



August 15, 2023

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 July 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 July 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 3 inches, 29 inches, and 29 inches from top of the manhole, respectively, during the inspection on July 5, 2023 (Photo Nos. 11-13). Throughout the July inspections, the water level in Sump 1 remained within 3 inches from the top of the manhole (Photo Nos. 25, 42, and 56). In both Sump 2 and Sump 3, the water level ranged from 19-21 inches from the top of the manhole throughout the month's remaining inspections on July 12, 19, and 26, 2023 (Photo Nos. 26, 27, 43, 44, 57, and 58). During all July inspections, the water in Sump 1 was observed to be brown in color (Photo Nos. 11, 25, 42, and 56). In Sump 2, the water was observed to be light brown during the July 5, 12, and 26, 2023 inspections (Photo Nos. 12, 26, and 57) and was observed to be clear during the July 19, 2023 inspection (Photo No. 43). In Sump 3, the water was observed to be clear during all July 2023 inspections (Photo Nos. 13, 27, 44, and 58). Sheen was observed in Sumps 1 and 3 during all July 2023 inspections (Photo Nos. 11, 13, 25, 27, 42, 44, 56, and 58), but

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was not observed in Sump 2 during any of the July 2023 inspections (Photo Nos. 12, 27, 43 and, 57). No odors were reported during the July inspections.

- The NAPL Collection System sumps (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 July 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 July 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). An accumulation of NAPL on the bottom of the inflow protector in Sump 1 was observed during the inspection on September 14, 2022. The material was removed, and the inflow protector was monitoring during subsequent inspections for additional NAPL accumulation. No additional accumulation was observed through July 26, 2023.
- Some small tar-like material seeps were observed on the asphalt or concrete in the NAPL Collection System in Stall B107 during the July 5, 12, 19, and 26 2023 inspections (Photo Nos. 8, 19, 41, 55). The tar-like material was recovered from these locations when observed.
- For areas outside the NAPL Collection System, a small amount of tar-like material was observed on the concrete or asphalt surface at the following locations during the June 2023 weekly inspections. The tar-like material was recovered from these locations when observed:

Seep Observations Outside the NAPL Collection System Area	
Stall Number	Observation Date(s)
A011	July 5 th , July 12 th , July 19 th , and July 26 th (Photo Nos. 1, 16, 32 and 47)
A022	July 5 th , July 12 th , July 19 th , and July 26 th (Photo Nos. 3, 17, and 33, 48)
B042	July 5 th , July 12 st , July 19 th , and July 26 th (Photo Nos.4, 21, 34, and 49)
B056	July 5 th , July 12 th , July 19 th , and July 26 th (Photo Nos. 5, 23, 35, and 50)
B057	July 5 th , July 12 th , July 19 th , and July 26 th (Photo No. 6, 24, 36, and 51)
B100	July 5 th , July 12 th , July 19 th , July 26 th (Photo Nos. 9, 28, 37, and 52)
B102	July 5 th , July 12 th , July 19 th , July 26 th (Photo Nos. 10, 30, 31, 38, and 53)
B105	July 19 th (Photo No. 39)

Seep Observations Outside the NAPL Collection System Area	
Stall Number	Observation Date(s)
Track 802	July 5 th , July 12 th , July 19 th , and July 26 th (Photo No. 14, 18 46, and 60)
RD-14	July 5 th , July 12 th , July 19 th , and July 26 th (Photo No. 2, 20, 45, and 59)

