

February 14, 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 January 2024 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 January 2024 (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 0 inches from the tops of the manhole, respectively, for each NAPL Collection System Sump, during the inspection on January 3, 2024 (Photo Nos.17-19). During the January 10, 2024 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 Nos. 32-34). On January 17, 2024, Sump 1, Sump 2, and Sump 3 were measured at 12, 15.5, and 15 inches from the top of the manhole, respectively (Photo Nos. 41-43). During the January 24, 2024 inspection, Sump 1, Sump 2, and Sump 3 each had 0 inches of freeboard measured due to heavy rain (Photo No. 62-64). On January 31, 2024, Sump 1, Sump 2, and Sump 3 were measured at 2, 9.5, and 9 inches from the top of the manhole, respectively (Photo No. 90-92). A pump down of the sumps was scheduled for early February due to high water levels seen during the January 2024 inspections. During the January 2024 inspections, the water in Sump 1 was observed to be light brown in color and the water in Sumps

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- 2 and 3 was observed to be clear. No sheen was observed in the sumps during the January inspections. No odors were reported during the January 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 January 2024. 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 January 2024 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 January 2024.
- 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 January 2024 inspections (Photo Nos. 16, 27, 60, 82, 97).
- For areas outside the NAPL Collection System, no new tar-like material was observed on the concrete or
  asphalt surface during the January 2024 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 January is minimal. No tar-like material was observed during the weekly inspection events
  in January 2024.
- Since the pressure washing event on August 18, 2023, no new brown staining/residue or seep water was
  observed during the October, November, December or January 2024 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.
- During the January 2024 inspections, no NAPL seeps were observed at the seven July 2020 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. TCEQ approved the Revised Work Plan in a letter dated January 9, 2024. UPRR is currently in the remediation contractor bid process for conducting the scope of work detailed in the Revised Work Plan.

