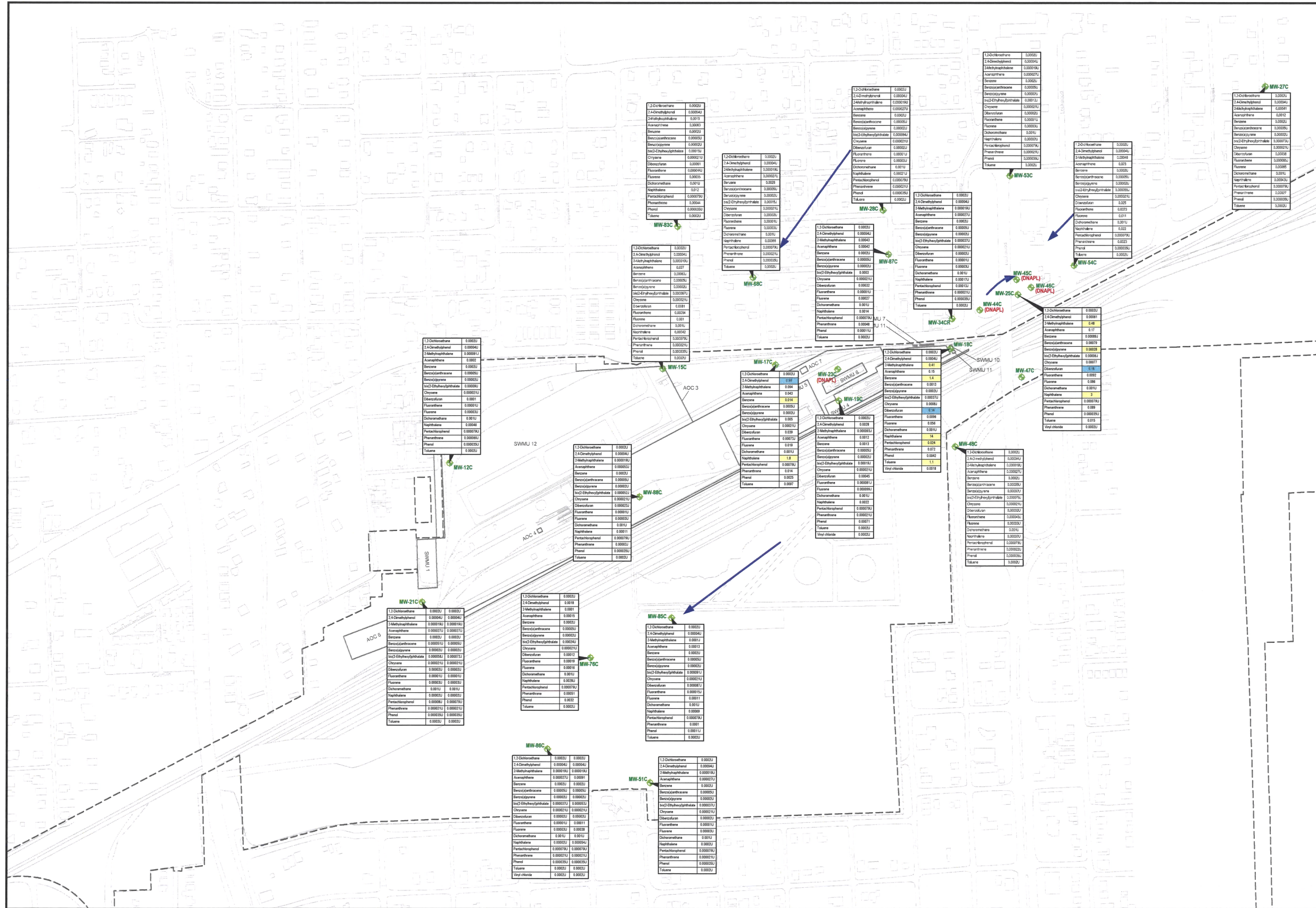
Attachment C1 – Jan/Feb 2018 Event

Attachment C2 – Mar/Apr 2018 Event

Attachment C3 – May/June 2018 Event

Attachment C1

Groundwater COC Concentrations Maps Jan/Feb 2018 Event



- ### EXPLANATION
- UPRR Property
 - Historic Structure and Feature
 - Road, Parking Lot, Sidewalk
 - Fence
 - Railroad
 - C-TZ Monitoring Well Location
 - Inferred Groundwater Flow Direction

- Notes:**
1. All concentrations are in mg/L.
 2. J = Estimated value between SQL and MDL.
 3. U = Not detected (RL/SQL reported).
 4. NA = Not analyzed.
 5. Blue highlighted and bolded concentrations exceed Residential Assessment Level (RALs).
 6. Yellow highlighted and bolded concentrations exceed Commercial Industrial PCLs.
 7. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).

Protective Concentration Levels (PCLs)

Parameter	RAL (mg/L)	PCL (mg/L)
1,2-Dichlorobenzene	0.002	0.002
1,4-Dichlorobenzene	0.002	0.002
1,4-Dimethylbenzene	0.40	1.5
1-Methyl-2-naphthol	0.05	0.20
Arochlor 1248	1.5	4.1
Benzobiphenylene	0.0013	0.0028
Benzene	0.005	0.005
Benzopyrene	0.0002	0.0002
1,2,3,4-Tetrahydroquinoline	0.005	0.006
Chrysene	0.15	0.38
Dibenzofuran	0.008	0.20
Dibenzophenone	0.005	0.005
Fluorene	0.50	1.5
Fluoranthene	0.001	0.001
Hexachlorobenzene	0.0001	0.0001
Hexachlorocyclopentadiene	0.0001	0.0001
Phenanthrene	0.75	2.2
Phenylacetylene	0.10	0.10
Toluene	1	1
Vanillic acid	0.002	0.002

- #### SWMU/AOC AREAS
- | No. | Description |
|---------|---|
| SWMU 1 | Closed Surface Impoundment |
| SWMU 2 | Northern and Southern Drainage Ditches |
| SWMU 4 | Recent Process Area |
| SWMU 5 | Original Process Area |
| SWMU 6 | Water Treatment and Boiler System |
| SWMU 7 | Tank Car Storage Area |
| SWMU 8 | Aboveground Storage Tank Area |
| SWMU 9 | Location of Former UST No. 44-023-05 |
| SWMU 10 | Location of Former Gap Water Treatment Tank |
| SWMU 11 | Oil/Water Separators |
| SWMU 12 | Railroad Tie Storage Area |
- AOC 1** Diesel Storage Tank
AOC 3 Contaminated Portion of City Water Line
AOC 4 Location of Former Incinerator
AOC 5 City Storm Sewer
AOC 6 Inactive Wastewater Lagoon
AOC 7 Location of Former UST No. 44-023-21
- Note:** Locations of SWMU-9 and AOCs 1, 3, 5 and 7 area approximate.

N

Scale in Feet

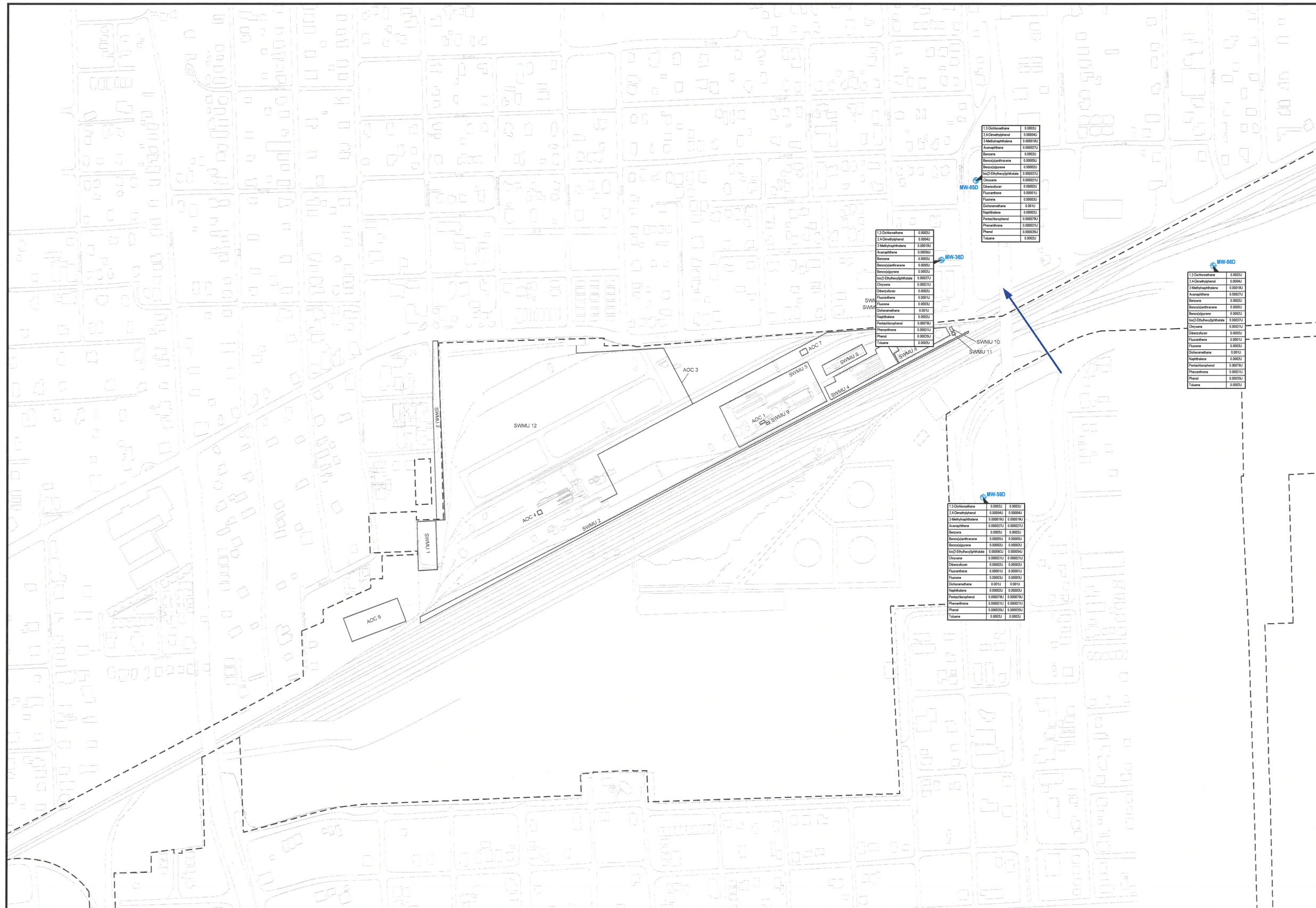
0 200 400

Source: State map from ERM Southwest, Inc. APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Figure SB-3
GROUNDWATER COC CONCENTRATION MAP
C-TZ - JANUARY/FEBRUARY 2018

PROJECT: 1556	BY: AJD	REVISIONS:
DATE: MAR. 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- D-TZ Monitoring Well Location
- Inferred Groundwater Flow Direction

- Notes:**
1. All concentrations are in mg/L.
 2. J = Estimated value between SQL and MDL.
 3. U = Not detected (RL/SQL reported).
 4. NA = Not analyzed.
 5. Blue highlighted and bolded concentrations exceed Residential Assessment Level (RAL).
 6. Yellow highlighted and bolded concentrations exceed Commercial Industrial PCLs.
 7. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).

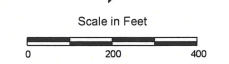
Protective Concentration Levels (PCLs)

Parameter	RAL (mg/L)	CIL (mg/L)
1,2-Dichloroethane	0.05	0.05
1,4-Dichlorobenzene	0.40	1.5
2,4-Dichlorophenol	0.05	0.25
Acetone	1.5	4.4
Benzene	0.013	0.028
Benzonitrile	0.05	0.05
Bromobenzene	0.05	0.05
Chlorobenzene	0.05	0.05
Chloroethane	0.2	0.28
Chloroform	0.05	0.25
Dichloromethane	0.05	0.05
Fluorobenzene	0.05	0.25
Fluorene	0.05	0.25
Heptachlor	0.40	1.5
Hexachlorobenzene	0.05	0.05
Phenanthrene	0.73	2.2
Pyrene	1	1
Toluene	0.05	0.05
Vinyl chloride	0.05	0.05

SWMU/AOC AREAS

No.	Description
SWMU 1	Closed Surface Impoundment
SWMU 2	Northern and Southern Drainage Ditches
SWMU 4	Recent Process Area
SWMU 5	Original Process Area
SWMU 6	Water Treatment and Boiler System
SWMU 7	Tank Car Storage Area
SWMU 8	Aboveground Storage Tank Area
SWMU 9	Location of Former LST No. 44-023-05
SWMU 10	Location of Former Sap Water Treatment Tank
SWMU 11	Oil/Water Separators
SWMU 12	Railroad Tie Storage Area
AOC 1	Diesel Storage Tank
AOC 3	Contaminated Portion of City Water Line
AOC 4	Location of Former Incinerator
AOC 5	City Storm Sewer
AOC 6	Inactive Wastewater Lagoon
AOC 7	Location of Former LST No. 44-023-21

Note: Locations of SWMU-9 and AOCs 1, 3, 5 and 7 area approximate.



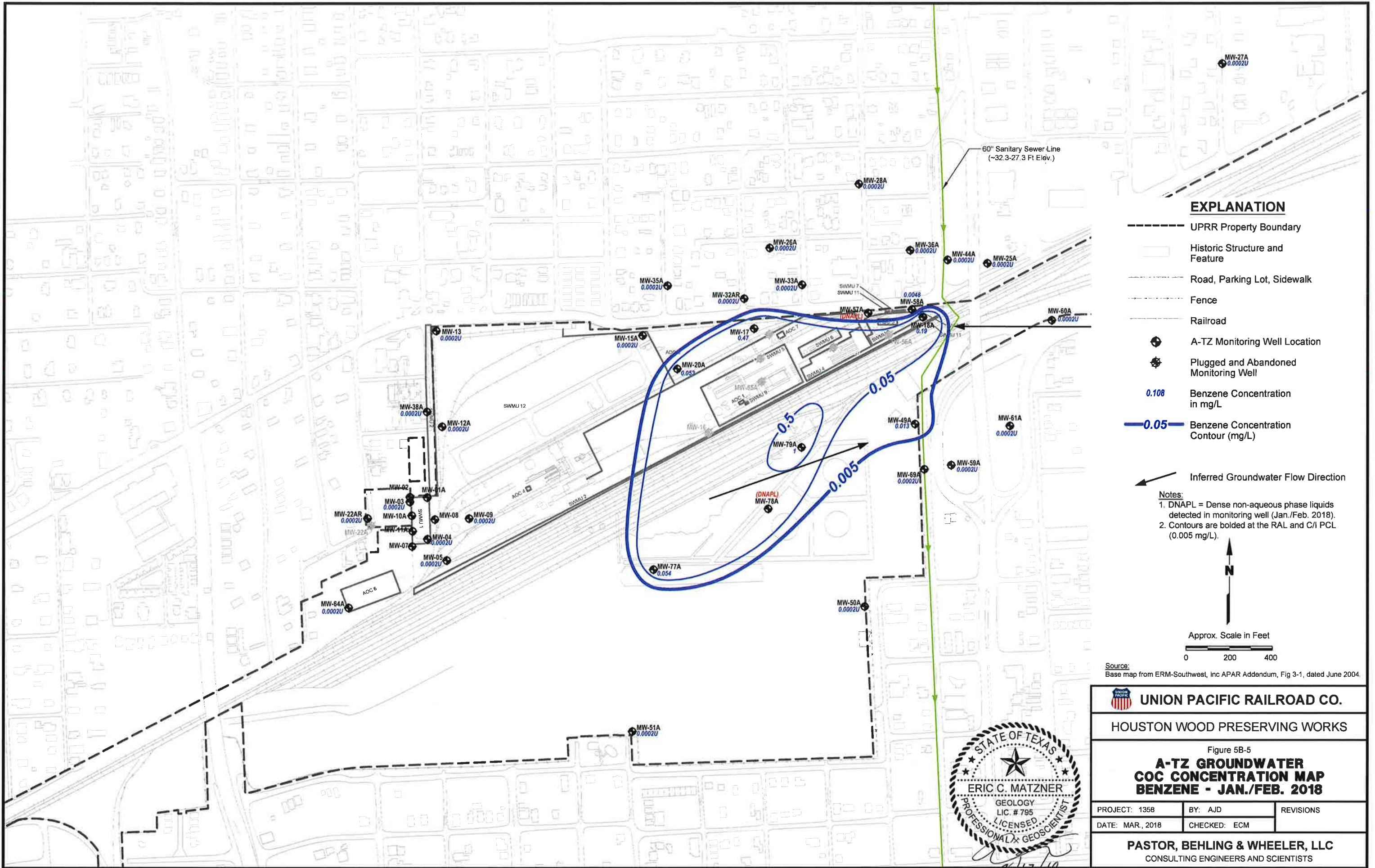
Source: Base map from ERM-Southwest, Inc. APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Figure SB-4
GROUNDWATER COC CONCENTRATION MAP
D-TZ - JANUARY/FEBRUARY 2018

PROJECT: 1558	BY: AJD	REVISIONS:
DATE: MAR. 2018	CHECKED: ECM	

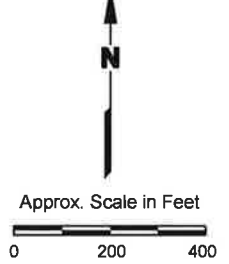
PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS



EXPLANATION

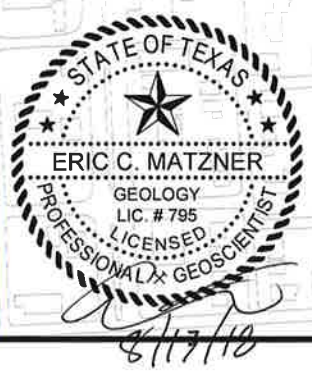
- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 0.108 Benzene Concentration in mg/L
- 0.05** Benzene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

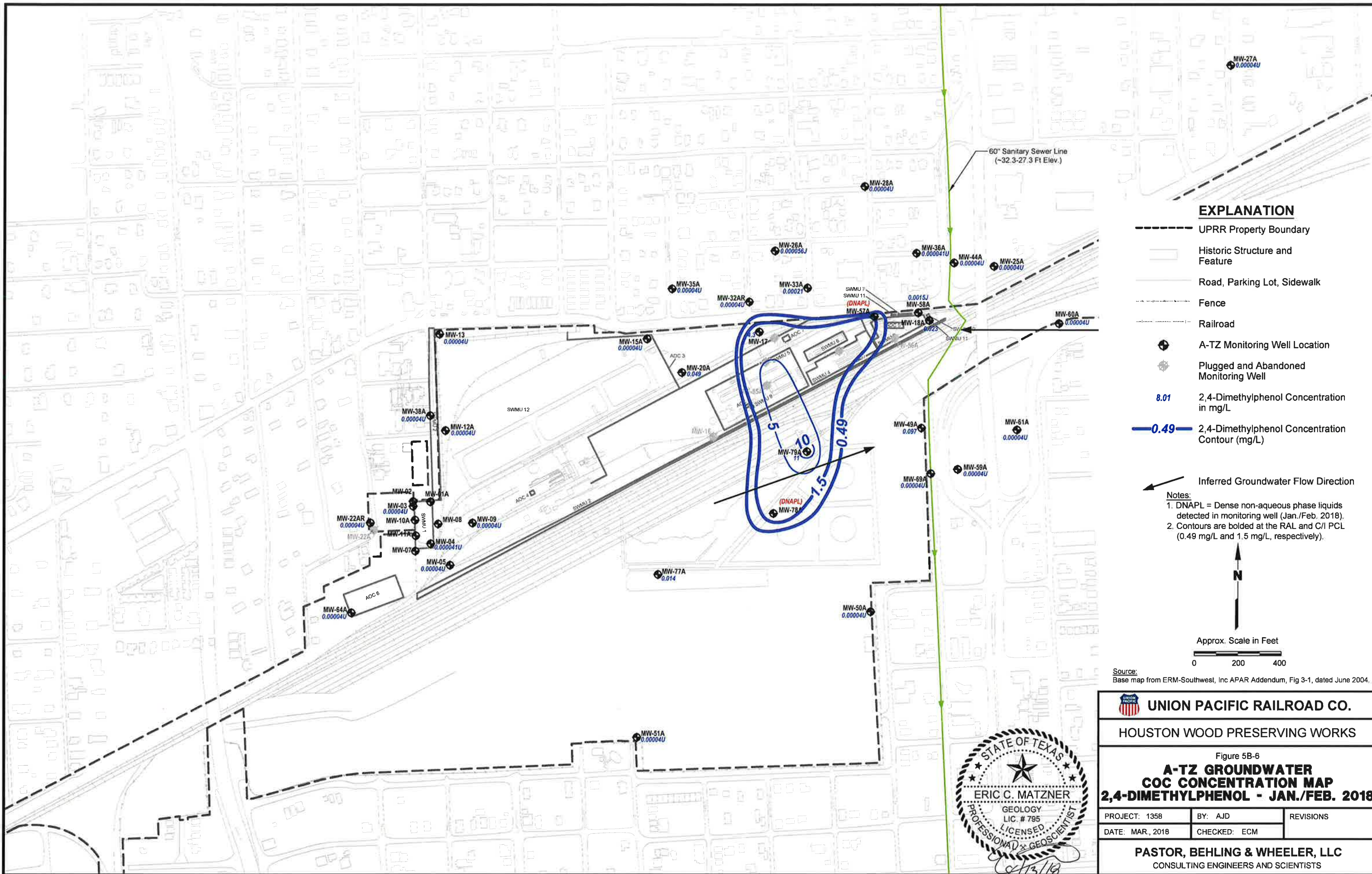
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.005 mg/L).



Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-5 A-TZ GROUNDWATER COC CONCENTRATION MAP BENZENE - JAN./FEB. 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

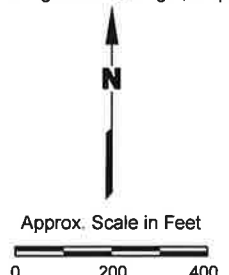




EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- 8.01 2,4-Dimethylphenol Concentration in mg/L
- 0.49** 2,4-Dimethylphenol Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

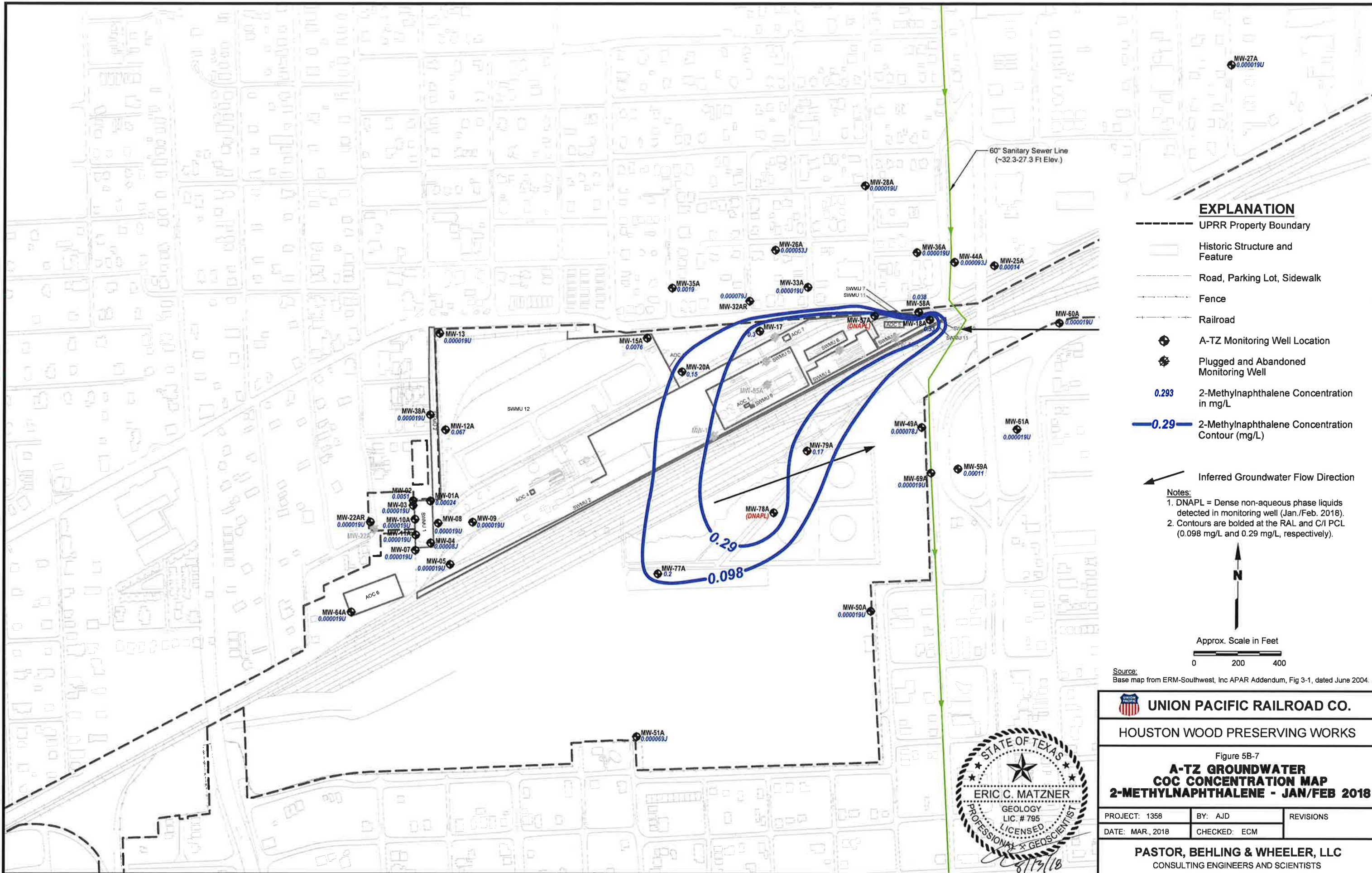
- Notes:
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-6 A-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - JAN./FEB. 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR., 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

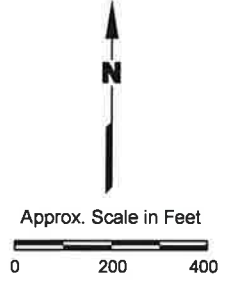




EXPLANATION

- UPRR Property Boundary
- - - Historic Structure and Feature
- - - Road, Parking Lot, Sidewalk
- - - Fence
- - - Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 0.293 2-Methylnaphthalene Concentration in mg/L
- 0.29** 2-Methylnaphthalene Concentration Contour (mg/L)
- ↙ Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.098 mg/L and 0.29 mg/L, respectively).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

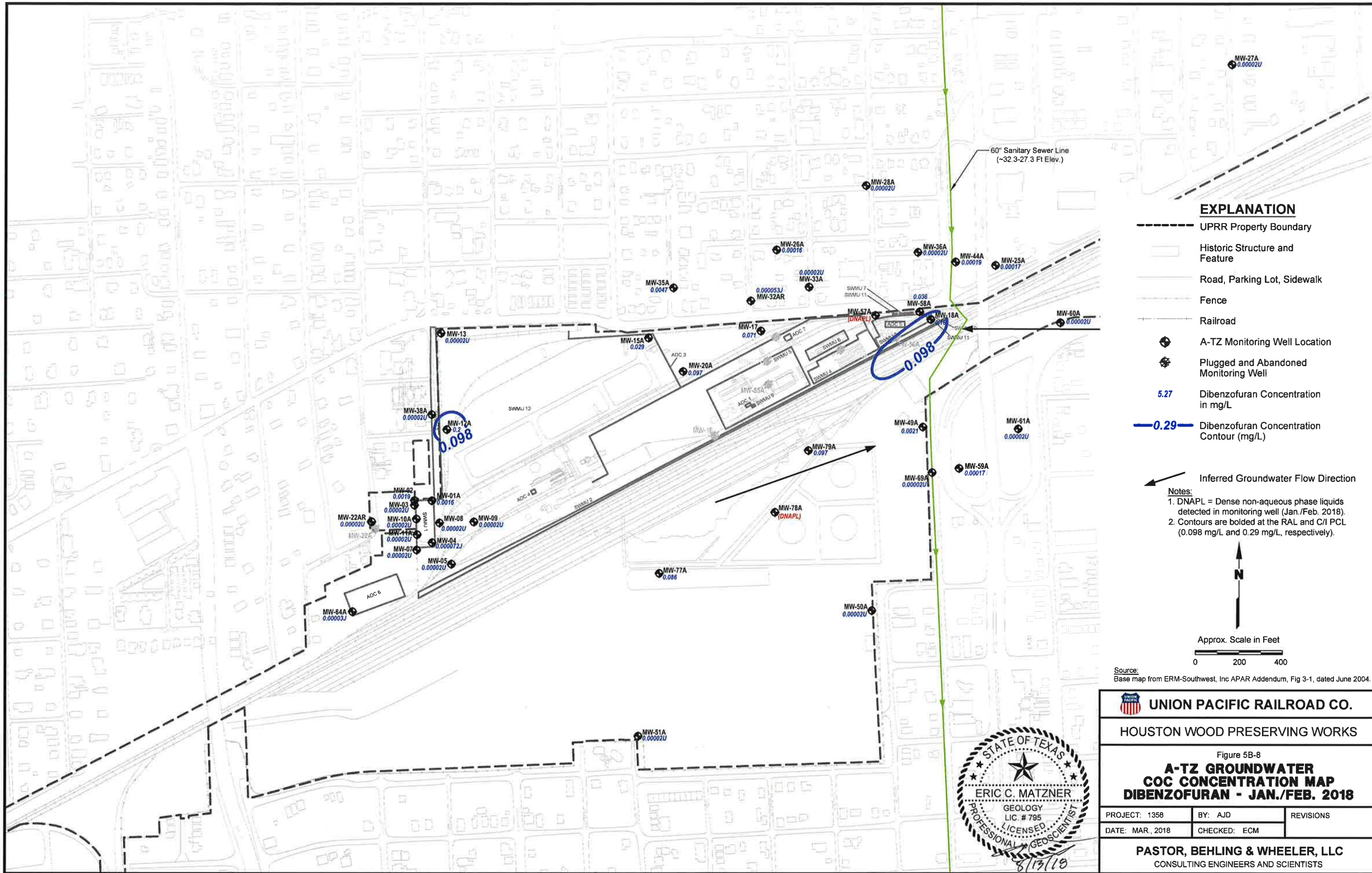
UNION PACIFIC RAILROAD CO.
 HOUSTON WOOD PRESERVING WORKS

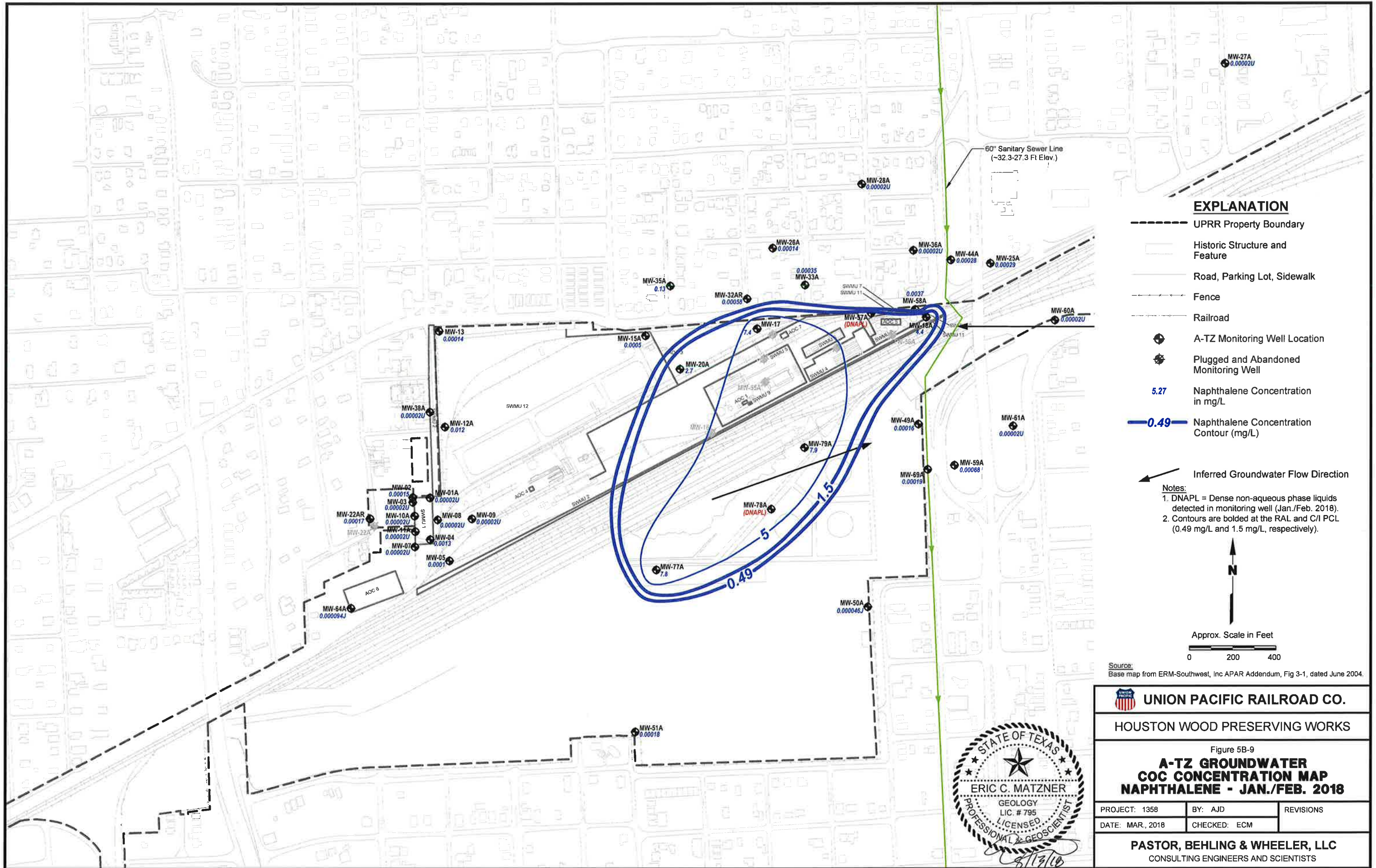
Figure 5B-7
A-TZ GROUNDWATER COC CONCENTRATION MAP
2-METHYLNAPHTHALENE - JAN/FEB 2018

PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR., 2018	CHECKED: ECM	

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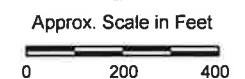




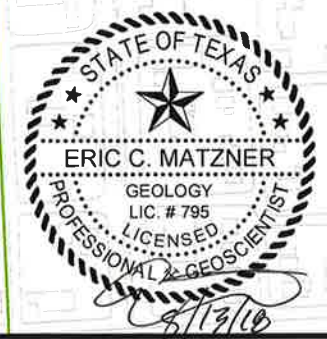
EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 5.27 Naphthalene Concentration in mg/L
- 0.49** Naphthalene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

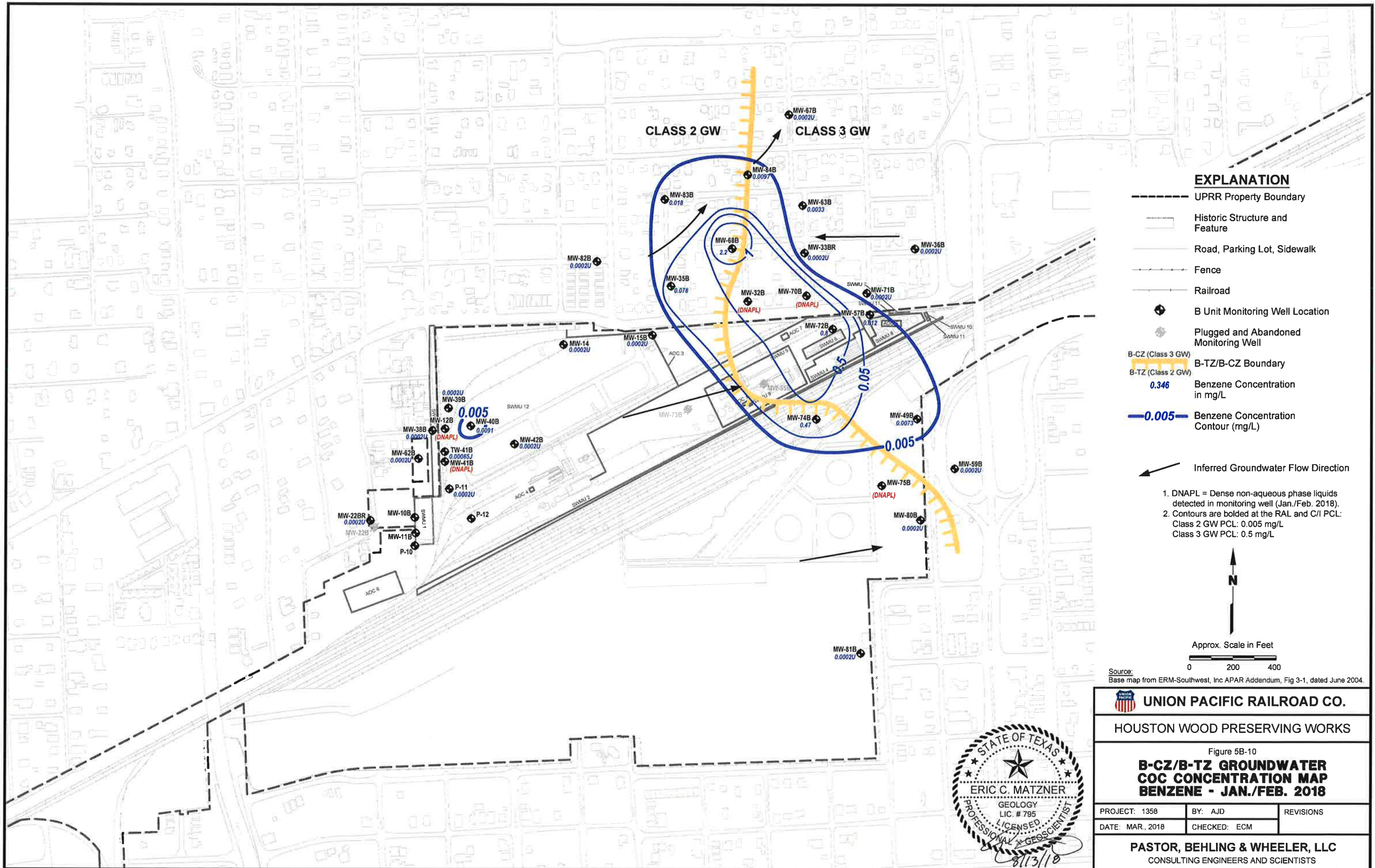
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-9 A-TZ GROUNDWATER COC CONCENTRATION MAP NAPHTHALENE - JAN./FEB. 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- - - Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.346 Benzene Concentration in mg/L
- 0.005 Benzene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCL: 0.005 mg/L
 Class 3 GW PCL: 0.5 mg/L