- As detailed in the July 2022 Monthly Status Update, a tar-like material seep was observed next to Track 802 that is located approximately 280 feet northwest of the NAPL Collection System. The tar-like material seep is located along on the northern side of the track at the edge of the railroad ballast (Photo No. 14). During the September 28, 2022 weekly inspection, an additional tar-like material seep was observed within the concrete road area (RD-14) about 45 feet north of Track 802 and east of the existing Track 802 seep location (Photo No. 2). A small amount of tar-like seep material was recovered at the Track 802 and RD-14 locations during all four of the inspections in June 2023.
- Tar-like material observed during the weekly inspection events was removed and recovered using a hand tool to scrape up the material. The number of tar-like material seeps observed, and total volume of material recovered during the month of July was similar to the June inspections. Less than 0.5 gallons of tar-like material was recovered for the month from the seep locations. The material that was recovered was placed in a drum staged at the CSA for disposal.
- After the pressure washing event on June 30, 2023, no brown staining/residue or seep water was observed during the July 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 to continue through the warmer months (through September 2021). UPRR will prepare a Test Pit Evaluation Report Addendum summarizing the test pit inspections from June through November 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 inspection on September 28, 2022, a small amount of tar like material was observed in stall B096 adjacent to the test pit patch for the first time since the test pit installation. A very small amount of tar-like material was recovered from the B096 historical seep location during the inspection on July 5, 12, 19, and 26 2023 (Photo Nos. 7, 29, 40, and 54). Through July 26, 2023, no NAPL seeps have been observed at the six other test pit locations (stalls A010, A021, A098, B013, B057, and B108). The seep observed in stall B057 (Photo No. 6, 24, 36 and 51) during the July inspections was observed coming from cracks in the asphalt pavement and not at the test pit location.
- 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 will be provided in the Test Pit Evaluation Report Addendum.
- 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 is preparing responses to the revised Work Plan. However, to allow additional time to develop responses to the TCEQ's comments and revise the Work Plan, UPRR submitted an extension request to the TCEQ on August 8, 2023 to submit the revised Work Plan by 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.

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.



Christopher Elofson, P.G.
Consultant, Geologist



Eric C. Matzner, P.G.
Director, Hydrogeologist

CC: Mr. Kevin Peterburs, UPRR – Milwaukee, WI
Ms. Alma Jefferson, Waste Section Manager, TCEQ Region 12, Houston

Attachment Table 1 – NAPL Measurements – NAPL Collection System
Attachment A – Weekly Inspection Photolog

TABLE 1
NAPL Measurements - NAPL Collection System - Englewood Intermodal Yard
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	
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
10/16/2019	0	39.5	39	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
10/24/2019	3	35	25	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 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	
11/13/2019	7	30	29	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
11/19/2019	4	26	25.5	Not measurable	
11/27/2019	0	25	23	Not measurable	
12/3/2019	2	25.5	25	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
12/11/2019	1.5	17	16.54	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 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 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	
2/12/2020	0	0	0	Not measurable	
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	
5/4/2020	-	-	-	Not Measured	Measurements were not taken; the inspector was 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	
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
7/15/2020	32	29.5	29	Not measurable	Sheen visible in B99/B100 sump & B107/B108 sump, 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
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	Sumps 1, 2, & 3 pumped down (September 1); Sheen 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	

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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	
4/14/2021	0	6.5	6	Not measurable	Less than 0.1 gal of DNAPL recovered B107/B108 sump; 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	25	Not measurable	
6/23/2021	0	12	13	Not measurable	
6/30/2021	0	3	1	Not measurable	
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
8/11/2021	0	33	32	Not Measured	Depth to DNAPL measurements were not taken; the 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	
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	
10/13/2021	3.6	10.56	9.72	Not measurable	Sheen visible in B103/104 and B107/B108 sumps; brown discoloration and slight odor noted B099/B100 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	
12/22/2021	-	-	-	Not Measured	Partial site inspection conducted 12/22/21; Sump measurements were not taken
12/29/2021	0	11.5	11	Not measurable	
1/5/2022	8.75	13.5	12.25	Not measurable	