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

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

Neasured   (B099/B100)   (B103/B104)   (B107/B108)   (B1	ut mp, less than 0.1 gal of mp, less than 0.1 gal of covered from B107/B108
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           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         DNAPL recovered           10/9/2019         3         42         41.5         Not measurable         DNAPL recovered           10/16/2019         0         39.5         39         Not measurable         Sump           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/B1           11/6/2019         9         39	ut mp, less than 0.1 gal of mp, less than 0.1 gal of covered from B107/B108
8/28/2019         44.5         47.9         45         Not measurable         Water from sumps pumped out           9/4/2019         19         42         41.5         Not measurable           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 sur           10/9/2019         3         42         41.5         Not measurable         DNAPL recovered           10/16/2019         0         39.5         39         Not measurable         Less than 0.1 gal of DNAPL recovered           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/B1           11/6/2019         9         39         38.5         Not measurable         Slight sheen visible in B107/B1<	ut mp, less than 0.1 gal of mp, less than 0.1 gal of covered from B107/B108
8/28/2019         44.5         47.9         45         Not measurable         Water from sumps pumped out           9/4/2019         19         42         41.5         Not measurable           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 sur           10/9/2019         3         42         41.5         Not measurable         DNAPL recovered           10/16/2019         0         39.5         39         Not measurable         Sump           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/B1           11/6/2019         9         39         38.5         Not measurable         Less than 0.1 gal of DNAPL recovered	ut mp, less than 0.1 gal of mp, less than 0.1 gal of covered from B107/B108
9/13/2019   0   39.5   38	mp, less than 0.1 gal of mp, less than 0.1 gal of overed from B107/B108
9/13/2019   0   39.5   38	mp, less than 0.1 gal of mp, less than 0.1 gal of overed from B107/B108
9/25/2019 0 42 42.5 Not measurable Water from sumps pumped ou Sheen visible in B107/B108 sur DNAPL recovered Less than 0.1 gal of	mp, less than 0.1 gal of mp, less than 0.1 gal of overed from B107/B108
10/2/2019   2.5   42.5   42   Not measurable   DNAPL recovered	mp, less than 0.1 gal of mp, less than 0.1 gal of overed from B107/B108
10/2/2019   2.5   42.5   42   Not measurable   DNAPL recovered	mp, less than 0.1 gal of covered from B107/B108
10/9/2019   3   42   41.5   Not measurable   DNAPL recovered	covered from B107/B108
10/9/2019   3   42   41.5   Not measurable   DNAPL recovered   Less than 0.1 gal of DNAPL reco	covered from B107/B108
10/16/2019         0         39.5         39         Not measurable         Sump           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/B1           11/6/2019         9         39         38.5         Not measurable           Less than 0.1 gal of DNAPL record	· 
Less than 0.1 gal of DNAPL record   Less than 0.1 gal of DNAPL record   Sump	overed from B107/B108
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10/30/2019         0         40         39         Not measurable         Slight sheen visible in B107/B1           11/6/2019         9         39         38.5         Not measurable           Less than 0.1 gal of DNAPL record	
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Less than 0.1 gal of DNAPL reco	108 sump
11/13/2019 7 30 29 Not measurable Sump	overed from B107/B108
11/19/2019 4 26 25.5 Not measurable	
11/27/2019 0 25 23 Not measurable	
Less than 0.1 gal of DNAPL reci	overed from B107/B108
12/3/2019 2 25.5 25 Not measurable Sump	
Less than 0.1 gal of DNAPL reco	overed from B107/B108
12/11/2019 1.5 17 16.54 Not measurable Sump	
12/17/2019 5 19.5 17.5 Not measurable	
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 ou	ut
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	
2/12/2020 0 0 Not measurable	
2/18/2020 1.5 11.5 10.25 Not measurable Water from sumps pumped ou	ut 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 0.5 25 22 Not measurable 4/21/2020 0 21 21 Not measurable	
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Measurements were not taken   5/4/2020 Not Measured unable to open the sumps	i, the hispector was
5/12/2020 0 20 19 Not measurable	
5/19/2020 0 15.75 14.25 Not measurable Sump 1 pumped down (May 2)	2nd)
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 Not measurable	
6/30/2020 0 0 Not measured	
7/1/2020 48 46 47 Not measurable Sumps 1, 2, & 3 pumped down	
Less than 0.1 gal of DNAPL reco	
7/8/2020 34 24.5 24 Not measurable Sump	
Sheen visible in B99/B100 sum	np & B107/B108 sump,
7/15/2020 32 29.5 29 Not measurable less than 0.1 gal of DNAPL reco	overed from B107/B108
Less than 0.1 gal of DNAPL reco	
Less than 0.1 gal of DNAPL reco	
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7/23/2020 0 23 22.5 Not measured Sump  7/31/2020 0 11 10 Not measurable  8/5/2020 0 7 5 Not measurable	
7/23/2020         0         23         22.5         Not measured         Less than 0.1 gal of DNAPL reconstruction           7/31/2020         0         11         10         Not measurable           8/5/2020         0         7         5         Not measurable           8/13/2020         1         11         10         Not measurable	
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7/23/2020         0         23         22.5         Not measured         Less than 0.1 gal of DNAPL reconstruction           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           9/2/2020         43         37         38         Not measurable    Less than 0.1 gal of DNAPL reconstructions  Sump  Not measurable  Sump  Sumps  1, 2, & 3 pumped down visible in B99/B100 sump & B1	n (September 1); Sheen 107/B108 sump
7/23/2020         0         23         22.5         Not measured         Less than 0.1 gal of DNAPL reconstruction           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	n (September 1); Sheen 107/B108 sump
7/23/2020         0         23         22.5         Not measured         Less than 0.1 gal of DNAPL reconstruction           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           9/2/2020         43         37         38         Not measurable    Less than 0.1 gal of DNAPL reconstructions  Sump  Not measurable  Sump  Sumps  1, 2, & 3 pumped down visible in B99/B100 sump & B1	n (September 1); Sheen 107/B108 sump
7/23/2020         0         23         22.5         Not measured         Less than 0.1 gal of DNAPL reconstruction           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           9/2/2020         43         37         38         Not measurable           Sumps 1, 2, & 3 pumped down         visible in B99/B100 sump & B1         9/9/2020           28         37         36         Not measurable         Sheen visible in B107/B108 sum	n (September 1); Sheen 107/B108 sump