Approx. Scale in Feet
 0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

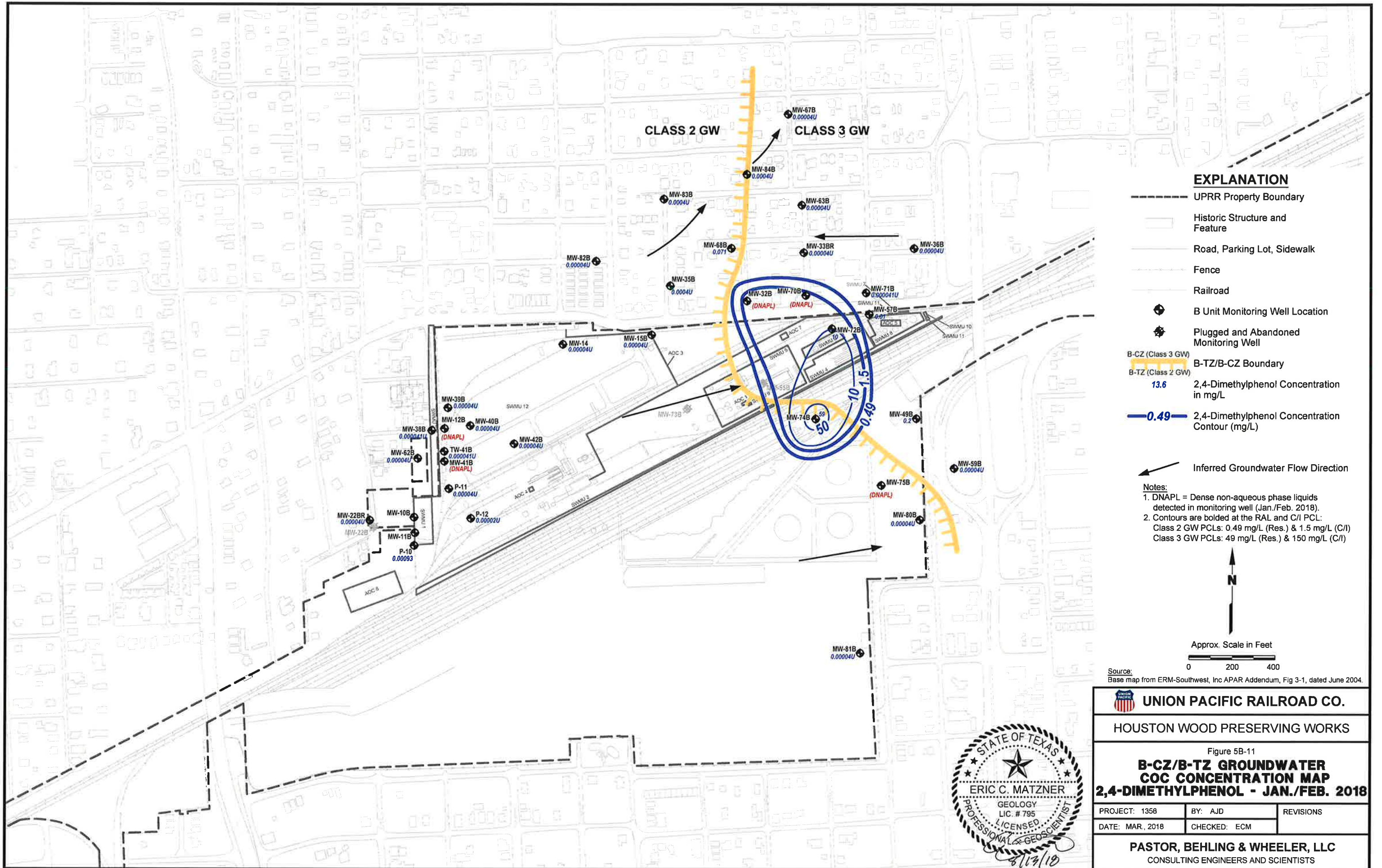
UNION PACIFIC RAILROAD CO.
 HOUSTON WOOD PRESERVING WORKS

Figure 5B-10
**B-CZ/B-TZ GROUNDWATER
 COC CONCENTRATION MAP
 BENZENE - JAN./FEB. 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	

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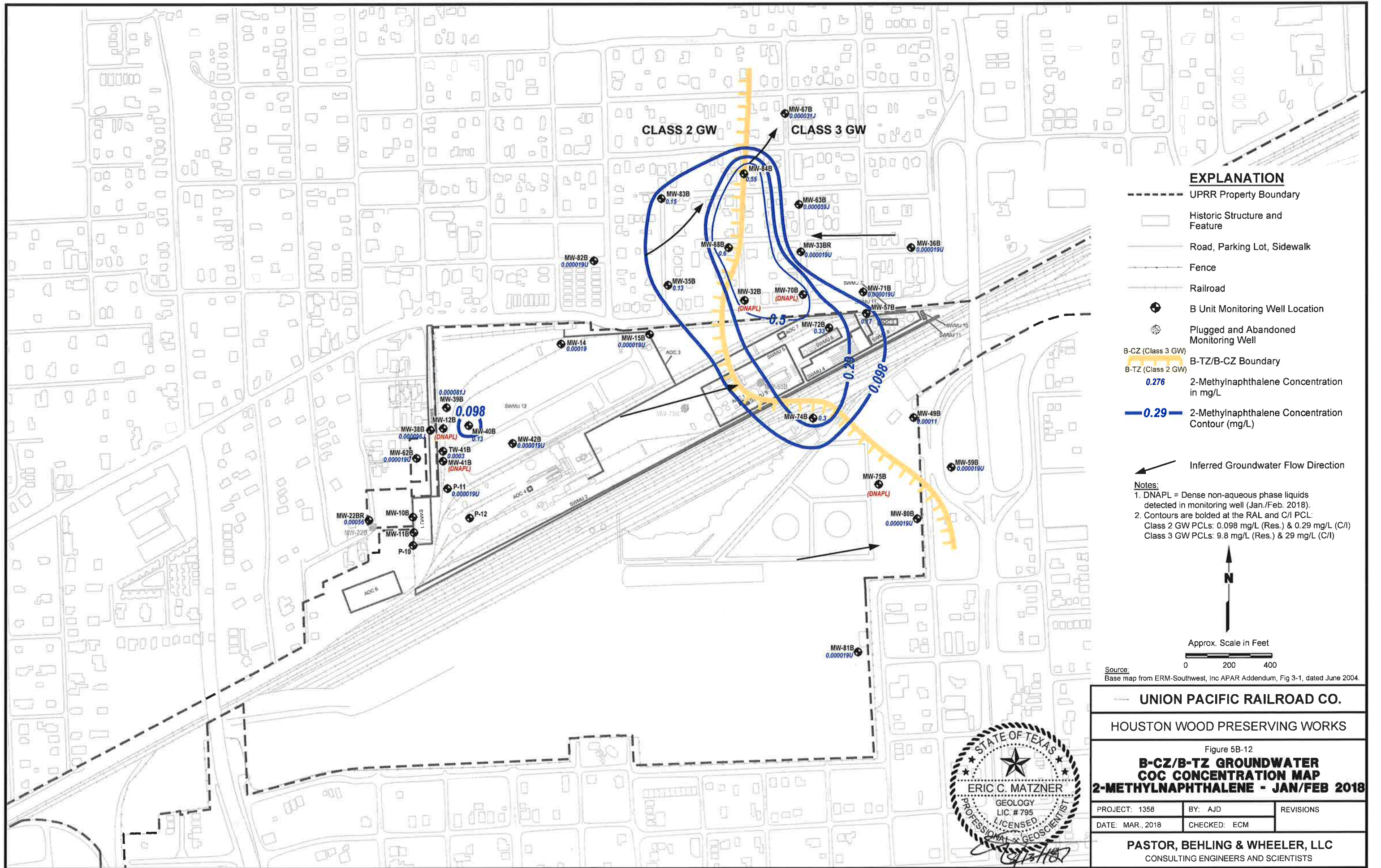
UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Figure 5B-11
**B-CZ/B-TZ GROUNDWATER
 COC CONCENTRATION MAP
 2,4-DIMETHYLPHENOL - JAN./FEB. 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	

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 CONSULTING ENGINEERS AND SCIENTISTS

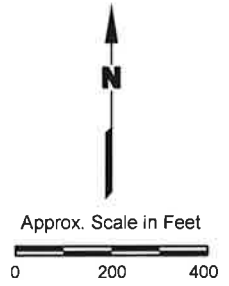




EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊙ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.276** 2-Methylnaphthalene Concentration in mg/L
- 0.29** 2-Methylnaphthalene Concentration Contour (mg/L)
- ↖ Inferred Groundwater Flow Direction

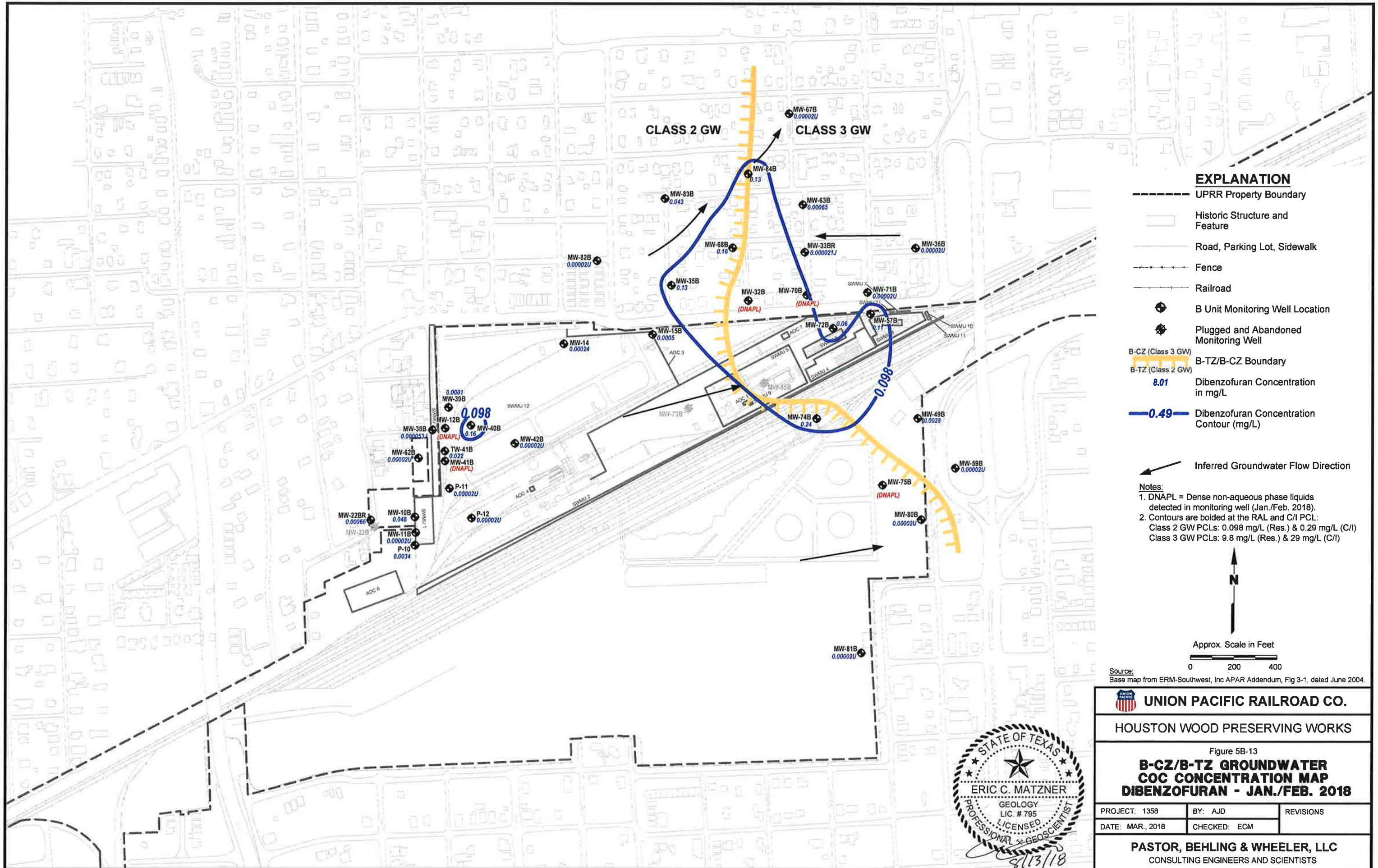
- Notes:**
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCLs: 0.098 mg/L (Res.) & 0.29 mg/L (C/I)
 Class 3 GW PCLs: 9.8 mg/L (Res.) & 29 mg/L (C/I)



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-12		
B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP 2-METHYLNAPHTHALENE - JAN/FEB 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

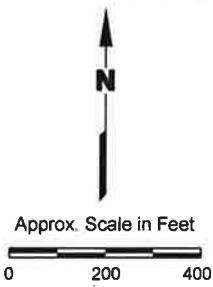




EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW) B-TZ/B-CZ Boundary
- 8.01 Dibenzofuran Concentration in mg/L
- 0.49 Dibenzofuran Concentration Contour (mg/L)
- ↖ Inferred Groundwater Flow Direction

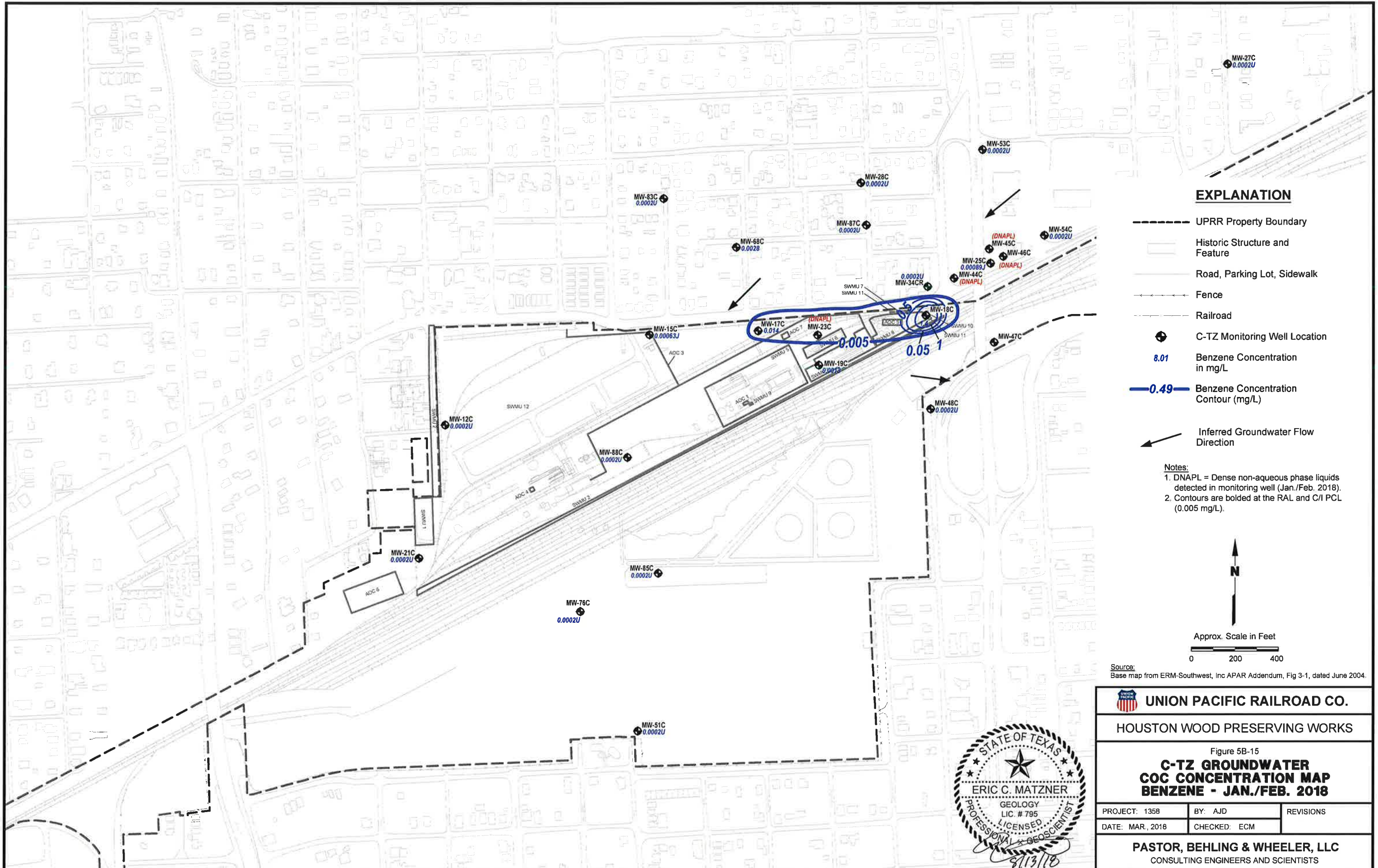
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCLs: 0.098 mg/L (Res.) & 0.29 mg/L (C/I)
 Class 3 GW PCLs: 9.8 mg/L (Res.) & 29 mg/L (C/I)



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



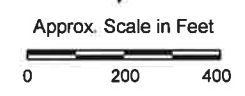
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-13 B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP DIBENZOFURAN - JAN./FEB. 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 8.01 Benzene Concentration in mg/L
- 0.49** Benzene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.005 mg/L).



Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

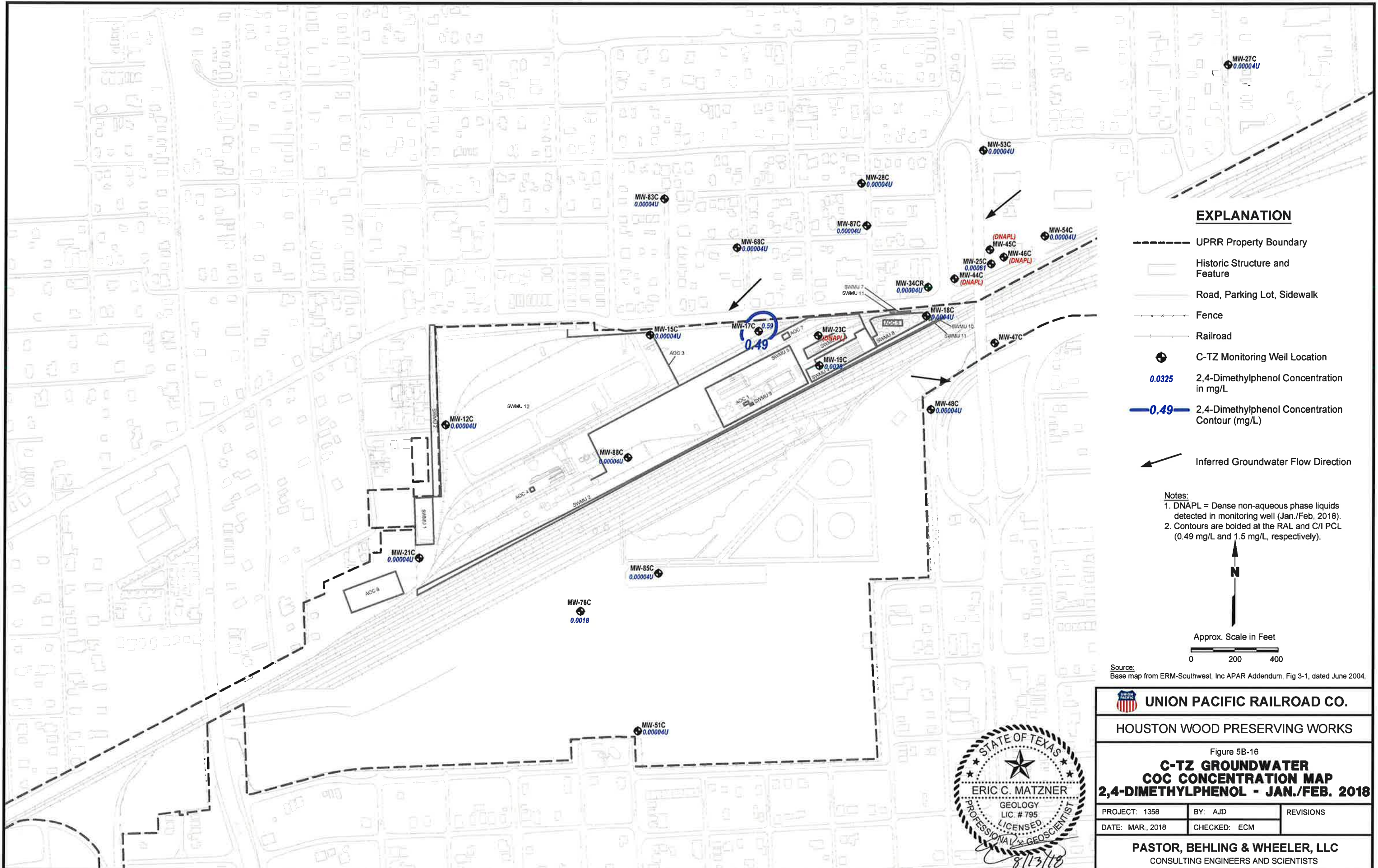
UNION PACIFIC RAILROAD CO.
 HOUSTON WOOD PRESERVING WORKS

Figure 5B-15
**C-TZ GROUNDWATER
 COC CONCENTRATION MAP
 BENZENE - JAN./FEB. 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	

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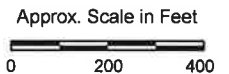




EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▭ Road, Parking Lot, Sidewalk
- Fence
- ▭ Railroad
- ⊕ C-TZ Monitoring Well Location
- 0.0325** 2,4-Dimethylphenol Concentration in mg/L
- 0.49** 2,4-Dimethylphenol Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

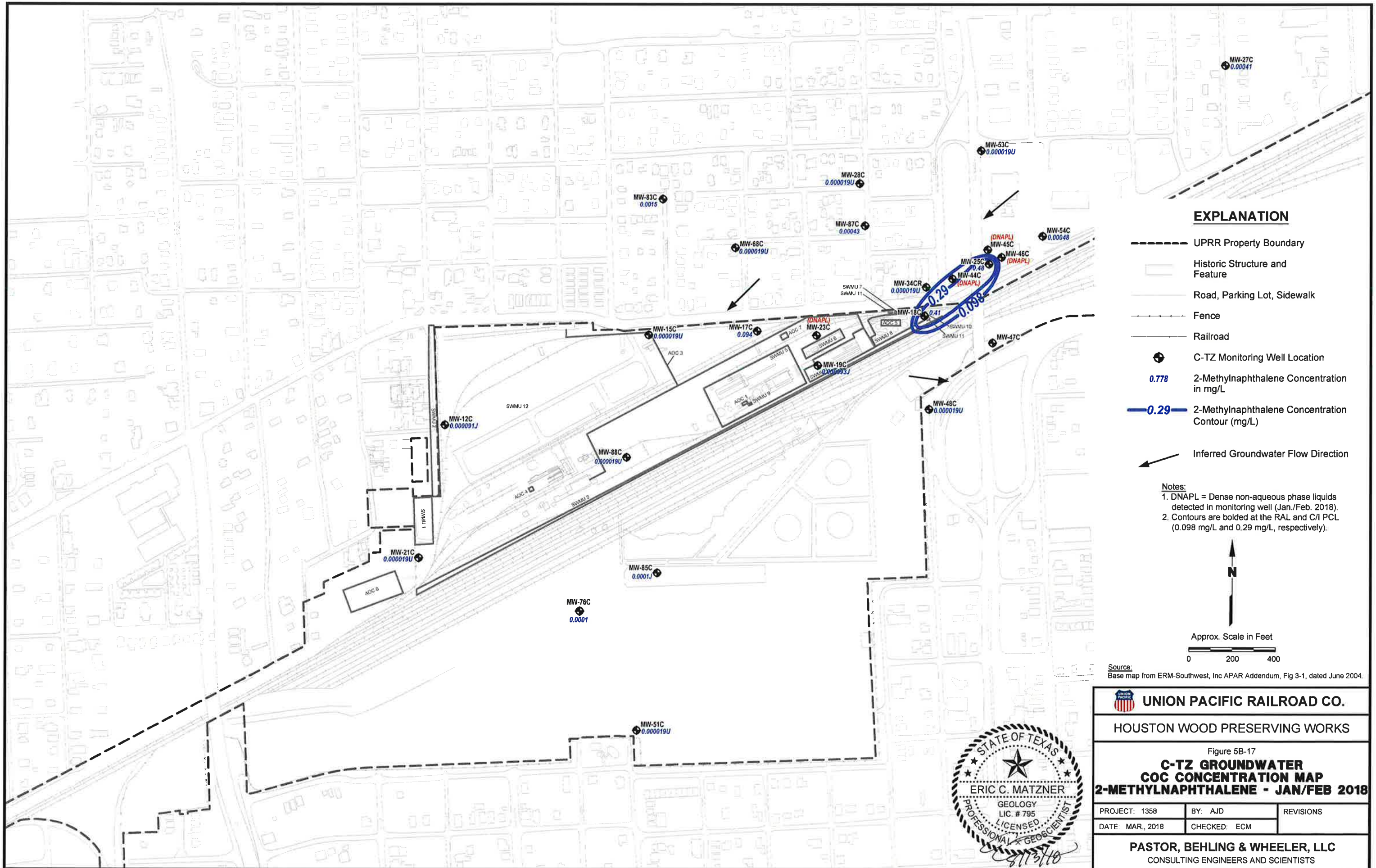
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).



Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-16		
C-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - JAN./FEB. 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



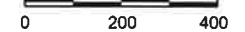
EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 0.778** 2-Methylnaphthalene Concentration in mg/L
- 0.29** 2-Methylnaphthalene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.098 mg/L and 0.29 mg/L, respectively).



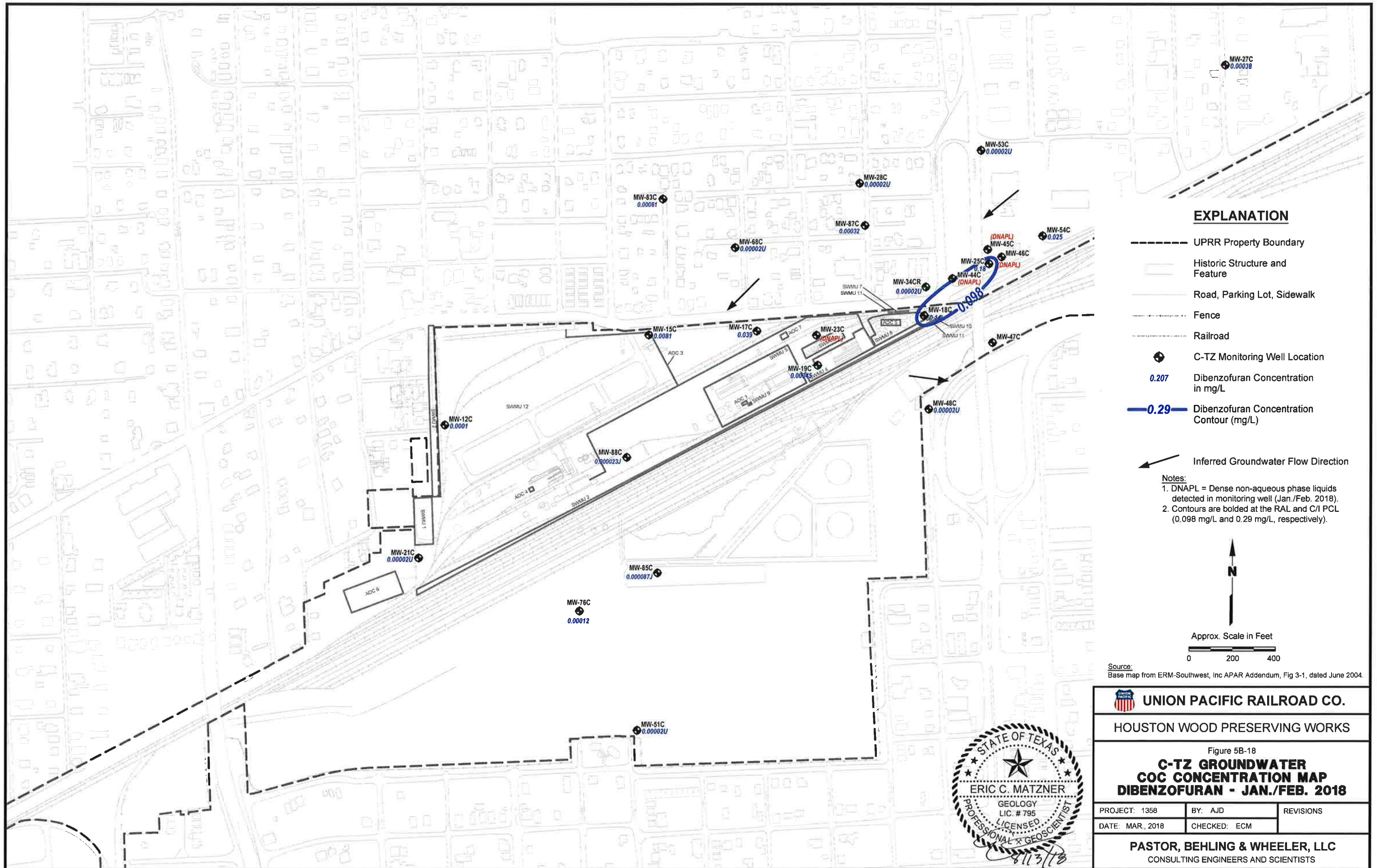
Approx. Scale in Feet



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-17 C-TZ GROUNDWATER COC CONCENTRATION MAP 2-METHYLNAPHTHALENE - JAN/FEB 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - - - Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 0.207** Dibenzofuran Concentration in mg/L
- 0.29** Dibenzofuran Concentration Contour (mg/L)
- ↙ Inferred Groundwater Flow Direction


Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.098 mg/L and 0.29 mg/L, respectively).

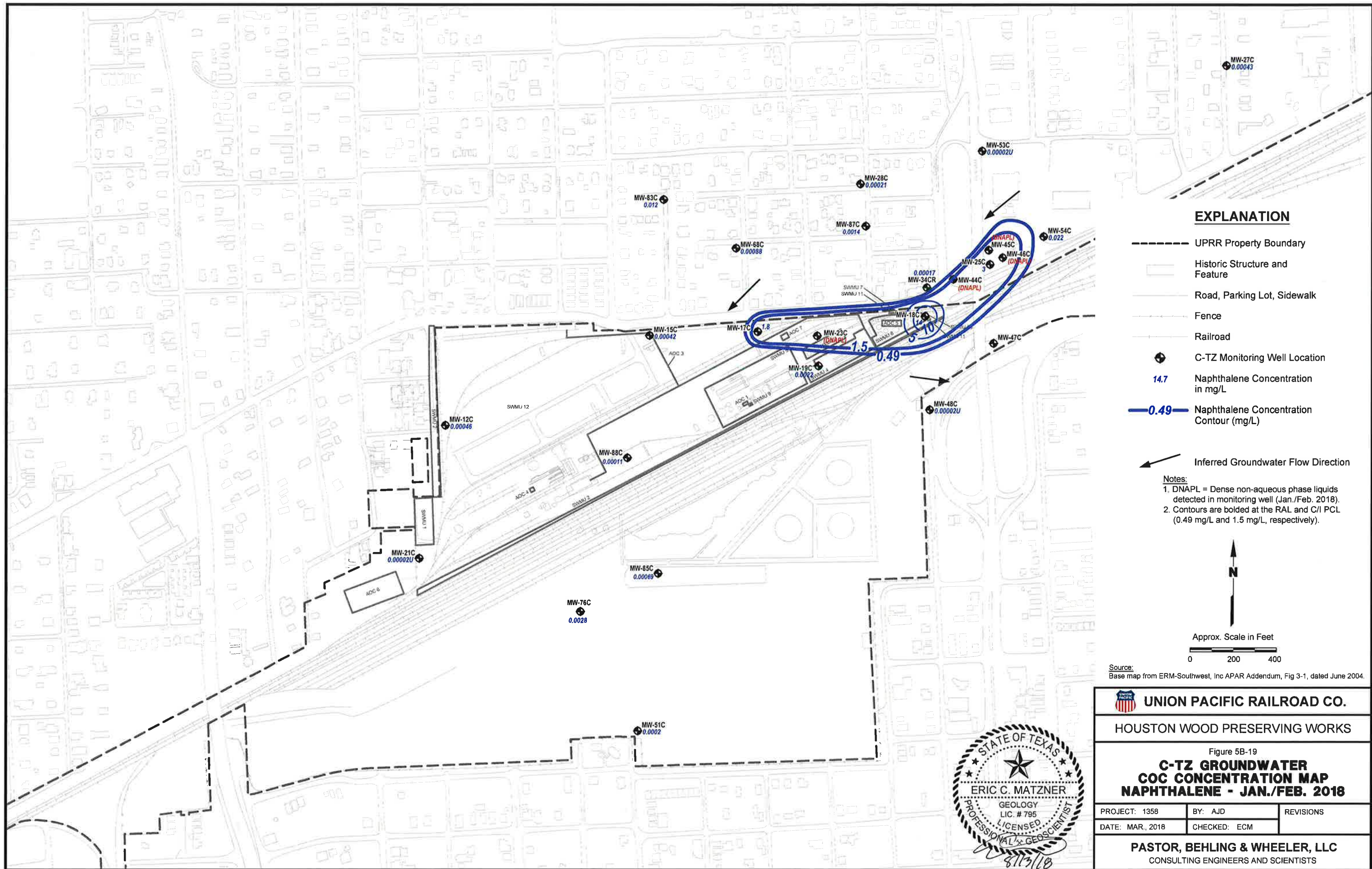


Approx. Scale in Feet
 0 200 400

Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



 UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-18 C-TZ GROUNDWATER COC CONCENTRATION MAP DIBENZOFURAN - JAN./FEB. 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 14.7** Naphthalene Concentration in mg/L
- 0.49** Naphthalene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).



Approx. Scale in Feet
 0 200 400

Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

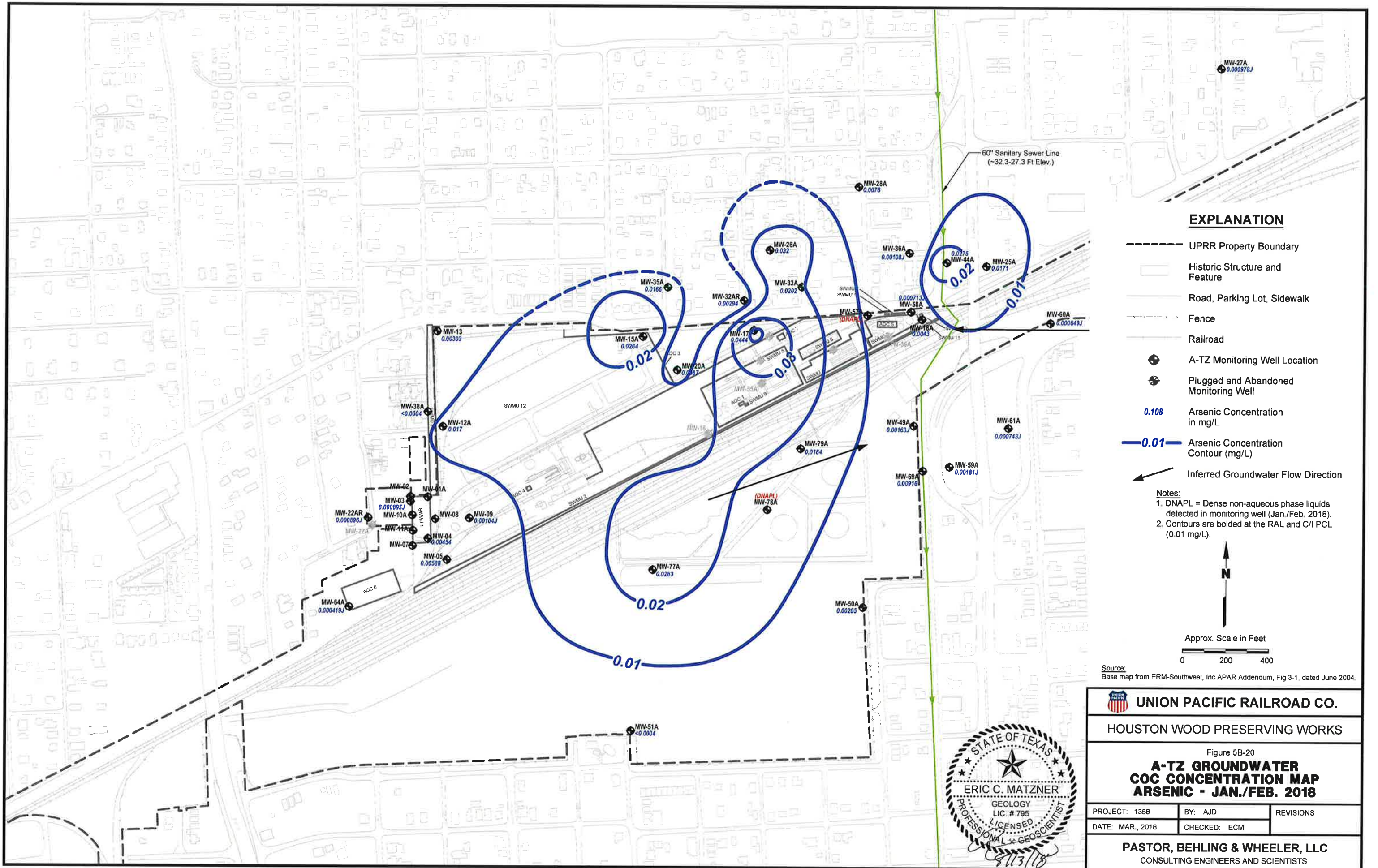
UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Figure 5B-19
**C-TZ GROUNDWATER
 COC CONCENTRATION MAP
 NAPHTHALENE - JAN./FEB. 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
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EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 0.108** Arsenic Concentration in mg/L
- 0.01** Arsenic Concentration Contour (mg/L)
- ↖ Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.01 mg/L).

