



January 15, 2025

Project No. 31406585.016

Mr. Jerry Wick

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 AND REVISED INTERIM MEASURES WORK PLAN CONSTRUCTION ACTIVITIES 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 Mr. Wick:

WSP USA Inc. (WSP), on behalf of Union Pacific Railroad Company (UPRR), is pleased to provide this monthly status update for December 2024 summarizing the weekly construction activities being conducted at the Englewood Intermodal Yard concrete cap area within the UPRR Houston Wood Preserving Works Facility (the Site). The construction activities are being conducted following the *Revised Interim Measures Work Plan – Englewood Intermodal Yard (EIY)* dated October 20, 2023, and prepared by WSP. The Texas Commission on Environmental Quality (TCEQ) requested in the Conditional Approval letter dated January 9, 2024, that weekly summaries be provided in the monthly status updates detailing the activities being implemented per the Revised Interim Measures Work Plan (IMWP). In addition, a summary of the weekly inspections conducted at the Englewood Intermodal Yard concrete cap area is provided in this monthly status update as requested by the TCEQ in a letter dated March 20, 2018. Below is a summary of the IMWP activities and inspections for December 2024.

Interim Measures Work Plan Activities

The TCEQ Conditional Approval letter dated January 9, 2024, for the Revised IMWP requested UPRR provide weekly summaries during the remediation activities detailing that adequate air monitoring and dust suppression, soil management, and stormwater protection activities are being implemented in accordance with the approved plans provided in the Revised IMWP. UPRR initiated the remediation activities on April 29, 2024, and completed construction activities on November 15, 2024, except for the final waste disposition. As required in the IMWP, WSP on behalf of UPRR inspected the backfilled focused excavation areas weekly as part of the Englewood IM Yard concrete cap inspection schedule. With the conclusion of the construction activities and pending final waste disposition, detailed weekly summaries are no longer necessary and the IMWP activities and weekly inspections are now summarized on a monthly basis, as discussed below:

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Activities from December 2 through December 31, 2024:

- **Remediation Activities**
 - Focused excavation work completed, and no remediation activities were conducted.

- **Dust Control and Air Monitoring**
 - Focused excavation work completed, and no dust generating activities took place. No air monitoring was conducted.

- **Soil/Waste Management**
 - Roll-off containers staged at the Site were kept covered.
 - Two roll-offs containing Class 2 non-hazardous soil waste were transported to the Republic Services McCarty Road Facility on December 2, 2024.

- **Stormwater Management**
 - Approximately 423,000 gallons of stormwater are being stored onsite pending profiling and disposal.
 - A Temporary Discharge Authorization was submitted to the City of Houston (COH) Public Works on December 23, 2024, seeking permission to discharge approximately 423,000 gallons of stormwater into the City's POTW through the permitted water treatment plant located at the Settegast Intermodal Yard.

- **Weekly Focused Excavation Inspections**
 - Weekly inspections of the completed 13 Focused Excavation areas were conducted on December 4, 11, 18, 23 and 27, 2024. There were no NAPL seeps observed at the Focused Excavation areas during the inspections. Photographs from the weekly inspections are provided in Attachment A under Photo Numbers 1 through 69.

Non-Aqueous Phase Liquid (NAPL) Collection System Inspections

A NAPL Collection System was installed in the Englewood Intermodal Yard in January 2019 to address the tar-like substance seeps within parking stalls B100 to B109 (for container trailers). The following is a summary of the observations from the weekly inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system for December 2024 (select photographs from the weekly inspections are provided in Attachment C):

- The NAPL Collection System Sump 1 (B099/B100 stalls), Sump 2 (B103/B104 stalls), and Sump 3 (B107/B108 stalls) have continued to be checked weekly for NAPL using an interface probe. A hoe has continued to be used to recover NAPL, if present, from the bottom of each of the sumps during the weekly inspections. No NAPL was detected or recovered from Sumps 1, 2 and 3 during the December 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. NAPL recovered from the sumps is placed in a drum for disposal. The drum is staged at the Container Storage Area (CSA). The inflow protector was monitored for NAPL accumulation, and no accumulation was observed through December 2024.
- Water levels in NAPL Collection System Sump 1, Sump 2, and Sump 3 were measured at the following levels below the top of the manholes:

- December 4th – B099/B100 was measured at 10 inches, B103/B104 was measured at 35 inches, and B107/B108 was measured at 33.5 inches (Photo 70, 71, and 72).
 - December 11th – at 4, 26, and 26 inches (Photo 73, 74, and 75).
 - December 18th – at 5, 23, and 22 inches (Photo 76, 77, and 78).
 - December 23rd – at 4.5, 23.5, and 22.5 inches (Photo 79, 80, and 81).
 - December 27th – at 2, 12, and 11.5 inches (Photo 82, 83, and 84).
- During the December 2024 inspections, the water in Sump 1, Sump 2, and Sump 3 were observed to be clear in color. A sheen was observed at Sump 1 during the December 4th, 11th, 18th, and 27th inspections (Photos 70, 73, 76, and 82). Additionally, a sheen was observed at Sump 2 during the December 4th inspection (Photo 71). No odors were reported during the December inspections.
 - Tar material seeps were not observed at Track 802 or along the concrete joint for the NAPL Collection System (Slot B-107) during the December inspections.

Areas Outside NAPL Collection System Inspections

For areas outside the NAPL Collection System, WSP made the following observations during the weekly inspections:

- Tar-like material seeps were not observed during the weekly inspection events. The seep activity during the month of December was less compared to the November inspections. The collection volume of the tar material from the seep decreased from 0.02 gallons over 4 inspections to 0 gallons over 5 inspections at the seep locations.
- During the December 2024 inspections, no NAPL seeps were observed at the seven August 2020 test pit locations (stalls A010, A021, A098, B013, B057, B096 and B108) or three other stall numbers B042, B056, and B102 Joint. Track 802 a
- The previously observed seeps at A010, A022, B042, B056, B057, B096, B100, B102, B105, and RD-14 have been addressed through the Focused Excavation activities. Track 802 and the concrete joint at Slot B-107, the two locations that could not be addressed with Focused Excavations, did not have tar-like material seeping from them.
- There was no brown water staining observed during the month of December.

If you have any questions or need additional information, please feel free to call us at (512) 501-5547 or Mr. Kevin Peterburs of UPRR at (414) 267-4164.

Sincerely,

WSP USA Inc.



Manny Higa, GIT
Senior Consultant, Geologist



Keshab Gyawali, P.E.
Lead Consultant, Civil Engineer



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

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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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	

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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/B100 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.
8/2/2023	0	16.5	15.5	Not measurable	Sheen Visible on B107/B108. Water color dark brown on B099/B100, light brown on B103/B104, and clear on B107/B108. Pumpdown conducted 8/4/2023.
8/9/2023	42	47	47	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.
8/16/2023	38.5	47	47	Not measurable	Sheen Visible on B099/B100 and B107/B108. Water color brown on B099/B100 and light brown on B103/B104 and B107/B108.
8/23/2023	33	46	46	Not measurable	Sheen visible in all Sumps. B099/B100 water color dark brown and, light brown on both B103/B104 and B107/B108.
8/30/2023	33	46	44	Not measurable	Sheen visible in all Sumps. B099/B100 water color dark brown and, light brown on both B103/B104 and B107/B108.
9/6/2023	1	38	38	Not measurable	Sheen visible in all Sumps. B099/B100 water color light brown, and clear on both B103/B104 and B107/B108.
9/13/2023	0	33	33	Not measurable	Sheen Visible on B099/B100 and B107/B108. Water color brown on B099/B100 and clear on B103/B104 and B107/B108. Pumpdown conducted 9/15/2023.
9/20/2023	14	41	40	Not measurable	Sheen Visible on B099/B100 and B107/B108. Water color brown on B099/B100 and light brown on B103/B104 and B107/B108.
9/27/2023	0.5	33	34	Not measurable	Sheen Visible on B099/B100 and B107/B108. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.