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	Comments			
10/8/2020	4	12	11.5	Not measurable	Comments			
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 12/23/2020	1	10 9	9 7.5	Not measurable  Not measurable				
12/23/2020	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	Sheen visible in B103/104 and B107/B100 samps			
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	25	Not measurable				
6/23/2021	0	12 3	13	Not measurable  Not measurable				
6/30/2021 7/7/2021	0	0	0	Not measurable				
7/14/2021	0	0	0	Not measurable	Sumps 1,2, & 3 pumped down (July 15)			
7/21/2021	0	39	37	Not measurable				
7/29/2021	0	37	35.5	Not measurable				
8/4/2021	0	36	34	Not measurable	Sheen visible in B103/104 and B107/B108 sumps			
					Depth to DNAPL measurements were not taken; the			
8/11/2021	0	33	32	Not Measured	interface probe was not functioning properly			
8/18/2021	0	25	23	Not measurable				
8/25/2021	0	20	22	Not measurable				
9/1/2021	0	20	17	Not measurable				
9/8/2021	3	14	11	Not measurable	Summe 1.2. 9. 2 numand dama (Control of 4.7)			
9/15/2021	0	3 46	4	Not measurable	Sumps 1,2, & 3 pumped down (September 17)			
9/22/2021	31.5 0	46 29	46 30.75	Not measurable	Sheen visible in B107/B108 sump Sheen visible in B103/104 and B107/B108 sumps			
9/29/2021 10/7/2021	6	18	30.75 17.5	Not measurable  Not measurable	Sinceri visible iii b103/104 anu b10//b100 sumps			
10///2021		10	17.3	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)			
10/27/2021	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 and decided (20.42)			
12/22/2024				Not Moss	Partial site inspection conducted 12/22/21; Sump			
12/22/2021	0	11 5	11	Not Measured	measurements were not taken			
12/29/2021 1/5/2022	8.75	11.5 13.5	11 12.25	Not measurable  Not measurable				
1/12/2022	6	13.5	12.25	Not measurable	1			
1/12/2022	ט	12	14	ivot illegantable				

