

January 12, 2024 Project No. 31406585.016

#### 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

Re: MONTHLY STATUS UPDATE – ENGLEWOOD INTERMODAL YARD – NAPL COLLECTION SYSTEM/CONCRETE CAP REPAIRS
UNION PACIFIC RAILROAD HOUSTON WOOD PRESERVING WORKS FACILITY
4910 LIBERTY ROAD FACILITY, HOUSTON, TEXAS
POST-CLOSURE CARE PERMIT NO. HW-50343; INDUSTRIAL SWR NO. 31547

Dear Ms. Hatfield:

WSP USA Inc. (WSP), on behalf of Union Pacific Railroad Company (UPRR), is pleased to provide this monthly status update for December 2023 for inspections conducted at the Englewood Intermodal Yard concrete cap area within the UPRR Houston Wood Preserving Works Facility (the Site). Monthly status updates were requested by the Texas Commission on Environmental Quality (TCEQ) in a letter dated March 20, 2018.

A non-aqueous phase liquid (NAPL) Collection System was installed in the Englewood Intermodal Yard in January 2019 to address the tar-like substance seeps within parking stalls B100 to B109 (for container trailers). The following is a summary of the observations from the weekly inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system for December 2023 (photographs from the weekly inspections are provided in Attachment A):

- Water levels in NAPL Collection System Sump 1 (B099/B100 stalls), Sump 2 (B103/B104 stalls), and Sump 3 (B107/B108 stalls) were measured at 8, 14, and 14 inches from tops of the manhole, respectively, during the inspection on December 6, 2023 (Photo No.17-19). During the December 13, 2023 inspection, Sump 1, Sump 2, and Sump 3 were measured at 5, 10, and 9.5 inches from the top of the manhole, respectively (Photo No. 32, 27 and 41). On December 20, 2023, Sump 1, Sump 2, and Sump 3 were measured at 9, 10, and 5 inches from the top of the manhole, respectively (Photo No. 61-63). During the December 27, 2023 inspection, Sump 1, Sump 2, and Sump 3 had 6, 13, and 11 inches of freeboard measured, respectively (Photo No. 83-85). During the December 2023 inspections, the water in Sump 1 was observed to be light brown in color and the water in Sumps 2 and 3 was observed to be clear. No sheen was observed in the sumps during the December inspections. No odors were reported during the November inspections.
- The NAPL Collection System Sumps 1, 2, and 3 have continued to be checked weekly for DNAPL using an
  interface probe. No measurable NAPL has been detected within the sumps using the interface probe through

WSP USA 16200 Park Row Suite 200 Houston, TX 77084 December 2023. Even though no measurable DNAPL was noted, a hoe has continued to be used to further evaluate the presence of and recover DNAPL, if present, from the bottom of each of the sumps during the weekly inspections. No DNAPL was encountered or recovered from the sumps during December 2023 weekly inspections. A notation on the presence of NAPL in each sump, tabulation of depth and thickness of NAPL if detected, and a tabulation of total mass of NAPL recovered from each sump is provided on the enclosed Table 1. Any NAPL recovered from the sumps is placed in a drum for disposal. The drum is staged at the Container Storage Area (CSA). The inflow protector was monitored for NAPL accumulation, and no accumulation was observed through December 2023.

- No new tar-like material seeps were observed along the concrete joint between the NAPL Collection System and the existing concrete at Stall B107 during the December 2023 inspections (Photo Nos. 16, 33, 60, 82).
- For areas outside the NAPL Collection System, no new tar-like material was observed on the concrete or asphalt surface during the December 2023 weekly inspections. As has been observed in previous years as the ambient weather cools, the number of tar-like material seeps observed and total volume of material recovered during the month of December was less than during the November inspections. No tar-like material was observed during the weekly inspection events in December 2023.
- Since the pressure washing event on August 18, 2023, no new brown staining/residue or seep water was
  observed during the October, November or December 2023 weekly inspections. UPRR will continue to have a
  remediation contractor pressure wash and/or collect the water in the areas where the brown staining and seeps
  are observed.
- WSP, on behalf of UPRR, submitted to the TCEQ the Englewood IM Yard Test Pit Evaluation Report dated June 2, 2021 summarizing the findings from the test pits installed in July 2020, including weekly inspections since the installation. As discussed in the Test Pit Report, the test pit inspections were continued through the warmer months (through September 2021). During inspections in June and July 2021 the concrete patches covering test pits in stalls A010, A021, B013, B057, B096, and B108 were observed to be damaged. UPRR contractor US Ecology removed the damaged test pit concrete on October 22, 2021 and completed installation of new rebar and concrete on October 25, 2021. The new concrete patches continue to be monitored during the weekly inspections.
- During the December 2023 inspections, no NAPL seeps were observed at the seven test pit locations (stalls A010, A021, A098, B013, B057, B096 and B108).
- A follow-up video camera survey of the stormwater sewer lines in the central area of the Englewood IM Yard
  was conducted on August 26, 2021 to evaluate the stormwater line near the test pit locations. Details of the
  follow-up video survey and test pit evaluation will be provided in the Interim Measures Response Action
  Completion Report after the activities detailed in the Interim Measure Work Plan (discussed below) are
  completed.
- The TCEQ issued a comment letter dated January 26, 2022 titled "Comments on Interim Groundwater Monitoring Report (July 2020), dated April 30, 2021 Englewood Intermodal Yard (EIY) Test Pit Evaluation Report, dated June 2, 2021, Corrective Action Monitoring Report, 2021 First Semi-Annual Event, dated July 9, 2021". In the comment letter, the TCEQ requested UPRR prepare an Interim Measures Work Plan (Work Plan) to address the NAPL seeps in the Englewood Intermodal Yard. The TCEQ requested that the Work Plan include a schedule and plan for implementation of additional interim measures to permanently address the NAPL seeps in the Englewood Intermodal Yard. UPRR submitted the requested Work Plan dated May 17, 2023 to the TCEQ on May 24, 2023. The TCEQ issued a comment letter dated July 5, 2023 on the Work Plan. UPRR submitted responses to the TCEQ comments and a Revised Work Plan on October 20, 2023.

Weekly site inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system will continue to be conducted.

Project No. 31406585.016

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

Sincerely,

WSP USA Inc.

Catherine Mear

Consultant, Environmental Scientist

Eric C. Matzner, P.G.