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
10/4/2023	0	0	0	Not measurable	No sheen visible in all sumps. Water color brown on B099/B100 and light brown on B103/B104 and B107/B108. Heavy rains all week filled up sumps.
10/11/2023	0	0	0	Not measurable	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 10/13/2023.
10/18/2023	46	48	47	Not measurable	Sheen visible on B099/B100 and B107/B108. Water color brown on B099/B100. Water color clear on B103/B104. Water color light brown on B107/B108.
10/25/2023	39	44	43	Not measurable	Sheen visible on B099/B100 and B107/B108. Water color dark brown on B099/B100 and light brown on B103/B104 and B107/B108.
11/1/2023	6.5	33	33	Not measurable	Sheen visible on B099/B100 and B107/B108. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
11/8/2023	12	34	33	Not measurable	Sheen visible on B099/B100. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
11/15/2023	2	6	5.5	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
11/22/2023	7	13	12	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
11/29/2023	5.5	10	9.5	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
12/6/2023	8	14	14	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
12/13/2023	5	10	9.5	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
12/20/2023	5	10	9	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
12/27/2023	6	13	11	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
1/3/2024	0	0	0	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on 103/B104 and B107/B108.
1/10/2024	5	10	9.5	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
1/17/2024	12	15.5	15	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
1/24/2024	0	0	0	Not measurable	No sheen observed in any of the sumps. Water color clear in all sumps.
1/31/2024	2	9.5	9	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
2/7/2024	2	18	16	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
2/14/2024	6	18	18	Not measurable	No sheen observed in any of the sumps. Water color clear on B099/B100, B103/B104 and B107/B108.
2/21/2024	6	14	13	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
2/28/2024	4	14	15	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
3/6/2024	4	15	15	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
3/13/2024	0	11	11	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
3/20/2024	0	7.5	7.5	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.

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
3/27/2024	0	7	6	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108. Some DNAPL (1.5 inches) was recovered from the bottom of Sump 1.
4/3/2024	0	10	10	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108. Some DNAPL (3 cubic inches) was recovered from the bottom of Sump 1.
4/10/2024	0	0	0	Not measurable	No sheen observed in any of the sumps. Water color brown on B099/B100 and clear on B103/B104 and B107/B108.
4/17/2024	0	10	9.5	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
4/24/2024	2.5	12	11	Not measurable	Sheen visible on B099/B100. Water color brown on B099/B100 and clear on B103/B104 and B107/B108. Pumpdown conducted 4/26/2024.
5/1/2024	9	20	21	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
5/8/2024	1	23	22	Not measurable	Sheen visible on B099/B100. Water color brown on B099/B100 and light brown on B103/B104 and clear on B107/B108.
5/15/2024	0	20	21	Not measurable	No sheen observed in any of the sumps. Water color light brown on B099/B100 and clear on B103/B104 and B107/B108.
5/22/2024 ¹	--	--	--	--	--
5/29/2024	0	19.5	19	Not measurable	No sheen observed in any of the sumps. Water color brown on B099/B100 and clear on B103/B104 and B107/B108.
6/5/2024	Not measurable	Not measurable	13	Not measurable	Sumps B099/B100 and B103/B104 could not be opened due to ongoing excavation. No sheen observed in any of the sumps. Water color was clear to cloudy by B107/B108.
6/12/2024	0	13	13	Not measurable	No sheen observed in any of the sumps. Water color was brown to cloudy by B099/B100, clear to cloudy by B103/B104, and clear by B107/B108.
6/19/2024	0	13	13	Not measurable	Sheen observed at B099/B100 and B107/B108. Water color was dark brown by B099/B100 and clear by B103/B104 and B107/B108.
6/26/2024	2.5	10.5	10	Not measurable	Sheen observed at B099/B100. Water color was brown to cloudy by B099/B100 and clear by B103/B104 and B107/B108.
7/3/2024	23	43	42	Not measurable	Dark brown water color and sheen observed at B099/B100. Brown water color and no sheen observed at B103/B104. Brown water color and sheen observed at B107/B108.
7/10/2024	13	35	34	Not measurable	Light brown water color and sheen observed at B099/B100. Brown water color and no sheen observed at B103/B104 and B107/B108.
7/17/2024	9	39	38	Not measurable	Light brown water color observed at all three sump systems. Sheen observed at B099/B100, 3 cubic in NAPL recovered from sump. No sheen observed at B103/B104 and B107/B108.
7/24/2024	0	36	36	Not measurable	Light brown water color observed at all three sump systems. Sheen observed at B103/B104. No sheen observed at B099/B100 and B107/B108.
7/31/2024	45	45	45	Not measurable	Brown water color and sheen observed at B099/B100. Light brown water color and no sheen observed at B103/B104 and B107/B108.
8/7/2024	23	32	32	Not measurable	Brown water color and no sheen observed at B099/B100. Brown/cloudy water color and no sheen observed at B103/B104 and B107/B108.