			1	x - Wood Preserv	ing 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
1/19/2022	13.5	17	16	Not measurable	Sheen visible in B099/B100 sump
1/27/2022	3	9	9	Not measurable	
					Measurements were not taken; the inspector was
2/2/2022	-	-	-	Not Measured	unable to open the sumps
2/9/2022	9	15	15	Not measurable	
2/16/2022	8.5	17	16	Not measurable	
2/23/2022	5.5	14	13.5	Not measurable	
3/2/2022	5.5	15	14	Not measurable	
3/9/2022	4.5	7	6	Not measurable	
					Sumps 1,2, & 3 pumped down during inspection; less
3/16/2022	48	36	45	Not measurable	than 0.5 gal of DNAPL recovered B107/B108 sump
3/23/2022	6	29	28	Not measurable	and the general and the second and t
3/30/2022	5.5	28	28	Not measurable	
4/6/2022	3.5	19	18	Not measurable	
4/13/2022	4.5	18	15	Not measurable	Sheen visible in B099/B100 sump
4/20/2022	5	18	18	Not measurable	Sheen visible in B099/B100 sump
4/27/2022	4.5	12	8.5	Not measurable	
					Sumps 1,2, & 3 pumped down during inspection; Sheen
5/4/2022	48	42	45	Not measurable	visible in B099/B100 sump
					Sheen visible in B099/B100, B103/104, and B107/B108
5/11/2022	16	44.5	44	Not measurable	sumps
5/18/2022	6.5	45	45	Not measurable	
5/25/2022	0	25	24	Not measurable	
6/1/2022	5.5	24	24	Not measurable	
6/8/2022	5	22	22	Not measurable	Sheen visible in B099/B100 and B103/104 sumps
6/15/2022	5	25	24	Not measurable	
6/22/2022	4.5	24	21	Not measurable	
6/29/2022	6	21	21	Not measurable	
7/6/2022	5.5	13	13	Not measurable	
7/13/2022	5	15	14	Not measurable	Sheen visible in B099/B100 sump
					Sumps 1,2, & 3 pumped down during inspection; less
7/20/2022	51.5	38	43.5	Not measurable	than 0.1 gal of DNAPL recovered B099/B100 sump
7/27/2022	4	42	40	Not measurable	
8/3/2022	5	39	39	Not measurable	
8/10/2022	5.5	38	38	Not measurable	Sheen visible in B107/B108 sump
8/17/2022	5.5	25.5	25	Not measurable	
					Inspector unable to open B099/B100 and B107/B108
					sumps as there was standing water on top of the sumps
8/24/2022	0	0.5	0	Not measurable	due to ongoing rain event
					Sumps 1,2, & 3 pumped down during inspection; sheen
8/31/2022	52	52	48	Not measurable	visible in B103/B104 sump
9/7/2022	3	37	37	Not measurable	
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 B107/B108 sump
9/28/2022	3	30	31	Not measurable	Sheen visible in B099/B100 and B107/B108 sumps
10/5/2022		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
					Common 1 2 9 2 more and decome decome incompations. Incom
					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
10/19/2022	48	48	48	Not measurable	B103/B104 sumps on recharge water after pumpdown
10/19/2022	6	46	48	Not measurable	Sheen visible in B107/B108 sump
11/2/2022	4	19	19	Not measurable	Success Assigned in prot/proc smith
	6	19	13	Not measurable	
11/9/2022	8	14	12	Not measurable	
11/16/2022 11/22/2022	0	0	0	Not measurable	
11/22/2022			U	ivot illeasurable	
					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	5 2. 2 2.22000 ca 110111 2207/ 200 30111p
12,7,2022	*	25.5			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
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	<u> </u>
1/11/2023		13	13	Not measurable	<u> </u>
1/25/2023		6	5	Not measurable	
2/1/2023	<1	1	<1	Not measurable	
2, 1, 2023	,1	ı -	`1	. TOT III Casulable	