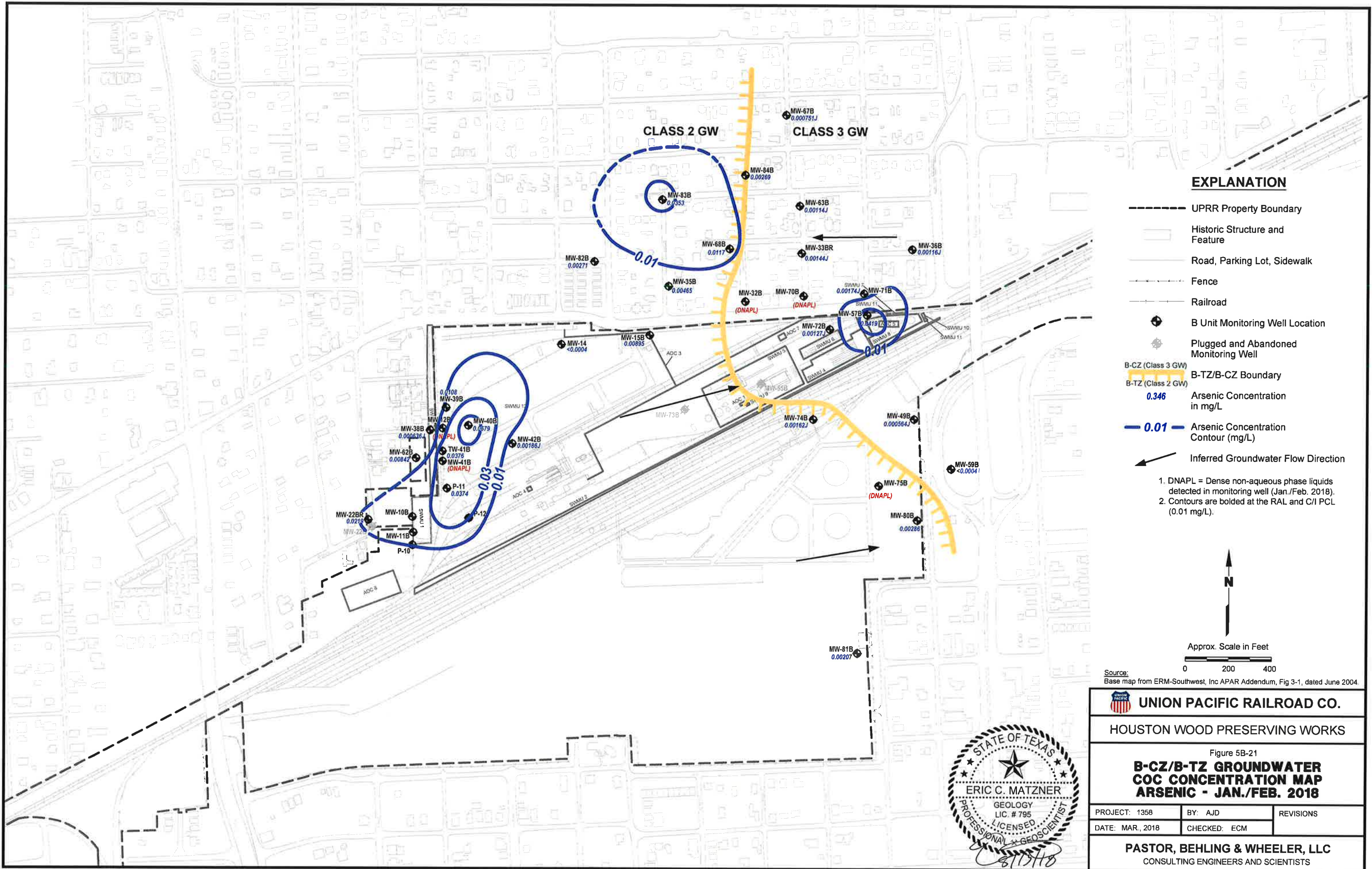


Approx. Scale in Feet
 0 200 400

Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-20		
A-TZ GROUNDWATER COC CONCENTRATION MAP ARSENIC - JAN./FEB. 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.346 Arsenic Concentration in mg/L
- 0.01 Arsenic Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
2. Contours are bolded at the RAL and C/I PCL (0.01 mg/L).



Approx. Scale in Feet
0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.

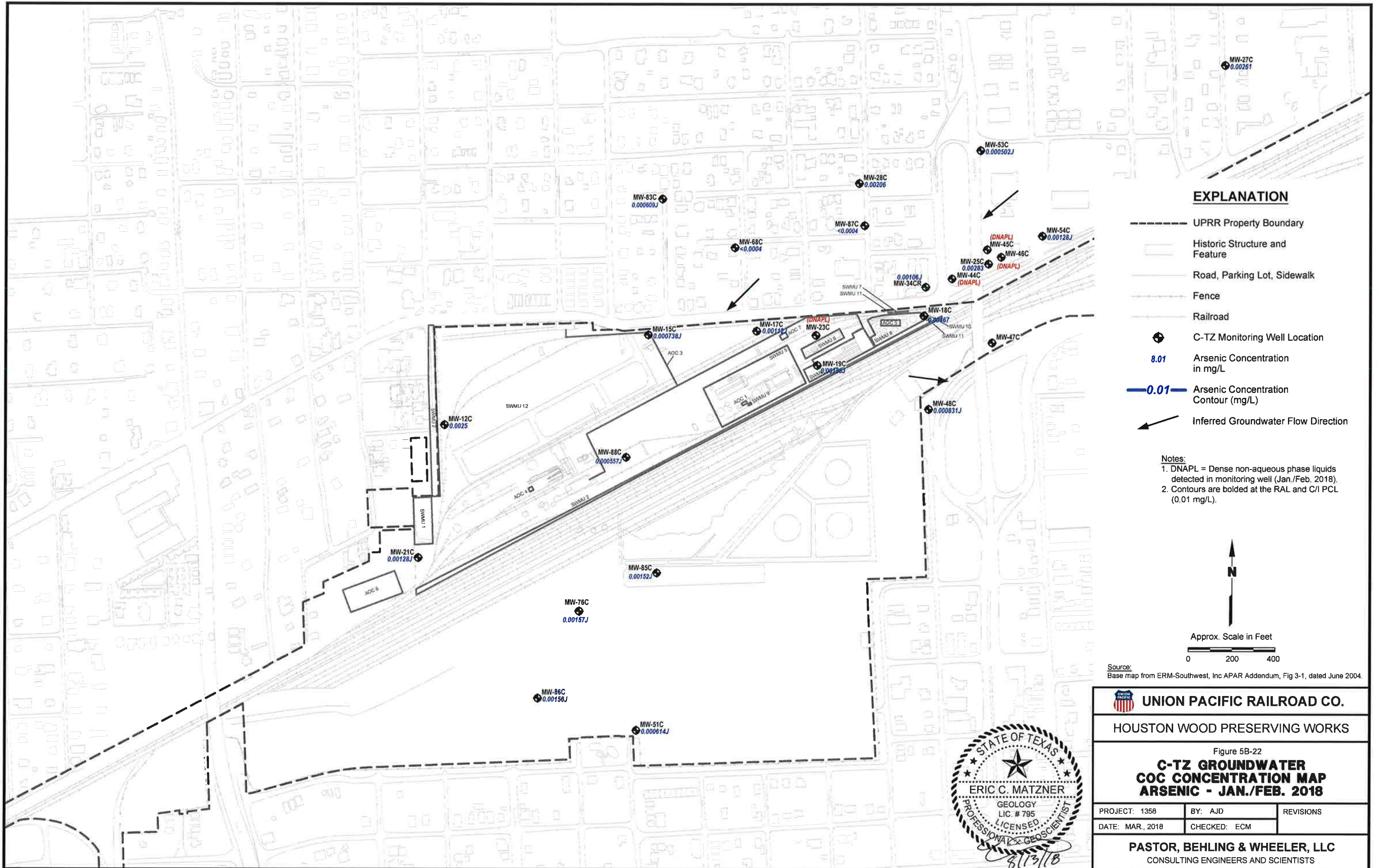
HOUSTON WOOD PRESERVING WORKS

Figure 5B-21
**B-CZ/B-TZ GROUNDWATER
COC CONCENTRATION MAP
ARSENIC - JAN./FEB. 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS





EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 8.01** Arsenic Concentration in mg/L
- 0.01** Arsenic Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (Jan./Feb. 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.01 mg/L).



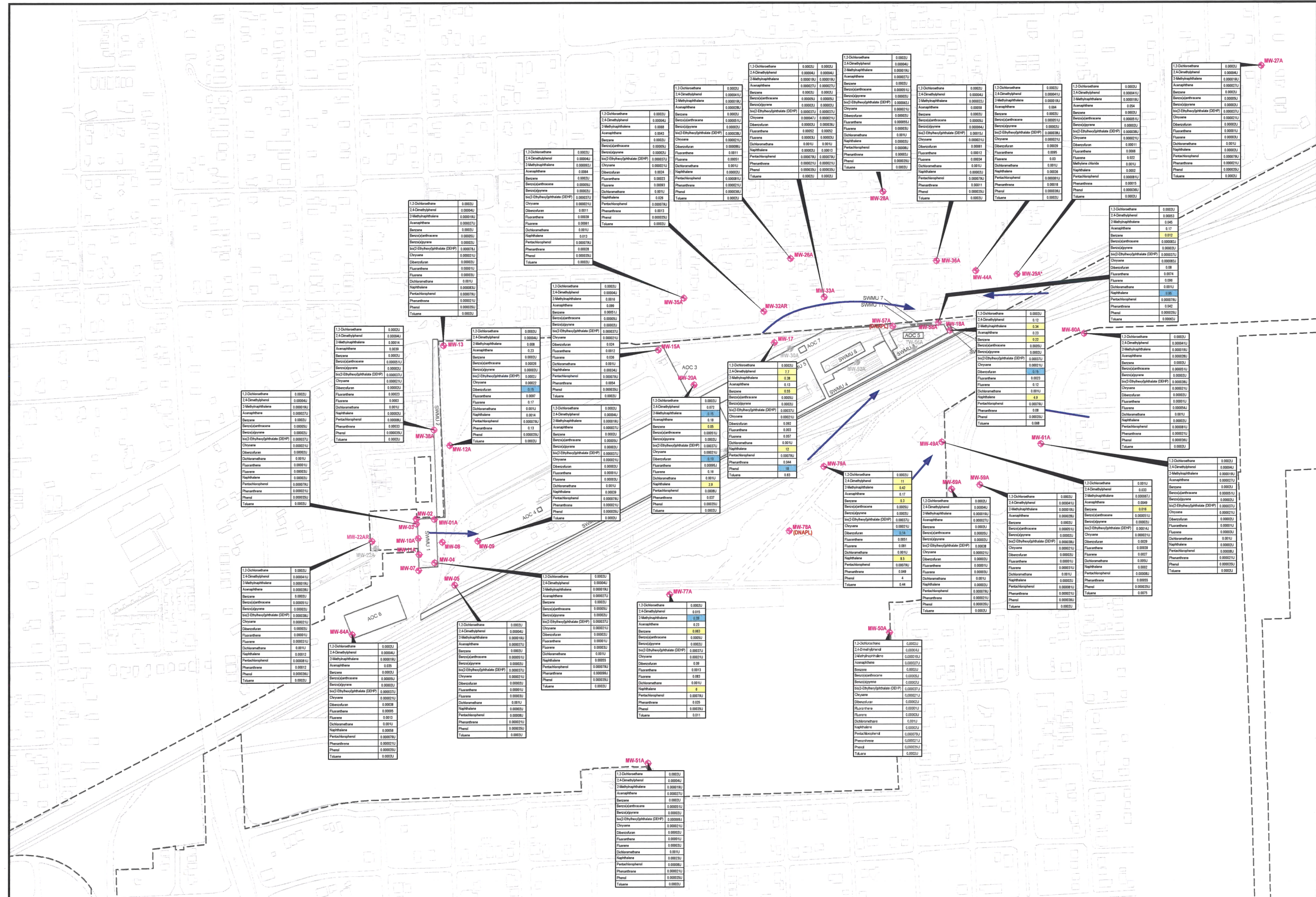
Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-22 C-TZ GROUNDWATER COC CONCENTRATION MAP ARSENIC - JAN./FEB. 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: MAR, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Attachment C2

Groundwater COC Concentrations Maps Mar/Apr 2018 Event



EXPLANATION

- UPRR Property
- - - Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- A-TZ Monitoring Well Location
- Inferred Groundwater Flow Direction

- Notes:
1. All concentrations are in mg/L.
 2. U = Estimated value between SQL and MDL.
 3. U = Not detected (RL/SQL reported).
 4. NA = Not analyzed.
 5. Blue highlighted and bolded concentrations exceed Residential Assessment Level (RALs).
 6. Yellow highlighted and bolded concentrations exceed Commercial Industrial PCIs.
 7. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March/April 2018).
 8. During the March/April 2018 sampling event, MW-25A and MW-25C were most likely mislabeled and have been switched.

Protective Concentration Levels (PCLs)

Parameter	RAL (mg/L)	PCI (mg/L)
1,2-Dichlorobenzene	0.005	0.005
1,4-Dimethylphenol	0.005	0.005
2-Methylnaphthalene	0.08	0.25
Acenaphthene	0.08	0.25
Benzocyclopentadiene	0.005	0.005
Benzofuran	0.005	0.005
Benzonitrile	0.005	0.005
Chrysene	0.005	0.005
Dibenzofuran	0.005	0.005
Dibenzothiophene	0.005	0.005
Fluorene	0.005	0.005
Fluoranthene	0.005	0.005
Indeno(1,2,3-cd)pyrene	0.005	0.005
Naphthalene	0.005	0.005
Phenanthrene	0.005	0.005
Phenol	0.005	0.005
Pyrene	0.005	0.005
Toluene	0.005	0.005

- SWMUAOC AREAS**
- | No. | Description |
|---------|---|
| SWMU 1 | Closed Surface Impoundment |
| SWMU 2 | Northern and Southern Drainage Ditches |
| SWMU 4 | Recent Process Area |
| SWMU 5 | Original Process Area |
| SWMU 6 | Water Treatment and Boiler System |
| SWMU 7 | Tank Car Storage Area |
| SWMU 8 | Aboveground Storage Tank Area |
| SWMU 9 | Location of Former UST No. 44-223-05 |
| SWMU 10 | Location of Former Sap Water Treatment Tank |
| SWMU 11 | Oil/Water Separators |
| SWMU 12 | Railroad Tie Storage Area |
- AOC 1 Diesel Storage Tank
 AOC 3 Contaminated Portion of City Water Line
 AOC 4 Location of Former Incinerator
 AOC 5 City Storm Sewer
 AOC 6 Inactive Wastewater Lagoon
 AOC 7 Location of Former UST No. 44-223-21
- Note: Locations of SWMU-9 and AOCs 1, 3, 5 and 7 area approximate.



Scale in Feet
 0 200 400

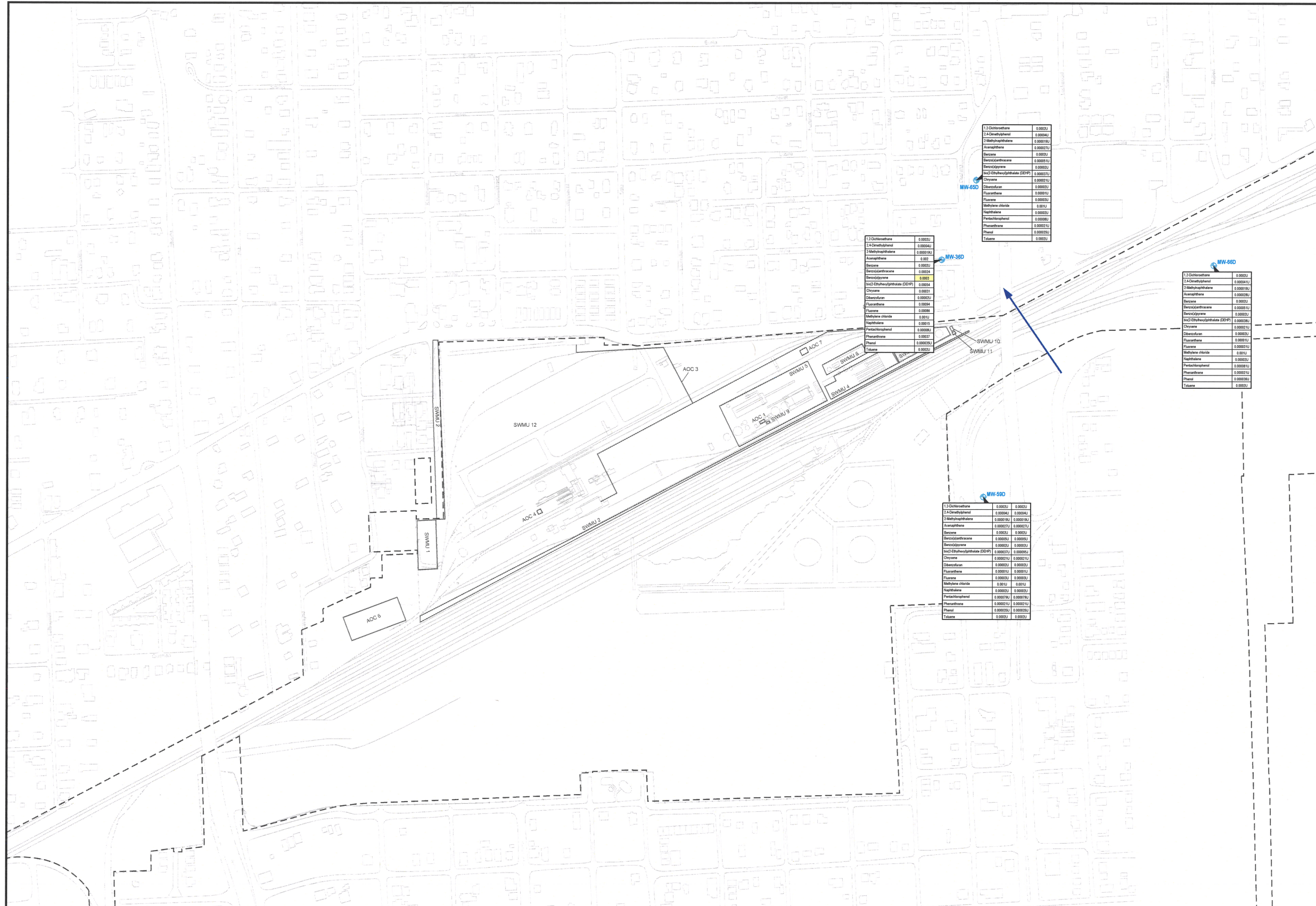
Source: Base map from ERM-Southwest, Inc. APAC Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Figure 5B-1
GROUNDWATER COC CONCENTRATION MAP
A-TZ - MARCH/APRIL 2018

PROJECT: 1358	BY: AJD	REVISIONS:
DATE: MAY, 2018	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS



EXPLANATION

- UPRR Property
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ D-TZ Monitoring Well Location
- ➔ Inferred Groundwater Flow Direction

- Notes:**
1. All concentrations are in mg/L.
 2. J = Estimated value between SQL and MDL.
 3. U = Not detected (RL/SQL reported).
 4. NA = Not analyzed.
 5. Blue highlighted and bolded concentrations exceed Residential Assessment Level (RALs).
 6. Yellow highlighted and bolded concentrations exceed Commercial Industrial PCLs.
 7. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March/April 2018).

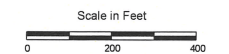
Protective Concentration Levels (PCLs)

Parameter	Res. (mg/L)	Com. (mg/L)
1,2-Dichlorobenzene	0.005	0.005
1,4-Dichlorobenzene	0.005	0.005
2,4-Dichlorophenol	0.49	1.5
Acenaphthene	0.00018	0.00018
Benzo(a)anthracene	0.0001	0.0001
Benzo(a)pyrene	0.00003	0.00003
Benzo(b)fluoranthene	0.0001	0.0001
Benzo(k)fluoranthene	0.00003	0.00003
Chrysene	0.0001	0.0001
Dibenz(a,h)anthracene	0.00003	0.00003
Fluorene	0.0001	0.0001
Indeno(1,2,3-cd)perylene	0.00003	0.00003
Phenanthrene	0.0001	0.0001
Pyrene	0.00003	0.00003
Toluene	0.0001	0.0001

SWMU/AOC AREAS

- | No. | Description |
|---------|---|
| SWMU 1 | Closed Surface Impoundment |
| SWMU 2 | Northern and Southern Drainage Ditches |
| SWMU 4 | Recent Process Area |
| SWMU 5 | Original Process Area |
| SWMU 6 | Water Treatment and Boiler System |
| SWMU 7 | Tank Car Storage Area |
| SWMU 8 | Aboveground Storage Tank Area |
| SWMU 9 | Location of Former UST No. 44-023-05 |
| SWMU 10 | Location of Former Sap Water Treatment Tank |
| SWMU 11 | Oil/Water Separators |
| SWMU 12 | Railroad Tie Storage Area |
-
- | ACOC | Description |
|--------|---|
| ACOC 1 | Diesel Storage Tank |
| ACOC 3 | Contaminated Portion of City Water Line |
| ACOC 4 | Location of Former Incinerator |
| ACOC 5 | City Storm Sewer |
| ACOC 6 | Inactive Wastewater Lagoon |
| ACOC 7 | Location of Former UST No. 44-023-21 |

Notes:
Locations of SWMU-8 and AOCs 1, 3, 5 and 7 area approximate.



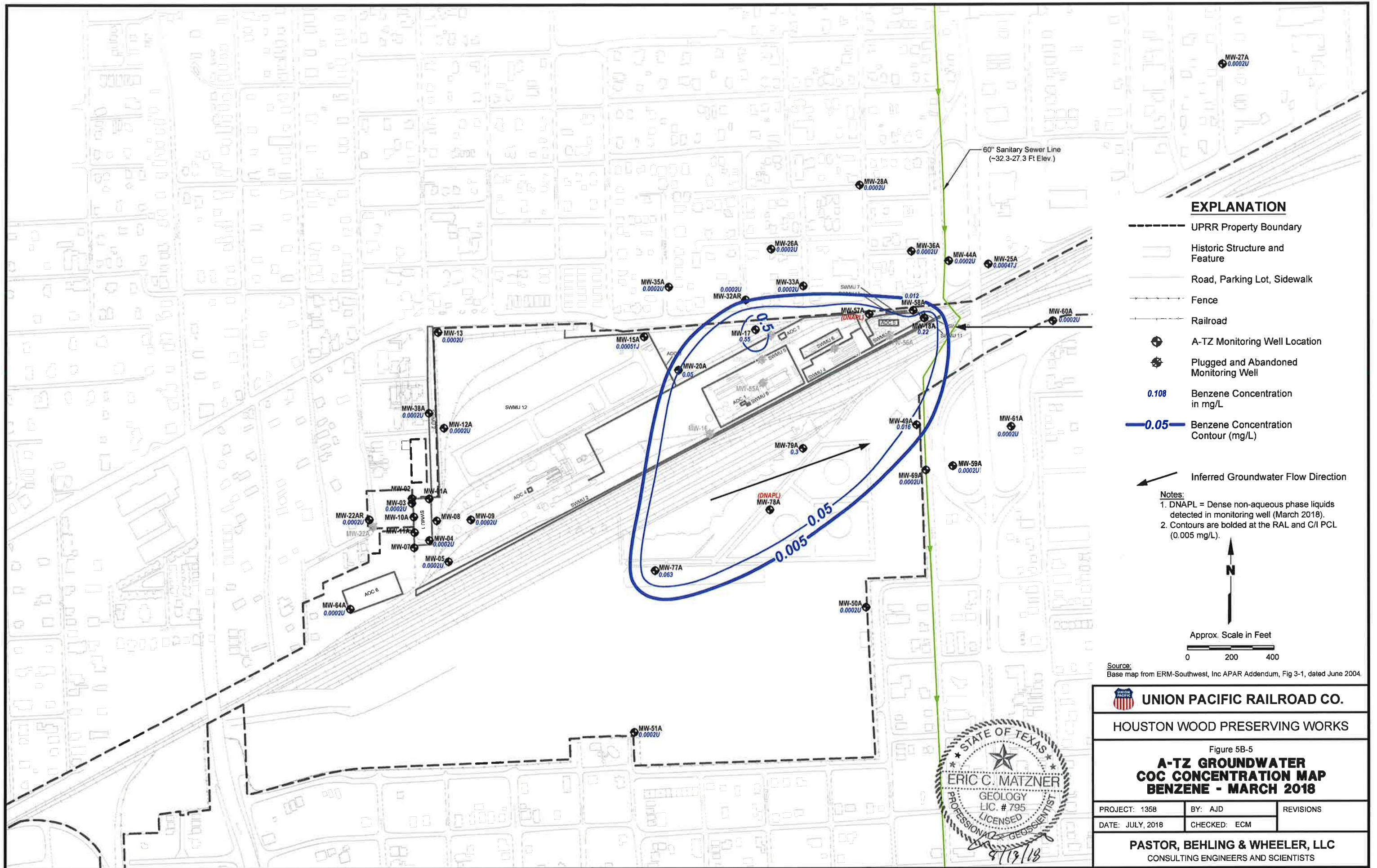
Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

**Figure 5B-4
GROUNDWATER COC
CONCENTRATION MAP
D-TZ - MARCH/APRIL 2018**

PROJECT: 1358	BY: AJD	REVISIONS:
DATE: MAY, 2018	CHECKED: ECM	

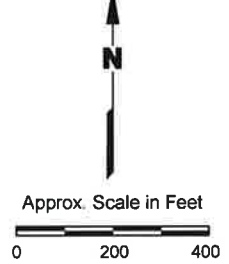
PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS



EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 0.108 Benzene Concentration in mg/L
- 0.05 Benzene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

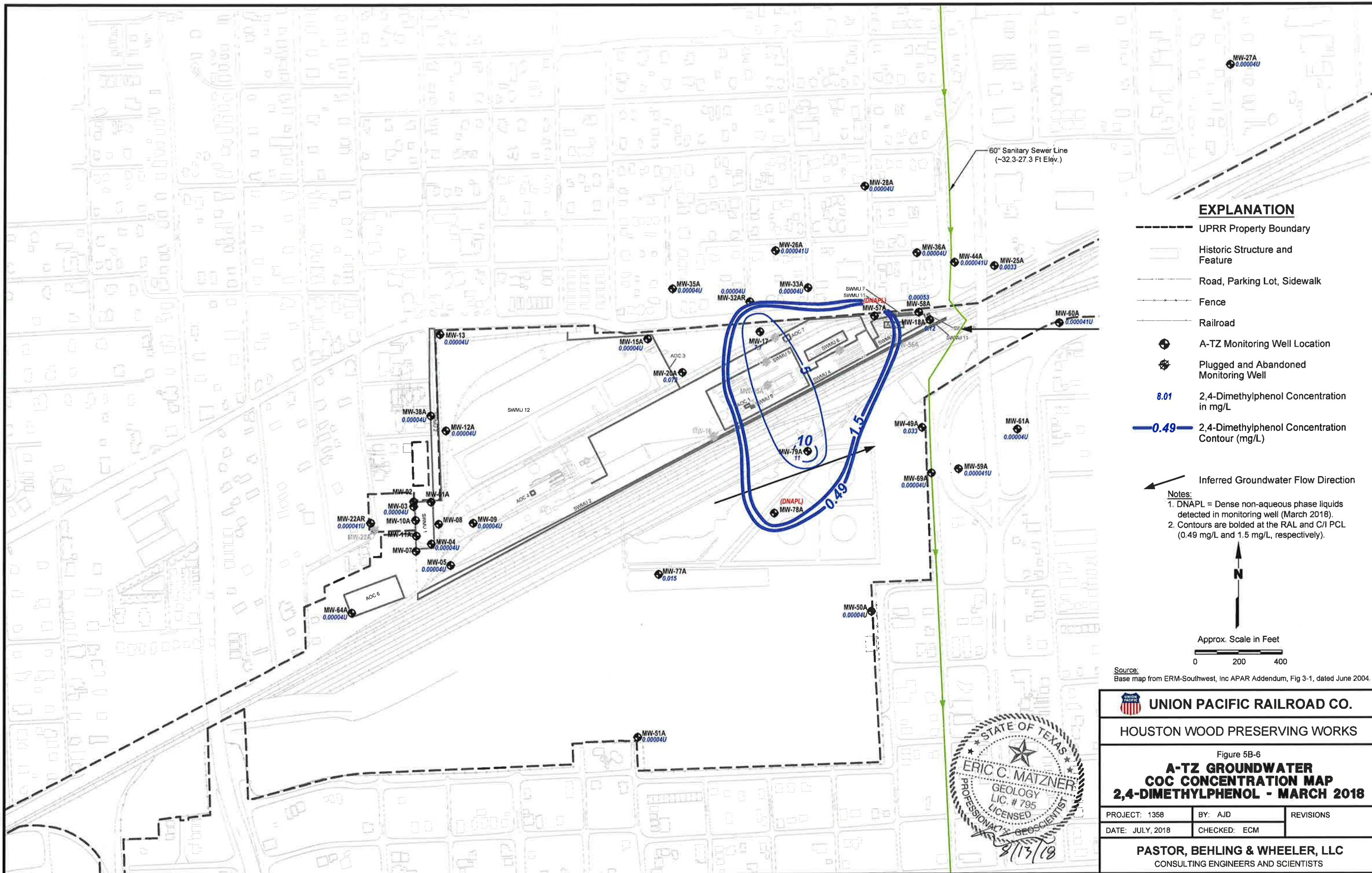
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.005 mg/L).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-5 A-TZ GROUNDWATER COC CONCENTRATION MAP BENZENE - MARCH 2018		
PROJECT: 1358	BY: A/JD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

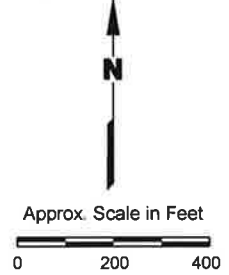




EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 8.01 2,4-Dimethylphenol Concentration in mg/L
- 0.49 2,4-Dimethylphenol Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

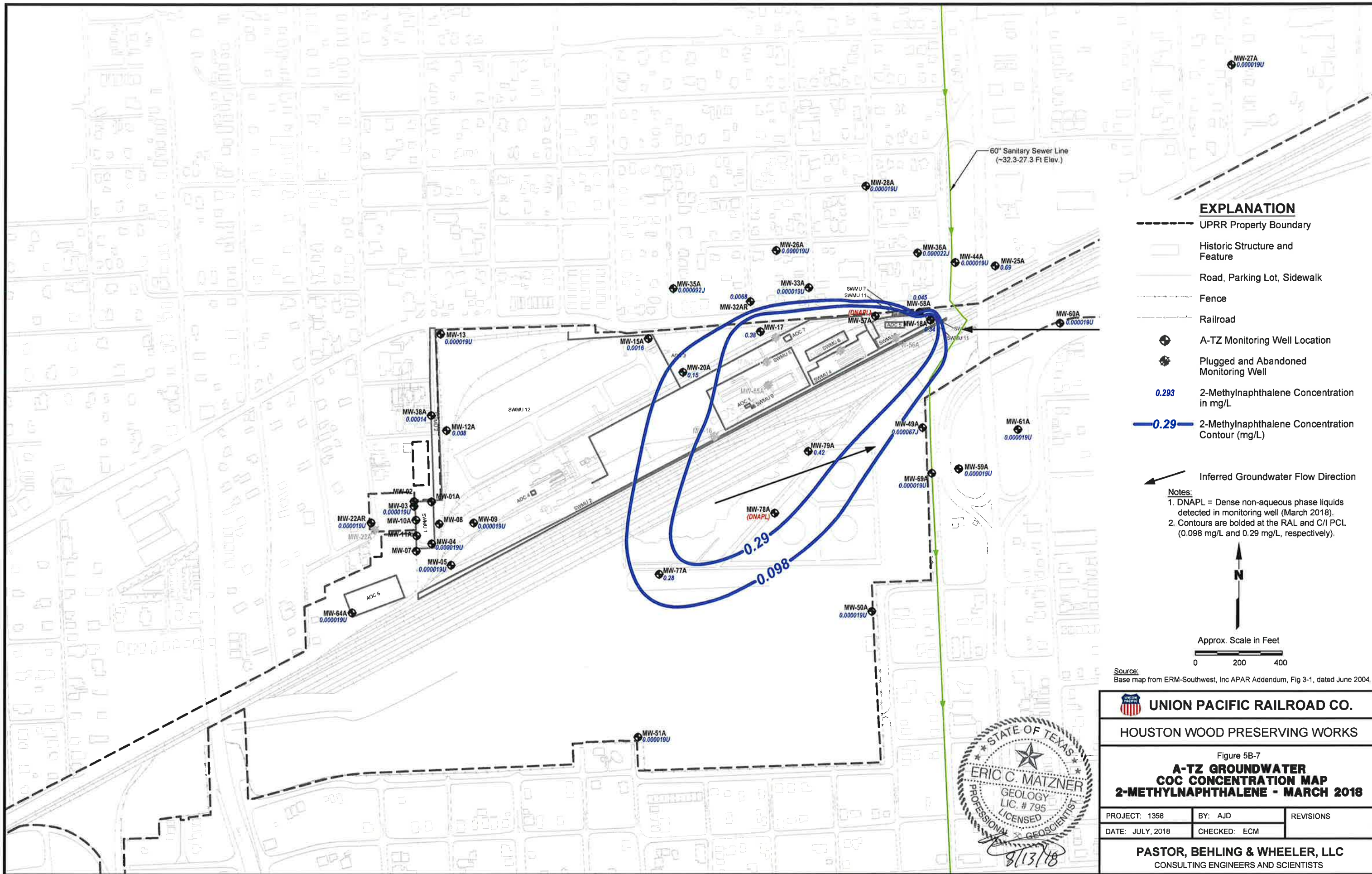
- Notes:
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).