Vice President - Director, Hydrogeologist

CC: Kevin Peterburs, UPRR – Milwaukee, WI

Karina Rocha, Waste Section Manager, TCEQ Region 12, Houston

Attachment Table 1 - NAPL Measurements - NAPL Collection System

Attachment A - Weekly Inspection Photolog

UPRR Houston, tx - Wood Preserving Works							
Measured Date	Sump 1 (B099/B100) Freeboard (in)	Sump 2 (B103/B104) Freeboard (in)	Sump 3 (B107/B108) Freeboard (in)	Depth to DNAPL (in)	Comments		
8/14/2019	2.5	28	29	Not measurable			
8/21/2019	0	27.5	26.5	Not measurable			
8/28/2019	44.5	47.9	45	Not measurable	Water from sumps pumped out		
9/4/2019	19	42	41.5	Not measurable	Water Hom Samps pamped out		
9/13/2019	0	39.5	38	Not measurable			
9/20/2019	0	3	2.5	Not measurable			
9/25/2019	0	42	42.5	Not measurable	Water from sumps pumped out		
10/2/2019	2.5	42.5	42	Not measurable	Sheen visible in B107/B108 sump, less than 0.1 gal of DNAPL recovered		
10/9/2019	3	42	41.5	Not measurable	Sheen visible in B107/B108 sump, less than 0.1 gal of DNAPL recovered		
	0	39.5	39	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump		
10/16/2019				Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108		
10/24/2019	3	35	25	Not measurable	Sump		
10/29/2019	0	24	23	Not measurable	Water from sumps pumped out		
10/30/2019	0	40	39	Not measurable	Slight sheen visible in B107/B108 sump		
11/6/2019	9	39	38.5	Not measurable			
					Less than 0.1 gal of DNAPL recovered from B107/B108		
11/13/2019	7	30	29	Not measurable	Sump		
11/19/2019	4	26	25.5	Not measurable			
11/27/2019	0	25	23	Not measurable			
					Less than 0.1 gal of DNAPL recovered from B107/B108		
12/3/2019	2	25.5	25	Not measurable	Sump Less than 0.1 gal of DNAPL recovered from B107/B108		
12/11/2019	1.5	17	16.54	Not measurable	Sump		
12/11/2019	5	19.5	17.5	Not measurable	Jump		
12/23/2019	10	21	20.5	Not measurable			
1/7/2020	9	13	12.5	Not measurable			
1/8/2020	9	13	12.5	Not measurable	Water from sumps pumped out		
1/17/2020	0	32	31.5	Not measurable			
1/21/2020	2.5	26.5	26	Not measurable			
1/28/2020	0	0	0	Not measurable			
2/4/2020	2	11	10.5	Not measurable			
	0	0	0	Not measurable			
2/12/2020					Weber 5		
2/18/2020	1.5	11.5	10.25	Not measurable	Water from sumps pumped out on 2/20/2020		
2/27/2020	2	42	36	Not measurable			
3/6/2020	1	36	36	Not measurable			
3/11/2020	2	36	35.5	Not measurable			
3/18/2020	0	35.5	35	Not measurable			
3/27/2020	0	29	28	Not measurable			
4/3/2020	1.5	29	28.5	Not measurable			
4/8/2020	0	23	22	Not measurable			
4/15/2020	0.5	23	22	Not measurable			
4/21/2020	0	21	21	Not measurable			
4/28/2020	0	23	22	Not measurable			
4/20/2020	0	25	22	Not measurable	Measurements were not taken; the inspector was		
5/4/2020	-	-	-	Not Measured	unable to open the sumps		
5/12/2020	0	20	19	Not measurable			
5/19/2020	0	15.75	14.25	Not measurable	Sump 1 pumped down (May 22nd)		
5/27/2020	0	14	13	Not measurable			
6/1/2020	0	7	5	Not measurable			
6/10/2020	0	10	9	Not measurable			
6/17/2020	1	12	11	Not measurable			
6/25/2020	0	0	0	Not measurable			
6/30/2020	0	0	0	Not measured	S		
7/1/2020	48	46	47	Not measurable	Sumps 1, 2, & 3 pumped down		
7/8/2020	34	24.5	24	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump		
					Sheen visible in B99/B100 sump & B107/B108 sump,		
7/15/2020	32	29.5	29	Not measurable	less than 0.1 gal of DNAPL recovered B107/B108 sump		
7/23/2020	0	23	22.5	Not measured	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump		
					Jump		
7/31/2020	0	11	10	Not measurable			
8/5/2020	0	7	5	Not measurable			
8/13/2020	1	11	10	Not measurable			
8/19/2020	0	7	6	Not measurable			
8/26/2020	0	10	9	Not measurable			
					Sumps 1, 2, & 3 pumped down (September 1); Sheen		
9/2/2020	43	37	38	Not measurable	visible in B99/B100 sump & B107/B108 sump		
9/9/2020	28	37	36	Not measurable	Sheen visible in B107/B108 sump		
9/15/2020	1	35	33	Not measurable			
9/23/2020	0	0	0	Not measurable			
3/23/2020	<u>_</u>		<u>_</u>	Not measurable	1		

	UPRR Houston, tx - Wood Preserving Works							
Measured Date	Sump 1 (B099/B100) Freeboard (in)	Sump 2 (B103/B104) Freeboard (in)	Sump 3 (B107/B108) Freeboard (in)	Depth to DNAPL (in)	Comments			
9/30/2020	1	10	9	Not measurable				
10/8/2020	4	12	11.5	Not measurable				
10/15/2020	0	11	10.5	Not measurable	Less than 0.1 gal of DNAPL recovered B107/B108 sump			
10/21/2020	1	10.5	9.25	Not measurable				
10/28/2020	0	11	10	Not measurable				
11/4/2020	9	13	12	Not measurable				
11/11/2020	0.5	12	11	Not measurable				
11/18/2020	3.5	13	12	Not measurable				
11/24/2020	7	14	13.5	Not measurable				
11/30/2020	2	7	6	Not measurable				
12/10/2020	5	10.5	10	Not measurable				
12/18/2020	4	10	9	Not measurable				
12/23/2020	1	9	7.5	Not measurable				
12/31/2020	0	4	3.5	Not measurable				
1/6/2021	4	10.5	9	Not measurable				
1/15/2021	43	39	37.5	Not measurable	Sumps 1, 2, & 3 pumped down			
1/22/2021	0	34	33	Not measurable	Sheen visible in B107/B108 sump			
1/29/2021	2	31	30	Not measurable	Sheen visible in B107/B108 sump			
2/4/2021	4	30	29.5	Not measurable	Sheen visible in B099/B100 sump			
2/10/2021	0	27	25.5	Not measurable				
2/17/2021	0	0	0	Not measurable				
2/24/2021	2	10	9.5	Not measurable				
3/2/2021	0	0	0	Not measurable				
3/10/2021	0	10	9.75	Not measurable				
3/17/2021	0	2	1	Not measurable				
3/24/2021	0	3.5	2	Not measurable				
3/31/2021	0	6.5	7	Not measurable				
4/8/2021	0	7.5	7	Not measurable				
					Less than 0.1 gal of DNAPL recovered B107/B108 sump;			
4/14/2021	0	6.5	6	Not measurable	Sheen visible in B103/104 and B107/B108 sumps			
4/21/2021	0.5	9	8.5	Not measurable				
4/28/2021	0	8.5	8	Not measurable				
5/5/2021	0	7.5	7	Not measurable				
5/12/2021	0	8	7.5	Not measurable				
5/19/2021	0	0	0	Not measurable				
5/26/2021	0	2	0.5	Not measurable				
5/27/2021	41	32	26	Not measurable	Sumps 1,2, & 3 pumped down			
6/2/2021	0	40	38	Not measurable	Sheen visible in B107/108 sump			
6/9/2021	0	30	28.5	Not measurable				
6/16/2021	0	24 12	25	Not measurable				
6/23/2021			13	Not measurable				
6/30/2021 7/7/2021	0	3 0	0	Not measurable				
7/14/2021				Not measurable Not measurable	Company 1.2. 9.2 more and discons (Lobe 15)			
	0	0 39	0 37	Not measurable	Sumps 1,2, & 3 pumped down (July 15)			
7/21/2021 7/29/2021								
8/4/2021	0	37	35.5 34	Not measurable  Not measurable	Shoon visible in B103/104 and B107/B109 sumps			
8/4/2021	U	36	34	Not measurable	Sheen visible in B103/104 and B107/B108 sumps  Depth to DNAPL measurements were not taken; the			
9/11/2021	_	22	27	Not Massurad	interface probe was not functioning properly			
8/11/2021 8/18/2021	0	33 25	32 23	Not Measured Not measurable	interface probe was not functioning properly			
8/25/2021	0	20	22	Not measurable	1			
9/1/2021	0	20	17	Not measurable	1			
9/8/2021	3	14	11	Not measurable				
9/15/2021	0	3	4	Not measurable	Sumps 1,2, & 3 pumped down (September 17)			
9/22/2021	31.5	46	46	Not measurable	Sheen visible in B107/B108 sump			
9/29/2021	0	29	30.75	Not measurable	Sheen visible in B103/104 and B107/B108 sumps			
10/7/2021	6	18	17.5	Not measurable	oncen visible in b103/104 and b107/b100 sumps			
10/7/2021	0	10	17.5	Not measurable	Sheen visible in B103/104 and B107/B108 sumps;			
					brown discoloration and slight odor noted B099/B100			
10/13/2021	3.6	10.56	9.72	Not measurable	sump			
10/20/2021	0	13.94	12.6	Not measurable	Sumps 1,2, & 3 pumped down (October 21)			
10/20/2021	0	22	21	Not measurable	Sheen visible in B099/B100 sump			
11/3/2021	10	20	21	Not measurable				
11/10/2021	12	16	15	Not measurable				
11/17/2021	8	16	15	Not measurable				
11/24/2021	7	14	13	Not measurable				
12/1/2021	7	15	14	Not measurable				
12/8/2021	6	12.5	12	Not measurable				
12/15/2021	7	15	15	Not measurable				
,		-	-		Partial site inspection conducted 12/22/21; Sump			
12/22/2021	-	-	-	Not Measured	measurements were not taken			
12/29/2021	0	11.5	11	Not measurable				
1/5/2022	8.75	13.5	12.25	Not measurable				
, , , ====					•			