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
2/8/2023	5	13	12	Not measurable	C P000/P400 P403/P404 and P407/P400
2/15/2022	-1	2	2.5	Nat was a sure bla	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
2/22/2022	32	42	43	Not moscurable	high turbidity
2/22/2023	32	42	43	Not measurable	riigii turbiurty
					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
5, 5, 2525	-				B099/B100 and B013/B104 brown color; B107/B108
3/15/2023	4	42	41	Not measurable	very light brown color
3/13/2023	8	26.5	25.5	Not measurable	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	4	31.5	31.5	Not measurable	Sheen visible in B107/B108 sump
5/3/2023	3	18	17.5	Not measurable	
5/10/2023	0	1.5	0	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
- /- /	_				brown and, light brown on both B103/B104 and
6/7/2023	3	38	37	Not measurable	B107/B108.
					Chana Visible in P000/P100 8 P107/P100 water calcu
6/14/2022	4	20	27	Nat was a sure bla	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.
0/21/2023	3	30	37	Not measurable	Sheen Visible in B099/B100 & B107/B108. water color
					dark brown on B099/B100 & B107/B108, light brown in
6/28/2023	3	31	31	Not measurable	B103/B104.
0,20,2023	3	- 51	31	- Hot medadidate	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
					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 or
- /- /	_				B099/B100, light brown on B103/B104, and clear on
8/2/2023	0	16.5	15.5	Not measurable	B107/B108. Pumpdown conducted 8/4/2023.
					Sheen Visible on B099/B100 and B107/B108. Water color brown on B099/B100, light brown on B103/B104,
9/0/2022	42	47	47	Not mossurable	and clear on B107/B108.
8/9/2023	42	47	47	Not measurable	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/B100 water color dark
					brown and, light brown on both B103/B104 and
8/23/2023	33	46	46	Not measurable	B107/B108.
					Sheen visible in all Sumps. B099/B100 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/B100 water color light
9/6/2023	1	38	38	Not measurable	brown, and clear on both B103/B104 and B107/B108.
					Sheen Visible on B099/B100 and B107/B108. Water
0/40/202	6	22	22	Natura II	color brown on B099/B100 and clear on B103/B104 and
9/13/2023	0	33	33	Not measurable	B107/B108. Pumpdown conducted 9/15/2023.
					Sheen Visible on B099/B100 and B107/B108. Water
0/20/2022	1.4	44	40	Not were	color brown on B099/B100 and light brown on
9/20/2023	14	41	40	Not measurable	B103/B104 and B107/B108.
					Sheen Visible on B099/B100 and B107/B108. Water
	0.5	22	24	Not mossurable	color light brown on B099/B100 and clear on B103/B104 and B107/B108.
9/27/2022	0.5	33	34	Not measurable	·
9/27/2023					ING sheen visible in all slimps. Water color brown on
9/27/2023					No sheen visible in all sumps. Water color brown on B099/B100 and light brown on B103/B104 and

UPRR Houston, tx - Wood Preserving Works							
	Sump 1	Sump 2	Sump 3				
Measured	(B099/B100)	(B103/B104)	(B107/B108)	Depth to DNAPL			
Date	Freeboard (in)	Freeboard (in)	Freeboard (in)	(in)	Comments		
					Sheen visible on B103/B104. B099/B100 water color		
					light brown, clear on B103/B104 and B107/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/B104. 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	5	10	9	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.		
					No sheen observed in any of the sumps. Water color		
					light brown on B099/B100 and clear on 103/B104 and		
1/3/2024	0	0	0	Not measurable	B107/B108.		
					No sheen observed in any of the sumps. Water color		
					light brown on B099/B100 and clear on B103/B104 and		
1/10/2024	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 B103/B104 and		
1/17/2024	12	15.5	15	Not measurable	B107/B108.		
, , , , , , , ,					No sheen observed in any of the sumps. Water color		
1/24/2024	0	0	0	Not measurable	clear in all sumps.		
, ,,	-	_	_		No sheen observed in any of the sumps. Water color		
					light brown on B099/B100 and clear on B103/B104 and		
1/31/2024	2	9.5	9	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: 1/3/2024

Description:

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

Lat: 29.785517 Long: -95.31834



Photo No.

Inspection Date:

1/3/2024

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.

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

3

Inspection Date: 1/3/2024

Description:

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

Lat: 29.78532 Long:-95.31833



Photo No.

Inspection Date:

**4** 1/3/2024

Description:

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

Lat: 29.785271 Long:-95.31841





Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. **5**  Inspection Date: 1/3/2024

Description:

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

Lat: 29.785387 Long: -95.318654



Photo No.

Inspection Date: 1/3/2024

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 Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/3/2024

Description:

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

Lat: 29.784923 Long: -95.319124



Photo No.

Inspection Date: 1/3/2024

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** 

Photo No.

Inspection Date: 1/3/2024

Description:

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

Lat: 29.784747 Long: -95.319549 Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 1/3/2024

Description:

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

Lat: 29.784858 Long: -95.319733





Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 1/3/2024

Site Location:

Englewood Intermodal Yard, Houston, Texas

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: 1/3/2024

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 Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/3/2024

Description:

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

Lat: 29.784233 Long: -95.320847



Photo No.