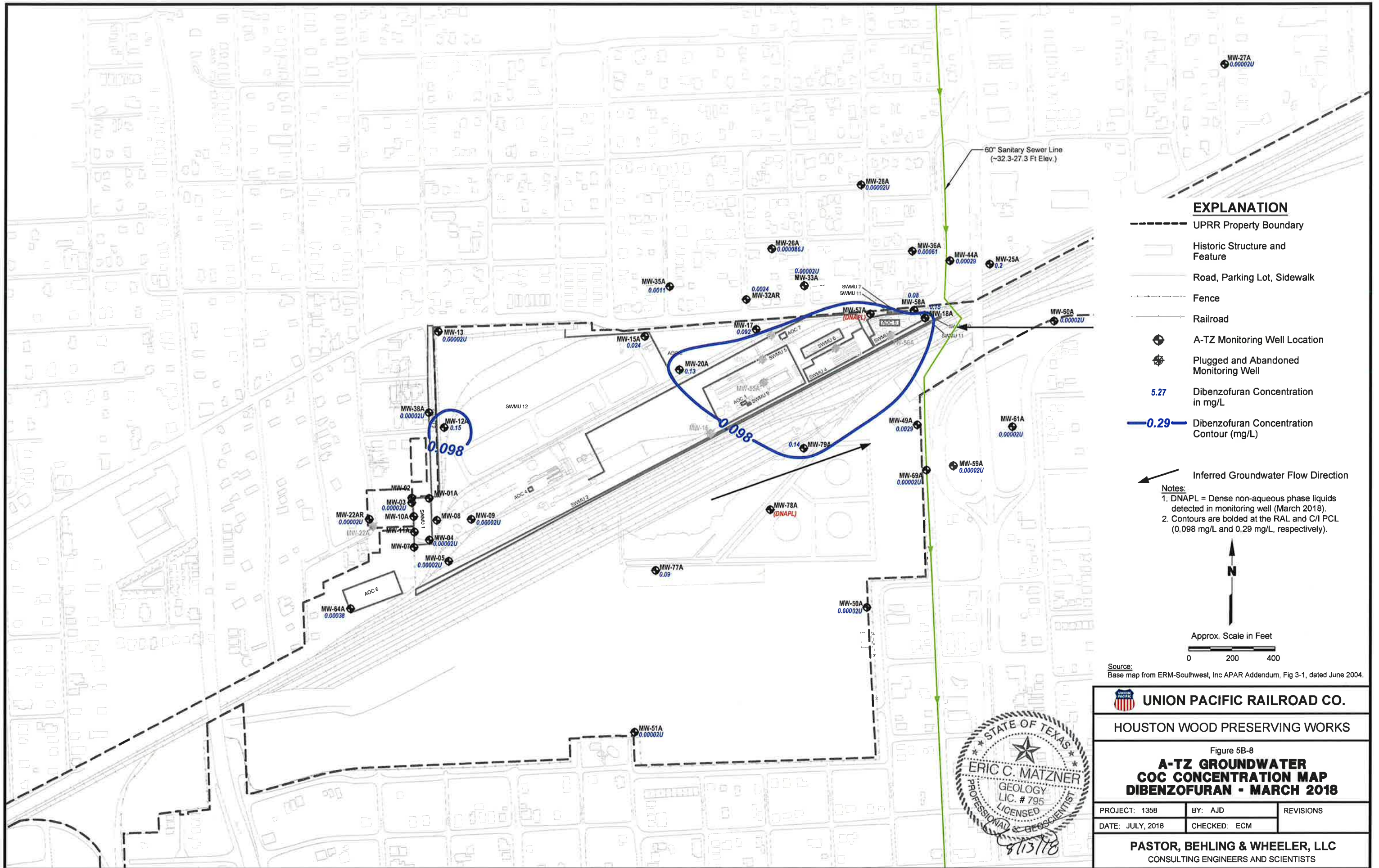


Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-6 A-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



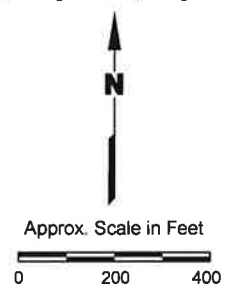




EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- 5.27 Dibenzofuran Concentration in mg/L
- 0.29** Dibenzofuran Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

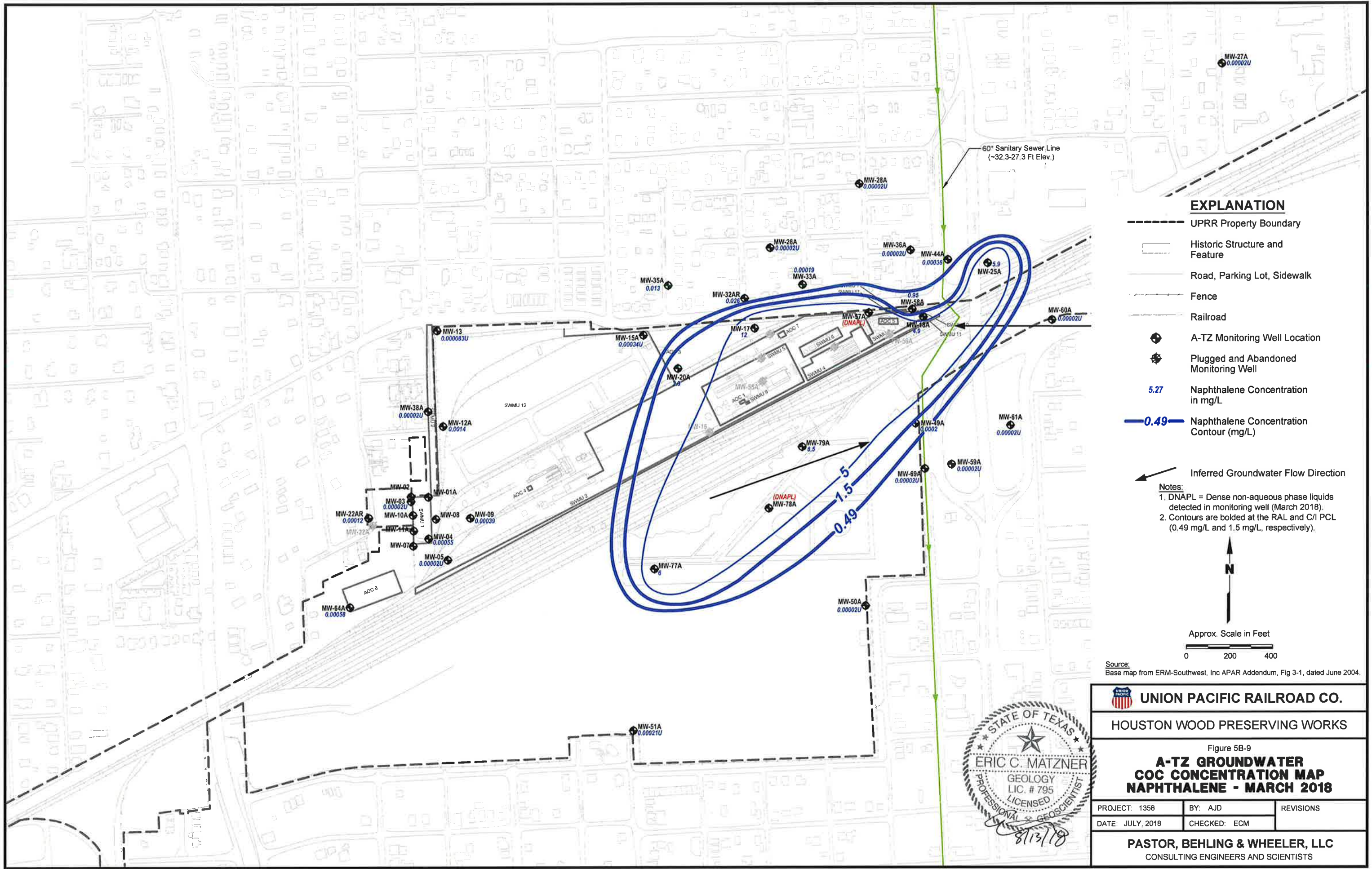
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.098 mg/L and 0.29 mg/L, respectively).



Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-8		
A-TZ GROUNDWATER COC CONCENTRATION MAP DIBENZOFURAN - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

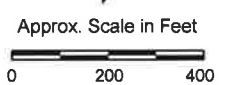




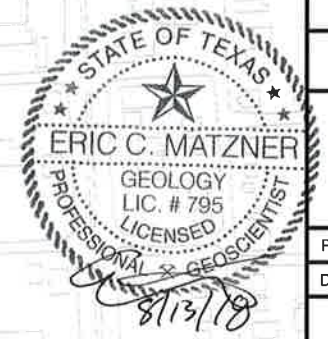
EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 5.27 Naphthalene Concentration in mg/L
- 0.49** Naphthalene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

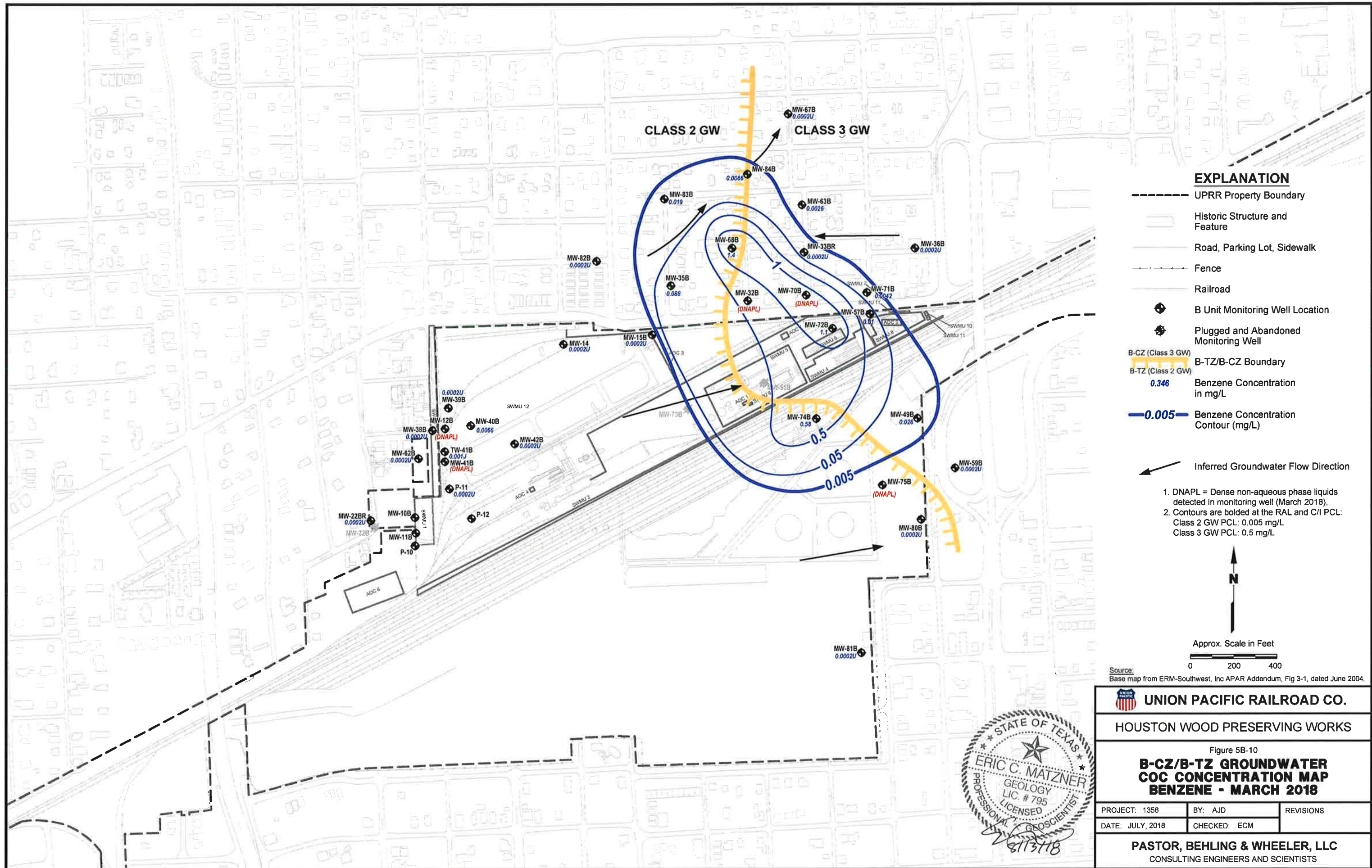
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).



Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



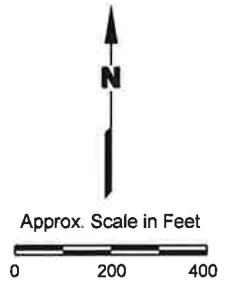
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-9 A-TZ GROUNDWATER COC CONCENTRATION MAP NAPHTHALENE - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



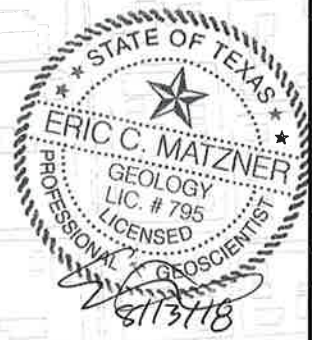
EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.346 Benzene Concentration in mg/L
- 0.005 Benzene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

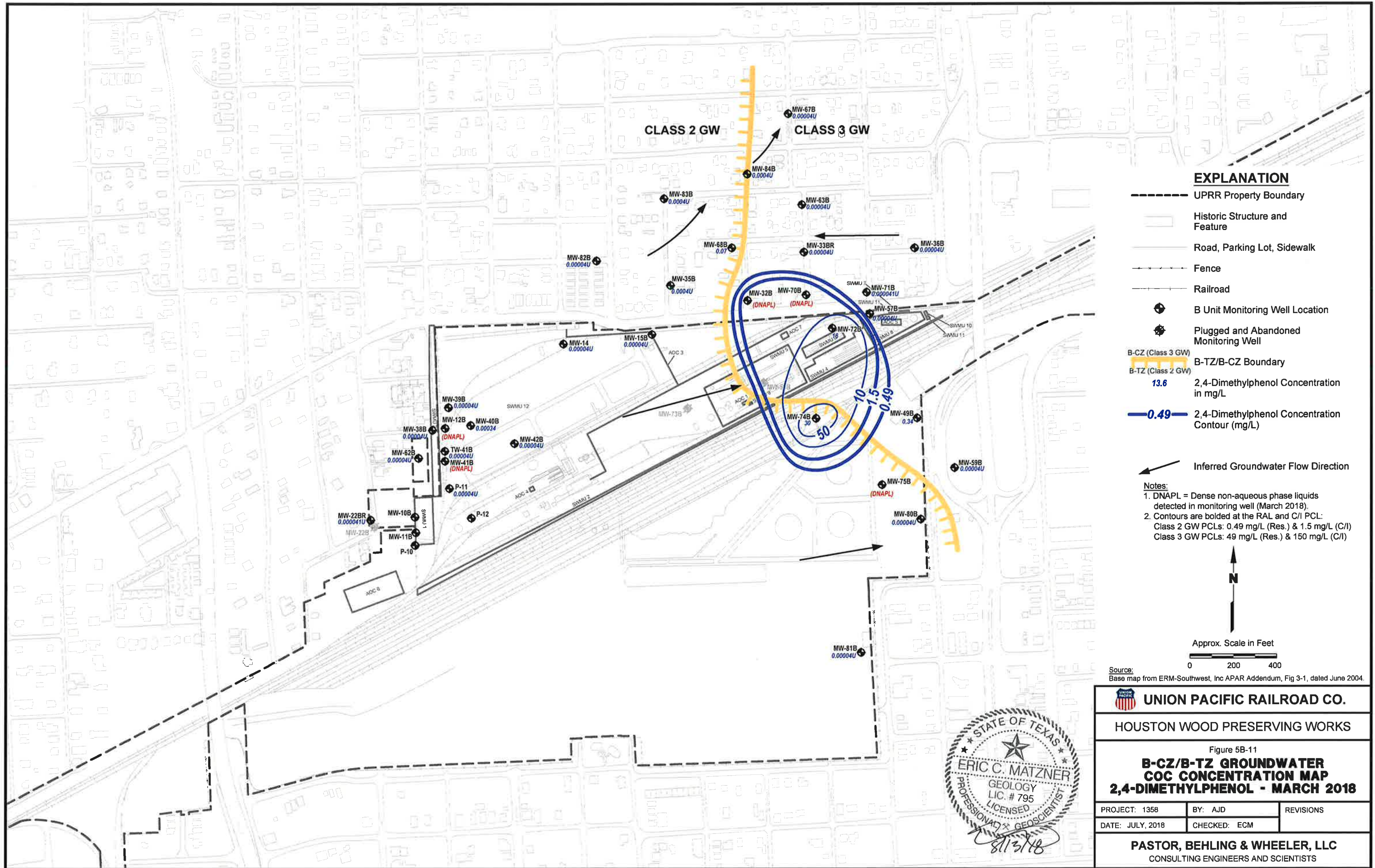
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCL: 0.005 mg/L
 Class 3 GW PCL: 0.5 mg/L



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



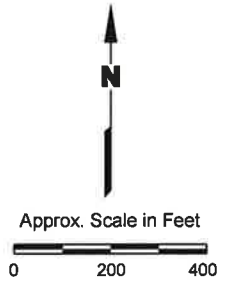
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-10		
B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP BENZENE - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



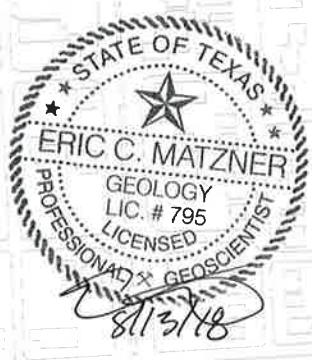
EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 13.6 2,4-Dimethylphenol Concentration in mg/L
- 0.49 2,4-Dimethylphenol Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

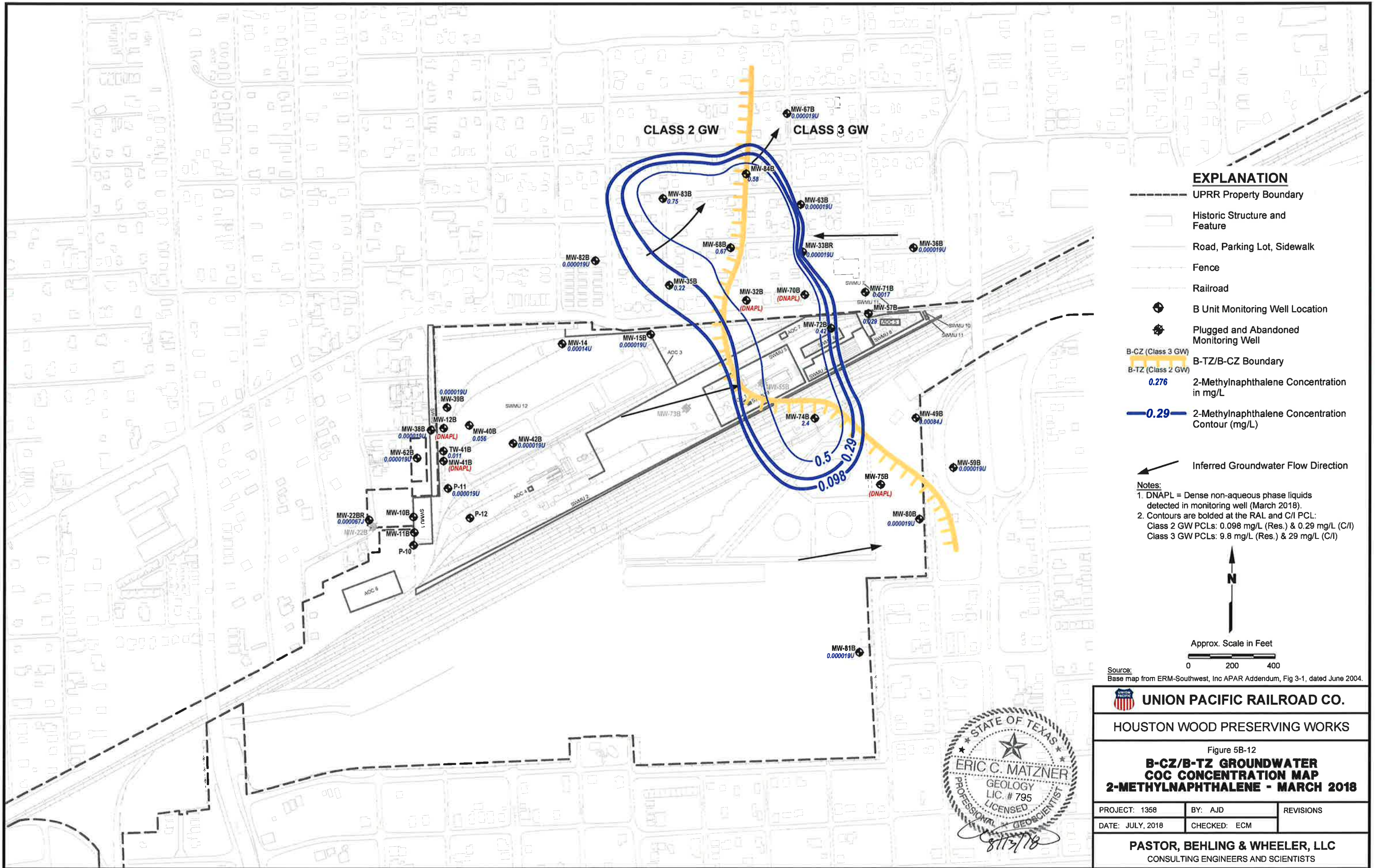
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCLs: 0.49 mg/L (Res.) & 1.5 mg/L (C/I)
 Class 3 GW PCLs: 49 mg/L (Res.) & 150 mg/L (C/I)



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



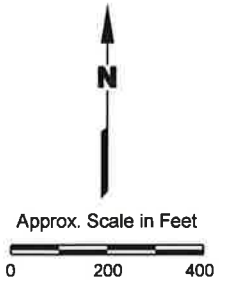
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-11		
B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▭ Road, Parking Lot, Sidewalk
- ▭ Fence
- ▭ Railroad
- ⊕ B Unit Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.276 2-Methylnaphthalene Concentration in mg/L
- 0.29 2-Methylnaphthalene Concentration Contour (mg/L)
- ↙ Inferred Groundwater Flow Direction

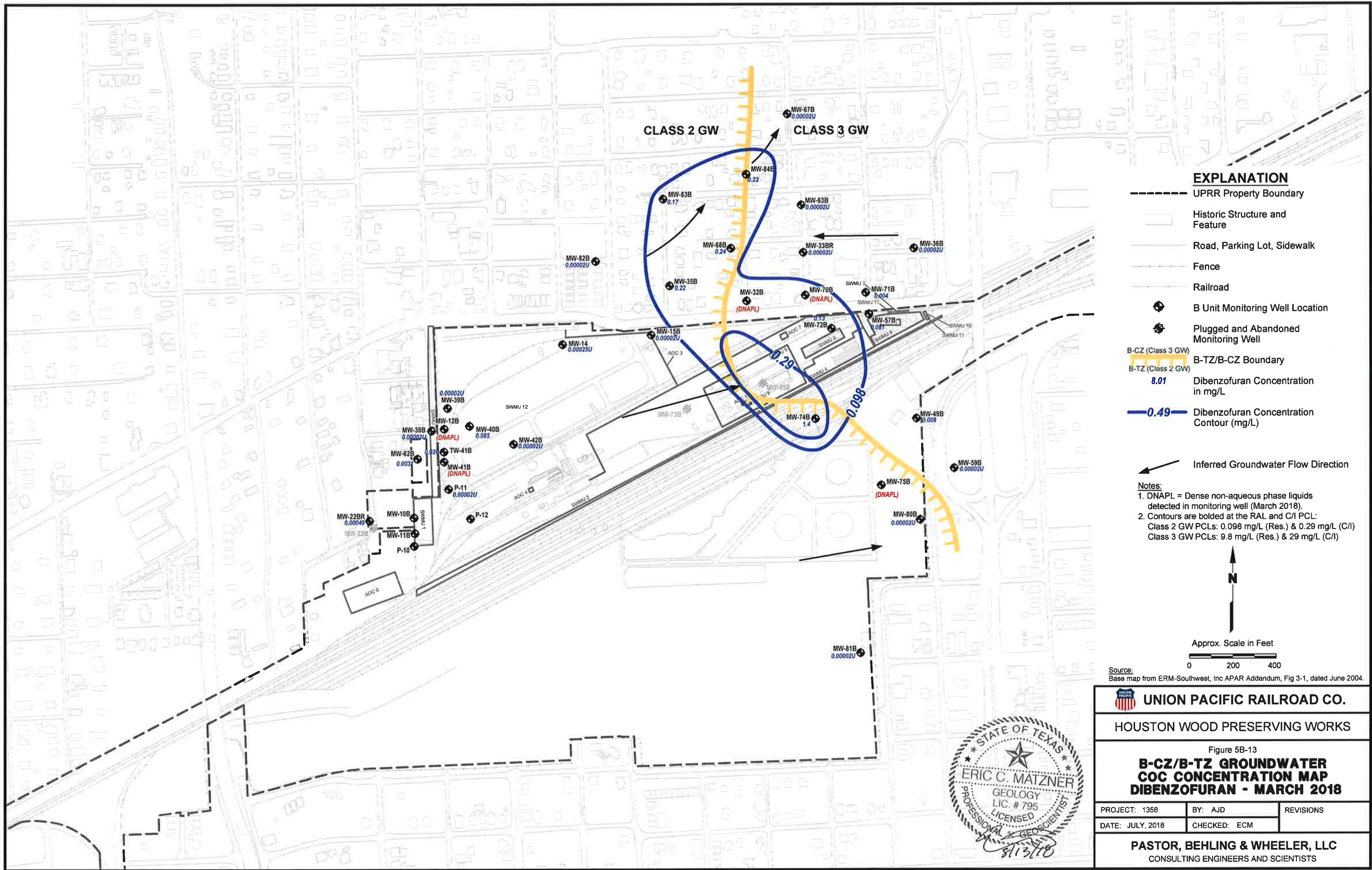
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCLs: 0.098 mg/L (Res.) & 0.29 mg/L (C/I)
 Class 3 GW PCLs: 9.8 mg/L (Res.) & 29 mg/L (C/I)

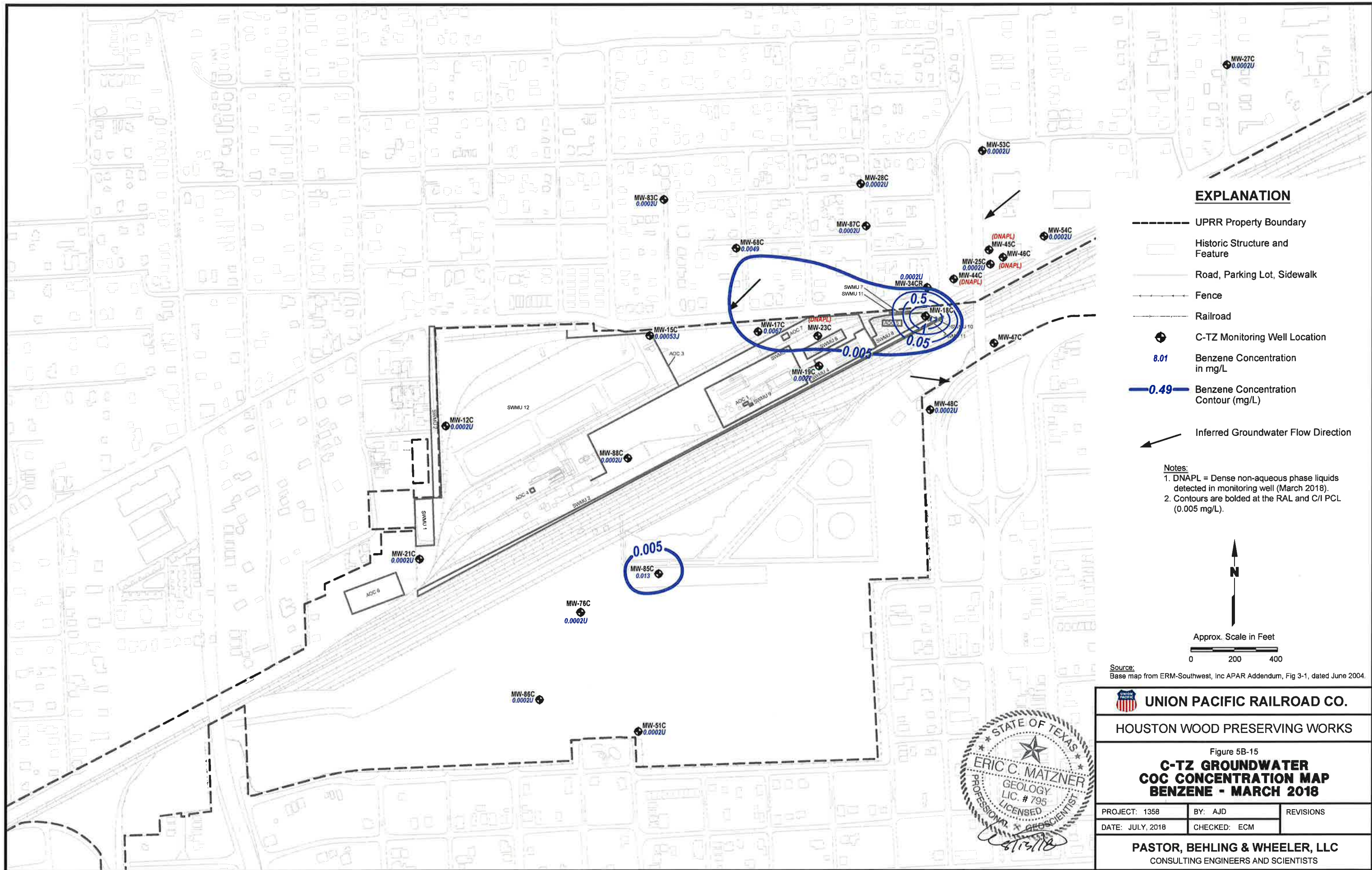


Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-12 B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP 2-METHYLNAPHTHALENE - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

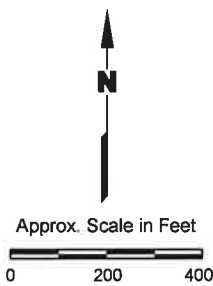




EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 8.01** Benzene Concentration in mg/L
- 0.49** Benzene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

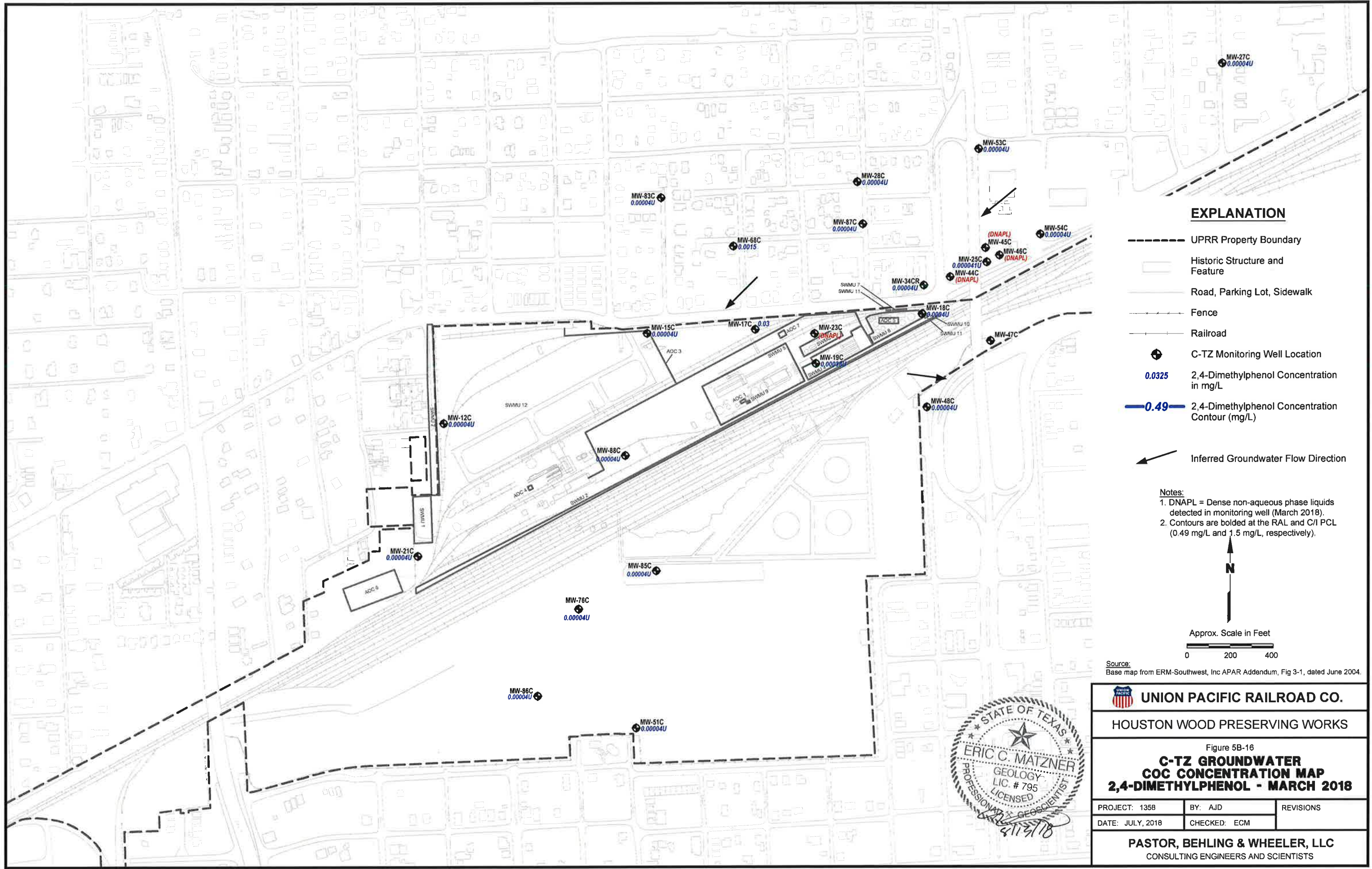
- Notes:**
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.005 mg/L).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004



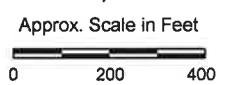
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-15 C-TZ GROUNDWATER COC CONCENTRATION MAP BENZENE - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 0.0325** 2,4-Dimethylphenol Concentration in mg/L
- 0.49** 2,4-Dimethylphenol Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

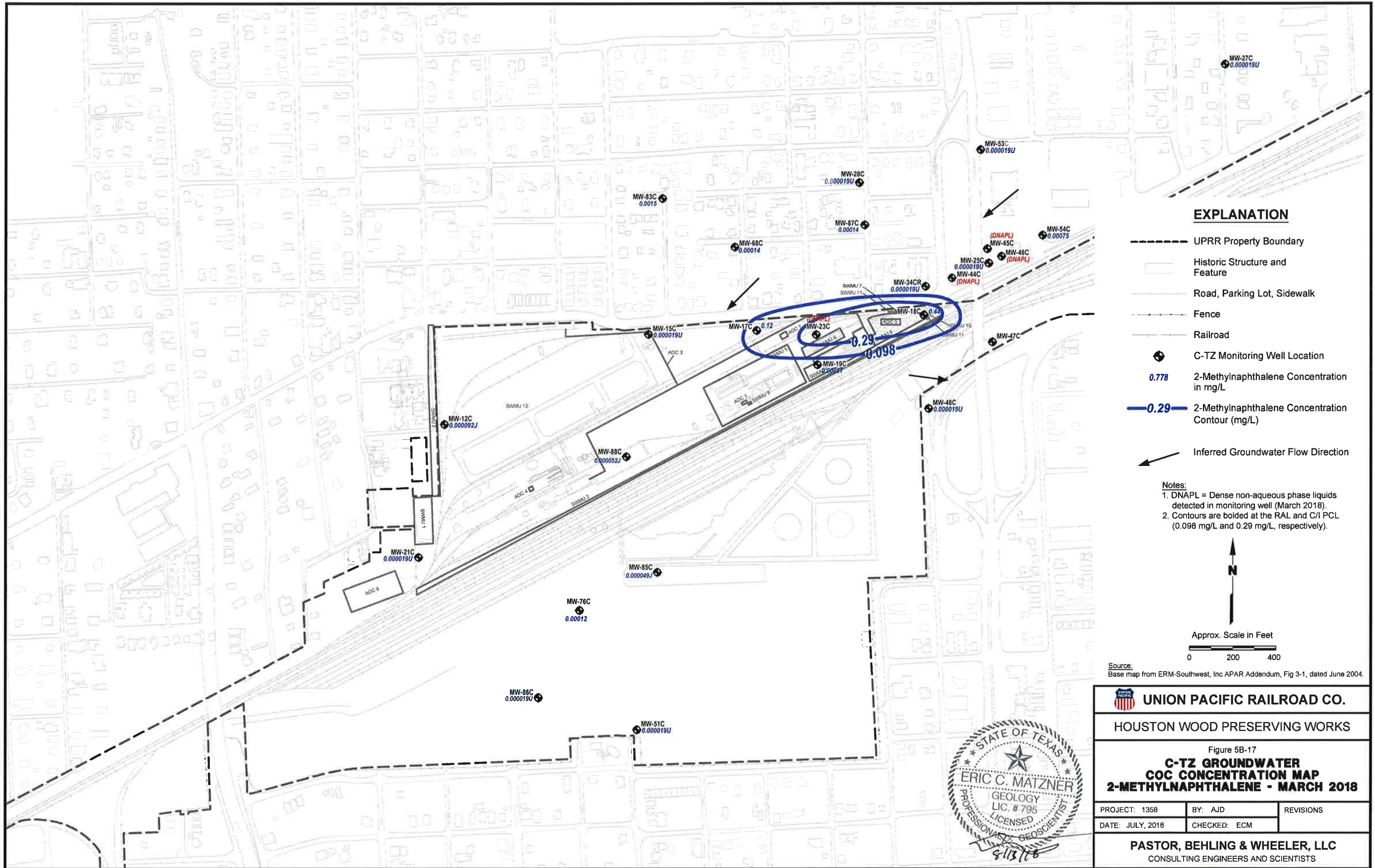
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).



Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



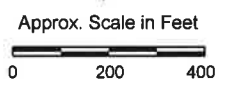
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-16 C-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ◆ C-TZ Monitoring Well Location
- 0.778 2-Methylnaphthalene Concentration in mg/L
- 0.29** 2-Methylnaphthalene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

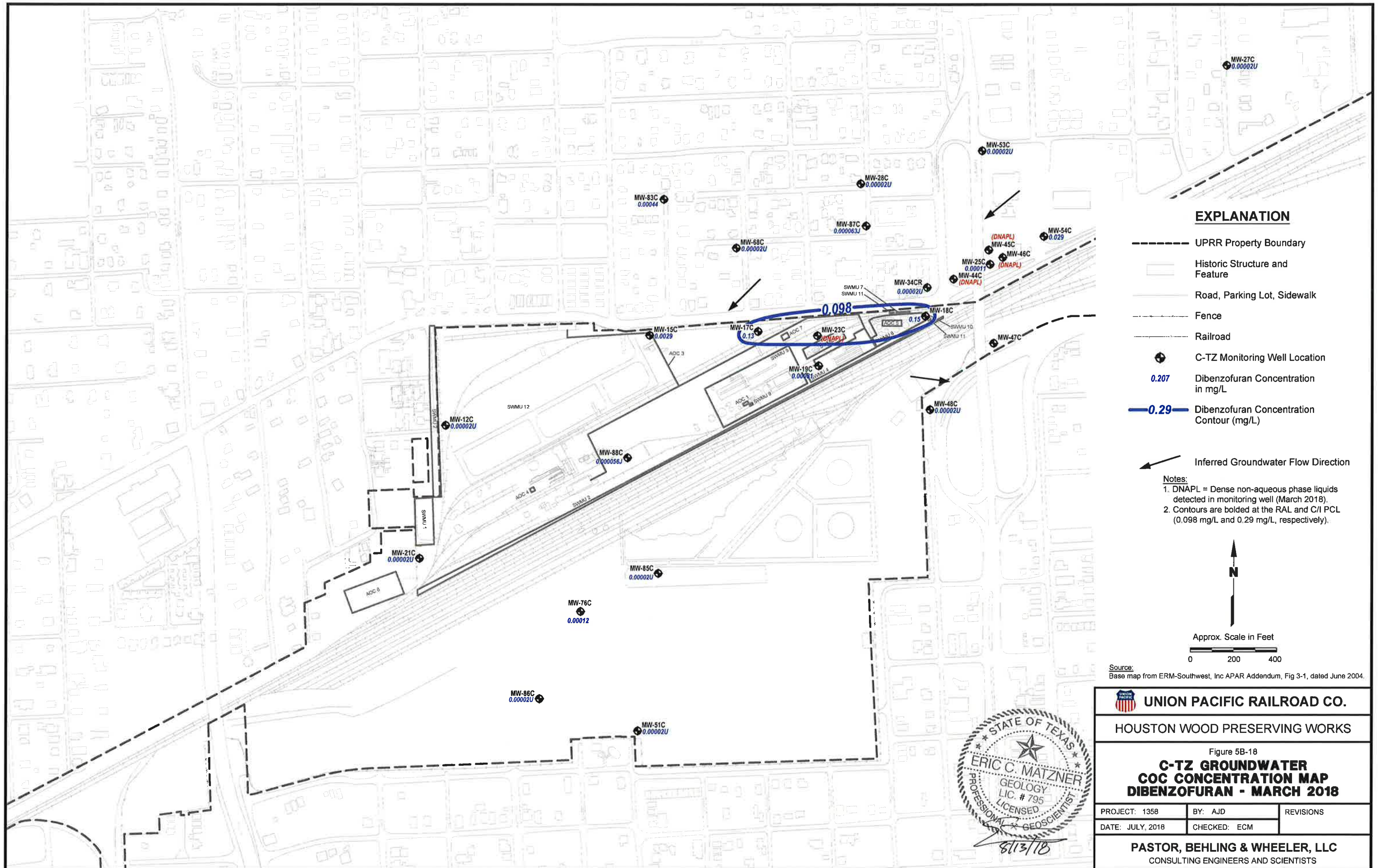
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.098 mg/L and 0.29 mg/L, respectively).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-17 C-TZ GROUNDWATER COC CONCENTRATION MAP 2-METHYLNAPHTHALENE - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 0.207** Dibenzofuran Concentration in mg/L
- 0.29** Dibenzofuran Concentration Contour (mg/L)
- ↙ Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.098 mg/L and 0.29 mg/L, respectively).