	UPRR Houston, tx - Wood Preserving Works							
11/12/12/12   6		(B099/B100)	(B103/B104)	(B107/B108)		Comments		
1/19/10/20								
1/27/2022   3   9   9   Not measurable						Sheen visible in R099/R100 sumn		
27/27/2022   -						Sheen visible in boss/b100 sump		
27/27/022   3	1/2//2022	3	9	9	Not measurable	Massuraments were not taken; the inspector was		
17/970072   9   15   15   Not measurable   Not measurab	2/2/2022				Not Management	•		
1/21/2002   8.5   17   16   Not measurable   1/21/2002   5.5   14   13.5   Not measurable			-			unable to open the sumps		
3/27/20/2								
3/3/2022								
3/9/2022   4.5   7   6   Not measurable	2/23/2022	5.5	14	13.5	Not measurable			
3/16/2002	3/2/2022	5.5	15	14	Not measurable			
3/36/2022	3/9/2022	4.5	7	6	Not measurable			
3/36/2022								
3/39/2022   6   29   28						Sumps 1,2, & 3 pumped down during inspection; less		
3/39/2022   6   29   28	3/16/2022	48	36	45	Not measurable	than 0.5 gal of DNAPL recovered B107/B108 sump		
3/30/2022   5.5   28						, , , , , , , , , , , , , , , , , , , ,		
4/13/2022								
A/13/2022   4.5   18   15								
A/27/2022						Shoon visible in P000/P100 sump		
4/27/2022								
Sylapso						Sheen visible in B099/B100 sump		
Syl1/2022	4/27/2022	4.5	12	8.5	Not measurable			
Sheen visible in B099/B100, B103/104, and B107/B108 sump								
S/11/2022   16	5/4/2022	48	42	45	Not measurable	· ' '		
S/18/2022   6.5   4.5   4.5   4.5   Not measurable						Sheen visible in B099/B100, B103/104, and B107/B108		
S/15/2022   0	5/11/2022	16	44.5	44	Not measurable	sumps		
6/3/2022 5 2 22 22 Not measurable 6/8/2022 5 25 24 Not measurable 5heen visible in B099/B100 and B103/104 sumps 6/8/2022 5 25 24 Not measurable 6/29/2022 4 5 25 24 21 Not measurable 6/29/2022 6 21 21 Not measurable 7/13/2022 5 15 13 13 Not measurable 7/13/2022 5 15 14 Not measurable 8/29/2022 5 15 14 Not measurable 8/29/2022 5 15 14 Not measurable 9/29/2022 5 15 14 Not measurable 8/3/2022 5 15 Not measurable 9/29/2022 6 14 13 Not measurable 9/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/2022 1 1/29/	5/18/2022	6.5	45	45	Not measurable			
6/8/2022   5   22   22	5/25/2022	0	25	24	Not measurable			
6/8/2022   5   22   22		5.5	24	24	Not measurable			
6/15/2022   5   25   24		5	22	22	Not measurable	Sheen visible in B099/B100 and B103/104 sumps		
6/22/2022   6		5	25	24				
6/29/2022   6								
7/6/2022   5.5   13   13								
7/13/2022   5								
Not measurable   Sumps 1,2, & 3 pumped down during inspection; less						Change visible in POOC/P100 comes		
7/20/2022   51.5   38	7/13/2022	5	15	14	NOT measurable	Sheen visible in B099/B100 sump		
7/20/2022   51.5   38								
7/27/2022								
8/3/2022   5   39   39   Not measurable						than 0.1 gal of DNAPL recovered B099/B100 sump		
8/10/2022   5.5   38   38   Not measurable   Sheen visible in B107/B108 sump								
8/17/2022   5.5   25.5   25   25   Not measurable   Inspector unable to open B099/B100 and B107/B108 sumps as there was standing water on top of the sumps as there was standing water on top of the sumps as there was standing water on top of the sumps as there was standing water on top of the sumps as there was standing water on top of the sumps as there was standing water on top of the sumps as the sumps as there was standing water on top of the sumps as the sumps as there was standing water on top of the sumps as the	8/3/2022	5	39	39	Not measurable			
Seen visible in B099/B100 and B107/B108	8/10/2022	5.5	38	38	Not measurable	Sheen visible in B107/B108 sump		
8/24/2022         0         0.5         0         Not measurable due to ongoing rain event           8/31/2022         52         52         48         Not measurable visible in B103/B104 sump           9/7/2022         3         37         37         Not measurable visible in B103/B104 sump           9/14/2022         1         34         31         Not measurable Sheen visible in B099/B100 sump           9/21/2022         2.2         31.5         27.5         Not measurable Sheen visible in B099/B100 and B107/B108 sump           9/28/2022         3         30         31         Not measurable Sheen visible in B099/B100 and B107/B108 sumps           10/5/2022         4         33         33         Not measurable Sheen visible in B099/B100 and B107/B108 sumps           10/12/2022         7         32         32         Not measurable Sheen visible in B099/B100 and B107/B108 sumps           10/19/2022         48         48         48         Not measurable Sheen visible in B099/B100 and B107/B108 sumps           10/19/2022         6         46         45         Not measurable Sheen visible in B099/B100 and B107/B108 sumps           11/20/202         6         14         13         Not measurable Sheen visible in B099/B100 and B107/B108 sumps           11/2022         6         14         13 </td <td>8/17/2022</td> <td>5.5</td> <td>25.5</td> <td>25</td> <td>Not measurable</td> <td></td>	8/17/2022	5.5	25.5	25	Not measurable			
8/24/2022   0						Inspector unable to open B099/B100 and B107/B108		
Sumps 1,2, & 3 pumped down during inspection; sheen visible in B103/B104 sump   Sumps 1,2, & 3 pumped down during inspection; sheen visible in B103/B104 sump   Sumps 1,2, & 3 pumped down during inspection; sheen visible in B103/B104 sump   Sumps 1,2, & 3 pumped down during inspection; sheen visible in B103/B104 sump   Sumps 1,2, & 3 pumped down during inspection; sheen visible in B103/B104 sump   Sheen visible in B103/B104 sump   Sheen visible in B103/B108 sump   Sheen visible in B099/B100 and B107/B108 sump   Sheen visible in B099/B100 and B107/B108 sump   Sheen visible in B099/B100 and B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/B108 sump   Sumps 1,2, & 3 pumped down during in						sumps as there was standing water on top of the sumps		
Sumps 1,2, & 3 pumped down during inspection; sheen visible in B103/B104 sump	8/24/2022	0	0.5	0	Not measurable	due to ongoing rain event		
8/31/2022   52   52   48	, ,							
9/17/2022 3 37 37 Not measurable 9/17/2022 1 34 34 31 Not measurable 9/21/2022 2.2 31.5 27.5 Not measurable 9/21/2022 2.2 31.5 27.5 Not measurable 9/21/2022 3 3.3 30 31 Not measurable Sheen visible in B099/B100 and B107/B108 sumps 10/5/2022 8 33 30 Not measurable Sheen visible in B099/B100 and B107/B108 sumps 10/5/2022 7 32 32 Not measurable Sheen visible in B099/B100 and B107/B108 sumps Sheen visible in B099/B100 and B107/B108 sump Sheen visible in B099/B100 sumps Sheen visible in B099/B100 sump Sheen visible in Sumps Sheen visible in Sheen visib	8/31/2022	52	52	48	Not measurable			
9/14/2022								
9/21/2022   2.2   31.5   27.5   Not measurable   Sheen visible in B107/B108 sump   9/28/2022   3   30   31   Not measurable   Sheen visible in B099/B100 and B107/B108 sumps   10/5/2022   8   33   33   Not measurable   Sheen visible in B099/B100 and B107/B108 sumps   10/12/2022   7   32   32   Not measurable   Sheen visible in B099/B100 and B107/B108 sumps   Sheen visible in B099/B100 sump; small amount of DNAPL visible but not recoverable in B099/B100 sump; sheen visible in B099/B100 sump   Sheen visible in Sumps   Sheen visible in Sumps   Sheen visible in Sumps   Sheen visible in Sumps   Sheen visible in B099/B100 sump   Sheen visible in Sumps   Sheen vis						Sheen visible in B099/B100 sump		
9/28/2022 3 3 30 31 Not measurable Sheen visible in B099/B100 and B107/B108 sumps 10/5/2022 8 33 33 Not measurable Sheen visible in B099/B100 and B107/B108 sumps Sheen visible in B107/B108 sumps small amount of DNAPL recovered from B107/108 sump; small amount of DNAPL visible in B1099/B100 and B107/B108 sump; small amount of DNAPL visible in B1099/B100 sump; sheen visible in B099/B100 sump; sheen visible in B103/B104 sumps on recharge water after pumpdown Sheen visible in B107/B108 sump Sheen visible in Sheen v								
10/5/2022   8   33   33   Not measurable   Sheen visible in B099/B100 and B107/B108 sumps			<del> </del>			<u> </u>		
10/12/2022   7   32   32   Not measurable   Sheen visible in B099/B100 and B107/B108 sumps   Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/108 sump; small amount of DNAPL visible but not recoverable in B099/B100 sump; sheen visible in B099/B100 and B103/B104 sumps on recharge water after pumpdown   10/26/2022   6   46   45   Not measurable   Sheen visible in B107/B108 sump   11/2/2022   4   19   19   Not measurable   Sheen visible in B107/B108 sump   11/9/2022   6   14   13   Not measurable   11/16/2022   8   14   12   Not measurable   11/12/2022   0   0   O   Not measurable   Very slight sheen visible in Sumps 1, 2, and 3; less than 11/30/2022   3   10   9   Not measurable   Very slight sheen visible in Sumps 1, 2, and 3; less than 11/30/2022   3   10   9   Not measurable   Very slight sheen visible in Sumps 1, 2, and 3; less than 0.2 gal of DNAPL recovered from B107/108 sump   12/7/2022   4   13.5   13   Not measurable   Replaced dipper tool with hoe for NAPL recovery from sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B107/B108 sump   12/14/2022   16   14   14   Not measurable   12/28/2022   16   14   14   Not measurable   14/2023   3.5   7.5   6   Not measurable   1/11/2023   12   12   3   Not measurable   1/11/2023   3   13   Not measurable   1/18/2023   3   13								
Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/108 sump; small amount of DNAPL visible but not recoverable in B099/B100 sump; sheen visible in B099/B100 and B103/B104 sumps on recharge water after pumpdown 10/26/2022 6 46 45 Not measurable Sheen visible in B107/B108 sump 11/2/2022 4 19 19 Not measurable 11/9/2022 6 14 13 Not measurable 11/16/2022 8 14 12 Not measurable 11/16/2022 8 14 12 Not measurable 11/22/2022 0 0 0 Not measurable 11/22/2022 0 Not measurable 11/22/2022 0 Not measurable 11/22/2022 4 13.5 13 Not measurable   Very slight sheen visible in Sumps 1, 2, and 3; less than 12/7/2022 4 13.5 13 Not measurable   Replaced dipper tool with hoe for NAPL recovery from sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B12/21/2022 4 8 7 Not measurable 12/21/2022 16 14 14 Not measurable 14/4023 3.5 7.5 6 Not measurable 11/10/203 12 12 3 Not measurable 11/11/203 12 12 3 Not measurable 11/11/203 12 12 3 Not measurable 11/11/203 13 Not measurable 11/11/203 13 Not measurable 11/11/2023 3 13 Not measurable 11/11/2023 3 Not measurable 11/11/2023 3 13 Not measurable 11/11/2023 3 3 13 Not measurable 11/11/2023 12 12 3 Not measurable 11/11/2023 12 12 12 12 12 12 12 12 12 12 12 12								
than 0.1 gal of DNAPL recovered from B107/108 sump; small amount of DNAPL visible but not recoverable in B099/B100 sump; sheen visible in B099/B100 and B103/B104 sumps on recharge water after pumpdown Sheen visible in B103/B104 sumps on recharge water after pumpdown Sheen visible in B107/B108 sump Sheen visible in Sheen visibl	10/12/2022	/	32	32	NOT measurable	Sheen visible in B099/B100 and B107/B108 sumps		
than 0.1 gal of DNAPL recovered from B107/108 sump; small amount of DNAPL visible but not recoverable in B099/B100 sump; sheen visible in B099/B100 and B103/B104 sumps on recharge water after pumpdown Sheen visible in B103/B104 sumps on recharge water after pumpdown Sheen visible in B107/B108 sump Sheen visible in Sheen visibl								
Small amount of DNAPL visible but not recoverable in B099/B100 sump; sheen visible in B099/B100 and B103/B104 sumps on recharge water after pumpdown B11/2/2022								
10/19/2022						The state of the s		
10/19/2022						small amount of DNAPL visible but not recoverable in		
10/26/2022   6						B099/B100 sump; sheen visible in B099/B100 and		
10/26/2022   6	10/19/2022	48	48	48	Not measurable	B103/B104 sumps on recharge water after pumpdown		
11/2/2022								
11/9/2022   6						,		
11/16/2022   8								
11/22/2022         0         0         Not measurable           11/30/2022         3         10         9         Not measurable         Very slight sheen visible in Sumps 1, 2, and 3; less than 0.2 gal of DNAPL recovered from B107/108 sump           12/7/2022         4         13.5         13         Not measurable         Replaced dipper tool with hoe for NAPL recovery from sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B107/B108 sump           12/14/2022         0         0         Not measurable recovered from B107/B108 sump           12/28/2022         16         14         14         Not measurable not measurable           1/4/2023         3.5         7.5         6         Not measurable not measurable not measurable           1/11/2023         12         12         3         Not measurable not me								
Very slight sheen visible in Sumps 1, 2, and 3; less than   11/30/2022   3   10   9   Not measurable   0.2 gal of DNAPL recovered from B107/108 sump   12/7/2022   4   13.5   13   Not measurable   Replaced dipper tool with hoe for NAPL recovery from sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B107/B108 sump   12/21/2022   4   8   7   Not measurable   12/28/2022   16   14   14   Not measurable   1/4/2023   3.5   7.5   6   Not measurable   1/11/2023   12   12   3   Not measurable   1/11/2023   3   13   13   Not measurable   1/18/2023   3   13   13   Not measurable   1/18/2023   3								
11/30/2022         3         10         9         Not measurable         0.2 gal of DNAPL recovered from B107/108 sump           12/7/2022         4         13.5         13         Not measurable         Replaced dipper tool with hoe for NAPL recovery from sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B107/B108 sump           12/14/2022         4         8         7         Not measurable recovered from B107/B108 sump           12/28/2022         16         14         14         Not measurable not measurable           1/4/2023         3.5         7.5         6         Not measurable not measurable not measurable           1/11/2023         12         12         3         Not measurable not measurable not measurable           1/18/2023         3         13         13         Not measurable not measurable not measurable	11/22/2022	<u> </u>	J	U	ivot measurable			
11/30/2022         3         10         9         Not measurable         0.2 gal of DNAPL recovered from B107/108 sump           12/7/2022         4         13.5         13         Not measurable         Replaced dipper tool with hoe for NAPL recovery from sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B107/B108 sump           12/14/2022         4         8         7         Not measurable recovered from B107/B108 sump           12/28/2022         16         14         14         Not measurable not measurable           1/4/2023         3.5         7.5         6         Not measurable not measurable not measurable           1/11/2023         12         12         3         Not measurable not measurable not measurable           1/18/2023         3         13         13         Not measurable not measurable not measurable						Variable to the second of the		
12/7/2022   4   13.5   13   Not measurable   Replaced dipper tool with hoe for NAPL recovery from sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B107/B108 sump recovered from B107/B108 sump   12/21/2022   4   8   7   Not measurable   12/28/2022   16   14   14   Not measurable   1/4/2023   3.5   7.5   6   Not measurable   1/1/2023   12   12   3   Not measurable   1/11/2023   3   13   Not measurable   1/18/2023   3   13   13   Not measurable   1/18/2023   3   13   13   Not measurable   1/18/2023   3   13   13   Not measurable   1/18/2023   13   Not measurable					l			
Replaced dipper tool with hoe for NAPL recovery from sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B107/B108 sump rec						0.2 gal of DNAPL recovered from B107/108 sump		
Sumps. Less than 0.4 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B099/B100 sump; approximately 0.1 gal of DNAPL recovered from B107/B108 sump   12/21/2022	12/7/2022	4	13.5	13	Not measurable			
12/14/2022   0   0   0   Not measurable   recovered from B107/B108 sump   12/21/2022   4   8   7   Not measurable     12/28/2022   16   14   14   Not measurable     1/4/2023   3.5   7.5   6   Not measurable     1/11/2023   12   12   3   Not measurable     1/18/2023   3   13   13   Not measurable     1/18/2023   3   13   Not measurable     1/18/2023   12   13   Not measurable     1/18/2023   13   N						Replaced dipper tool with hoe for NAPL recovery from		
12/14/2022   0   0   0   Not measurable   recovered from B107/B108 sump   12/21/2022   4   8   7   Not measurable     12/28/2022   16   14   14   Not measurable     1/4/2023   3.5   7.5   6   Not measurable     1/11/2023   12   12   3   Not measurable     1/18/2023   3   13   13   Not measurable     1/18/2023   3   13   Not measurable     1/18/2023   12   13   Not measurable     1/18/2023   13   N						sumps. Less than 0.4 gal of DNAPL recovered from		
12/14/2022         0         0         Not measurable recovered from B107/B108 sump           12/21/2022         4         8         7         Not measurable           12/28/2022         16         14         14         Not measurable           1/4/2023         3.5         7.5         6         Not measurable           1/11/2023         12         12         3         Not measurable           1/18/2023         3         13         13         Not measurable								
12/21/2022     4     8     7     Not measurable       12/28/2022     16     14     14     Not measurable       1/4/2023     3.5     7.5     6     Not measurable       1/11/2023     12     12     3     Not measurable       1/18/2023     3     13     Not measurable       1/18/2023     3     13     Not measurable	12/14/2022	n	0	0	Not measurable			
12/28/2022     16     14     14     Not measurable       1/4/2023     3.5     7.5     6     Not measurable       1/11/2023     12     12     3     Not measurable       1/18/2023     3     13     13     Not measurable								
1/4/2023     3.5     7.5     6     Not measurable       1/11/2023     12     12     3     Not measurable       1/18/2023     3     13     13     Not measurable						1		
1/11/2023         12         12         3         Not measurable           1/18/2023         3         13         13         Not measurable								
1/18/2023 3 13 13 Not measurable								
1/25/2023  3   6   5   Not measurable								
, -,	1/25/2023	3	6	5	Not measurable			