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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
1/12/2022	6	12	12	Not measurable	
1/19/2022	13.5	17	16	Not measurable	Sheen visible in B099/B100 sump
1/27/2022	3	9	9	Not measurable	
2/2/2022	-	-	-	Not Measured	Measurements were not taken; the inspector was 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	
3/16/2022	48	36	45	Not measurable	Sumps 1,2, & 3 pumped down during inspection; less than 0.5 gal of DNAPL recovered B107/B108 sump
3/23/2022	6	29	28	Not measurable	
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	
5/4/2022	48	42	45	Not measurable	Sumps 1,2, & 3 pumped down during inspection; Sheen visible in B099/B100 sump
5/11/2022	16	44.5	44	Not measurable	Sheen visible in B099/B100, B103/104, and B107/B108 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
7/20/2022	51.5	38	43.5	Not measurable	Sumps 1,2, & 3 pumped down during inspection; less 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	
8/24/2022	0	0.5	0	Not measurable	Inspector unable to open B099/B100 and B107/B108 sumps as there was standing water on top of the sumps due to ongoing rain event
8/31/2022	52	52	48	Not measurable	Sumps 1,2, & 3 pumped down during inspection; sheen 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	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
10/19/2022	48	48	48	Not measurable	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	
11/22/2022	0	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	
12/14/2022	0	0	0	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
12/21/2022	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	
1/25/2023	3	6	5	Not measurable	

TABLE 1
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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
2/1/2023	<1	1	<1	Not measurable	
2/8/2023	5	13	12	Not measurable	
2/15/2023	<1	2	2.5	Not measurable	Sumps B099/B100, B103/B104, and B107/B108 pumped down during inspection
2/22/2023	32	42	43	Not measurable	Sheen visible in B099/B100, B103/B104, and B107/B108 sumps; water in B099/B100 noted as brown color with high turbidity
3/1/2023	9	41	40	Not measurable	Sheen visible in B099/B100, B103/B104, and B107/B108 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 B103/B104 brown color; B107/B108 very light brown color
3/22/2023	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
4/12/2023	4	12	14	Not measurable	All three sumps pumped down during inspection, 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.
5/31/2023	28	50	49	Not measurable	B099/B100 water color brown. B103/B104 and B107/B108 water color light brown.
6/7/2023	3	38	37	Not measurable	Sheen visible in all Sumps. B099/B0100 water color brown and, light brown on both B103/B104 and B107/B108.
6/14/2023	4	38	37	Not measurable	Sheen Visible in B099/B100 & B107/B108. water color brown on B099/B100 & light brown in all other sumps.
6/21/2023	3	36	37	Not measurable	Sheen Visible in B107/B108. water color brown on B099/B100 & light brown in all other sumps.
6/28/2023	3	31	31	Not measurable	Sheen Visible in B099/B100 & B107/B108. water color dark brown on B099/B100 & B107/B108, light brown in B103/B104.
7/12/2023	3	20	19	Not measurable	Sheen Visible in B099/B100 and B107/B108. Water color brown on B099/B100, light brown in B103/B104.
7/19/2023	3	19	19	Not measurable	Sheen Visible on B099/B100 and B107/B108. Water color brown on B099/B100 and clear on B103/B104 and B107/B108.
7/26/2023	3	21	20	Not measurable	Sheen Visible on B099/B100 and B107/B108. Water color brown on B099/B100, light brown on B103/B104, and clear on 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



PHOTOGRAPHIC LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

1

Inspection Date:

7/5/2023

Description:

Stall A011 some tar-like material observed at historical seep location along asphalt crack, material was removed. View looking southeast.

Lat: 29.785467

Long: -95.318341



Photo No.

2

Inspection Date:

7/5/2023

Description:

RD-14 Seep location observed within the concrete road area (RD-14) north of Track 802 (east of existing Track 802 seep location), very small amount of tar-like material observed along a concrete joint, material was removed.

Lat: 29.784975

Long: -95.321335





PHOTOGRAPHIC LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

3

Inspection Date:

7/5/2023

Description:

Stall A022. Some tar-like material observed at historical seep location along asphalt crack, material was removed.

Lat: 29.785378

Long:-95.318694



Photo No.

4

Inspection Date:

7/5/2023




Description:




Stall BO42. Some tar-like material observed at historical seep location along asphalt crack, material was removed.