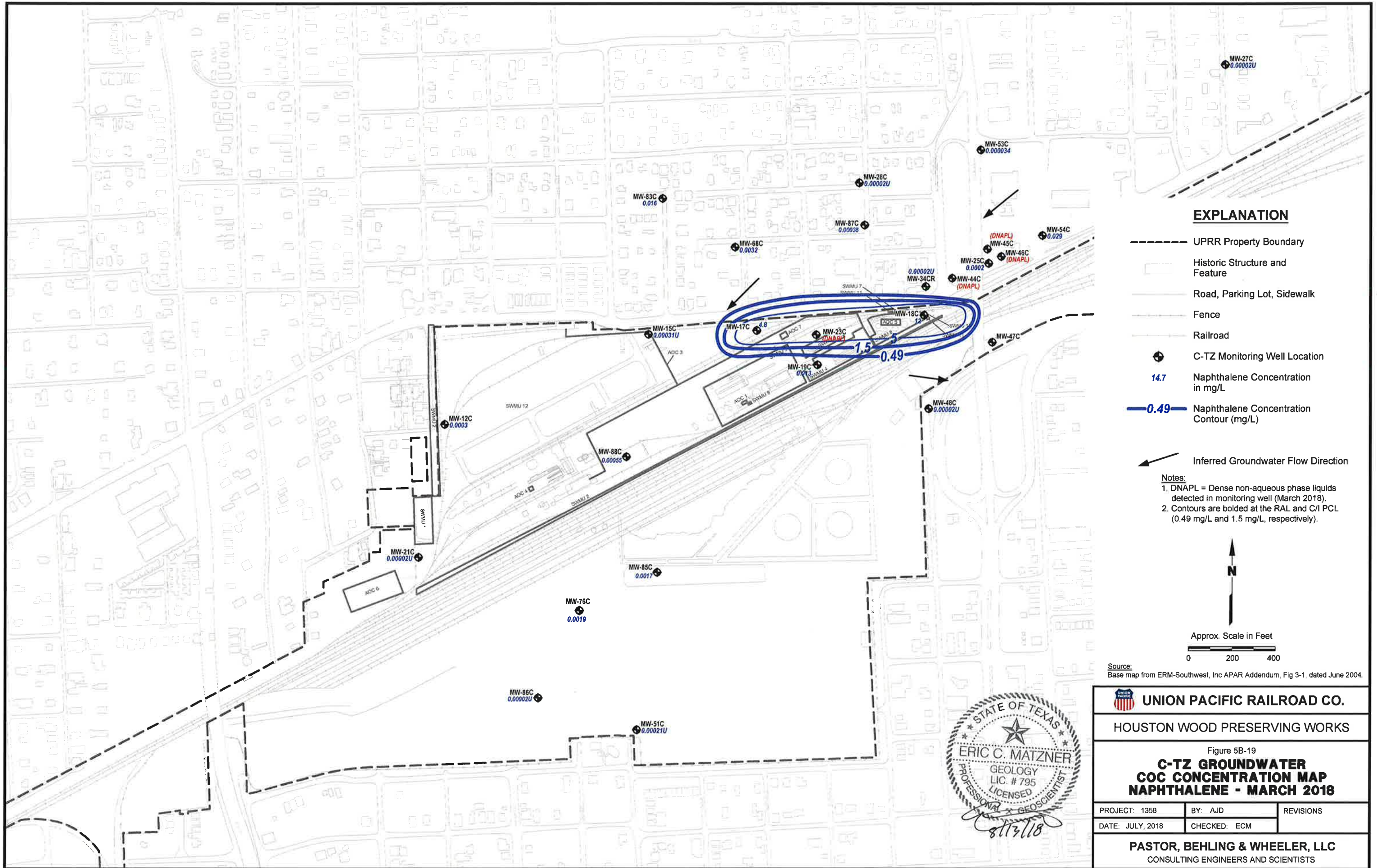


Approx. Scale in Feet
 0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-18 C-TZ GROUNDWATER COC CONCENTRATION MAP DIBENZOFURAN - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 14.7** Naphthalene Concentration in mg/L
- 0.49** Naphthalene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).

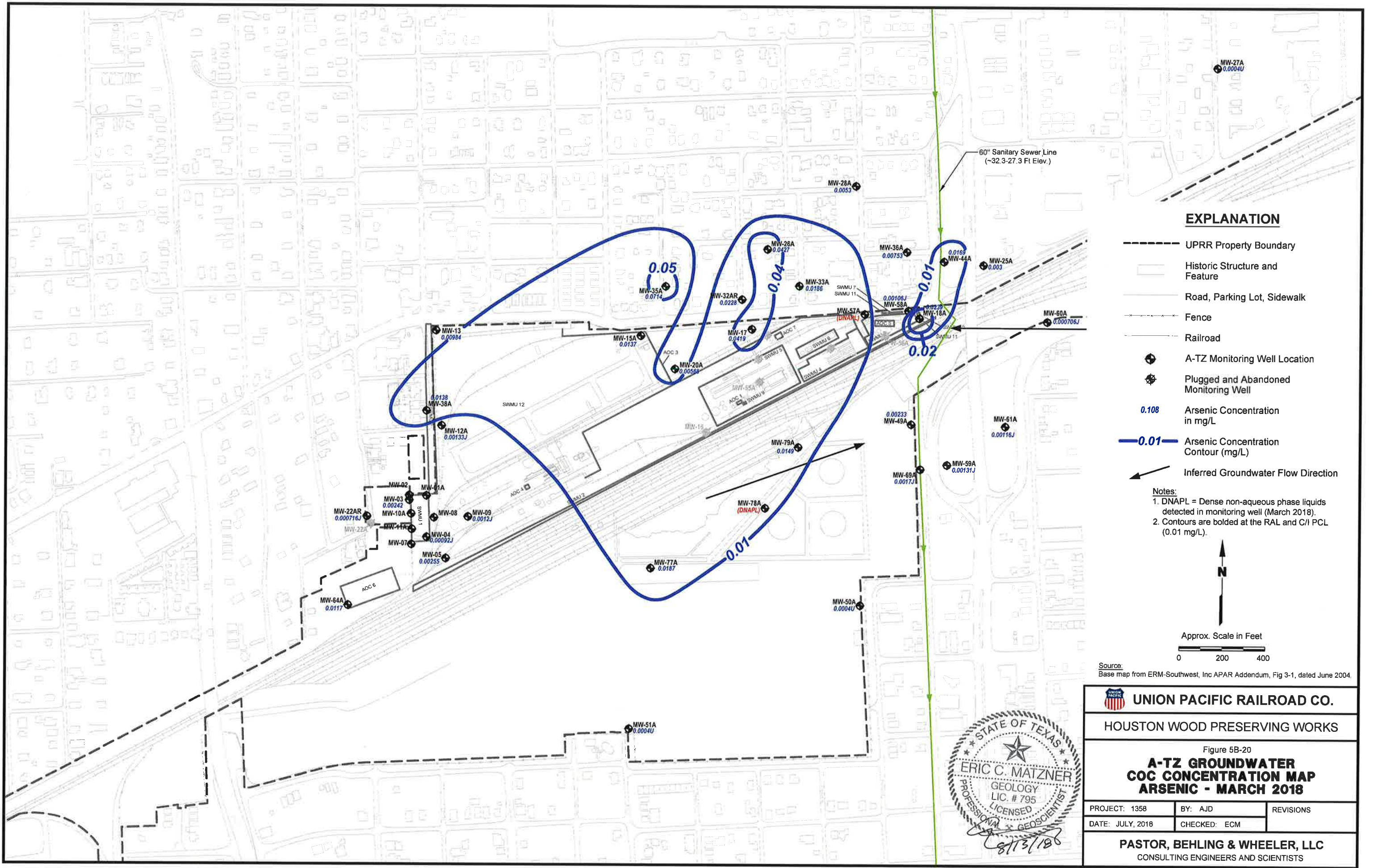


Approx. Scale in Feet
 0 200 400

Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-19 C-TZ GROUNDWATER COC CONCENTRATION MAP NAPHTHALENE - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 0.108** Arsenic Concentration in mg/L
- 0.01** Arsenic Concentration Contour (mg/L)
- ↙ Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.01 mg/L).



Approx. Scale in Feet
 0 200 400

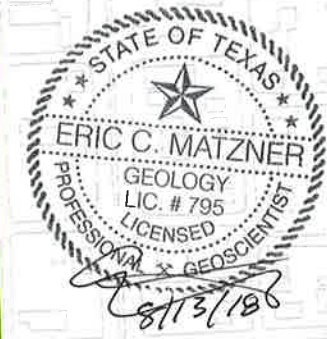
Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

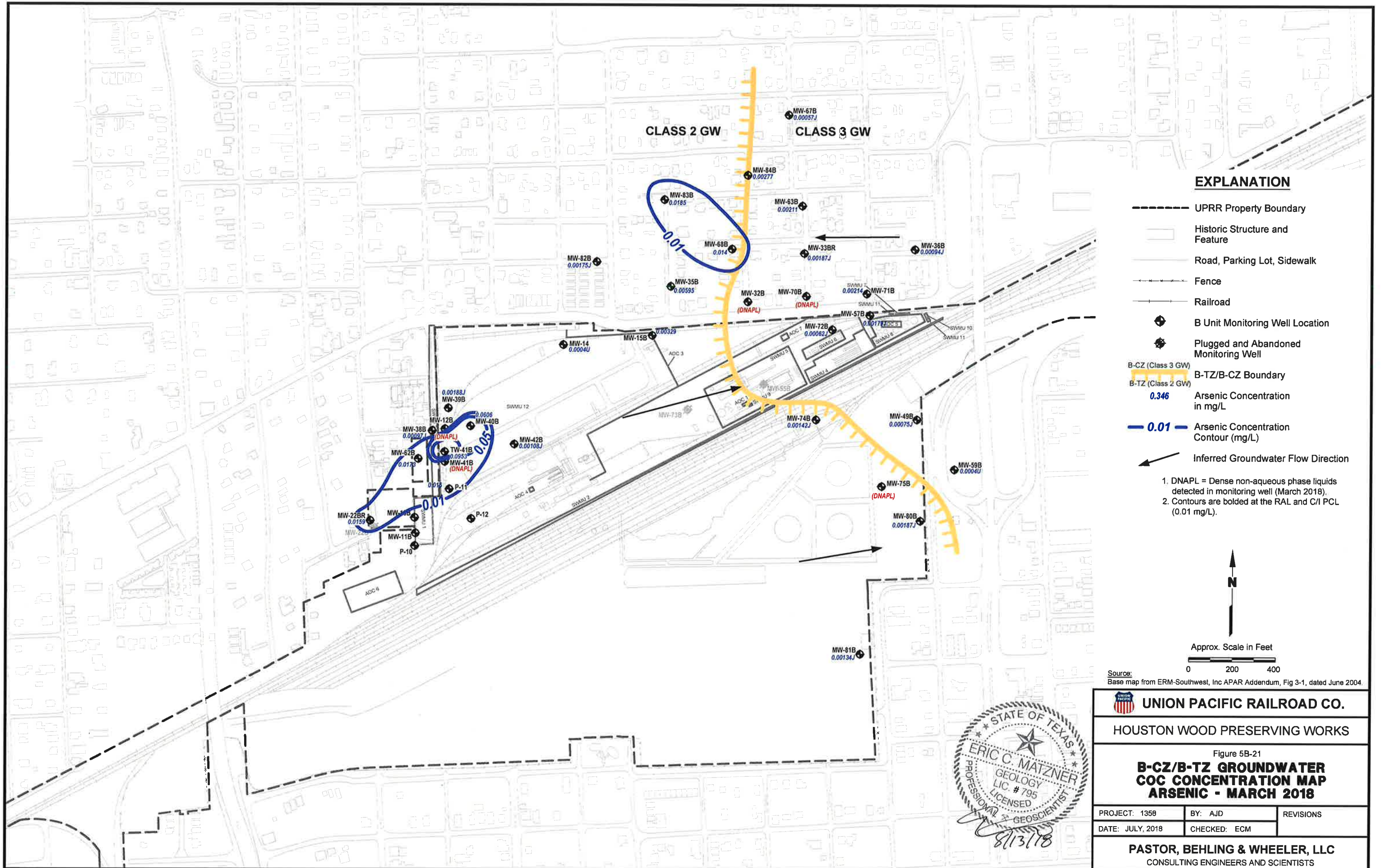
UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Figure 5B-20
**A-TZ GROUNDWATER
 COC CONCENTRATION MAP
 ARSENIC - MARCH 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS

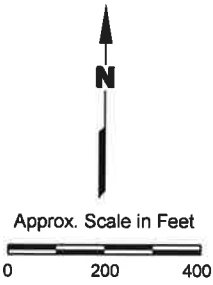




EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.346 Arsenic Concentration in mg/L
- 0.01 Arsenic Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
2. Contours are bolded at the RAL and C/I PCL (0.01 mg/L).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

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HOUSTON WOOD PRESERVING WORKS

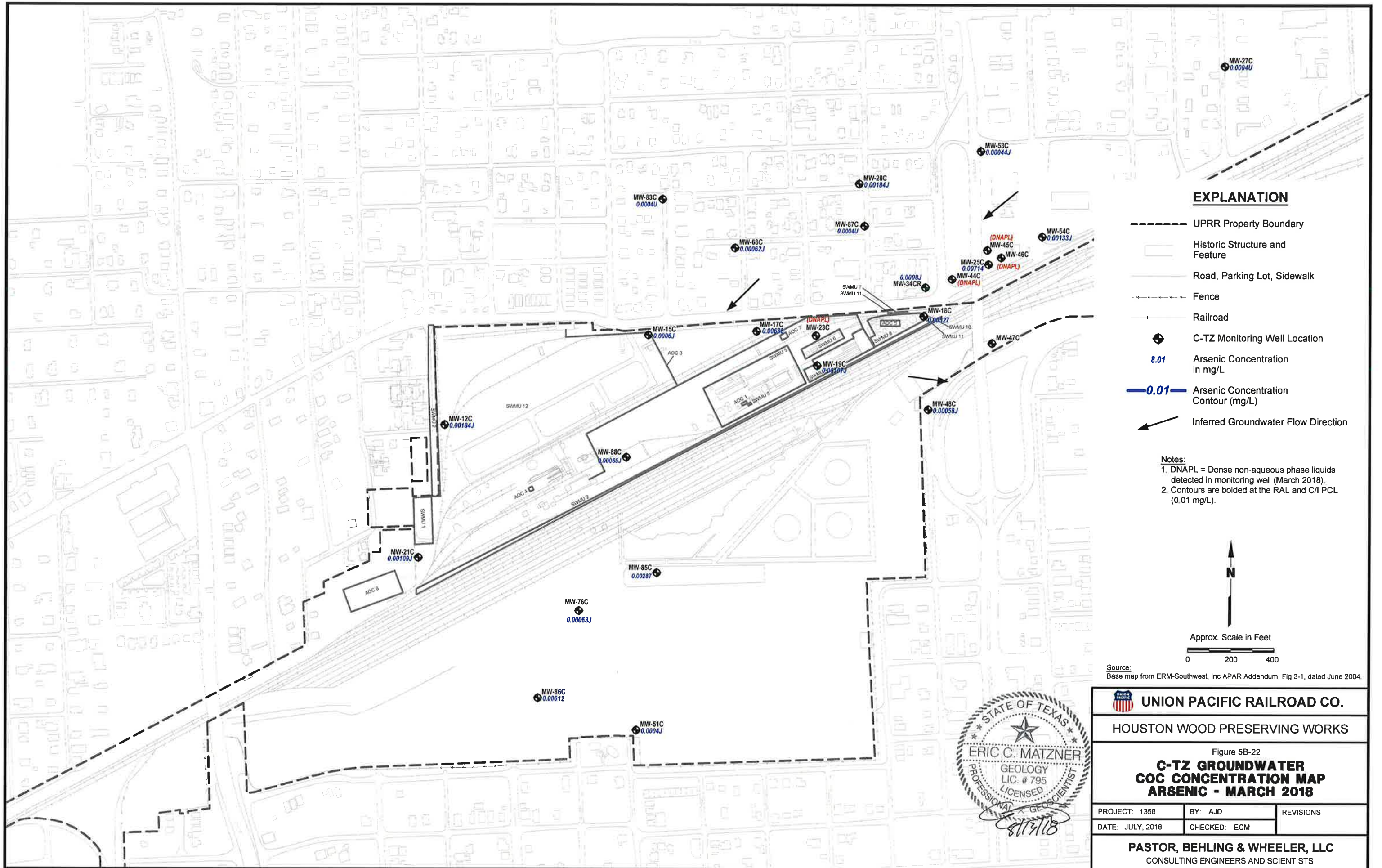
Figure 5B-21

B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP ARSENIC - MARCH 2018

PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	

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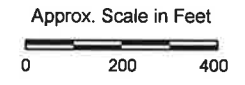




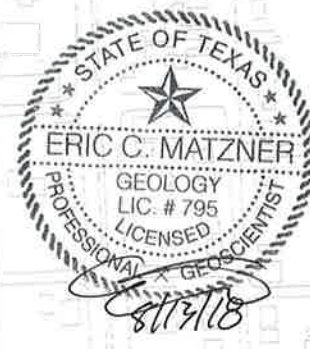
EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 8.01** Arsenic Concentration in mg/L
- 0.01** Arsenic Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.01 mg/L).



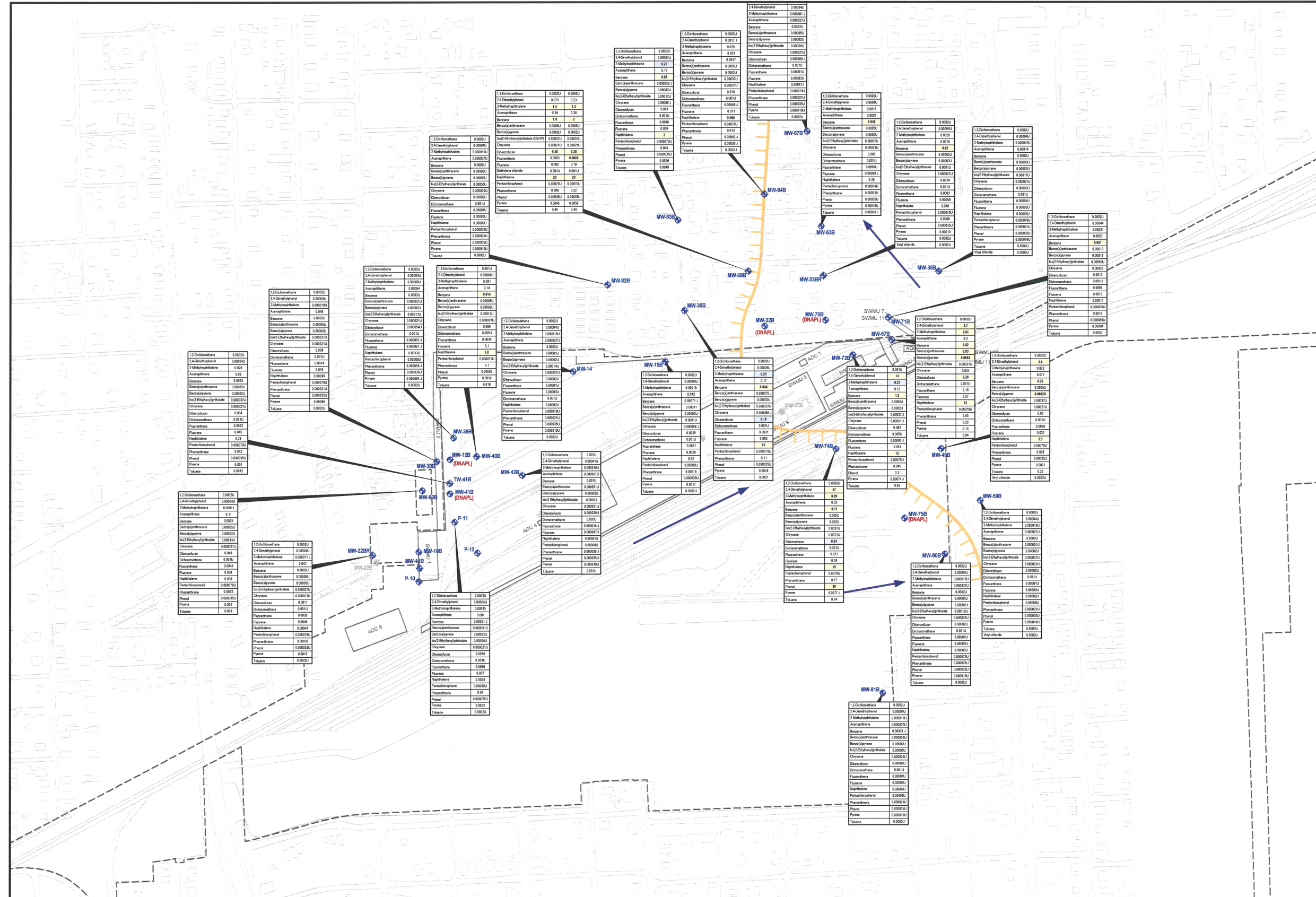
Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-22 C-TZ GROUNDWATER COC CONCENTRATION MAP ARSENIC - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Attachment C3

Groundwater COC Concentrations Maps May/June 2018 Event



EXPLANATION

- UPRR Property
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- B-TZ/B-CZ Monitoring Well Location
- Inferred Groundwater Flow Direction
- B-TZ/B-CZ Boundary

- Notes:
- All concentrations are in mg/L.
 - U = Estimated value between SOL and MDL.
 - U = Not detected (RL/SOL reported).
 - NA = Not analyzed.
 - Blue highlighted and bolded concentrations exceed Residential Assessment Level (RAL).
 - Yellow highlighted and bolded concentrations exceed Commercial Industrial PCLs.
 - DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).

Protective Concentration Levels (PCLs)

Parameter	RAL (mg/L)	CIL (mg/L)
1,2-Dichlorobenzene	0.005	0.025
1,4-Dimethylbenzene	0.48	1.5
1-Methyl-2-naphthol	0.098	0.29
Acetophenone	1.5	4.1
Benzonitrile	0.019	0.059
Benzotriazole	0.005	0.015
Benzopyrene	0.0001	0.0002
Diethylhexylphthalate	0.008	0.024
Chrysene	0.13	0.38
Dibenzofuran	0.002	0.006
Fluorene	0.002	0.006
Fluoranthene	0.001	0.003
Hexachlorobenzene	0.0001	0.0003
Hexachlorocyclopentadiene	0.0001	0.0003
Hexachlorocyclopentadiene (209)	0.0001	0.0003
Hexachlorocyclopentadiene (210)	0.0001	0.0003
Hexachlorocyclopentadiene (211)	0.0001	0.0003
Hexachlorocyclopentadiene (212)	0.0001	0.0003
Hexachlorocyclopentadiene (213)	0.0001	0.0003
Hexachlorocyclopentadiene (214)	0.0001	0.0003
Hexachlorocyclopentadiene (215)	0.0001	0.0003
Hexachlorocyclopentadiene (216)	0.0001	0.0003
Hexachlorocyclopentadiene (217)	0.0001	0.0003
Hexachlorocyclopentadiene (218)	0.0001	0.0003
Hexachlorocyclopentadiene (219)	0.0001	0.0003
Hexachlorocyclopentadiene (220)	0.0001	0.0003
Hexachlorocyclopentadiene (221)	0.0001	0.0003
Hexachlorocyclopentadiene (222)	0.0001	0.0003
Hexachlorocyclopentadiene (223)	0.0001	0.0003
Hexachlorocyclopentadiene (224)	0.0001	0.0003
Hexachlorocyclopentadiene (225)	0.0001	0.0003
Hexachlorocyclopentadiene (226)	0.0001	0.0003
Hexachlorocyclopentadiene (227)	0.0001	0.0003
Hexachlorocyclopentadiene (228)	0.0001	0.0003
Hexachlorocyclopentadiene (229)	0.0001	0.0003
Hexachlorocyclopentadiene (230)	0.0001	0.0003
Hexachlorocyclopentadiene (231)	0.0001	0.0003
Hexachlorocyclopentadiene (232)	0.0001	0.0003
Hexachlorocyclopentadiene (233)	0.0001	0.0003
Hexachlorocyclopentadiene (234)	0.0001	0.0003
Hexachlorocyclopentadiene (235)	0.0001	0.0003
Hexachlorocyclopentadiene (236)	0.0001	0.0003
Hexachlorocyclopentadiene (237)	0.0001	0.0003
Hexachlorocyclopentadiene (238)	0.0001	0.0003
Hexachlorocyclopentadiene (239)	0.0001	0.0003
Hexachlorocyclopentadiene (240)	0.0001	0.0003
Hexachlorocyclopentadiene (241)	0.0001	0.0003
Hexachlorocyclopentadiene (242)	0.0001	0.0003
Hexachlorocyclopentadiene (243)	0.0001	0.0003
Hexachlorocyclopentadiene (244)	0.0001	0.0003
Hexachlorocyclopentadiene (245)	0.0001	0.0003
Hexachlorocyclopentadiene (246)	0.0001	0.0003
Hexachlorocyclopentadiene (247)	0.0001	0.0003
Hexachlorocyclopentadiene (248)	0.0001	0.0003
Hexachlorocyclopentadiene (249)	0.0001	0.0003
Hexachlorocyclopentadiene (250)	0.0001	0.0003

SWMU/AOC AREAS

No.	Description
SWMU 1	Closed Surface Impoundment
SWMU 2	Northern and Southern Drainage Ditches
SWMU 4	Recent Process Area
SWMU 5	Original Process Area
SWMU 6	Water Treatment and Boiler System
SWMU 7	Tank Car Storage Area
SWMU 8	Aboveground Storage Tank Area
SWMU 9	Location of Former UST No. 44-023-05
SWMU 10	Location of Former Sap Water Treatment Tank
SWMU 11	Oil/Water Separators
SWMU 12	Railroad Tie Storage Area

AOC 1	Description
AOC 1	Diesel Storage Tank
AOC 3	Contaminated Portion of City Water Line
AOC 4	Location of Former Incinerator
AOC 5	City Storm Sewer
AOC 7	Inactive Wastewater Lagoon
AOC 7	Location of Former UST No. 44-023-21

Note: Locations of SWMU-9 and AOCs 1, 3, 5 and 7 area approximate.

ERIC C. MATZNER
STATE OF TEXAS
LICENSED PROFESSIONAL ENGINEER
NO. 44000
EXPIRES 08/31/2018

Scale in Feet

Source: Base map from ERM-Southwest, Inc. APAR Addendum, Fig 3-1, dated June 2004.

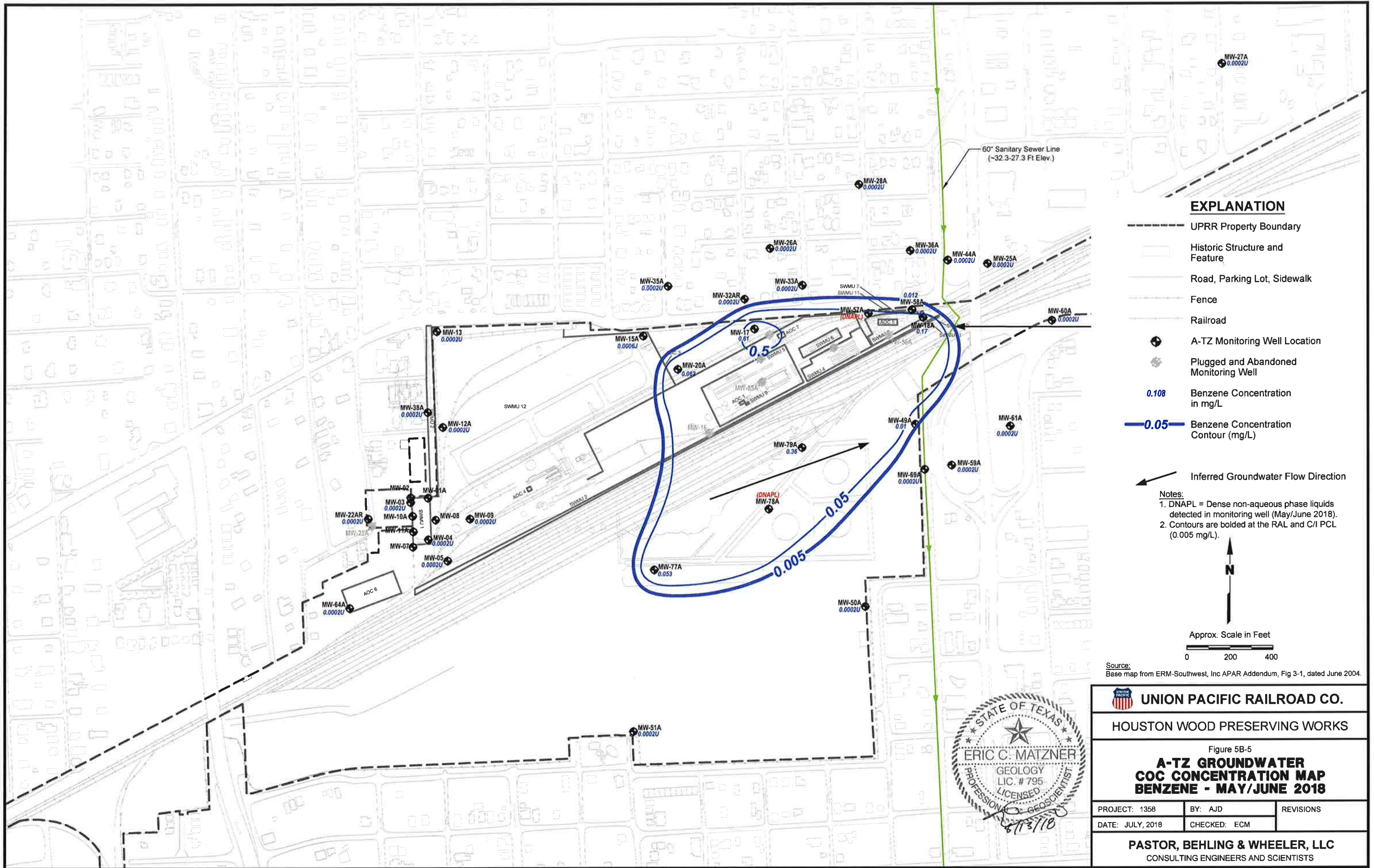
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HOUSTON WOOD PRESERVING WORKS

Figure 5B-2
GROUNDWATER COC CONCENTRATION MAP
B-TZ & B-CZ - MAY/JUNE 2018

PROJECT:	BY:	AJD	REVISIONS:
DATE:	JULY, 2018	CHECKED:	ECM

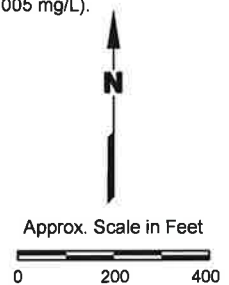
PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▬ Road, Parking Lot, Sidewalk
- ▬ Fence
- ▬ Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 0.108 Benzene Concentration in mg/L
- 0.05** Benzene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

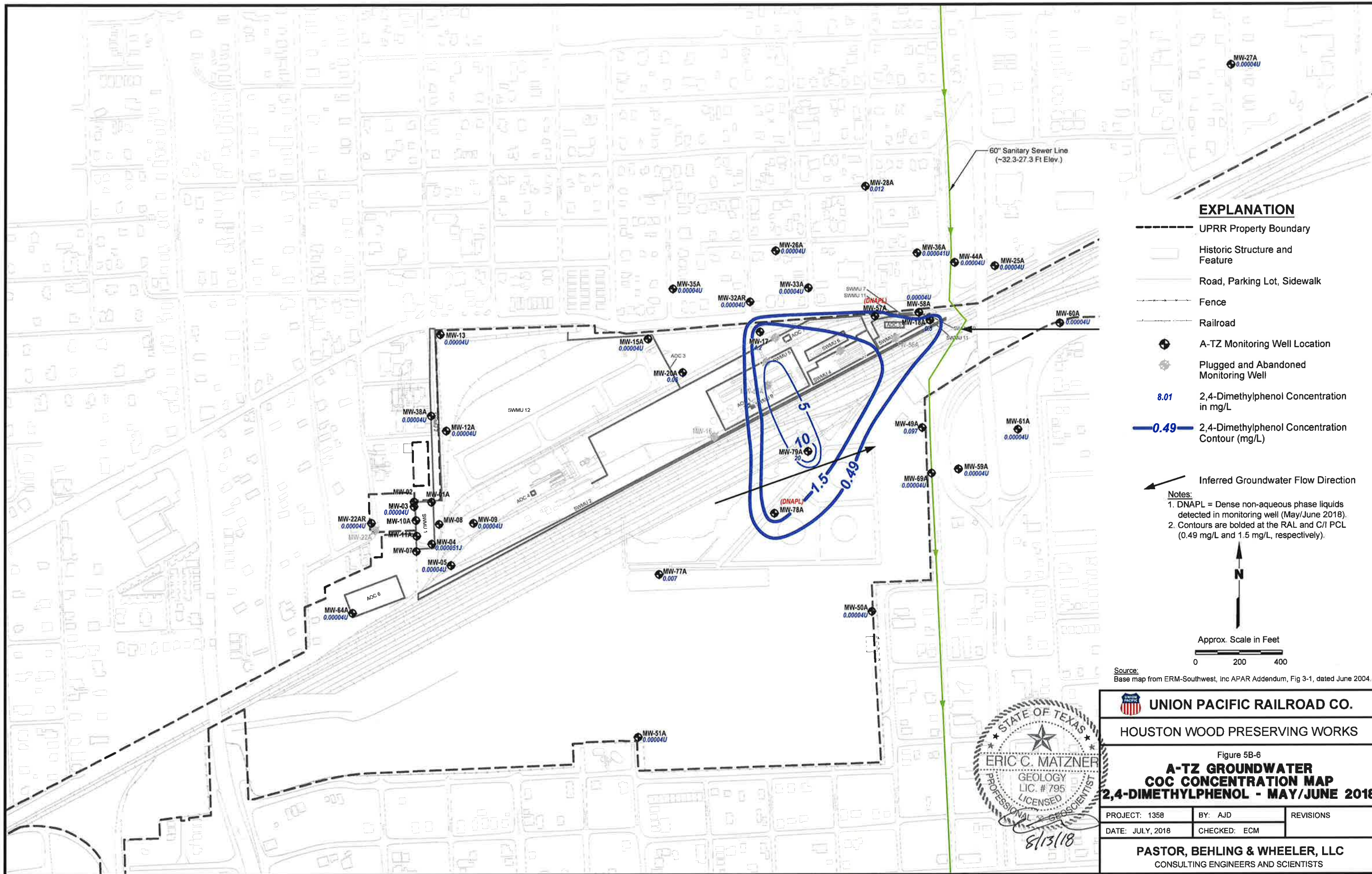
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.005 mg/L).



Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



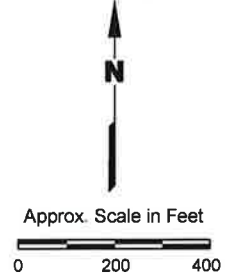
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-5		
A-TZ GROUNDWATER COC CONCENTRATION MAP BENZENE - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▭ Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- 8.01 2,4-Dimethylphenol Concentration in mg/L
- 0.49** 2,4-Dimethylphenol Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

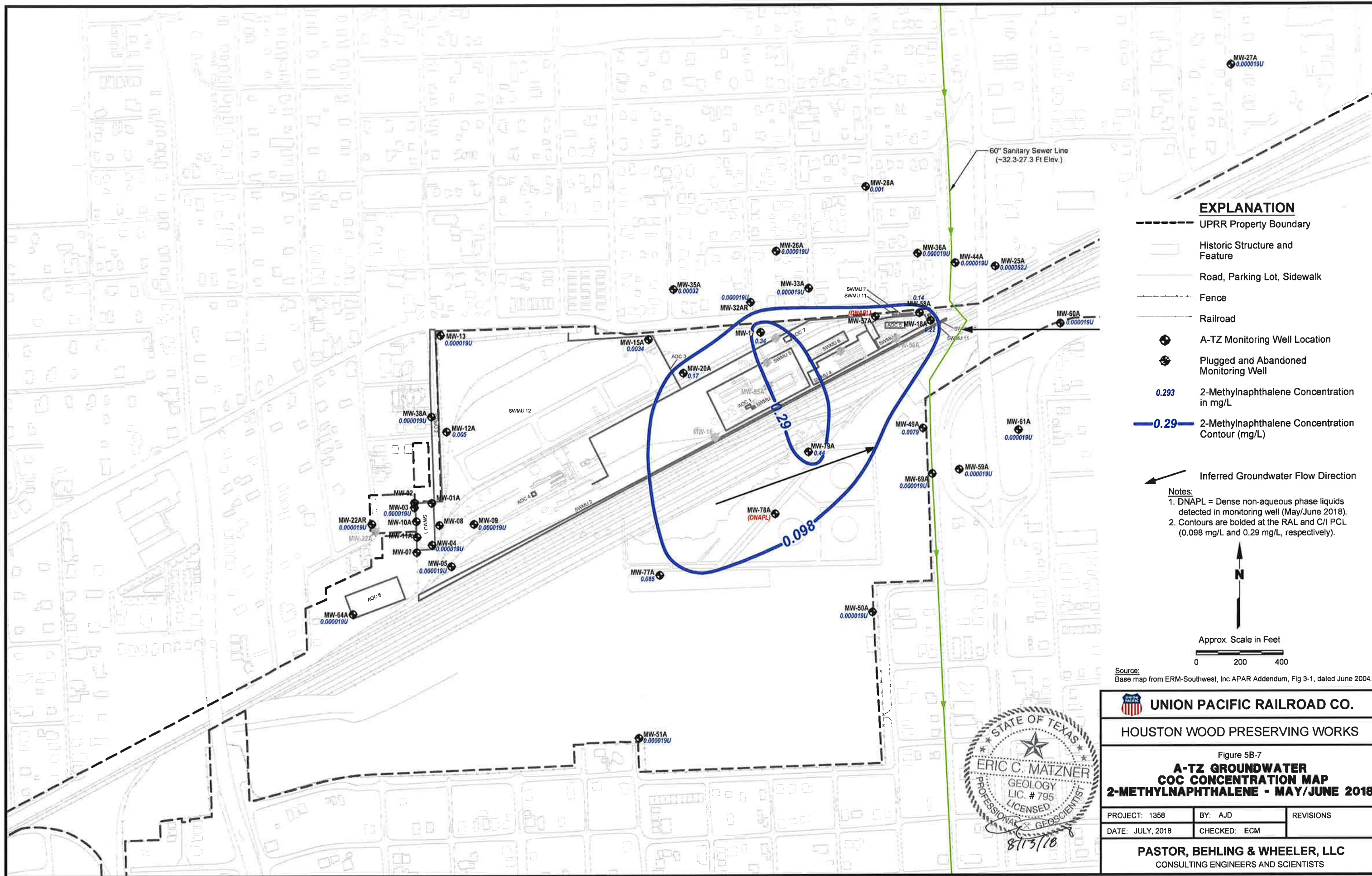
- Notes:**
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



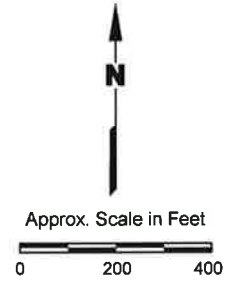
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-6		
A-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- - - Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- 0.293 2-Methylnaphthalene Concentration in mg/L
- 0.29** 2-Methylnaphthalene Concentration Contour (mg/L)
- ↙ Inferred Groundwater Flow Direction

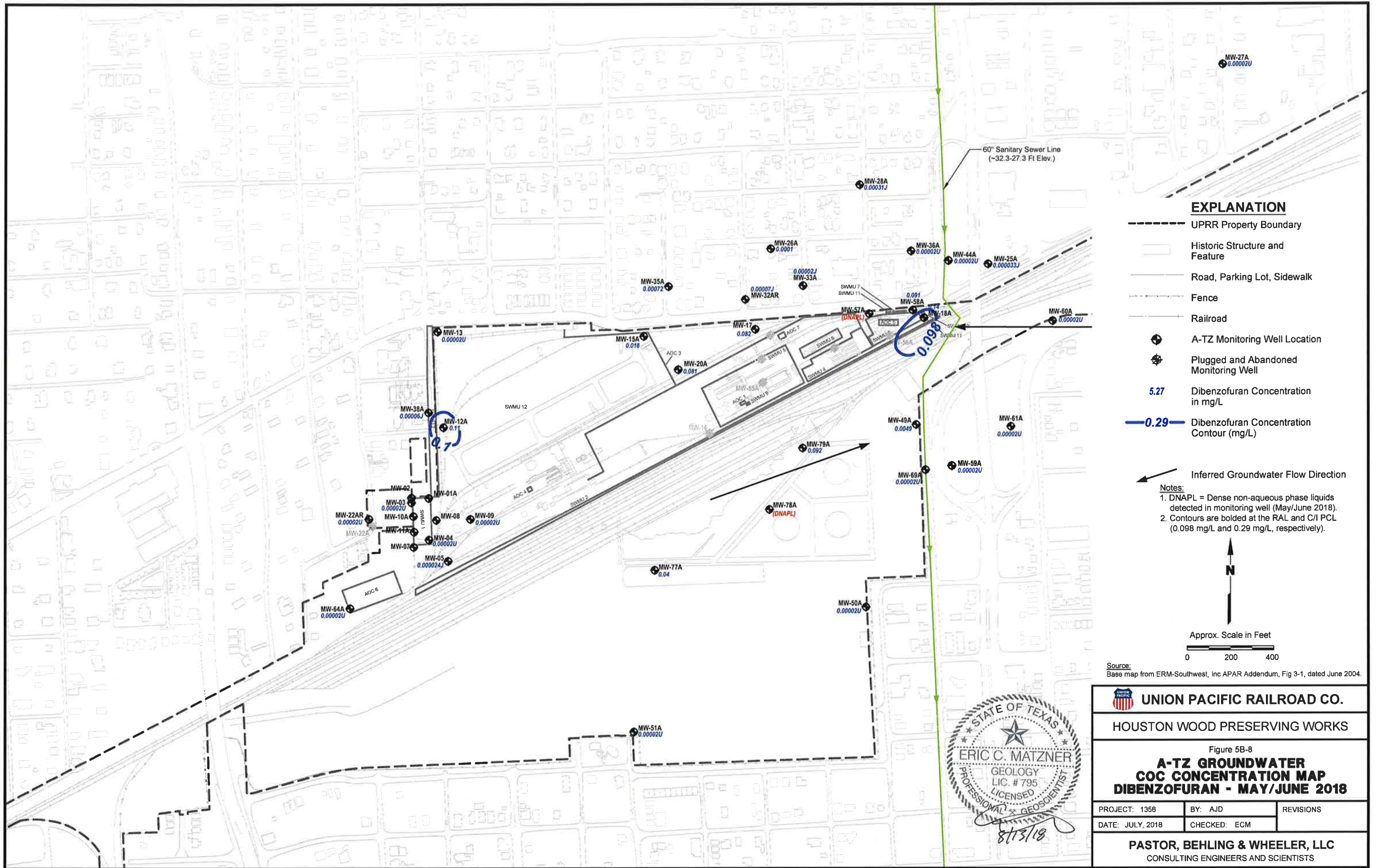
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.098 mg/L and 0.29 mg/L, respectively).




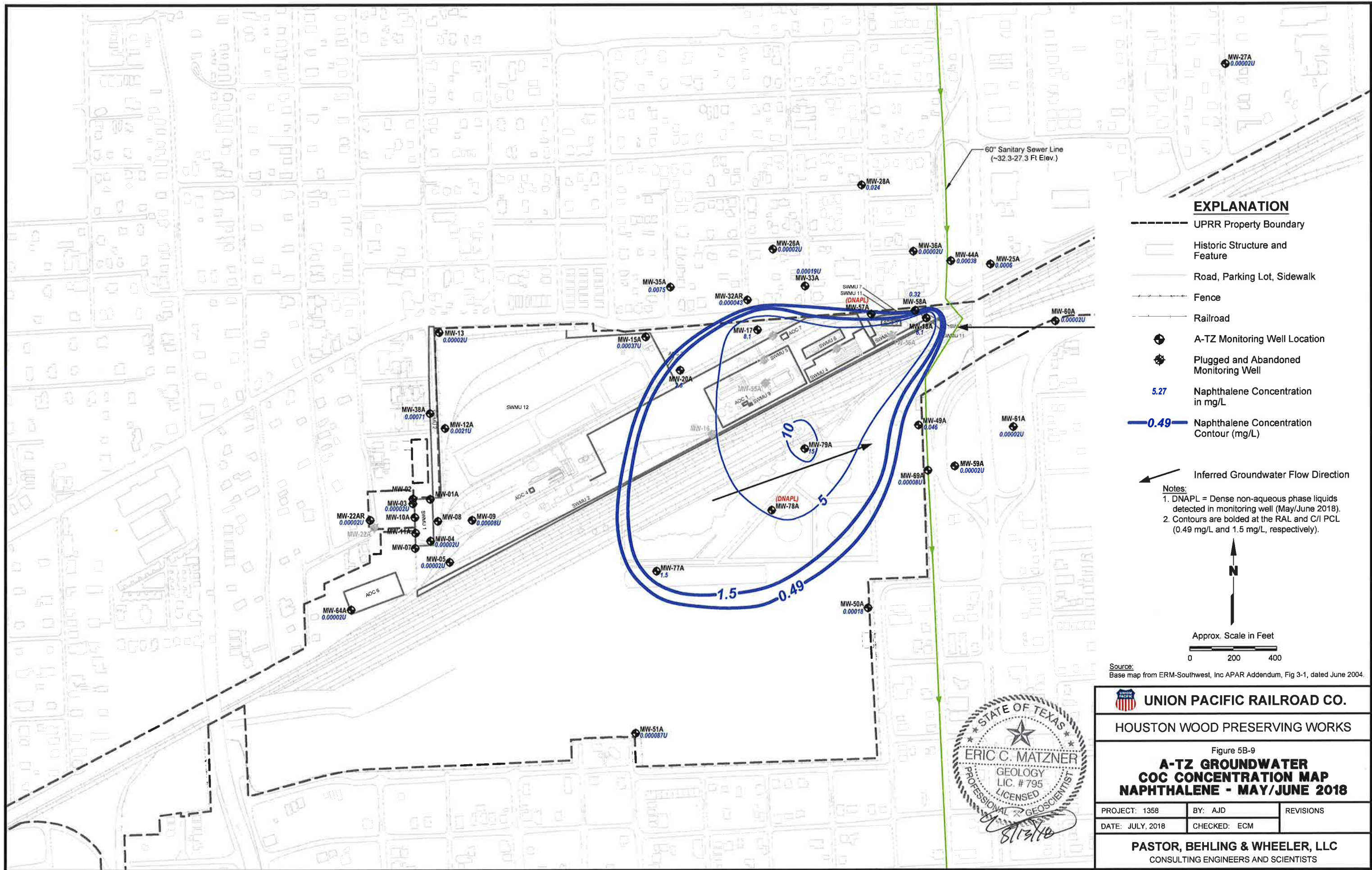
Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

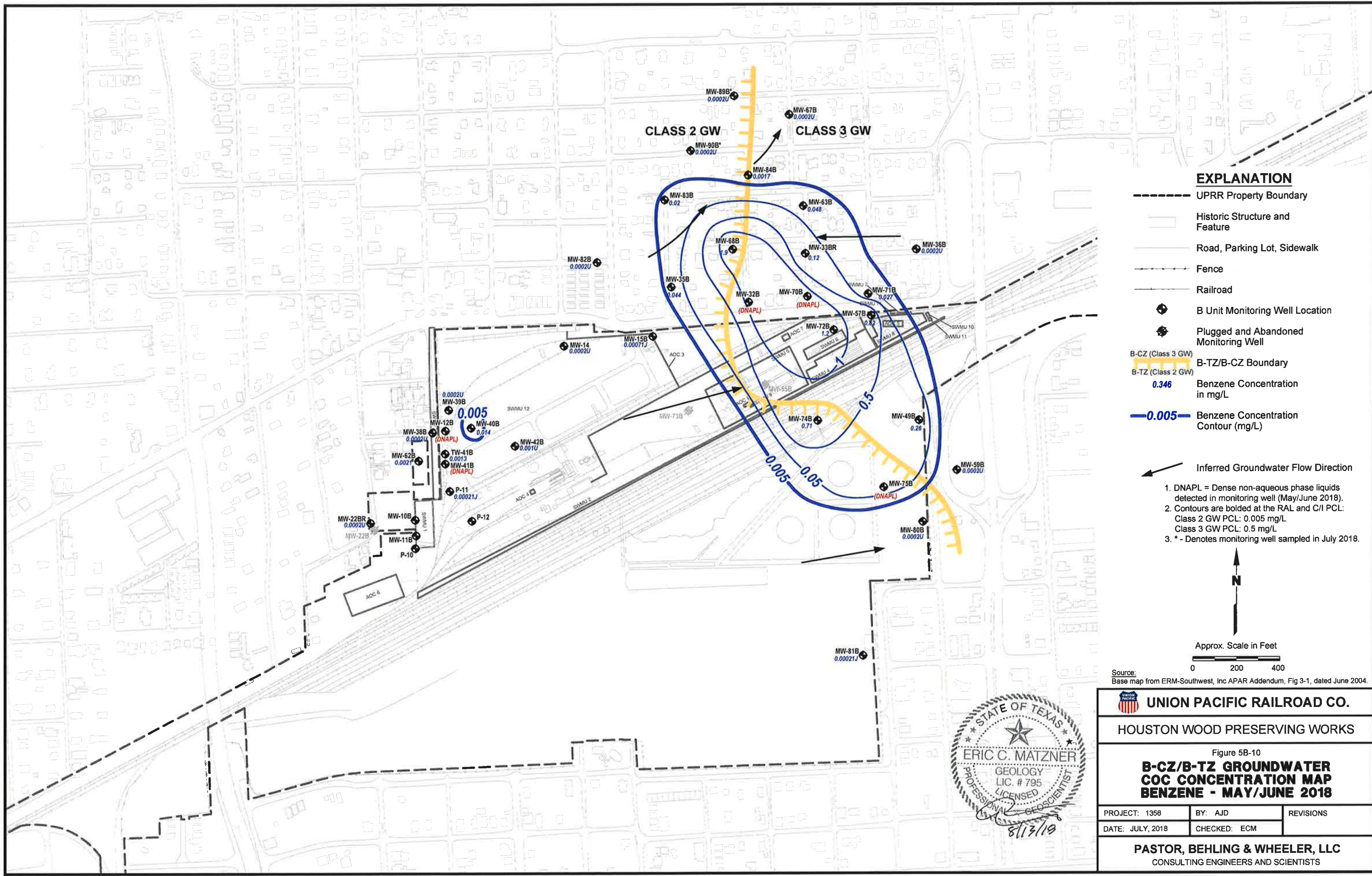


UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-7		
A-TZ GROUNDWATER COC CONCENTRATION MAP 2-METHYLNAPHTHALENE - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



 UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-8		
A-TZ GROUNDWATER COC CONCENTRATION MAP DIBENZOFURAN - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		





EXPLANATION


- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▭ Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.346 Benzene Concentration in mg/L
- 0.005 Benzene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
2. Contours are bolded at the RAL and C/I PCL:
Class 2 GW PCL: 0.005 mg/L
Class 3 GW PCL: 0.5 mg/L
3. * - Denotes monitoring well sampled in July 2018.

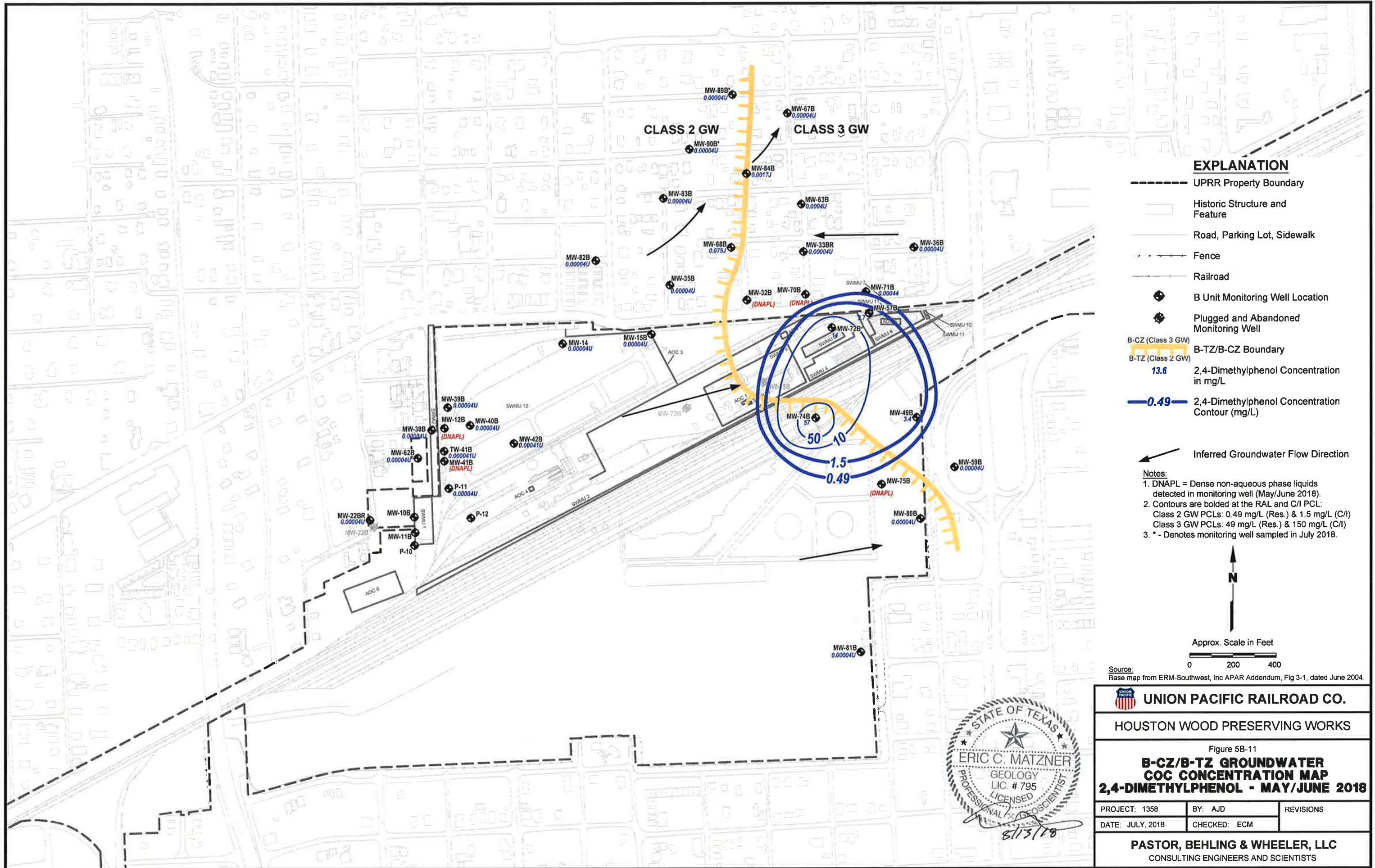


Approx. Scale in Feet
0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

 UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-10 B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP BENZENE - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		





EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 13.6** 2,4-Dimethylphenol Concentration in mg/L
- 0.49** 2,4-Dimethylphenol Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

- Notes:
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL:
Class 2 GW PCLs: 0.49 mg/L (Res.) & 1.5 mg/L (C/I)
Class 3 GW PCLs: 49 mg/L (Res.) & 150 mg/L (C/I)
 3. * - Denotes monitoring well sampled in July 2018.



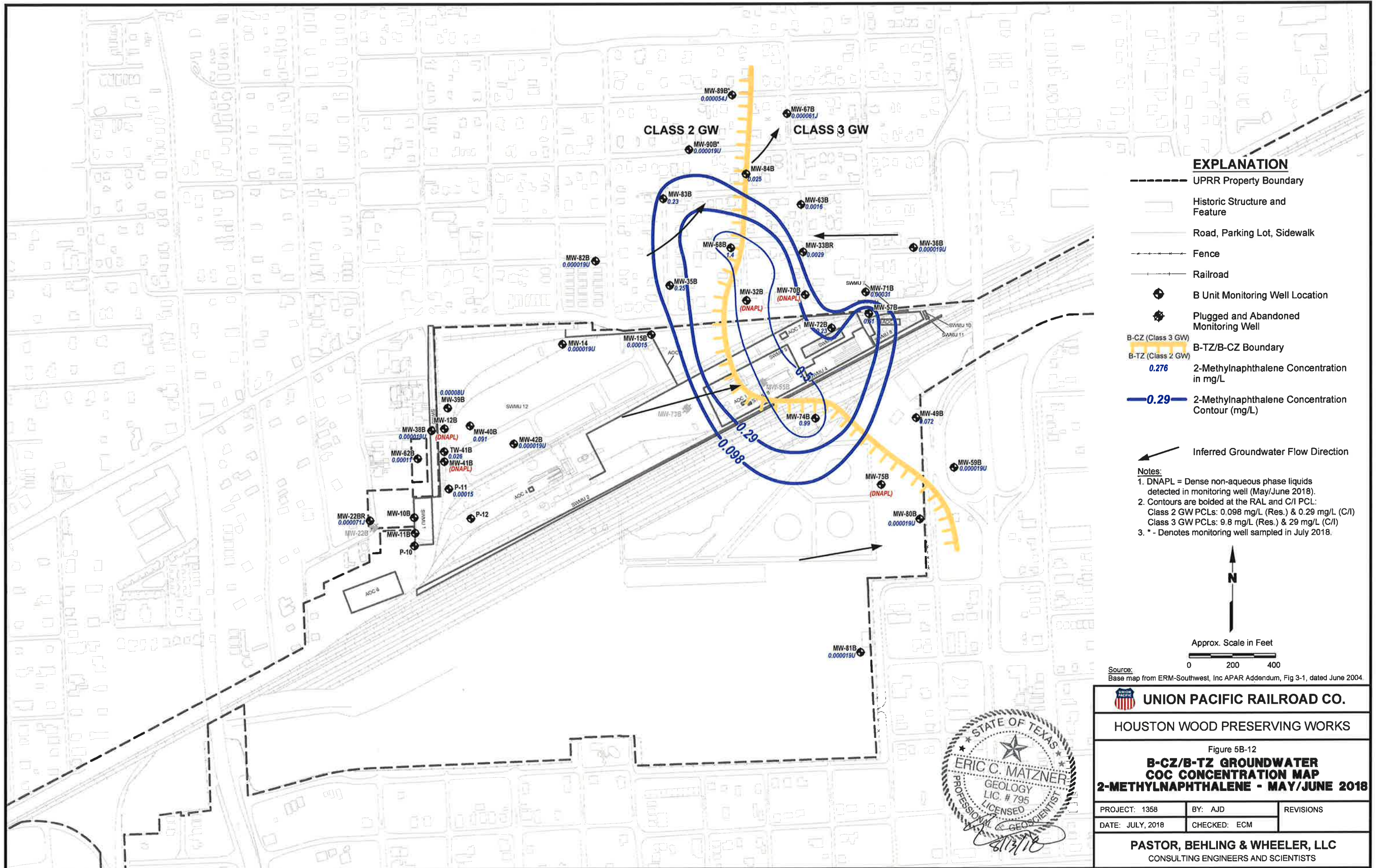
Approx. Scale in Feet



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-11		
B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.276** 2-Methylnaphthalene Concentration in mg/L
- 0.29** 2-Methylnaphthalene Concentration Contour (mg/L)
- ↖ Inferred Groundwater Flow Direction

- Notes:**
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL:
Class 2 GW PCLs: 0.098 mg/L (Res.) & 0.29 mg/L (C/I)
Class 3 GW PCLs: 9.8 mg/L (Res.) & 29 mg/L (C/I)
 3. * - Denotes monitoring well sampled in July 2018.

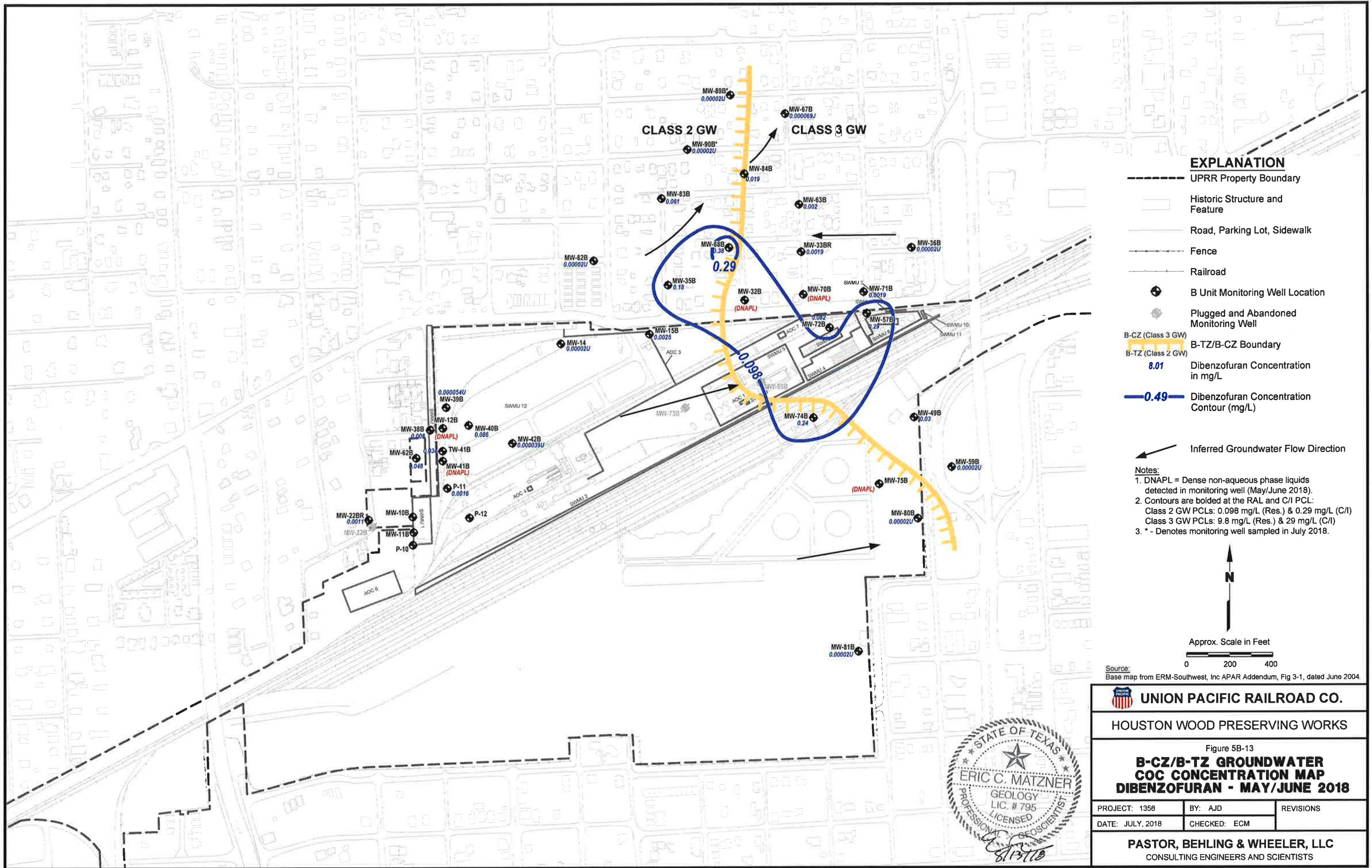


Approx. Scale in Feet
0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-12 B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP 2-METHYLNAPHTHALENE - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

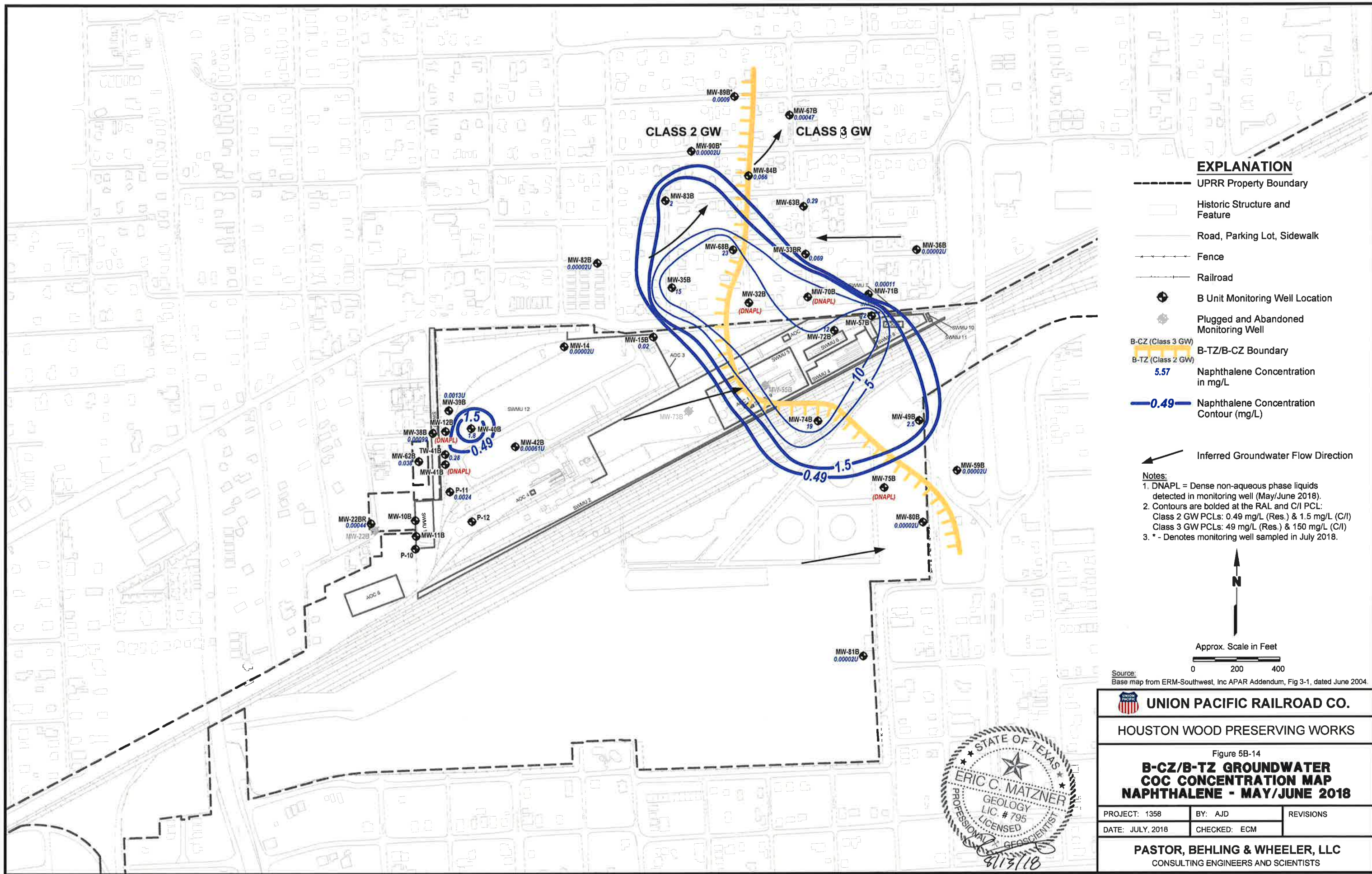
Figure 5B-13

**B-CZ/B-TZ GROUNDWATER
COC CONCENTRATION MAP
DIBENZOFURAN - MAY/JUNE 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

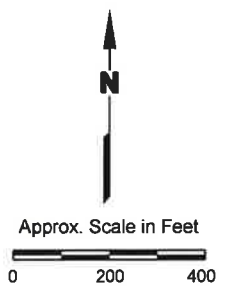




EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- ⊙ Plugged and Abandoned Monitoring Well
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 5.7 Naphthalene Concentration in mg/L
- 0.49 Naphthalene Concentration Contour (mg/L)
- ← Inferred Groundwater Flow Direction

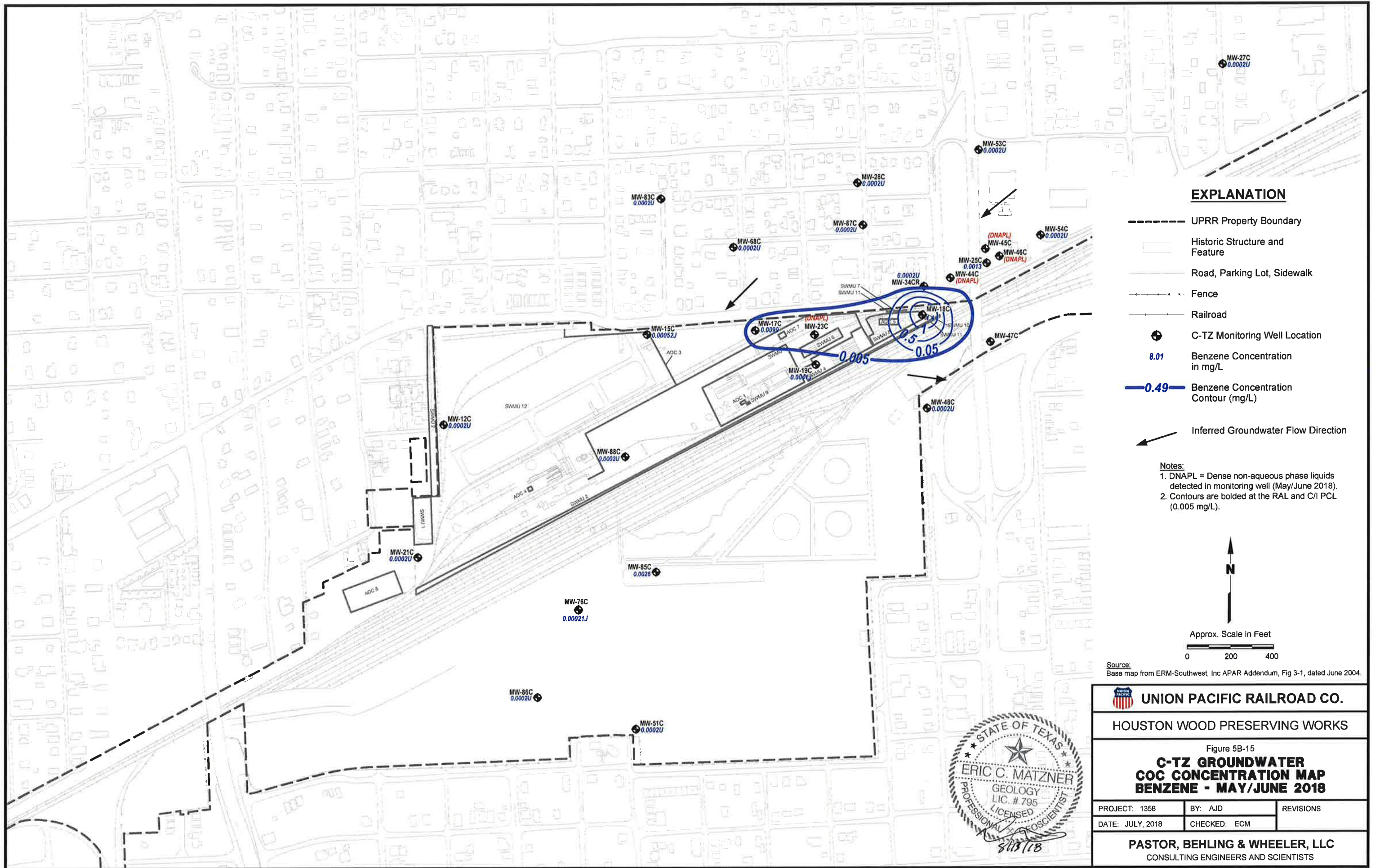
- Notes:**
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL:
Class 2 GW PCLs: 0.49 mg/L (Res.) & 1.5 mg/L (C/I)
Class 3 GW PCLs: 49 mg/L (Res.) & 150 mg/L (C/I)
 3. * - Denotes monitoring well sampled in July 2018.



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-14 B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP NAPHTHALENE - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		





EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 8.01** Benzene Concentration in mg/L
- 0.49** Benzene Concentration Contour (mg/L)
- ↙ Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.005 mg/L).

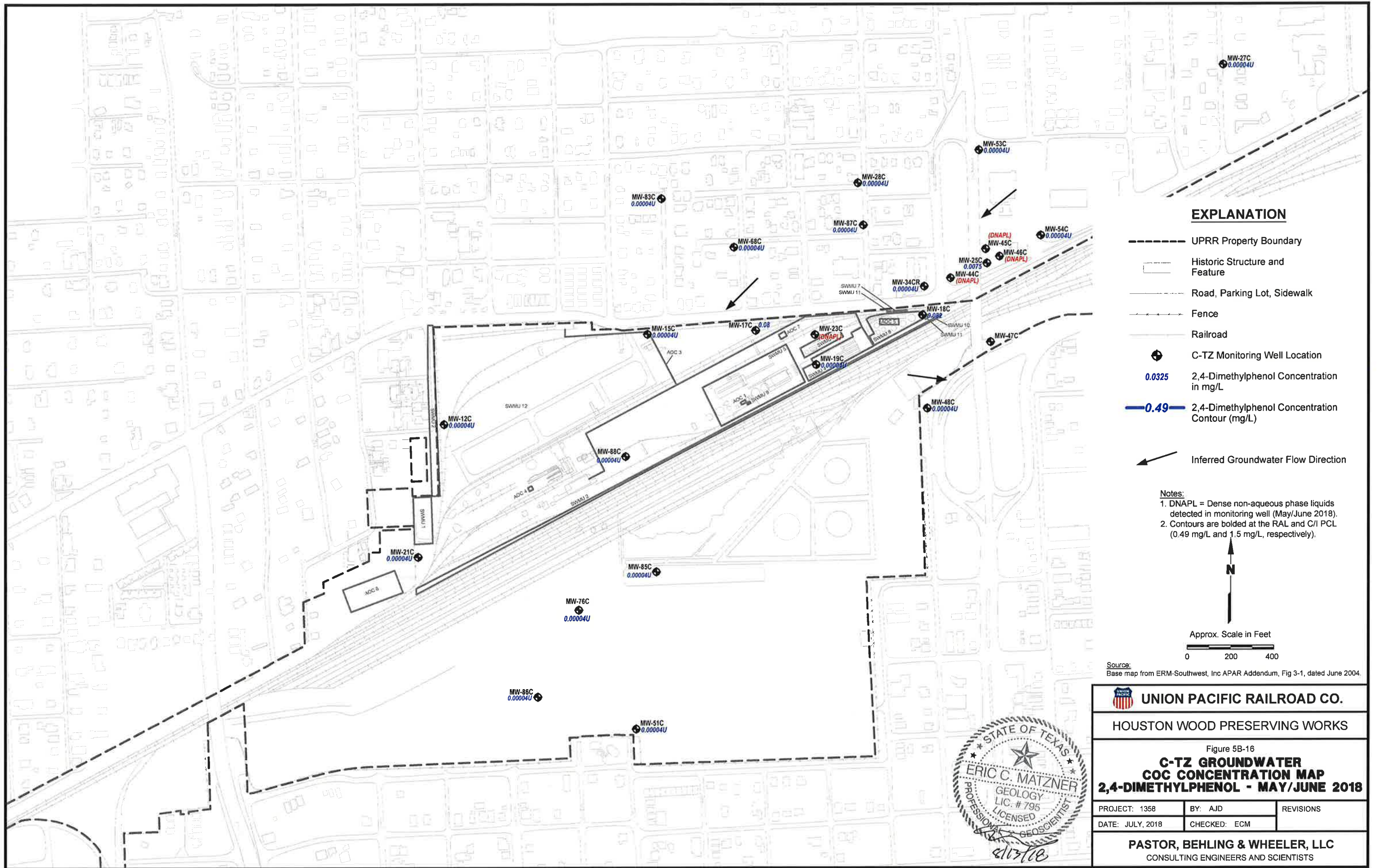


Approx. Scale in Feet
 0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-15 C-TZ GROUNDWATER COC CONCENTRATION MAP BENZENE - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		





EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 0.0325** 2,4-Dimethylphenol Concentration in mg/L
- 0.49** 2,4-Dimethylphenol Concentration Contour (mg/L)
- ↙ Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).