Measured	Sump 1 (B099/B100)	Sump 2 (B103/B104)	Sump 3 (B107/B108)	Depth to DNAPL		
Date	Freeboard (in)	Freeboard (in)	Freeboard (in)	(in)	Comments	
2/1/2023	<1	1	<1	Not measurable		
2/8/2023	5	13	12	Not measurable		
2/15/2022	-1	2	2.5	Not mossurable	Sumps B099/B100, B103/B104, and B107/B108	
2/15/2023	<1	2	2.5	Not measurable	pumped down during inspection Sheen visible in B099/B100, B103/B104, and B107/B108	
					sumps; water in B099/B100 noted as brown color with	
2/22/2023	32	42	43	Not measurable	high turbidity	
					Sheen visible in B099/B100, B103/B104, and B107/B108	
3/1/2023	9	41	40	Not measurable	sumps, water color in sumps noted as brown	
3/8/2023	5	42	41	Not measurable	B099/B100 & B103/B104 light brown color	
3/15/2023	4	42	41	Not measurable	B099/B100 and B013/B104 brown color; B107/B108	
3/22/2023	8	26.5	25.5	Not measurable	very light brown color B099/B100 light brown color	
3/29/2023	3	24	25	Not measurable	B099/B100 light brown color	
4/5/2023	2.5	25	25	Not measurable	B099/B100 light brown color	
					All three sumps pumped down during inspection,	
4/12/2023	4	12	14	Not measurable	B099/B100 brown color	
4/19/2023	5	42	42	Not measurable	Sheen visible in B107/B108 sump	
4/26/2023	3	31.5 18	31.5 17.5	Not measurable	Sheen visible in B107/B108 sump	
5/3/2023 5/10/2023	0	1.5	0	Not measurable  Not measurable	Sheen visible in B107/B108 sump	
5/17/2023	0	2	0	Not measurable	Sheen visible in B107/B108 sump	
5/24/2023	2	14	13	Not measurable	Pumpdown and boom swap.	
					B099/B100 water color brown. B103/B104 and	
5/31/2023	28	50	49	Not measurable	B107/B108 water color light brown.	
					Sheen visible in all Sumps. B099/B0100 water color	
s /= /2022			0.7		brown and, light brown on both B103/B104 and	
6/7/2023	3	38	37	Not measurable	B107/B108.	
					Sheen Visible in B099/B100 & B107/B108. water color	
6/14/2023	4	38	37	Not measurable	brown on B099/B100 & light brown in all other sumps.	
					Sheen Visible in B107/B108. water color brown on	
6/21/2023	3	36	37	Not measurable	B099/B100 & light brown in all other sumps.	
					Sheen Visible in B099/B100 & B107/B108. water color	
6/20/2022	2	24	24	Natura a constitu	dark brown on B099/B100 & B107/B108, light brown in	
6/28/2023	3	31	31	Not measurable	B103/B104. Sheen Visible in B099/B100 and B107/B108. Water color	
					brown on B099/B100, light brown in B103/B104.	
7/12/2023	3	20	19	Not measurable	, , , , , , , , , , , , , , , , , , , ,	
					Sheen Visible on B099/B100 and B107/B108. Water	
7/40/2022	2	40	10	Natura a constitu	color brown on B099/B100 and clear on B103/B104 and	
7/19/2023	3	19	19	Not measurable	B107/B108. Sheen Visible on B099/B100 and B107/B108. Water	
					color brown on B099/B100, light brown on B103/B104,	
7/26/2023	3	21	20	Not measurable	and clear on B107/B108.	
					Sheen Visible on B107/B108. Water color dark brown on	
		_			B099/B100, light brown on B103/B104, and clear on	
8/2/2023	0	16.5	15.5	Not measurable	B107/B108.	
					Sheen Visible on B099/B100 and B107/B108. Water color brown on B099/B100, light brown on B103/B104,	
8/9/2023	42	47	47	Not measurable	and clear on B107/B108.	
-,-,					Sheen Visible on B099/B100 and B107/B108. Water	
					color brown on B099/B100 and light brown on	
8/16/2023	38.5	47	47	Not measurable	B103/B104 and B107/B108.	
					Sheen visible in all Sumps. B099/B0100 water color dark	
0/22/2022	22	46	4.0	Not manage !!!	brown and, light brown on both B103/B104 and B107/B108.	
8/23/2023	33	46	46	Not measurable	Sheen visible in all Sumps. B099/B0100 water color dark	
					brown and, light brown on both B103/B104 and	
8/30/2023	33	46	44	Not measurable	B107/B108.	
		·				
		_			Sheen visible in all Sumps. B099/B0100 water color light	
9/6/2023	1	38	38	Not measurable	brown, amd clear on both B103/B104 and B107/B108.	
					Sheen Visible on B099/B100 and B107/B108. Water	
					color brown on B099/B100 and clear on B103/B104 and	
9/13/2023	0	33	33	Not measurable	B107/B108. Pumpdown conducted on 9/15/2023.	
					Sheen Visible on B099/B100 and B107/B108. Water	
					color brown on B099/B100 and light brown on	
9/20/2023	14	14	40	Not measurable	B103/B104 and B107/B108.	
					Sheen Visible on B099/B100 and B107/B108. Water color light brown on B099/B100 and clear on B103/B104	
9/27/2023	0.5	33	34	Not measurable	and B107/B108.	
5,2,,2023	0.5		3-		1	