Inspection Date:

1/3/2024

#### 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** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. 15 Inspection Date: 1/3/2024

Description:

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

Lat: 29.784209 Long: -95.320943



Photo No.

Inspection Date:

1/3/2024

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



Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No. Inspection Date: 17 1/3/2024

Description:

Sump 1 (B099/B100), 0 inches of freeboard in sump, no odor noted, no sheen observed, water color noted as light brown.

Lat: 29.7844000 Long: - 95.3205861

No.		
1		
	3	

Englewood Intermodal Yard, Houston, Texas

Site Location:



Photo No. Inspection Date: 18 1/3/2024

Description:

Sump 2 (B103/B104), 0 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** 

Photo No.

Inspection Date: 1/3/2024

Description:

Sump 3 (B107/B108), 0 inches of freeboard in sump, no sheen observed, water color noted as

Lat: 29.7844000 Long: - 95.3205861 Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 1/3/2024

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** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/3/2024

#### 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: 1/10/2024

#### 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: 1/10/2024

#### 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:

**24** 1/10/2024

#### 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** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

Photo No. 25

Inspection Date: 1/10/2024

Description:

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

Lat: 29.784769 Long: -95.3195798



Photo No. 26

Inspection Date: 1/10/2024

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** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/10/2024

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



Photo No.

Inspection Date: 1/10/2024

Description:

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

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.

Inspection Date: 1/10/2024

#### 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: 1/10/2024

#### 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: 1/10/2024

#### 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: 1/10/2024

#### 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.

33

Inspection Date: 1/10/2024

Description:

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

Lat: 29.7842861 Long: - 95.3208611



Photo No. 34

Inspection Date:

1/10/2024

Description:

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





Client Name:

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/10/2024

#### 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



Photo No.

Inspection Date: 1/10/2024

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

Project No. 31406585.016

Photo No.

Inspection Date: 1/10/2024

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: 1/10/2024

Description:

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

Lat: 29.784233 Long: -95.320847



wsp

# **PHOTOGRAPHIC LOG**

Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/10/2024

Description:

Stall A021. No seeps noted at Test Pit A021.

Lat: 29.785387 Long: -95.318654



Photo No.

Inspection Date: 1/10/2024

Description:

Stall B013. No seeps noted at Test Pit B013.

Lat: 29.78532 Long:-95.31833





**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

41

Inspection Date:

1/17/2024

#### Description:

Sump 1 (B099/B100), 12 inches of freeboard in sump, no sheen observed, water color noted as light brown.

Lat: 29.7844000 Long: - 95.3205861



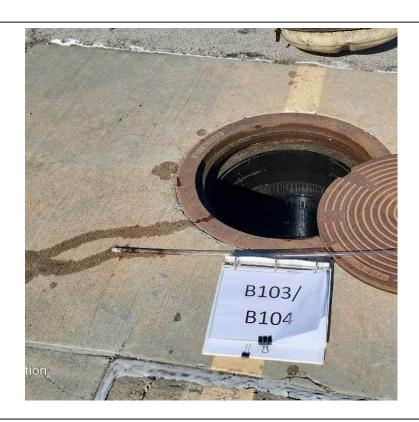
Photo No. 42

Inspection Date: 1/17/2024

#### Description:

Sump 2 (B103/B104), 15.5 inches of freeboard in sump. No odor or sheen observed, color noted as clear.

Lat: 29.7842861 Long: - 95.3208611



wsp

# **PHOTOGRAPHIC LOG**

**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/17/2024

Description:

Sump 3 (B107/B108), 15 inches of freeboard in sump, no sheen observed, water color noted as clear

Lat: 29.7844000 Long: - 95.3205861



Photo No.

Inspection Date:

44

1/17/2024

#### Description:

Stall A010. No seeps noted at Test Pit A010.

Lat: 29.785517 Long: -95.31834





Client Name:

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas 31406

Project No. 31406585.016

Photo No.