Lat: 29.784923

Long: -95.319124



		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 5	Inspection Date: 7/5/2023	<div> <div> Description: Stall B056. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Lat: 29.784751 Long: -95.319532 </div> <div>  </div> </div>	
Photo No. 6	Inspection Date: 7/5/2023	<div> <div> Description: Stall B057. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Lat: 29.784747 Long: -95.319549 </div> <div>  </div> </div>	

		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	
Project No.: 31406585.016			
Photo No. 7	Inspection Date: 7/5/2023	<div> <p>Description:</p> <p>Stall B096, some staining and cracking concrete observed at former test pit location. Some tar-like material observed and removed.</p> <p>Lat: 29.78417 Long: - 95.32091</p> </div> 	
Photo No. 8	Inspection Date: 7/5/2023	<div> <p>Description:</p> <p>Stalls B107, some new tar-like material observed and removed at seep location on concrete joint along the southern edge of the excavated area, looking northwest.</p> <p>Lat: 29.784137 Long: -95.32096</p> </div> 	

		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 9	Inspection Date: 7/5/2023		
Description: Stall B100, Some tar-like material observed and removed. Lat: 29.7844000 Long: - 95.3205861			
Photo No. 10	Inspection Date: 7/5/2023		
Description: Stall B102, tar-like material observed and removed. Lat: 29.784233 Long: -95.320847			



PHOTOGRAPHIC LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

11

Inspection Date:

7/5/2023

Description:

Sump 1 (B099/B100), 3 inches of freeboard in sump, sheen observed, no odor noted, no new NAPL accumulation on inflow protector, color noted as brown/turbid.

Lat: 29.7844000

Long: - 95.3205861



Photo No.

12

Inspection Date:

7/5/2023



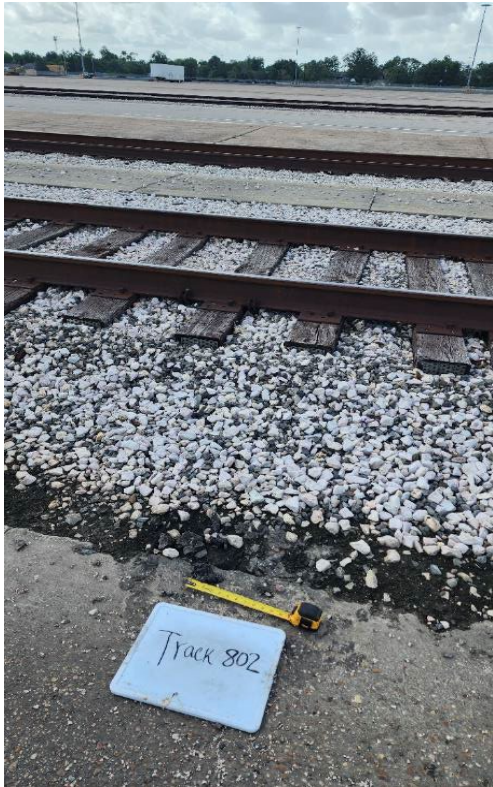
Description:

Sump 2 (B103/B104), 29 inches of freeboard, no sheen observed, no odor noted, color noted as light brown.

Lat: 29.7842861



Long: - 95.3208611









		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 13	Inspection Date: 7/5/2023	<div> <div> Description: Sump 3 (B107/B108), 29 inches of freeboard in sump, sheen observed, no odor noted, color noted as clear. Lat: 29.784172 Long: -95.320998 </div> <div>  </div> </div>	
Photo No. 14	Inspection Date: 7/5/2023	<div> <div> Description: North side of Track 802, some tar-like material observed at seep location near the edge of the ballast, material removed. Looking Southeast Lat: 29.784895 Long: -95.321327 </div> <div>  </div> </div>	









PHOTOGRAPHIC LOG




Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 15	Inspection Date: 7/5/2023		
Description: Stall B102 Joint , new tar-like material observed and removed at seep location along stall joint. Lat: 29.784197 Long: -95.320821			
Photo No. 16	Inspection Date: 7/12/2023		
Description: Stall A011 some tar-like material observed at historical seep location along asphalt crack, material was removed. View looking southeast. Lat: 29.785467 Long: -95.318341			