	Sump 1	Sump 2	Sump 3	x - wood Preservi	1	
Measured	(B099/B100)	(B103/B104)	(B107/B108)	Depth to DNAPL		
Date	Freeboard (in)	Freeboard (in)	Freeboard (in)	(in)	Comments	
24.0	110000010 ()	110000010 ()	110000010 ()	(,	No sheen visible in all sumps. Water color brown on	
					B099/B100 and light brown on B103/B104 and	
10/4/2023	0	0	0	Not measurable	B107/B108. Heavy rains all week filled up sumps.	
-, , -	-				Sheen visible on B103/B104. B099/B100 water color	
					light brown, clear on B103/B104 and B017/B108. Heavy	
					rains in the week filled up sumps. Pumpdown conducted	
10/11/2023	0	0	0	Not measurable	10/13/2023.	
					Sheen visible on B099/B100 and B107/B108. Water	
					color brown on B099/B100. Water color clear on	
10/18/2023	46	48	47	Not measurable	B103/104. Water color light brown on B107/B108.	
					Sheen visible on B099/B100 and B107/B108. Water	
					color dark brown on B099/B100 and light brown on	
10/25/2023	39	44	43	Not measurable	B103/B104 and B107/B108.	
					Sheen visible on B099/B100 and B107/B108. Water	
					color light brown on B099/B100 and clear on 103/B104	
11/1/2023	6.5	33	33	Not measurable	and B107/B108.	
					Sheen visible on B099/B100. Water color light brown on	
11/8/2023	12	34	33	Not measurable	B099/B100 and clear on 103/B104 and B107/B108.	
					No sheen observed in any of the sumps. Water color	
					light brown on B099/B100 and clear on 103/B104 and	
11/15/2023	2	6	5.5	Not measurable	B107/B108.	
					No sheen observed in any of the sumps. Water color	
					light brown on B099/B100 and clear on 103/B104 and	
11/22/2023	7	13	12	Not measurable	B107/B108.	
					No sheen observed in any of the sumps. Water color	
					light brown on B099/B100 and clear on 103/B104 and	
11/29/2023	5.5	10	9.5	Not measurable	B107/B108.	
					No sheen observed in any of the sumps. Water color	
					light brown on B099/B100 and clear on 103/B104 and	
12/6/2023	8	14	14	Not measurable	B107/B108.	
					No sheen observed in any of the sumps. Water color	
					light brown on B099/B100 and clear on 103/B104 and	
12/13/2023	5	10	9.5	Not measurable	B107/B108.	
					No sheen observed in any of the sumps. Water color	
					light brown on B099/B100 and clear on 103/B104 and	
12/20/2023	9	10	5	Not measurable	B107/B108.	
					No sheen observed in any of the sumps. Water color	
					light brown on B099/B100 and clear on 103/B104 and	
12/27/2023	6	13	11	Not measurable	B107/B108.	