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
8/14/2024	24	42.5	41.5	Not measurable	Brown water color and sheen observed at B099/B100. Gray water color and no sheen observed at B103/104. Light brown and no sheen observed at B107/108.
8/21/2024	22.5	42.5	41.5	Not measurable	Brown water color and no sheen observed at B099/B100, B103/104 and at B107/108.
8/28/2024	20	42	41.5	Not measurable	Tan water color and sheen observed at B099/B100. Brown water color and no sheen observed at B103/104. Light brown and no sheen observed at B107/108.
9/4/2024	8	41	40	Not measurable	Tan water color and sheen observed at B099/B100. Tan water color and no sheen observed at B103/B104 and B107/B108.
9/12/2024	5.5	39	38.5	Not measurable	Clear water and sheen observed at B099/B100. Brown water color and no sheen observed at B103/B104 and Tan water color and no sheen observed at B107/B108.
9/18/2024	7	38.5	38	Not measurable	Clear water with sheen observed at B099/B100. Brown water color and no sheen observed at B103/B104. Light brown and no sheen observed at B107/B108.
9/26/2024	9.5	40	39	Not measurable	Clear water color and sheen observed at B099/B100. Grey and turbid water with no sheen observed at B103/B104 and brownish water with no sheen observed at B107/B108.
10/2/2024	11.5	36.5	36	Not measurable	Clear water color and no sheen observed at B099/B100. Tan water color with no sheen observed at B103/B104. Brown water with no sheen observed at B107/B108.
10/9/2024	10	37	36	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
10/16/2024	12	38	36	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
10/24/2024	14	41	40	Not measurable	Light brown water color and sheen observed at B099/B100. Light brown water color with no sheen observed at B103/B104. Brown water with no sheen observed at B107/B108.
10/30/2024	4	37.5	37	Not measurable	Turbid tan water color with no sheen observed at B099/B100. Turbid tan water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
11/6/2024	2.5	32	31	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
11/13/2024	5	32.5	32	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
11/20/2024	3.5	34	34	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
11/27/2024	8	34.5	34	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
12/4/2024	10	35	33.5	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color and sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
12/11/2024	4	26	26	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.

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
12/18/2024	5	23	22	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
12/23/2024	4.5	23.5	22.5	Not measurable	Clear water color with no sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.
12/27/2025	2	12	11.5	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water with no sheen observed at B107/B108.

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

- Freeboard not measured on 5/22/2024 due to the ongoing excavations as part of the Interim Measures Work Plan Construction Activities



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: 12/4/2024

Description:
FE-1&3 weekly inspection of asphalt cap. No NAPL observed at joints.

Lat: 29.784267
Long: -95.321050



Photo No. 2
Inspection Date: 12/4/2024

Description:
FE-2 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784047
Long: -95.320775





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No.: 3	Inspection Date: 12/4/2024
Description: FE-4 weekly inspection of asphalt cap. No NAPL observed at joints.	
Lat: 29.784755 Long: -95.319711	



Photo No.: 4	Inspection Date: 12/4/2024
Description: FE-5 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.785430 Long: -95.318517	





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
5

Inspection Date:
12/4/2024

Description:
FE-6 weekly inspection of asphalt cap. No NAPL observed at joints.

Lat: 29.785450
Long: -95.318198



Photo No.
6

Inspection Date:
12/4/2024

Description:
FE-7 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784161
Long: -95.320623





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No.: 7	Inspection Date: 12/4/2024
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Description:
FE-8 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784879
Long: -95.319143



Photo No.: 8	Inspection Date: 12/4/2024
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Description:
FE-9 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.785224
Long: -95.318371





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
9

Inspection Date:
12/4/2024

Description:
FE-10 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784904
Long: -95.317827



Photo No.
10

Inspection Date:
12/4/2024

Description:
FE-11 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784301
Long: -95.319553





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
11

Inspection Date:
12/4/2024

Description:
FE-12 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.785585
Long: -95.318704



Photo No.
12

Inspection Date:
12/4/2024

Description:
FE-13 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784982
Long: -95.321231





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No. 13	Inspection Date: 12/4/2024
Description: Track 802 weekly inspection. No NAPL observed at joints.	
Lat: 29.784967 Long: -95.321253	



Photo No. 14	Inspection Date: 12/4/2024
Description: Joint B-107 weekly inspection. No NAPL observed at joints.	
Lat: 29.784123 Long: -95.320976	





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
15

Inspection Date:
12/11/2024

Description:
FE-1&3 weekly inspection of asphalt cap. No NAPL observed at joints.