		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 17	Inspection Date: 7/12/2023		
Description: Stall A022. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Looking South Lat: 29.785378 Long:-95.318694			
Photo No. 18	Inspection Date: 7/12/2023		
Description: North side of Track 802, some tar-like material observed at seep location near the edge of the ballast, material removed. Looking Southeast. Lat: 29.784895 Long: -95.321327			

		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 19	Inspection Date: 7/12/2023	<div> <div> Description: Stalls B107, view of NAPL collection system (Sump 3 in background of photo), some new tar-like material observed and removed at seep location on concrete joint along the southern edge of the excavated area, looking northwest. Lat: 29.784137 Long: -95.32096 </div> <div>  </div> </div>	
Photo No. 20	Inspection Date: 7/12/2023	<div> <div> Description: RD-14 Seep location observed within the concrete road area (RD-14) north of Track 802 (east of existing Track 802 seep location), very small amount of tar-like material observed along a concrete joint, material was removed. </div> <div> Lat: 29.785064 Long: -95.321219 </div> <div>  </div> </div>	

		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 21	Inspection Date: 7/12/2023		
Description: Stall B042. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Lat: 29.784923 Long: -95.319124			
Photo No. 22	Inspection Date: 7/12/2023		
Description: Stall B056. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Looking North Lat: 29.784751 Long: -95.319532			

		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 23	Inspection Date: 7/12/2023		
Description: Stall B056. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Lat: 29.784751 Long: -95.319532			
Photo No. 24	Inspection Date: 7/12/2023		
Description: Stall B057. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Lat: 29.784747 Long: -95.319549			

		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 25	Inspection Date: 7/12/2023		
Description: Sump 1 (B099/B100), 3 inches of freeboard in sump, no odor noted, sheen observed, no new NAPL accumulation on inflow protector, watercolor noted as brown. Lat: 29.7844000 Long: - 95.3205861			
Photo No. 26	Inspection Date: 7/12/2023		
Description: Sump 2 (B103/B104), 20 inches of freeboard before pumping. No sheen or odor noted, color noted as light brown. Lat: 29.7842861 Long: - 95.3208611			

		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 27	Inspection Date: 7/12/2023		
Description: Sump 3 (B107/B108), 19 inches of freeboard in sump, no odor noted, sheen observed, no new NAPL accumulation on inflow protector, watercolor noted as clear. Lat: 29.7844000 Long: - 95.3205861			
Photo No. 28	Inspection Date: 7/12/2023		
Description: Stall B100, some new tar-like material observed and removed at seep location on concrete crack/hole in concrete. Lat: 29.7842517 Long: -95.3208166			



PHOTOGRAPHIC LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

29

Inspection Date:

7/12/2023

Description:

Stall B096, some staining and cracking concrete observed at former test pit location. Some tar-like material observed and removed.

Lat: 29.78417

Long: - 95.32091



Photo No.

30

Inspection Date:

7/12/2023


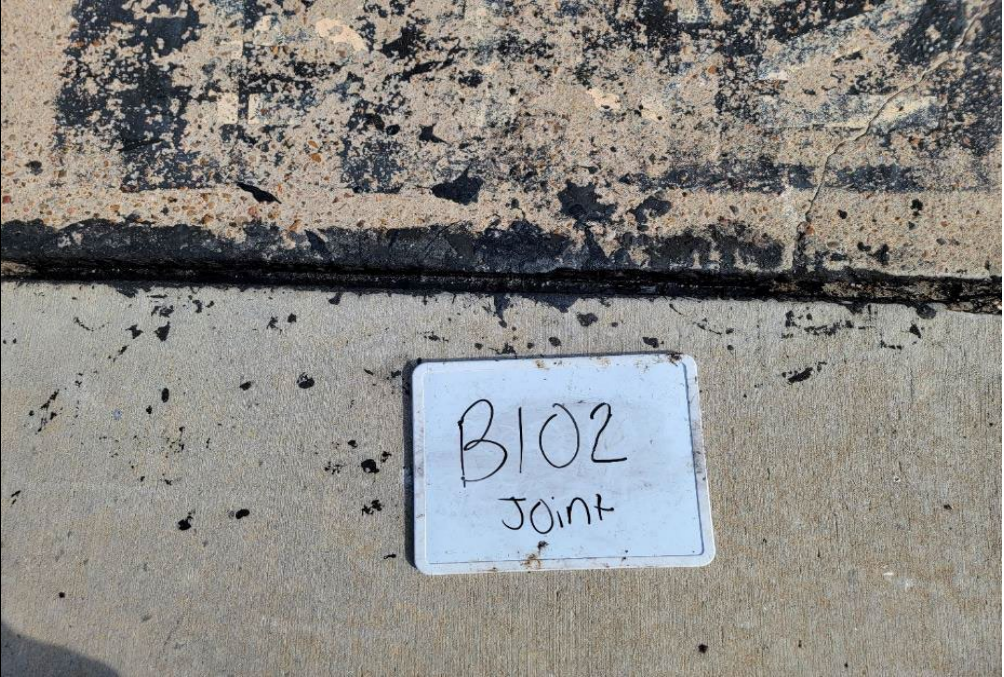

Description:

Stall B102 Joint, tar-like material observed and removed at seep location along stall joint. Looking northeast.

Lat: 29.784197

Long: -95.320821



		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 31	Inspection Date: 7/12/2023		
Description: Stall B102 Joint, tar-like material observed and removed at seep location along stall joint. Lat: 29.784197 Long: -95.320821			
Photo No. 32	Inspection Date: 7/19/2023		
Description: Stall A011 some tar-like material observed at historical seep location along asphalt crack, material was removed. View looking southeast. Lat: 29.785392, Long: -95.318655			



PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
33

Inspection Date:
7/19/2023

Description:

Stall A022, some tar-like material observed at the seep location along the edge tar-like material seeps observed and removed, view looking southeast.

Lat: 29.785381
Long: - 95.318619



Photo No.
34

Inspection Date:
7/19/2023

Description:

Stall BO42. Some tar-like material observed at historical seep location along asphalt crack, material was removed.

Lat: 29.784923
Long: -95.319124





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
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Photo No. 35	Inspection Date: 7/19/2023	
Description: Stall B056. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Lat: 29.784751 Long: -95.319532		

Photo No. 36	Inspection Date: 7/19/2023	
Description: Stall B057, some new tar-like material observed and removed at seep location along asphalt crack. Lat: 29.784769 Long: -95.3195798		



PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
37

Inspection Date:
7/19/2023

Description:

Stall B100, tar-like material observed and removed at seep location along asphalt crack/hole in the asphalt. Test pit on right of photo. Looking North.

Lat: 29.7842517
Long: -95.3208166



Photo No.
38

Inspection Date:
7/19/2023

Description:

Stall B102 Joint, tar-like material observed and removed at seep location along stall joint.

Lat: 29.7843668
Long: -95.3209849





PHOTOGRAPHIC LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

39

Inspection Date:

7/19/2023

Description:

Stall B105, tar-like material observed and removed at seep location along asphalt crack/hole in the asphalt.

Lat: 29.7842517

Long: -95.3208166



Photo No.

40

Inspection Date:

7/19/2023




Description:

Stall B096, some staining and cracking concrete observed at historical seepage location. Some tar-like material observed and removed.

Lat: 29.78417

Long: -95.32091



		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 41	Inspection Date: 7/19/2023		
Description: Stalls B107, some new tar-like material observed and removed at seep location on concrete joint along the southern edge of the excavated area, looking northwest. Lat: 29.784156 Long: -95.320953			
Photo No. 42	Inspection Date: 7/19/2023		
Description: Sump 1 (B099/B100), 3 inches of freeboard in sump, no odor noted, sheen observed, no new NAPL accumulation on inflow protector, watercolor noted as brown. 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.
43

Inspection Date:
7/19/2023

Description:

Sump 2 (B103/B104), 19 inches of freeboard before pumping. No sheen or odor noted, color noted as clear.