Note:

Freeboard in sumps is measured as depth to water from top rim of sump, measured in inches



**ATTACHMENT A** 

Weekly Inspection Photolog



Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/6/2023

Description:

Stall A010. No tar-like material observed at Test Pit A010.

Lat: 29.785517 Long: -95.31834



Photo No.

Inspection Date:

12/6/2023

Description:

Stall A011. No tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785467 Long: -95.318341





**Client Name:** 

Union Pacific Railroad

Photo No.

Inspection Date: 12/6/2023

Description:

Stall B013. No tar-like material seeps observed at Test Pit B013.

Lat: 29.78532 Long:-95.31833



Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 12/6/2023

Description:

Stall B016. No tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785271 Long:-95.31841



### wsp

#### **PHOTOGRAPHIC LOG**

Client Name:

Photo No.

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

5

Inspection Date: 12/6/2023

Description:

Stall A021. No tar-like material seeps observed at Test Pit A021.

Lat: 29.785387 Long: -95.318654



Photo No.

Inspection Date:

12/6/2023

Description:

Stall A022. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785378 Long: -95.318694





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/6/2023

Description:

Stall B042. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.784923 Long: -95.319124



Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 12/6/2023

Description:

Stall B056. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.784751 Long: -95.319532





**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/6/2023

Description:

Stall B057 (joint), no tar-like material observed at historical seep location at Test Pit B057.

Lat: 29.784747 Long: -95.319549



Photo No.

Inspection Date: 12/6/2023

Description:

Stalls A060 - A070. Looking southwest. No residual staining observed along cracks in asphalt.

Lat: 29.784858 Long: -95.319733





Client Name:

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/6/2023

#### Description:

Stall B096, no new tar-like material observed at historical seep location along concrete joint at Test Pit B096.

Lat: 29.784276 Long: -95.320651



Photo No.

Inspection Date: 12/6/2023

#### Description:

Stall B100, no new tar-like material observed on concrete crack/hole in concrete.

Lat: 29.784236 Long: -95.320786





**Client Name:** 

**Union Pacific Railroad** 

Inspection Date:

Site Location:

Photo No. 13

12/6/2023

Description:

Stall B102 (center), no tar-like material observed at seep location along cracks in pavement.

Lat: 29.784233 Long: -95.320847



Project No.

Photo No. 14

Inspection Date: 12/6/2023

Description:

Stall B102 (joint) no new tar-like material observed at historical seep site along concrete joint.

Lat: 29.784197 Long: -95.320821





**Client Name:** 

**Union Pacific Railroad** 

Photo No. Inspection Date: 12/6/2023

Description:

Stall B105. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.784209 Long: -95.320943



Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No. Inspection Date: 12/6/2023

#### Description:

Stall B107, no new tar-like material observed at seep location on concrete joint along the southern edge of the excavated area.

Lat: 29.784137 Long: -95.32096





**Client Name:** 

**Union Pacific Railroad** 

color noted as light brown.