Inspection Date: 1/17/2024

#### 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: 1/17/2024

#### Description:

Stall A021. No seeps noted at Test Pit A021.

Lat: 29.785387 Long: -95.318654





Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/17/2024

Description:

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

Lat: 29.78537 Long: - 95.31869

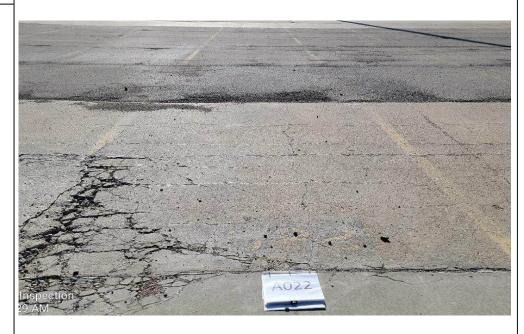


Photo No.

Inspection Date: 1/17/2024

Description:

Stall B013. No seeps noted at Test Pit B013.

Lat: 29.78532 Long:-95.31833





Client Name:

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/17/2024

#### 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: 1/17/2024

#### Description:

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

Lat: 29.784923 Long: -95.319124





Client Name: Site Location:

Union Pacific Railroad Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/17/2024

#### 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: 1/17/2024

#### 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: 1/17/2024

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: 1/17/2024

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.

Inspection Date: 1/17/2024

### 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: 1/17/2024

#### 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: 1/17/2024

### 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: 1/17/2024

#### Description:

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

Lat: 29.784769 Long: -95.3195798



# **PHOTOGRAPHIC LOG**

Project No.

31406585.016

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

59

Inspection Date: 1/17/2024

Description:

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

Lat: 29.784209 Long: -95.320943

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Site Location:

Englewood Intermodal Yard, Houston, Texas

Photo No.

Inspection Date: 1/17/2024

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





Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/17/2024

### 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



Photo No.

Inspection Date: 1/24/2024

#### Description:

Sump 1 (B099/B100), 0 inches of freeboard in sump, no sheen observed, water color noted as clear.

Lat: 29.7844000 Long: - 95.3205861



# **PHOTOGRAPHIC LOG**

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

63
Description:

Sump 2 (B103/B104), 0 inches of freeboard in sump. No odor or sheen observed, color noted as

Inspection Date:

1/24/2024

Lat: 29.7842861 Long: - 95.3208611

B103/ B104	

Photo No.

Inspection Date: 1/24/2024

#### Description:

Sump 3 (B107/B108), 0 inches of freeboard in sump, no sheen observed, water color noted as clear.

Lat: 29.7844000 Long: - 95.3205861



# **PHOTOGRAPHIC LOG**

Client Name:

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/24/2024

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: 1/24/2024

Description:

Stall A010. No seeps noted at Test Pit A010.

Lat: 29.785517 Long: -95.31834



# **PHOTOGRAPHIC LOG**

Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/24/2024

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: 1/24/2024

Description:

Stall B013. No seeps noted at Test Pit B013.

Lat: 29.78532 Long:-95.31833





Client Name:

Photo No.

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

69

Inspection Date: 1/24/2024

## 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: 1/24/2024

#### 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: 1/24/2024

Description:

Stall A021. No seeps noted at Test Pit A021.

Lat: 29.785387 Long: -95.318654



Photo No.

Inspection Date: 1/24/2024

Description:

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

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: 1/24/2024

## 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:

1/24/2024

### 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: 1/24/2024

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: 1/24/2024

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





Client Name: Union Pacific Railroad Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/24/2024

## 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



Photo No.

Inspection Date: 1/24/2024

#### 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



# **PHOTOGRAPHIC LOG**

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/24/2024

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: 1/24/2024

Description:

Stall B102 (center), no seep observed.