Lat: 29.7842861
Long: - 95.3208611



Photo No.
44

Inspection Date:
7/19/2023

Description:

Sump 3 (B107/B108), 19 inches of freeboard in sump, no odor noted, sheen observed, no new NAPL accumulation on inflow protector, watercolor 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.

45

Inspection Date:

7/19/2023

Description:

RD-14 Seep location observed within the concrete road area (RD-14) north of Track 802 (east of existing Track 802 seep location), small amount of tar-like material observed along a concrete joint, material was removed.

Lat: 29.785064

Long: -95.321219



Photo No.

46

Inspection Date:

7/19/2023




Description:

North side of Track 802, some tar-like material observed at seep location near the edge of the ballast, material removed.

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. 47	Inspection Date: 7/26/2023		
Description: Stall A011 some tar-like material observed at historical seep location along asphalt crack, material was removed. View looking southeast. Lat: 29.785392, Long: -95.318655			
Photo No. 48	Inspection Date: 7/26/2023		
Description: Stall A022, some tar-like material observed at the seep location along the edge tar-like material seeps observed, looking southeast. 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.

49

Inspection Date:

7/26/2023

Description:

Stall B042. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Looking North

Lat: 29.784923

Long: -95.319124



Photo No.

50

Inspection Date:

7/26/2023




Description:

Stall B056. Some tar-like material observed at historical seep location along asphalt crack, material was removed. Looking North

Lat: 29.784751

Long: -95.319532



		PHOTOGRAPHIC LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 31406585.016
Photo No. 51	Inspection Date: 7/26/2023		
Description: Stall B057, some new tar-like material observed and removed at seep location along asphalt crack. Looking North Lat: 29.784769 Long: -95.3195798			
Photo No. 52	Inspection Date: 7/26/2023		
Description: Stall B100, tar-like material observed and removed at seep location along asphalt crack/ hole in the asphalt. Lat: 29.7842517 Long: -95.3208166			



PHOTOGRAPHIC LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

53

Inspection Date:

7/26/2023

Description:

Stall B102 Joint, tar-like material observed and removed at seep location along stall joint.

Lat: 29.7843668

Long: -95.3209849



Photo No.

54

Inspection Date:

7/26/2023

Description:

Stall B096, some staining and cracking concrete observed at former test pit location. Some tar-like material observed and removed.

Lat: 29.78417

Long: - 95.32091





PHOTOGRAPHIC LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

55

Inspection Date:

7/26/2023

Description:

Stalls B107, some new tar-like material observed and removed at seep location on concrete joint along the southern edge of the excavated area, looking northwest.

Lat: 29.784156

Long: -95.320953



Photo No.

56

Inspection Date:

7/26/2023




Description:




Sump 1 (B099/B100), 3 inches of freeboard in sump, no odor noted, sheen observed, no new NAPL accumulation on inflow protector, watercolor noted as brown.

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. 57	Inspection Date: 7/26/2023		
Description: Sump 2 (B103/B104), 21 inches of freeboard before pumping. No sheen or odor noted, color noted as light brown. Lat: 29.7842861 Long: - 95.3208611			
Photo No. 58	Inspection Date: 7/26/2023		
Description: Sump 3 (B107/B108), 20 inches of freeboard in sump, no odor noted, sheen observed, no new NAPL accumulation on inflow protector, watercolor 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. 59	Inspection Date: 7/26/2023		
Description: RD-14 Seep location observed within the concrete road area (RD-14) north of Track 802 (east of existing Track 802 seep location), small amount of tar-like material observed along a concrete joint, material was removed. Lat: 29.785064 Long: -95.321219			
Photo No. 60	Inspection Date: 7/26/2023		
Description: North side of Track 802, some tar-like material observed at seep location near the edge of the ballast, material removed. Lat: 29.784947 Long: -95.321214			