Site Location:

Project No. 31406585.016

Photo No.

Inspection Date:

12/6/2023

Description:

Sump 1 (B099/B100), 8 inches of freeboard in sump, no odor noted, no sheen observed, water

Lat: 29.7844000 Long: - 95.3205861



Photo No.

Inspection Date: 12/6/2023

Description:

Sump 2 (B103/B104), 14 inches of freeboard in sump. No odor or sheen observed, color noted as clear.

Lat: 29.7842861 Long: - 95.3208611





Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/6/2023

Site Location:

Englewood Intermodal Yard, Houston, Texas

#### Description:

Sump 3 (B107/B108), 14 inches of freeboard in sump, no sheen observed, water color noted as clear.

Lat: 29.7844000 Long: - 95.3205861

A.			3574	
	B107/	BIOS		Mais In us

Photo No.

Inspection Date: 12/6/2023

#### Description:

RD-14 Seep location observed within the concrete road area north of Track 802 (east of existing Track 802 seep location), No new tar-like material observed along a concrete joint.

Lat: 29.785064 Long: -95.321219





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/6/2023

Description:

North side of Track 802, no new tar-like material observed at seep location near the edge of the ballast.

Lat: 29.784947 Long: -95.321214



Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 12/13/2023

Description:

Stall B056. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.7847472 Long: -95.3195417



wsp

**PHOTOGRAPHIC LOG** 

Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

23

Inspection Date: 12/13/2023

Site Location:

Englewood Intermodal Yard, Houston, Texas

Description:

Stall B016. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785271 Long: -95.31841



Photo No.

Inspection Date: 12/13/2023

Description:

Stall A022. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785378 Long: -95.318694



wsp

#### **PHOTOGRAPHIC LOG**

Client Name:

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/13/2023

Description:

Stall B057, no new tar-like material observed along asphalt crack.

Lat: 29.784769 Long: -95.3195798



Photo No.

Inspection Date: 12/13/2023

Description:

Stall A011. No tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785467 Long: -95.318341





Project No.

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/13/2023

Site Location:

#### Description:

Sump 2 (B103/B104), 10 inches of freeboard in sump. No odor or sheen observed, color noted as clear

Lat: 29.7842861 Long: - 95.3208611



Photo No.

Inspection Date: 12/13/2023

#### Description:

Stall A010. No tar-like material observed at Test Pit A010 location.

Lat: 29.785517 Long: -95.31834





**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. **29**  Inspection Date: 12/13/2023

#### Description:

Stall B096, no new tar-like material observed at historical seep location along concrete joint.

Lat: 29.7842528 Long: -95.3206250



Photo No.

Inspection Date: 12/13/2023

#### Description:

Stall B100, no new tar-like material observed at seep location along asphalt crack/ hole in the asphalt.

Lat: 29.7842528 Long: - 95.3206250





Client Name:

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/13/2023

#### Description:

Stall B105, no new tar-like material observed at the historical seep location along asphalt crack.

Lat: 29.784209 Long: -95.320943



Photo No.

Inspection Date: 12/13/2023

#### Description:

Sump 1 (B099/B100), 5 inches of freeboard in sump, no sheen observed, water color noted as light brown.

Lat: 29.7844000 Long: - 95.3205861





**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/13/2023

#### Description:

Stalls B107, no new tar-like material observed at seep location on concrete joint along the southern edge of the excavated area.

Lat: 29.784156 Long: -95.320953



Photo No.

Inspection Date: 12/13/2023

#### Description:

Stall B102 (center), no tar-like material observed at seep location where pavement is cracked.

Lat: 29.784769 Long: -95.3195798





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/13/2023

#### Description:

RD-14 Seep location observed within the concrete road area (RD-14) north of Track 802 (east of existing Track 802 seep location), no new tar-like material observed along a concrete joint.

Lat: 29.785064 Long: -95.321219 Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 12/13/2023

#### Description:

Stall B042. No new tar-like material observed at historical seep location along concrete crack.

Lat: 29.784923 Long: -95.319124





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

37

Inspection Date: 12/13/2023

**Site Location:**Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

#### Description:

Stalls A060 - A070, some residual staining previously observed along cracks in pavement. No new water seeps observed. Viewing southwest.

Lat: 29.784858 Long: -95.319733



Photo No.

Inspection Date: 12/13/2023

#### Description:

Stall B102 Joint, no new tar-like material observed at seep location along stall joint.

Lat: 29.7842203 Long: - 95.320827



wsp

#### **PHOTOGRAPHIC LOG**

Client Name:

Union Pacific Railroad

Photo No.

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

39

Inspection Date: 12/13/2023

Description:

Stall A021. No seeps noted at Test Pit A021.

Lat: 29.785387 Long: -95.318654



Photo No.

Inspection Date: 12/13/2023

Description:

Stall B013. No seeps noted at Test Pit B013.

Lat: 29.78532 Long:-95.31833





**Client Name:** 

Union Pacific Railroad
Photo No.

41

Inspection Date: 12/13/2023

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Sump 3 (B107/B108), 9.5 inches of freeboard in sump, no sheen observed, water color noted as clear

Lat: 29.7844000 Long: - 95.3205861



Photo No.

Inspection Date: 12/13/2023

#### Description:

North side of Track 802, no new tar-like material observed at seep location near the edge of the ballast.

Lat: 29.784947 Long: -95.321214





**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/20/2023

#### Description:

RD-14 Seep location observed within the concrete road area north of Track 802 (east of existing Track 802 seep location), no new tar-like material observed along a concrete joint.

Lat: 29.785064 Long: - 95.321219



Photo No.

Inspection Date: 12/20/2023

#### Description:

Stall A010. No seeps noted at Test Pit A010.

Lat: 29.785517 Long: -95.31834



wsp

#### **PHOTOGRAPHIC LOG**

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. **45**  Inspection Date: 12/20/2023

Description:

Stall A011. No tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785467 Long: -95.318341



Photo No.

Inspection Date: 12/20/2023

Description:

Stall A021. No seeps noted at Test Pit A021.

Lat: 29.785387 Long: -95.318654



wsp

#### **PHOTOGRAPHIC LOG**

Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/20/2023

Description:

Stall A022, no new tar-like material observed at the seep location along the edge.

Lat: 29.78537 Long: - 95.31869



Photo No.

Inspection Date: 12/20/2023

Description:

Stall B013. No seeps noted at Test Pit B013.

Lat: 29.78532 Long:-95.31833



**Client Name:** 

Site Location: **Union Pacific Railroad** 

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. 49

Inspection Date: 12/20/2023

#### Description:

Stall B016. No tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785271 Long: -95.31841



Photo No. **50** 

Inspection Date: 12/20/2023

#### Description:

Stall B042. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.784923 Long: -95.319124





Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/20/2023

Description:

North side of Track 802, no new tar-like material observed at seep location near the edge of the ballast.

Lat: 29.784947 Long: -95.321214



Photo No.

Inspection Date: 12/20/2023

Description:

Stall B056. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.7847472 Long: -95.3195417





Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/20/2023

Description:

Stall B057, no new tar-like material observed and removed at seep location along asphalt crack.

Lat: 29.784769 Long: -95.3195798



Photo No.

Inspection Date: 12/20/2023

#### Description:

Stalls A060 - A070, some residual staining previously observed along cracks in pavement. No new water seeps observed. Viewing southwest.

Lat: 29.78484 Long: -95.31974





**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. **55** 

Inspection Date: 12/20/2023

Description:

Stall B096, no new tar-like material observed at historical seep location along concrete joint.

Lat: 29.7842528 Long: -95.3206250



Photo No.

Inspection Date: 12/20/2023

Description:

Stall B100, no new tar-like material observed at seep location along asphalt crack/ hole in the asphalt.