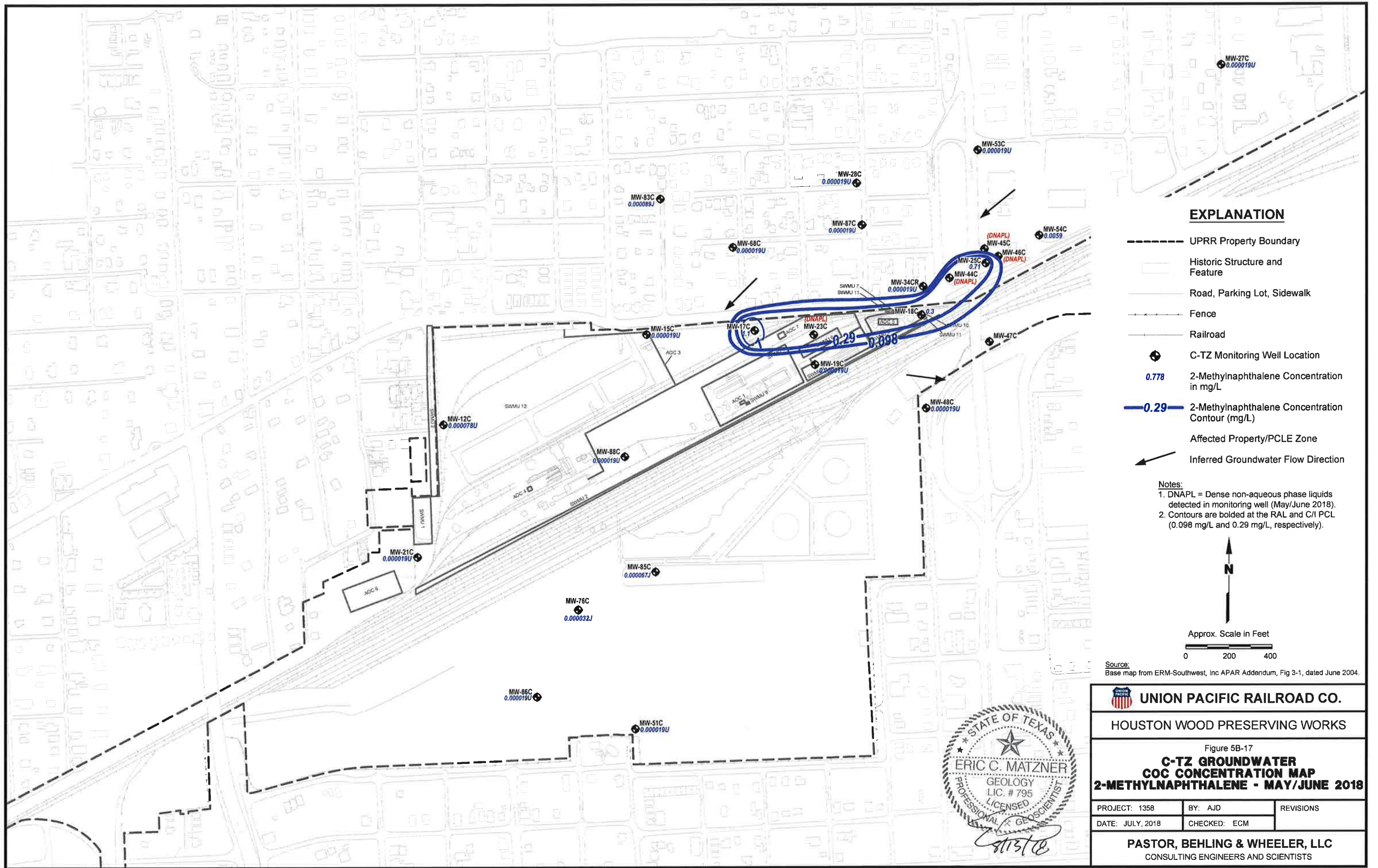


Approx. Scale in Feet
 0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



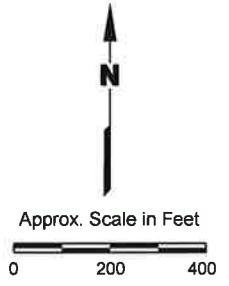
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-16 C-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



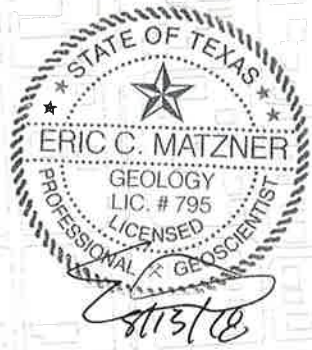
EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 0.778 2-Methylnaphthalene Concentration in mg/L
- 0.29** 2-Methylnaphthalene Concentration Contour (mg/L)
- Affected Property/PCLE Zone
- ↖ Inferred Groundwater Flow Direction

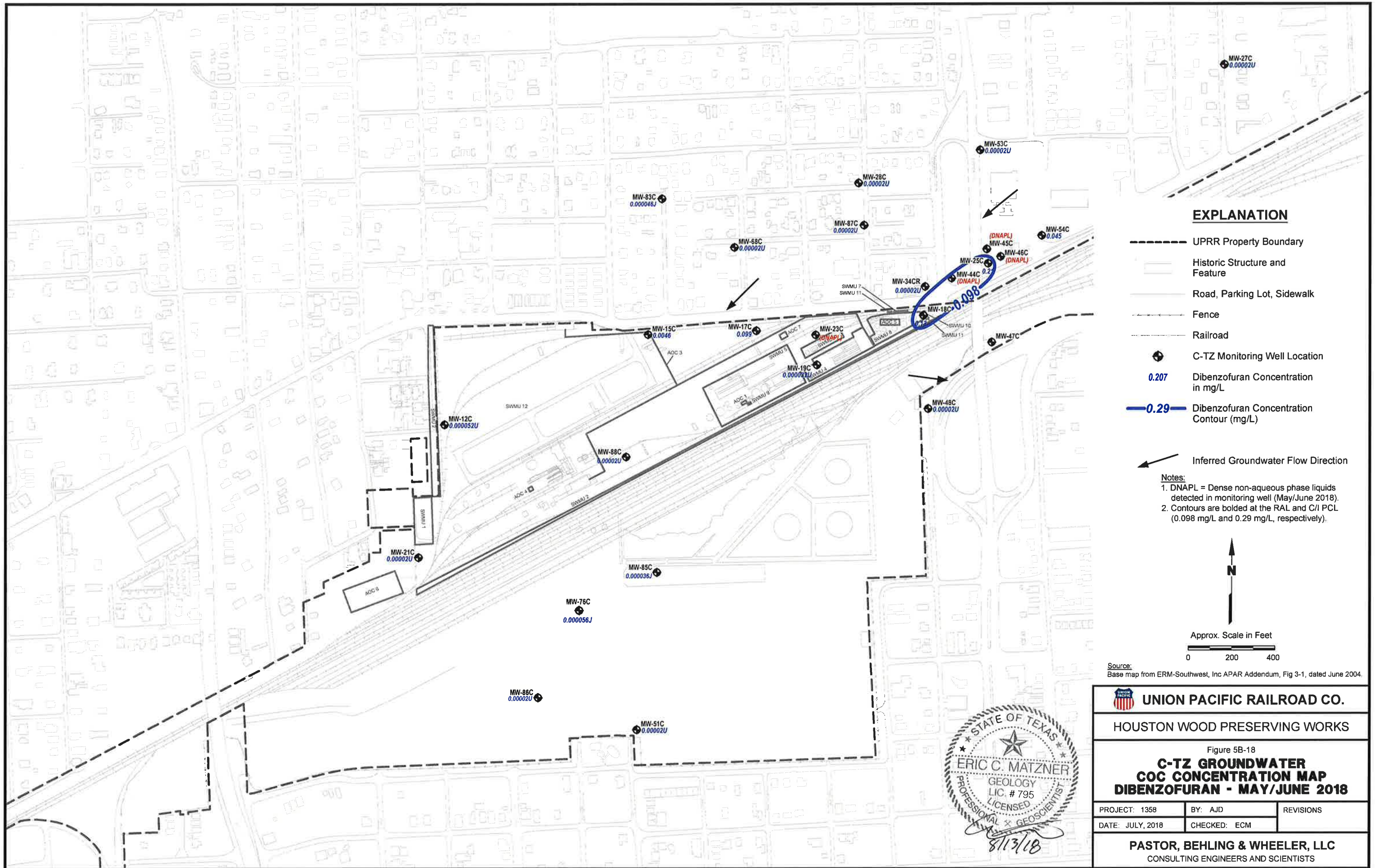
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.098 mg/L and 0.29 mg/L, respectively).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-17 C-TZ GROUNDWATER COC CONCENTRATION MAP 2-METHYLNAPHTHALENE - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



UNION PACIFIC RAILROAD CO.

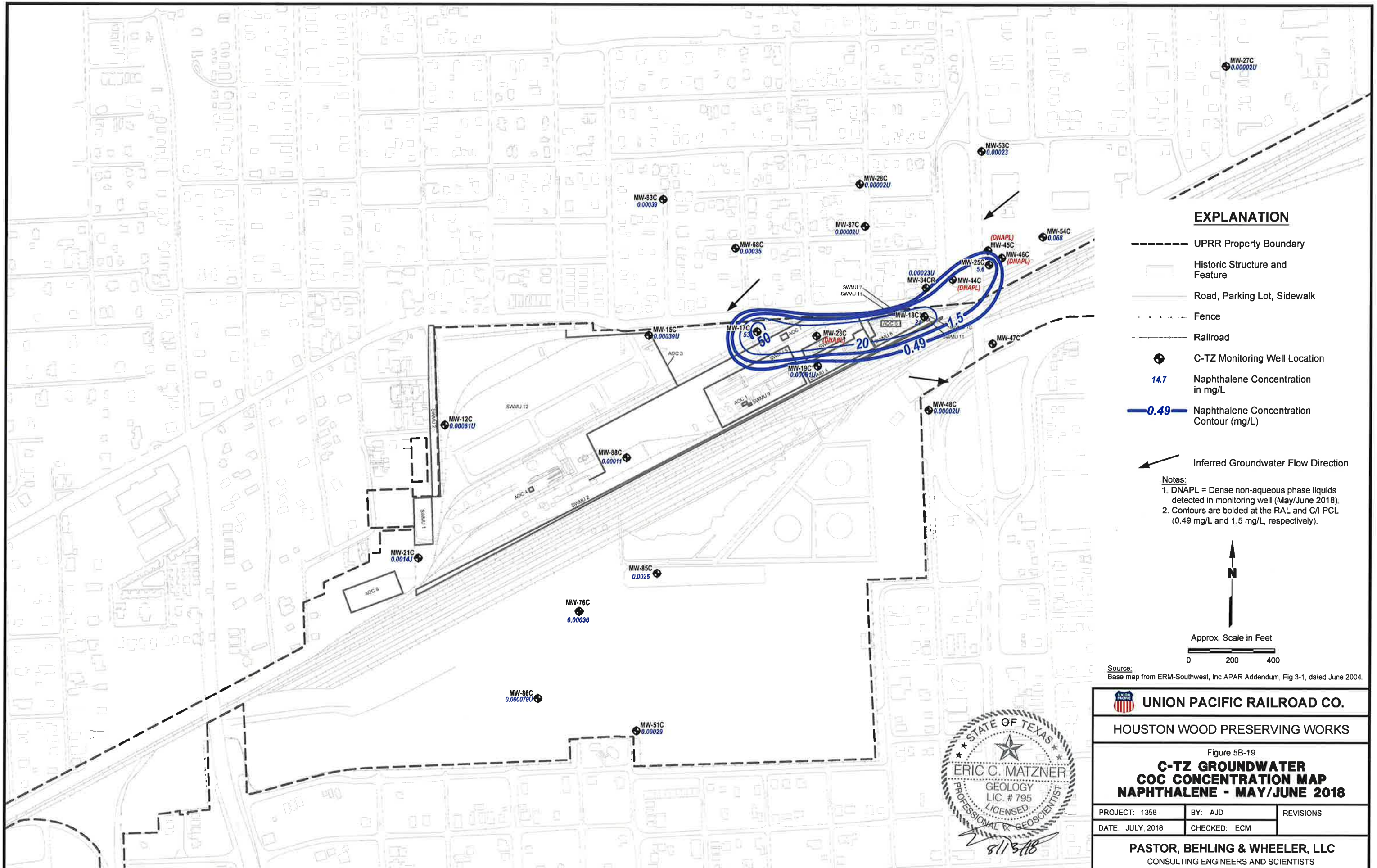
HOUSTON WOOD PRESERVING WORKS

Figure 5B-18
**C-TZ GROUNDWATER
COC CONCENTRATION MAP
DIBENZOFURAN - MAY/JUNE 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS





EXPLANATION

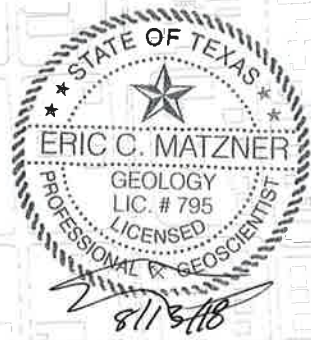
- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▭ Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 14.7 Naphthalene Concentration in mg/L
- 0.49** Naphthalene Concentration Contour (mg/L)
- ↖ Inferred Groundwater Flow Direction

- Notes:
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.49 mg/L and 1.5 mg/L, respectively).

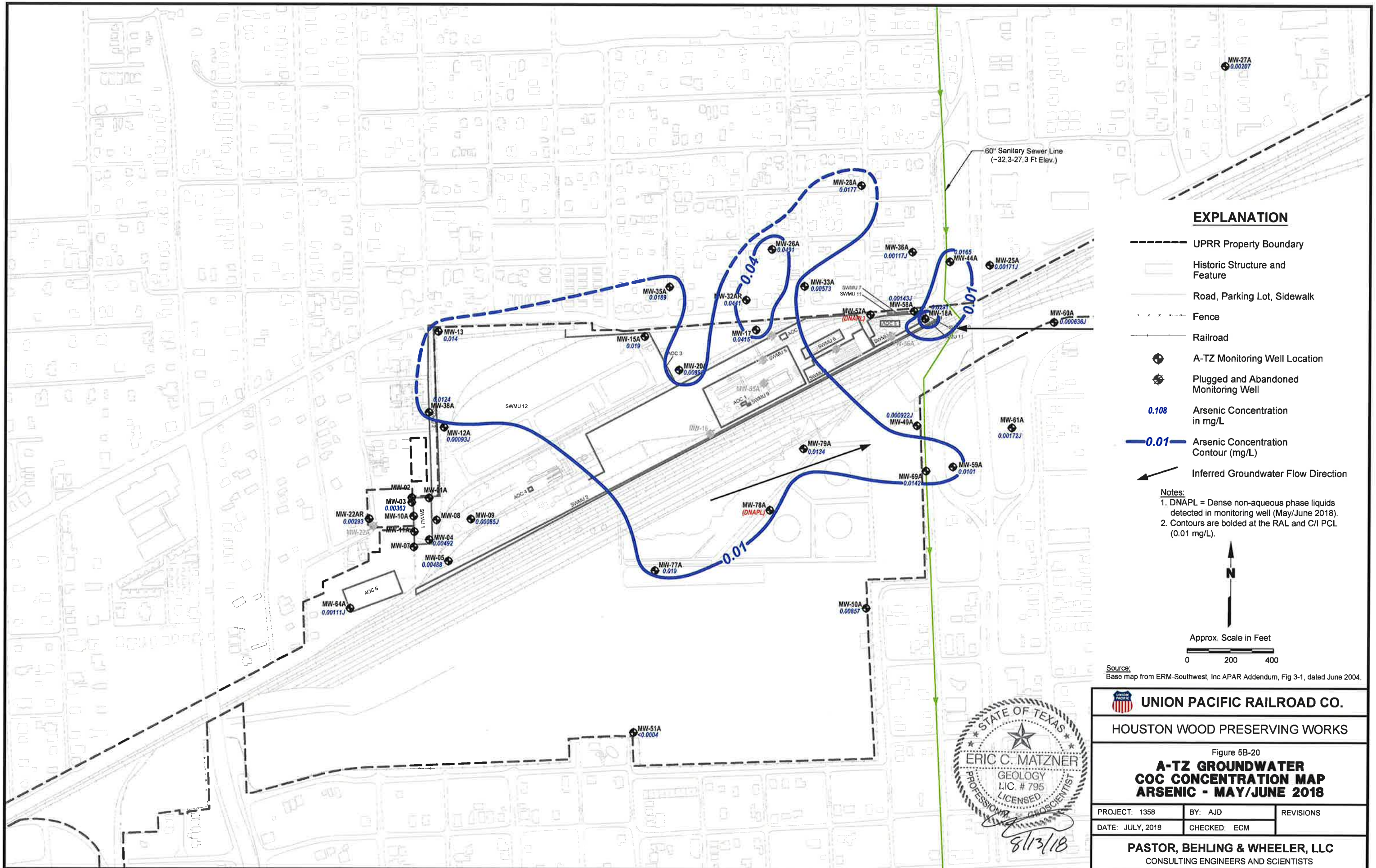


Approx. Scale in Feet
0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



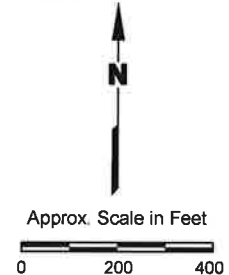
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-19		
C-TZ GROUNDWATER COC CONCENTRATION MAP NAPHTHALENE - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



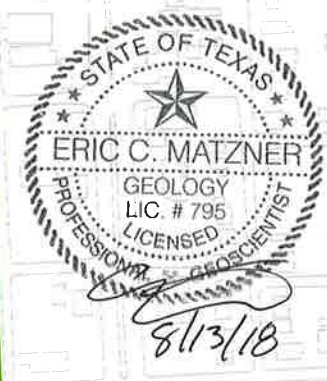
EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- 0.108 Arsenic Concentration in mg/L
- 0.01** Arsenic Concentration Contour (mg/L)
- ↖ Inferred Groundwater Flow Direction

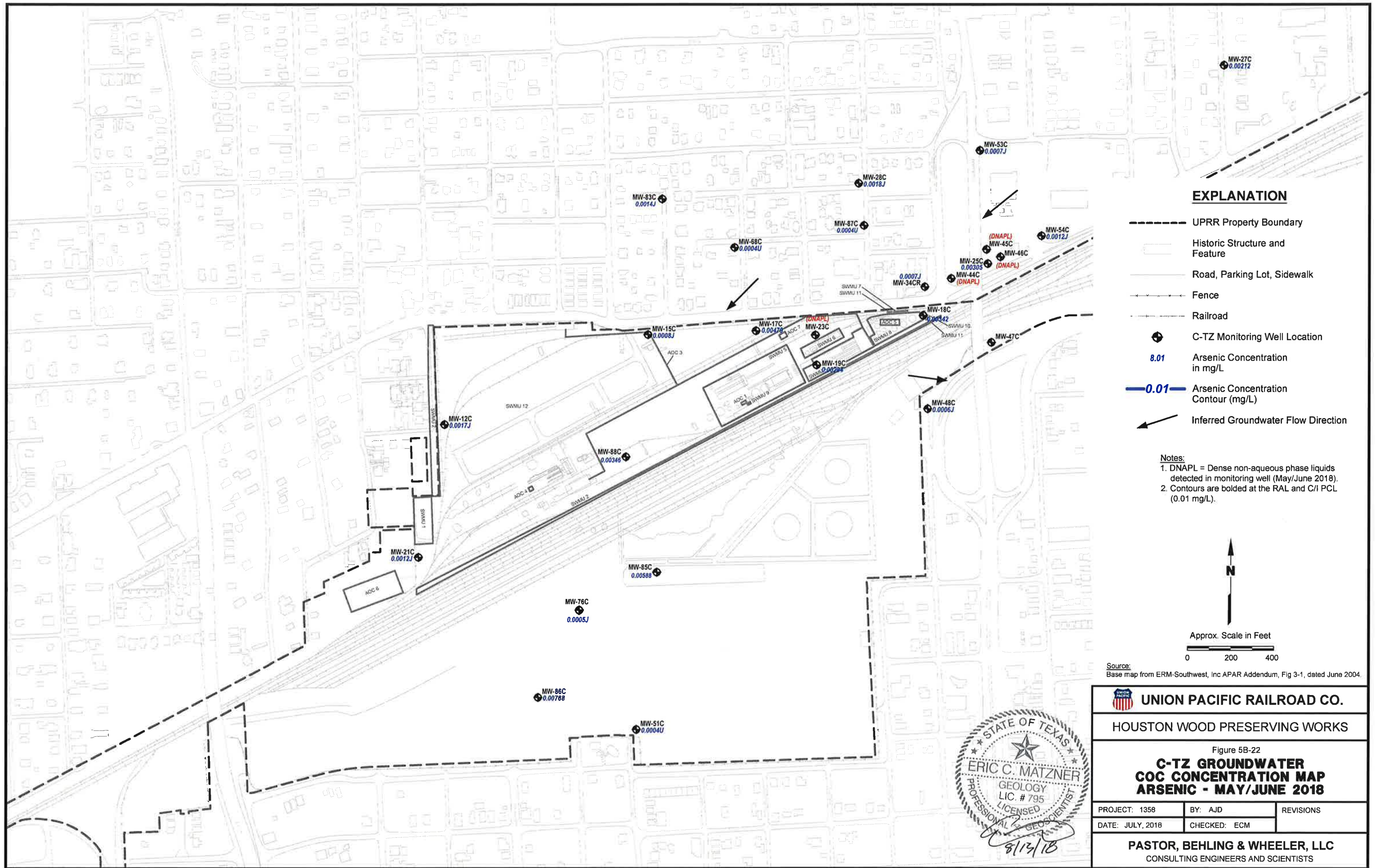
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.01 mg/L).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		
Figure 5B-20 A-TZ GROUNDWATER COC CONCENTRATION MAP ARSENIC - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - Fence
- Railroad
- ⊕ C-TZ Monitoring Well Location
- 8.01** Arsenic Concentration in mg/L
- 0.01** Arsenic Concentration Contour (mg/L)
- ↖ Inferred Groundwater Flow Direction


Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May/June 2018).
 2. Contours are bolded at the RAL and C/I PCL (0.01 mg/L).



Approx. Scale in Feet
 0 200 400

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



 UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-22 C-TZ GROUNDWATER COC CONCENTRATION MAP ARSENIC - MAY/JUNE 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Attachment D
Groundwater Gradient Maps

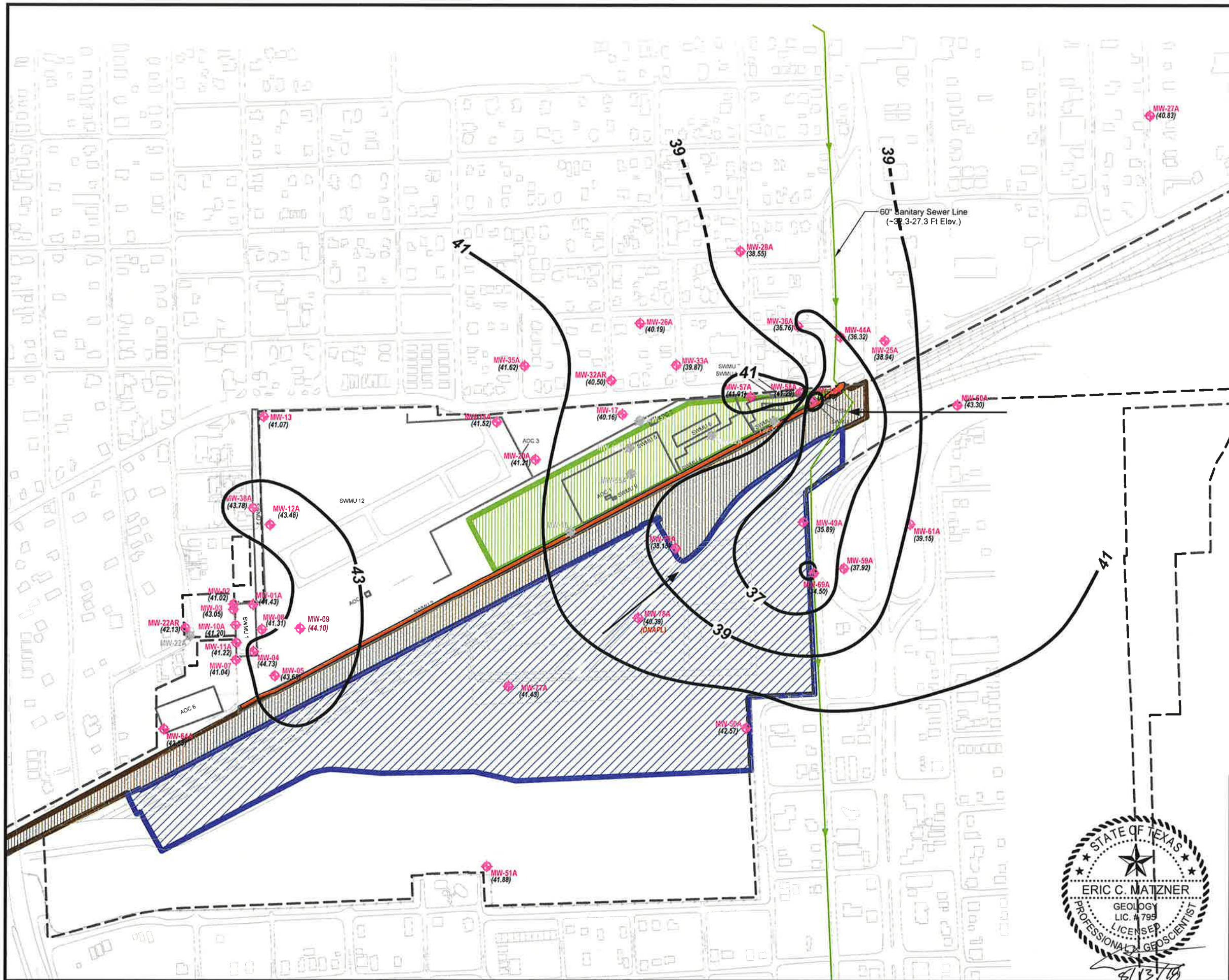
Attachment D1 – Jan/Feb 2018 Event

Attachment D2 – Mar/Apr 2018 Event

Attachment D3 – May/June 2018 Event



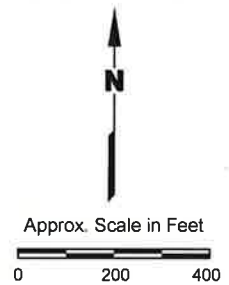
Attachment D1
Groundwater Gradient Maps Jan/Feb 2018 Event



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▭ Road, Parking Lot, Sidewalk
- ▭ Fence
- ▭ Railroad
- ◆ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- (37.71) Groundwater Elevation (Ft, HVD) (NM= Not measured)
- 39 — Groundwater Elevation Contour (Ft, HVD) C.I.= 2 Ft
- ↖ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- ▨ Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area

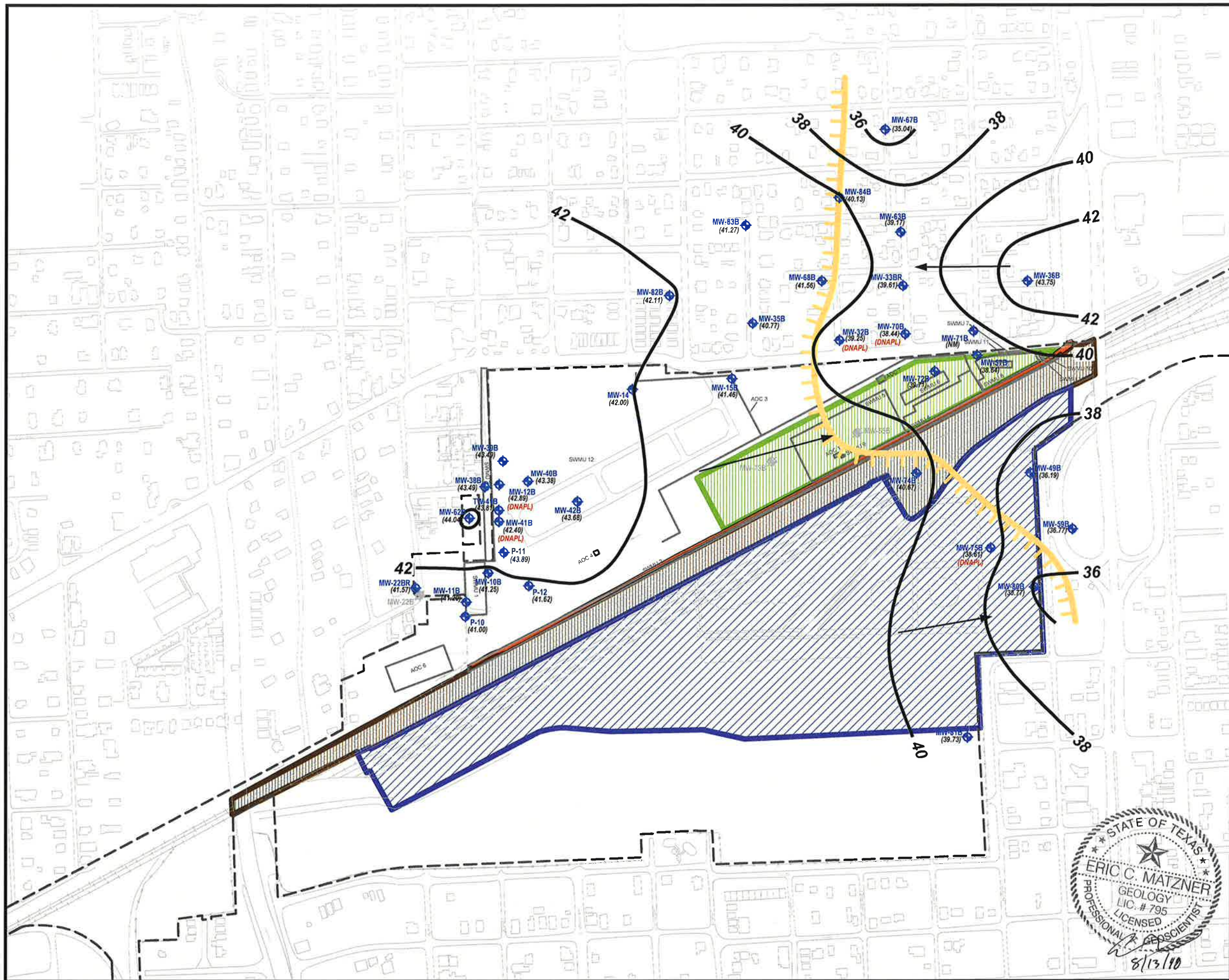
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (January 2018)



SOURCE:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5A-1		
GROUNDWATER GRADIENT MAP A-TZ - JANUARY/FEBRUARY 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



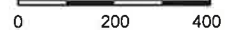
EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▭ Road, Parking Lot, Sidewalk
- ▭ Fence
- ▭ Railroad
- ◆ B-TZ Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- B-CZ B-TZ/B-CZ Boundary
- B-TZ Groundwater Elevation (Ft, HVD) (NM= Not measured) (* Not used for contour)
- 36 Groundwater Elevation Contour (Ft, HVD) C.I.= 2 Ft (Dashed where inferred)
- ↖ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- ▨ Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area

- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (January 2018).



Approx. Scale in Feet



SOURCE: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

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HOUSTON WOOD PRESERVING WORKS

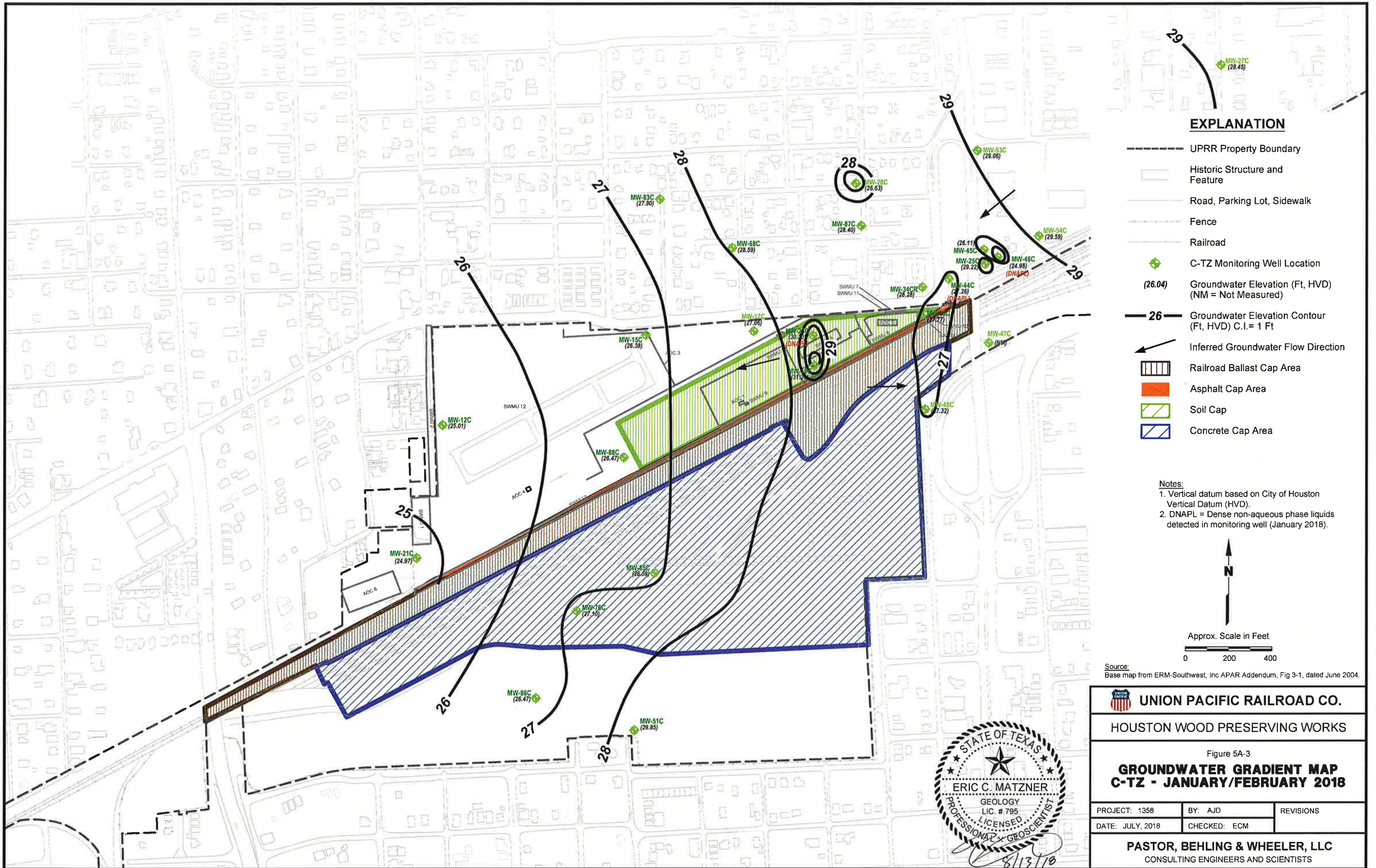
Figure 5A-2

**GROUNDWATER GRADIENT MAP
B-TZ AND B-CZ - JAN./FEB. 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
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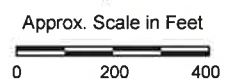




EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- ▭ Road, Parking Lot, Sidewalk
- ▭ Fence
- ▭ Railroad
- ◆ C-TZ Monitoring Well Location
- (26.04) Groundwater Elevation (Ft, HVD) (NM = Not Measured)
- 26 — Groundwater Elevation Contour (Ft, HVD) C.I. = 1 Ft
- ↖ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area

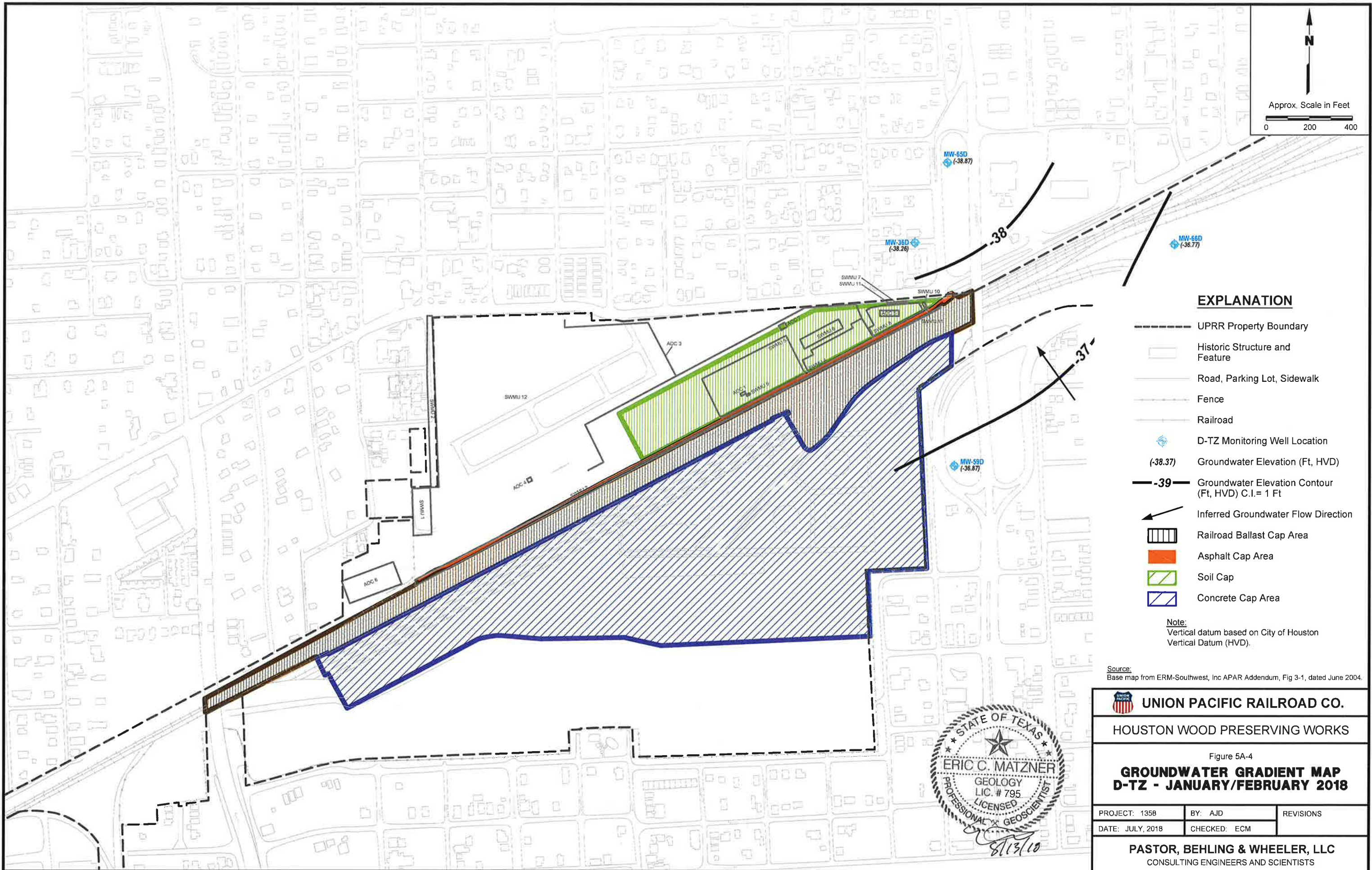
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (January 2018).