Lat: 29.784769 Long: -95.3195798





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Inspection Date: 1/24/2024

Description:

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

Lat: 29.784209 Long: -95.320943

Ţ	Site	Location:
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Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 1/24/2024

#### 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





Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/24/2024

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:

**84** 1/31/2024

#### 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



### PHOTOGRAPHIC LOG

Client Name:

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/31/2024

Description:

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

Lat: 29.7847472 Long: -95.3195417

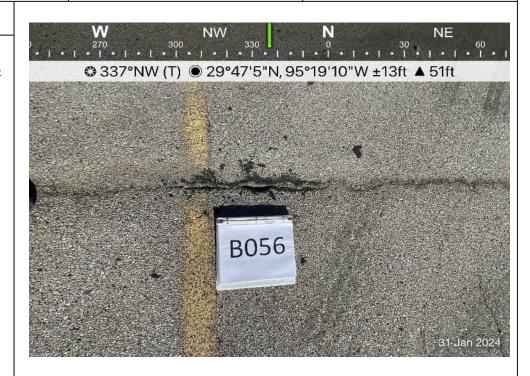


Photo No.

Inspection Date: 1/31/2024

86

Description:

Stall A010. No seeps noted at Test Pit A010.

Lat: 29.785517 Long: -95.31834





**Client Name:** 

**Union Pacific Railroad** 

Site Location: Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date:

Description:

87 1/31/2024

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

Lat: 29.784923 Long: -95.319124



Photo No.

Inspection Date: 1/31/2024

88 Description:

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

Lat: 29.785271 Long: -95.31841





**Client Name:** 

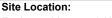
**Union Pacific Railroad** 

Photo No. Inspection Date: 89 1/31/2024

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



Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016



Photo No.

Inspection Date: 1/31/2024

Description:

Sump 1 (B099/B100), 2 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. **91**  Inspection Date: 1/31/2024

## Description:

Sump 2 (B103/B104), 9.5 inches of freeboard in sump. No odor or sheen observed, color noted as clear.

Lat: 29.7842861 Long: - 95.3208611



Photo No.

Inspection Date:

1/31/2024

### Description:

Sump 3 (B107/B108), 9 inches of freeboard in sump, no sheen observed, water color noted as clear.

Lat: 29.7844000 Long: - 95.3205861



### PHOTOGRAPHIC LOG

Client Name:

**Union Pacific Railroad** 

Photo No.

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Inspection Date:

93

1/31/2024

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:

94

1/31/2024

### Description:

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

Lat: 29.7842203 Long: - 95.320827





**Client Name:** 

Site Location:

Project No. 31406585.016

**Union Pacific Railroad** 

Photo No. Inspection Date: 95 1/31/2024

Description:

Stall B013. No seeps noted at Test Pit B013.

Lat: 29.78532 Long:-95.31833



Photo No. Inspection Date: 96 1/31/2024

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



### PHOTOGRAPHIC LOG

**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

Inspection Date: 1/31/2024

## 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: 1/31/2024

98
Description:

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

Lat: 29.785381 Long: - 95.318619



### PHOTOGRAPHIC LOG

**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No.

Inspection Date: 1/31/2024

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: 1/31/2024

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



### PHOTOGRAPHIC LOG

**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. **101**  Inspection Date: 1/31/2024

Description:

Stall A021. No seeps noted at Test Pit A021.

Lat: 29.785387 Long: -95.318654



Photo No.

Inspection Date: 1/31/2024

Description:

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

Lat: 29.784769 Long: -95.3195798





**Client Name:** 

**Union Pacific Railroad** 

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No. 31406585.016

Photo No. **103**  Inspection Date:

1/31/2024

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



Photo No.

Inspection Date:

1/31/2024

Description:

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

Lat: 29.784769 Long: -95.3195798



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Client Name: Site I			tion:	Project No.	
Union Pacific Railro	oad	Englewood	d Intermodal Yard, Houston, Texas	31406585.016	
Photo No.	Inspection Date:			•	
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