Lat: 29.7842528 Long: - 95.3206250





Client Name: Site Location:
Union Pacific Railroad Englewood Intermodal Yard, Houston, Texas

Union Pacific Railroad
Photo No. Inspection Date:

Project No. 31406585.016

Photo N

Inspection Date: 12/20/2023

### Description:

Stall B102 Joint, no new tar-like material observed at seep location along stall joint.

Lat: 29.7842203 Long: - 95.320827



Photo No.

Inspection Date: 12/20/2023

#### Description:

Stall B102 (center), no tar-like material observed at seep location where pavement is cracked.

Lat: 29.784769 Long: -95.3195798





**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/20/2023

### Description:

Stall B105, no new tar-like material observed at the historical seep location along asphalt crack.

Lat: 29.784209 Long: -95.320943



Photo No.

Inspection Date: 12/20/2023

#### Description:

Stalls B107, no new tar-like material observed at seep location on concrete joint along the southern edge of the excavated area.

Lat: 29.784156 Long: -95.320953





Project No.

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

61

Inspection Date: 12/20/2023 Site Location:

Description:

Sump 1 (B099/B100), 9 inches of freeboard in sump, no sheen observed, water color noted as light brown.

Lat: 29.7844000 Long: - 95.3205861



Photo No. Inspection Date: 62 12/20/2023

Description:

Sump 2 (B103/B104), 10 inches of freeboard in sump. No odor or sheen observed, color noted as clear.

Lat: 29.7842861 Long: - 95.3208611





Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/20/2023

#### Description:

Sump 3 (B107/B108), 5 inches of freeboard in sump, no sheen observed, water color noted as clear

Lat: 29.7844000 Long: - 95.3205861



Photo No.

Inspection Date: 12/27/2023

#### Description:

Stall B057 (joint), no new tar-like material observed at historical seep location along concrete joint near Test Pit B057.

Lat: 29.784747 Long: -95.319549





**Client Name:** 

Union Pacific Railroad

Photo No. **65**  Inspection Date: 12/27/2023

### Description:

North side of Track 802, no new tar-like material observed at seep location near the edge of the ballast.

Lat: 29.784947 Long: -95.321214 Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 12/27/2023

#### Description:

Stall A010. No seeps noted at Test Pit A010.

Lat: 29.785517 Long: -95.31834



Client Name:

# **PHOTOGRAPHIC LOG**

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. **67**  Inspection Date: 12/27/2023

Description:

Stall A011. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785467 Long: -95.318341



Photo No.

Inspection Date: 12/27/2023

Description:

Stall B013. No seeps noted at Test Pit B013.

Lat: 29.78532 Long:-95.31833





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

69

Inspection Date: 12/27/2023

### Description:

Stall B016. No tar-like material observed at historical seep location along asphalt crack.

Lat: 29.785271 Long: -95.31841



Photo No.

Inspection Date: 12/27/2023

#### Description:

Stall A022, no new tar-like material observed at the seep location along the edge.

Lat: 29.785381 Long: - 95.318619





Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 12/27/2023

Description:

Stall A021. No seeps noted at Test Pit A021.

Lat: 29.785387 Long: -95.318654



Photo No.

Inspection Date: 12/27/2023

Description:

Stall B042. No new tar-like material observed at historical seep location along concrete joint.

Lat: 29.784923 Long: -95.319124





Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/27/2023

Site Location:

Englewood Intermodal Yard, Houston, Texas

#### Description:

RD-14 Seep location observed within the concrete road area north of Track 802 (east of existing Track 802 seep location), no new tar-like material observed along a concrete joint.

Lat: 29.785064 Long: - 95.321219

La E	The state of the s	and Supple	The state of the s	
THE BELLEVILLE	and the	AN THE PARTY OF TH	CONTRACTOR OF THE PARTY OF THE	100
		Control of the Control	A STATE OF THE STA	
The second second	of the last of the	11 11 11 11 11		
The state of the s	and the second	Wally St.		
A TOTAL SHOULD BE A SHOULD BE A SHOULD BE A SHOULD BE A SHOULD BE ASSESSED.				
	7		200	
	No. of the last of	A STATE OF THE STA	Acres (1) (1)	San Artist
		rienza	A. M.	
	The Landson			1
		A) EV SUFFER		
	50.00		- 10 m 44 -	1
			100000000000000000000000000000000000000	1
			13.00	
	一 增加			
		hard the state of the same	-	120
	all Fall States		100	
		2017		
Services of the services	The second second		The Control	Land Marie
	THE RESERVE	A CONTRACTOR	Total State of the	
图			A STATE OF THE STA	
	RD-14	and the same of th		<b>计图图</b>
	10-14			
		A CONTRACTOR OF THE PARTY OF TH	- 一	
	THE RESERVE OF THE PARTY OF THE	TALE OF THE PARTY	1	The state of the s

Photo No.

Inspection Date: 12/27/2023

#### Description:

Stall B056. No new tar-like material observed at historical seep location along asphalt crack.

Lat: 29.7847472 Long: -95.3195417





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/27/2023

Description:

Stall B057, no new tar-like material observed and removed at seep location along asphalt crack.

Lat: 29.784769 Long: -95.3195798

Site Location:
----------------

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 12/27/2023

#### Description:

Stalls A060 - A070, some residual staining previously observed along cracks in pavement. No new water seeps observed. Viewing southwest.

Lat: 29.784858 Long: -95.319733





Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/27/2023

Site Location:

Englewood Intermodal Yard, Houston, Texas

Description:

Stall B096, no new tar-like material observed at historical seep location along concrete joint next to Test Pit B096.

Lat: 29.7842528 Long: -95.3206250

Junior Tolland	
B096	1

Photo No.

Inspection Date: 12/27/2023

#### Description:

Stall B100, no new tar-like material observed at seep location along asphalt crack/ hole in the asphalt.

Lat: 29.7842528 Long: - 95.3206250





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 12/27/2023

Description:

Stall B102 Joint, no new tar-like material observed at seep location along stall joint.

Lat: 29.7842203 Long: - 95.320827



Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 12/27/2023

Description:

Stall B102 (center), no seep observed.

Lat: 29.784769 Long: -95.3195798





Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No. Inspection Date: 81 12/27/2023

Description:

Stall B105, no new tar-like material observed at the historical seep location along asphalt crack.

Lat: 29.784209 Long: -95.320943

7	
	مسيدة السلب
B105	

Site Location:

Englewood Intermodal Yard, Houston, Texas

Photo No. Inspection Date: 82 12/27/2023

Description:

Stalls B107, no new tar-like material observed at seep location on concrete joint along the southern edge of the excavated area.

Lat: 29.784156 Long: -95.320953



wsp

# **PHOTOGRAPHIC LOG**

Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

83

Inspection Date: 12/27/2023

Site Location:

Englewood Intermodal Yard, Houston, Texas

Description:

Sump 1 (B099/B100), 6 inches of freeboard in sump, no sheen observed, water color noted as light brown.

Lat: 29.7844000 Long: - 95.3205861

	5	
	6	
B099/		
B099/ B100		

Photo No.

Inspection Date: 12/27/2023

Description:

Sump 2 (B103/B104), 13 inches of freeboard in sump. No odor or sheen observed, color noted as clear.

Lat: 29.7842861 Long: - 95.3208611



<b>\\S</b> D			PHOTOGRAPHIC LOG
Client Name:		Site Location:	
Union Pacific Railroad		Englewood Intermodal Yard, Houston, Texas	<b>Project No.</b> 31406585.016
	ection Date:		
	2/27/2023		
Description:  Sump 3 (B107/B108), 11 inches of sump, no sheen observed, water clear.  Lat: 29.7844000  Long: - 95.3205861	of freeboard in color noted as	B107	
Photo No. Inspe	ection Date:	B107/ B108	
Description:			