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5A-3 GROUNDWATER GRADIENT MAP C-TZ - JANUARY/FEBRUARY 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ◆ D-TZ Monitoring Well Location
- (-38.37) Groundwater Elevation (Ft, HVD)
- -39 Groundwater Elevation Contour (Ft, HVD) C.I.= 1 Ft
- ↖ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- Soil Cap
- Concrete Cap Area

Note:
Vertical datum based on City of Houston
Vertical Datum (HVD).

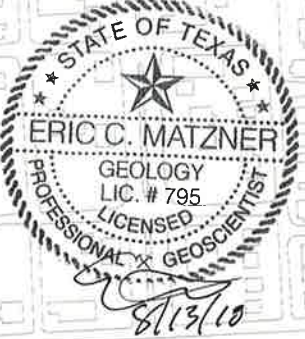
Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Figure 5A-4
**GROUNDWATER GRADIENT MAP
D-TZ - JANUARY/FEBRUARY 2018**

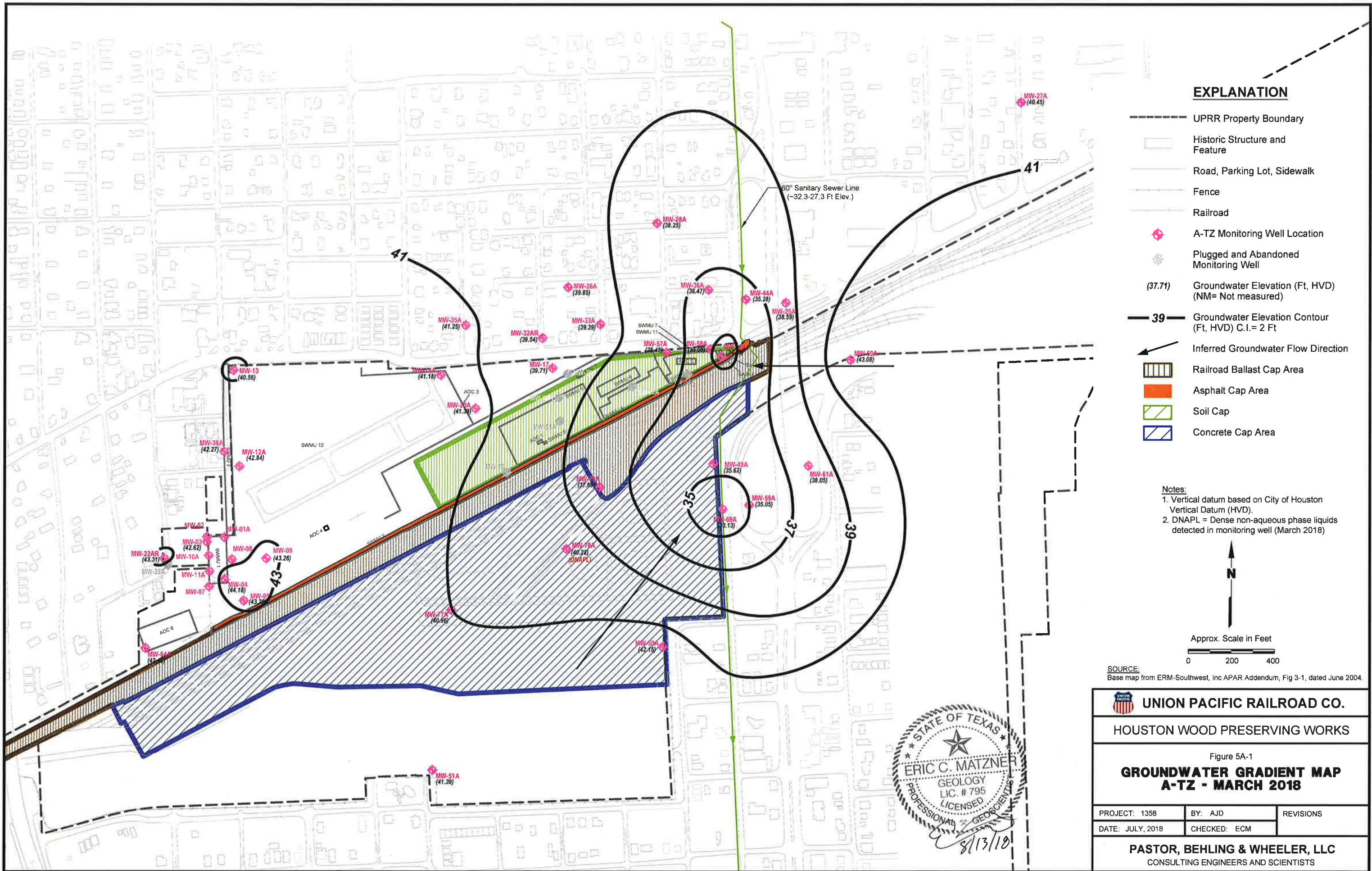
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	

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Attachment D2

Groundwater Gradient Maps Mar/Apr 2018 Event



UNION PACIFIC RAILROAD CO.

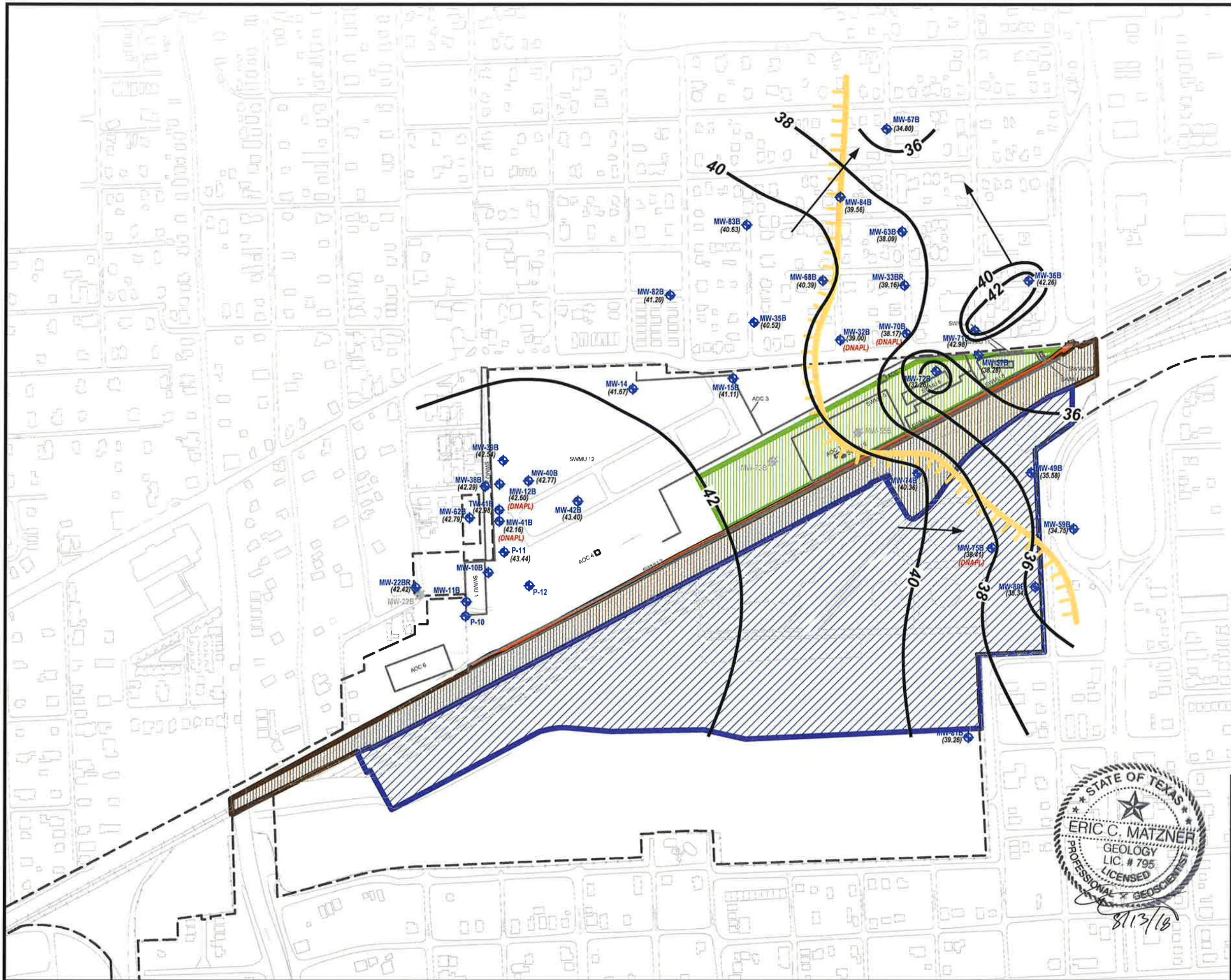
HOUSTON WOOD PRESERVING WORKS

Figure 5A-1

**GROUNDWATER GRADIENT MAP
A-TZ - MARCH 2018**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	

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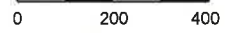
EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ◆ B-TZ Monitoring Well Location
- ⊕ Plugged and Abandoned Monitoring Well
- B-CZ B-TZ/B-CZ Boundary
- B-TZ
- (39.98) Groundwater Elevation (Ft, HVD) (NM= Not measured) (* Not used for contour)
- 36 — Groundwater Elevation Contour (Ft, HVD) C.I.= 2 Ft (Dashed where inferred)
- ↖ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area

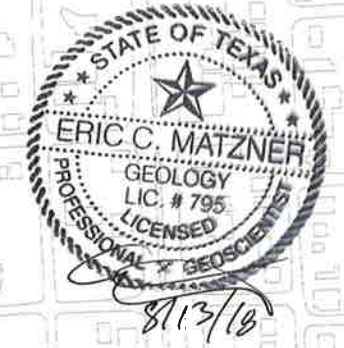
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (March 2018).



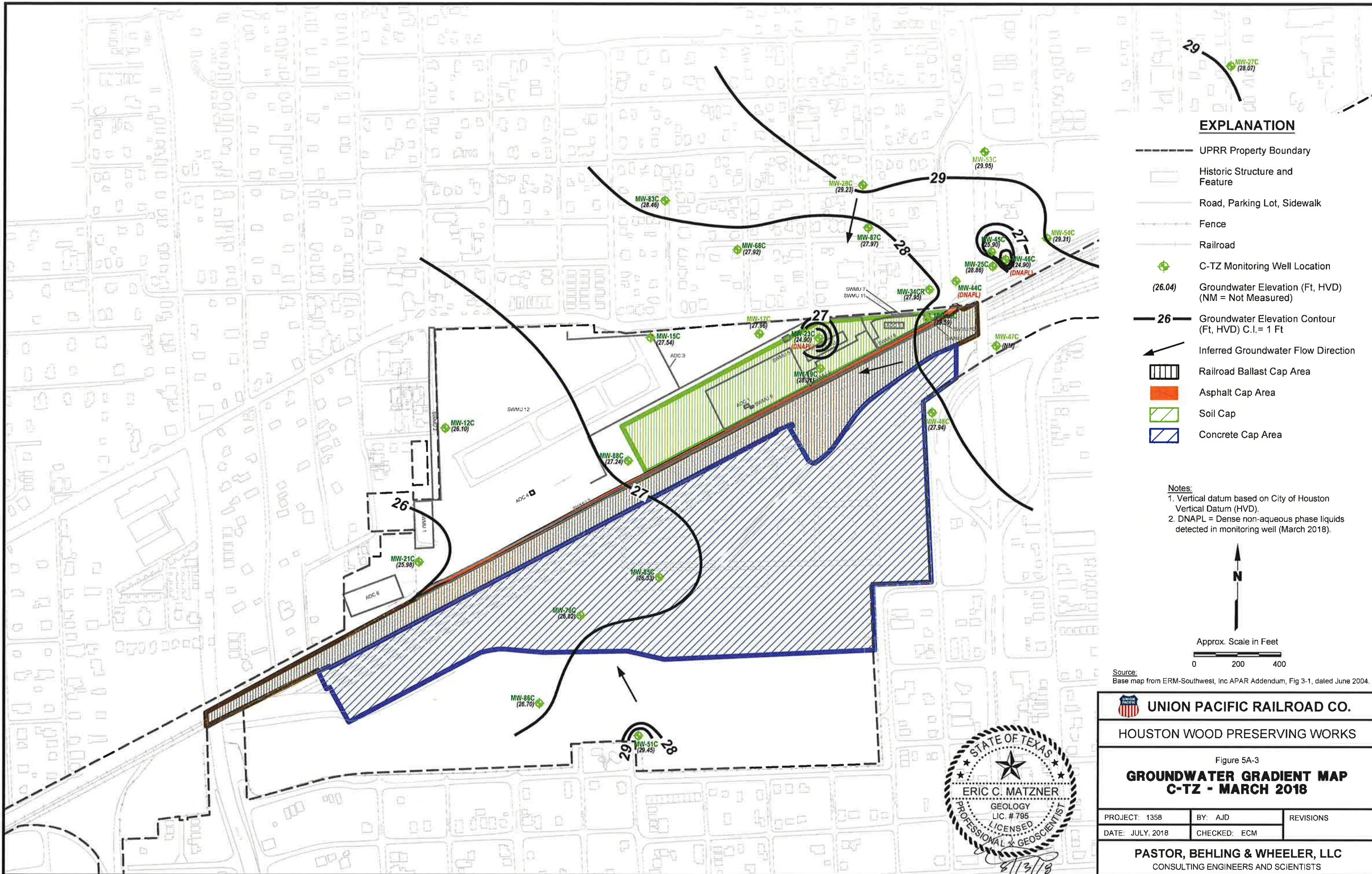
Approx. Scale in Feet

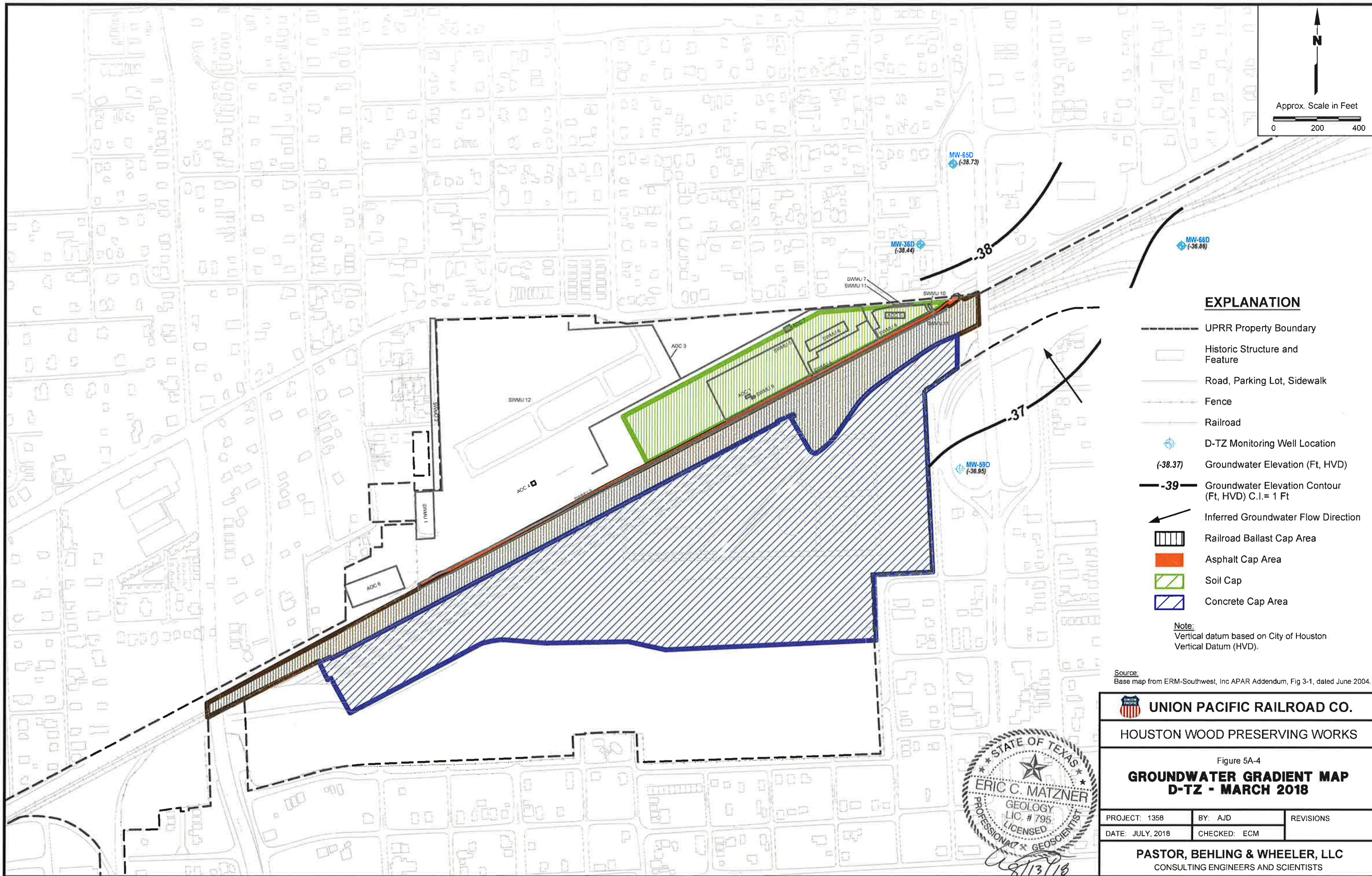


SOURCE: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5A-2		
GROUNDWATER GRADIENT MAP B-TZ AND B-CZ - MARCH 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		





EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ◆ D-TZ Monitoring Well Location
- (-38.37) Groundwater Elevation (Ft, HVD)
- -39 Groundwater Elevation Contour (Ft, HVD) C.I.= 1 Ft
- ↙ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area

Note:
Vertical datum based on City of Houston Vertical Datum (HVD).

Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Figure 5A-4
**GROUNDWATER GRADIENT MAP
D-TZ - MARCH 2018**

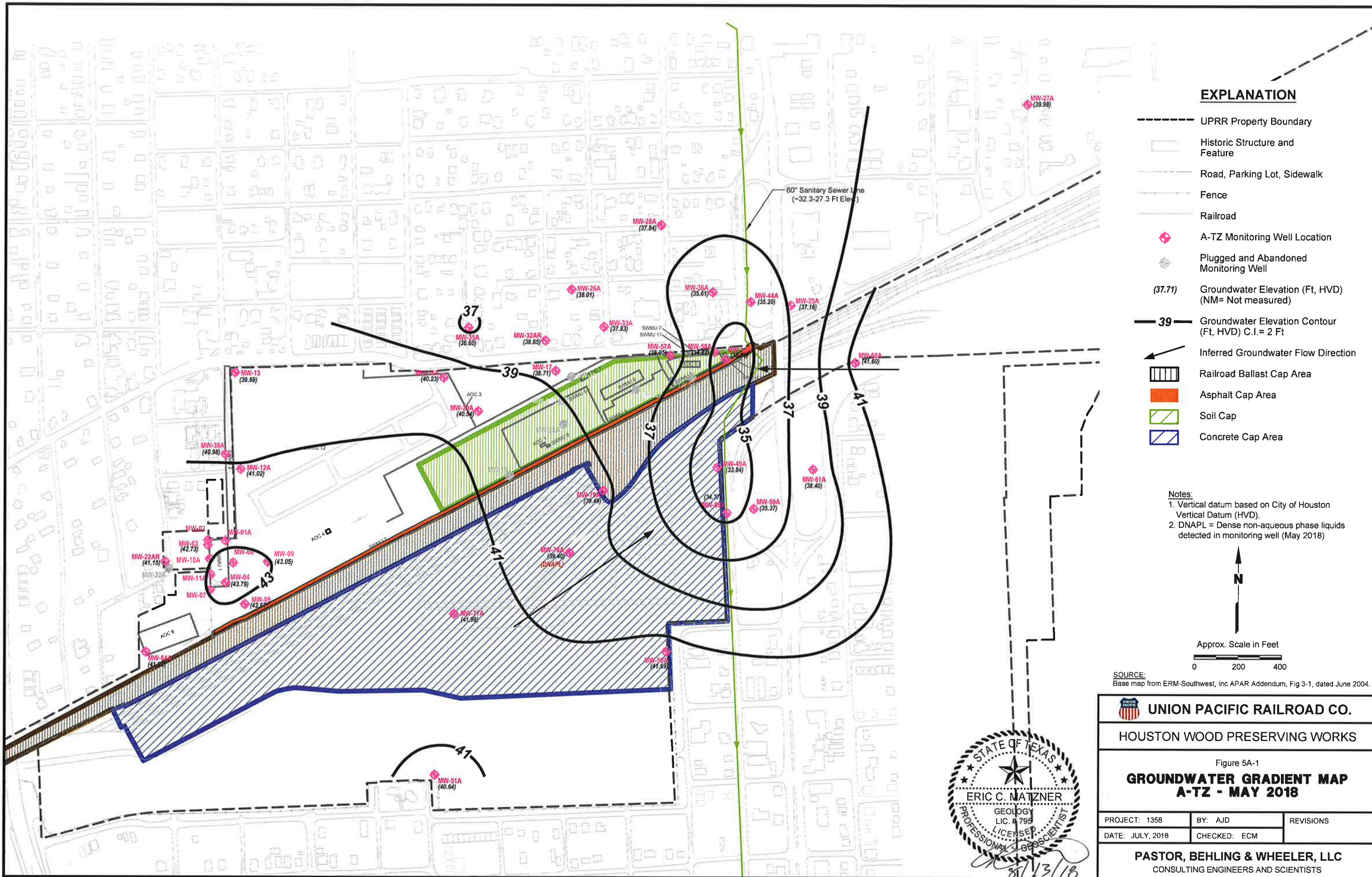
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	

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Attachment D3

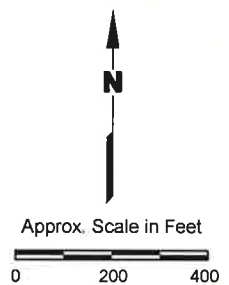
Groundwater Gradient Maps May/June 2018 Event



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ◆ A-TZ Monitoring Well Location
- ⊗ Plugged and Abandoned Monitoring Well
- (37.71) Groundwater Elevation (Ft, HVD) (NM= Not measured)
- 39 — Groundwater Elevation Contour (Ft, HVD) C.I.= 2 Ft
- ↙ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area

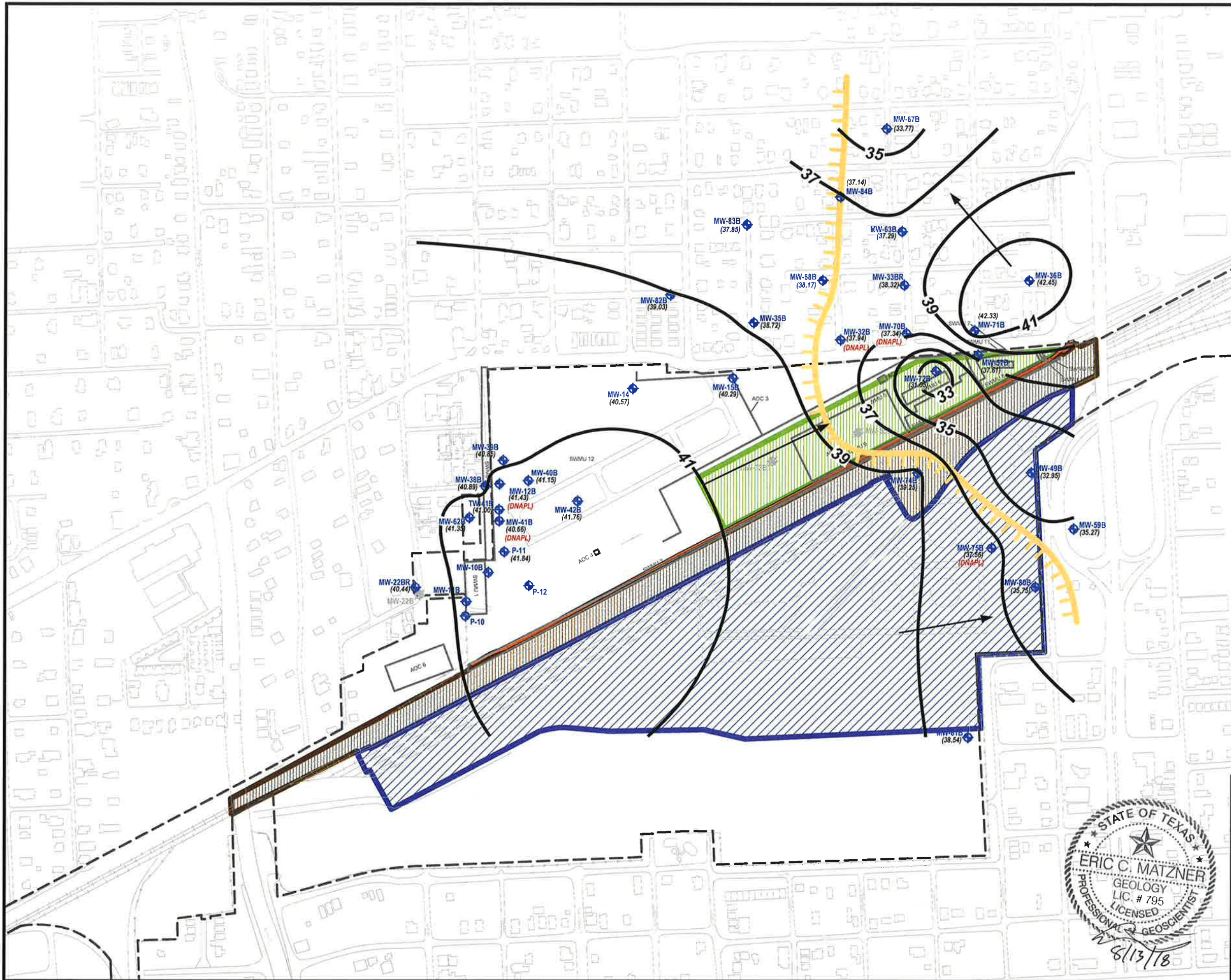
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May 2018)



SOURCE:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5A-1 GROUNDWATER GRADIENT MAP A-TZ - MAY 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



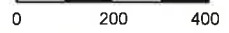
EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ◆ B-TZ Monitoring Well Location
- ⊙ Plugged and Abandoned Monitoring Well
- B-CZ
- B-TZ
- Groundwater Elevation (Ft, HVD)
(NM= Not measured)
(* Not used for contour)
- 36 Groundwater Elevation Contour
(Ft, HVD) C.I.= 2 Ft
(Dashed where inferred)
- ↖ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area

Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (May 2018).



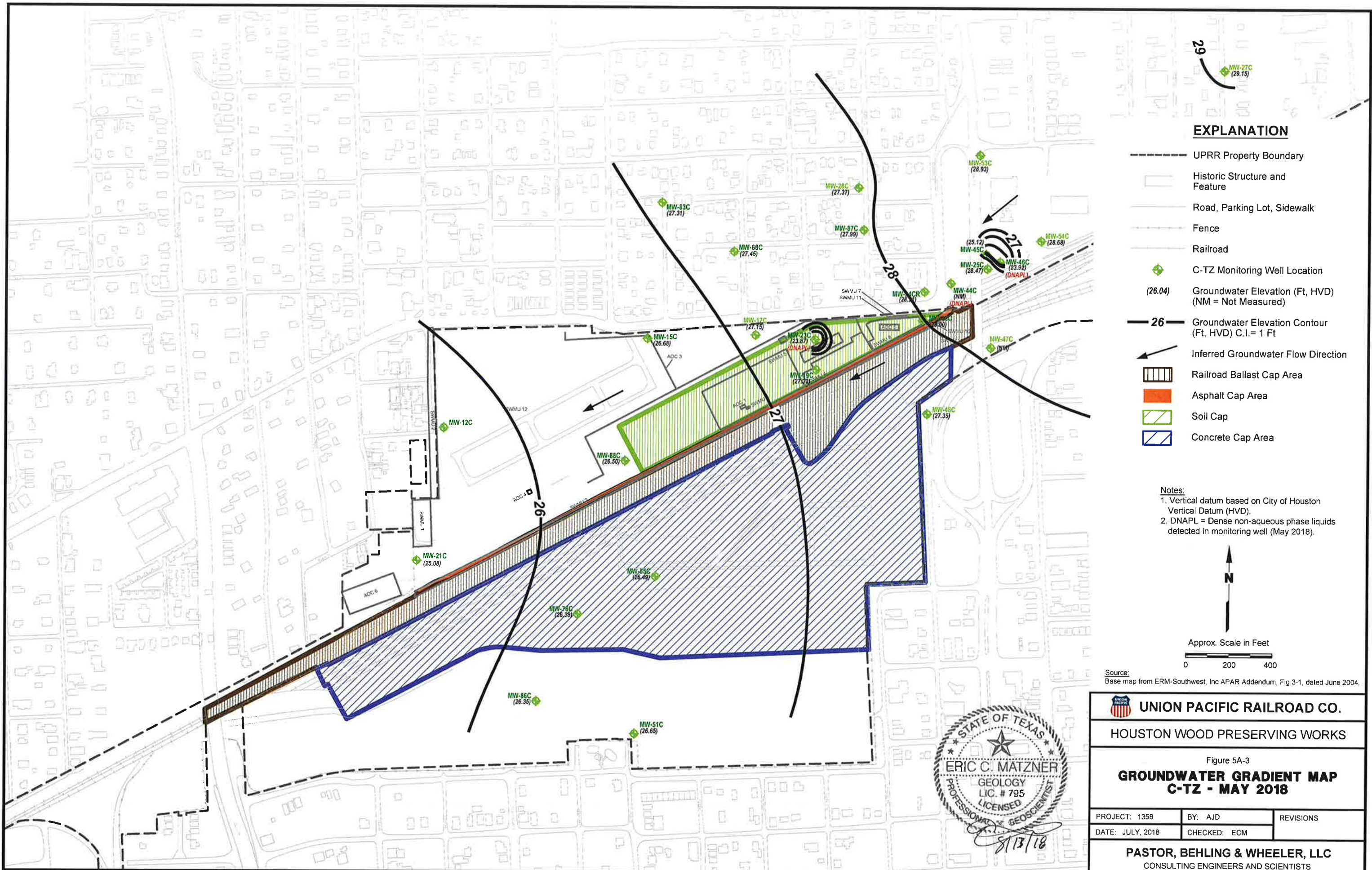
Approx. Scale in Feet



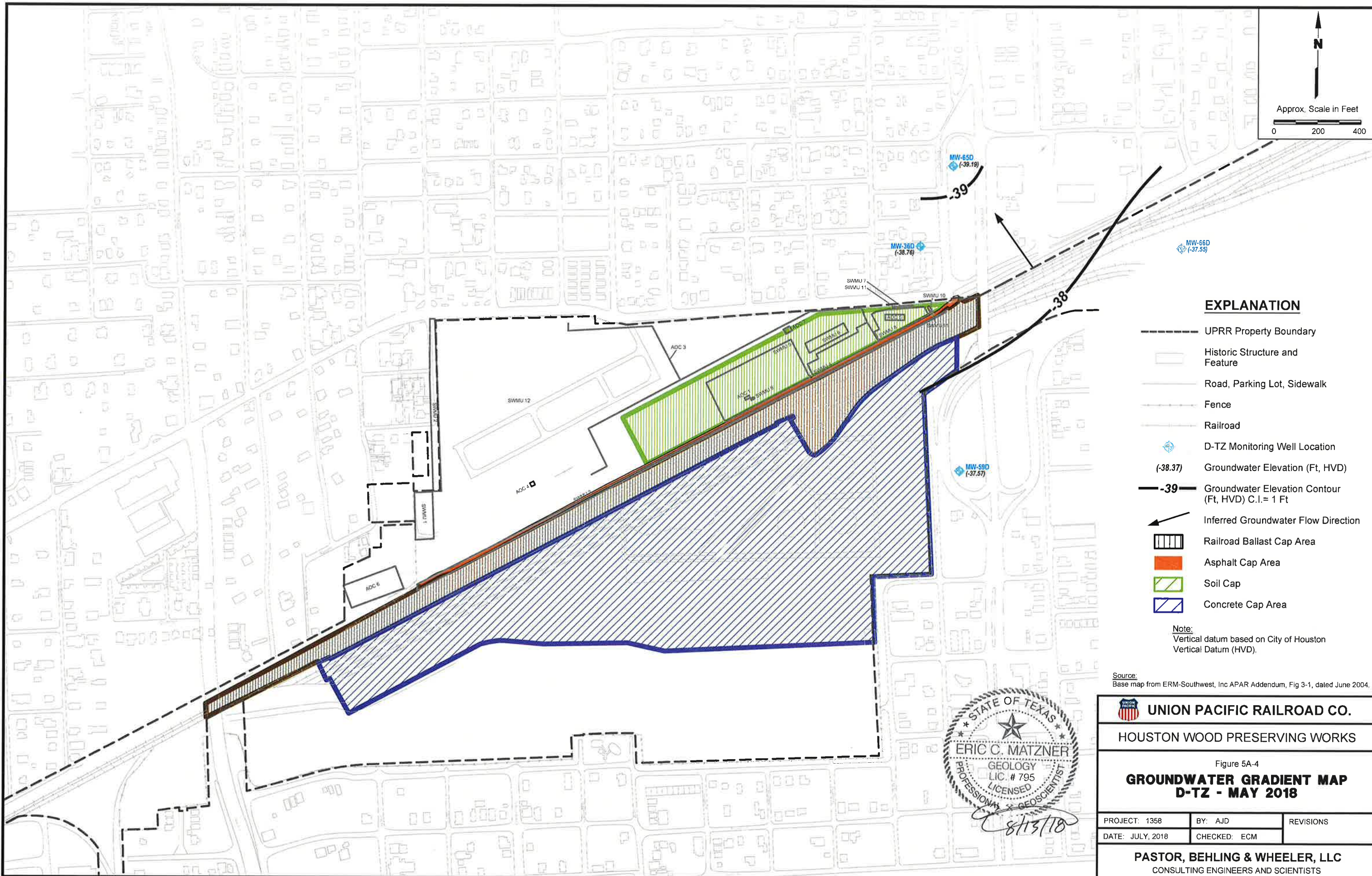
SOURCE:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5A-2		
GROUNDWATER GRADIENT MAP B-TZ AND B-CZ - MAY 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5A-3 GROUNDWATER GRADIENT MAP C-TZ - MAY 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

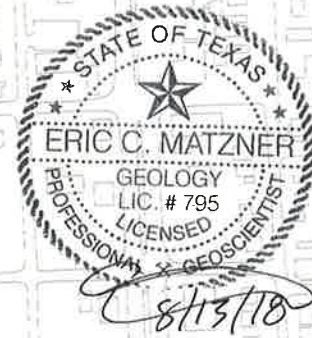


EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ◆ D-TZ Monitoring Well Location
- (-38.37) Groundwater Elevation (Ft, HVD)
- -39 — Groundwater Elevation Contour (Ft, HVD) C.I.= 1 Ft
- ↙ Inferred Groundwater Flow Direction
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area

Note:
Vertical datum based on City of Houston Vertical Datum (HVD).

Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5A-4		
GROUNDWATER GRADIENT MAP D-TZ - MAY 2018		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JULY, 2018	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		