Lat: 29.784323
Long: -95.321148



Photo No.
16

Inspection Date:
12/11/2024

Description:
FE-2 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784183
Long: -95.321047





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
17

Inspection Date:
12/11/2024

Description:
FE-4 weekly inspection of asphalt cap. No NAPL observed at joints.

Lat: 29.784724
Long: -95.319640



Photo No.
18

Inspection Date:
12/11/2024

Description:
FE-5 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.785229
Long: -95.318695





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
19

Inspection Date:
12/11/2024

Description:
FE-6 weekly inspection of asphalt cap. No NAPL observed at joints.

Lat: 29.785354
Long: -95.318295



Photo No.
20

Inspection Date:
12/11/2024

Description:
FE-7 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784167
Long: -95.320663





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No.: 21	Inspection Date: 12/11/2024
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Description:
FE-8 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784835
Long: -95.319111



Photo No.: 22	Inspection Date: 12/11/2024
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Description:
FE-9 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.785172
Long: -95.318420





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
23

Inspection Date:
12/11/2024

Description:
FE-10 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784842
Long: -95.317715

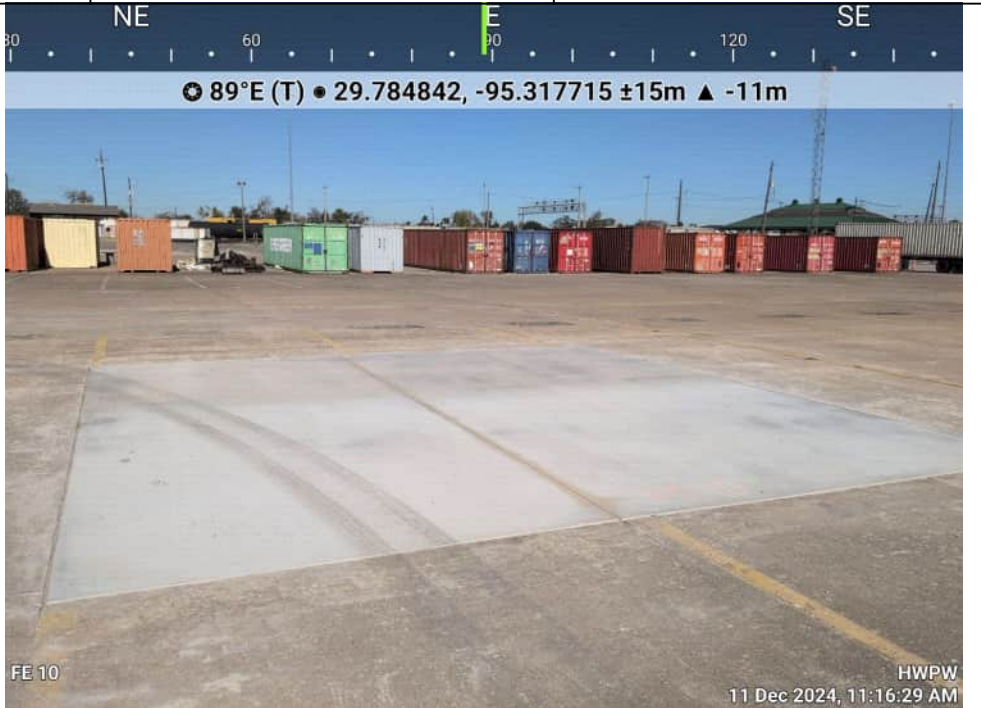


Photo No.
24

Inspection Date:
12/11/2024

Description:
FE-11 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784290
Long: -95.319553





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 25	Inspection Date: 12/11/2024
Description: FE-12 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.785588 Long: -95.318675	



Photo No. 26	Inspection Date: 12/11/2024
Description: FE-13 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784967 Long: -95.321243	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 27	Inspection Date: 12/11/2024
Description: Track 802 weekly inspection. No NAPL observed at joints.	
Lat: 29.784942 Long: -95.321199	



Photo No. 28	Inspection Date: 12/11/2024
Description: Joint B-107 weekly inspection. No NAPL observed at joints.	
Lat: 29.784136 Long: -95.320959	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 29	Inspection Date: 12/18/2024
Description: FE-1&3 weekly inspection of asphalt cap. No NAPL observed at joints.	
Lat: 29.784225 Long: -95.321012	



Photo No. 30	Inspection Date: 12/18/2024
Description: FE-2 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784111 Long: -95.320899	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 31	Inspection Date: 12/18/2024
Description: FE-4 weekly inspection of asphalt cap. No NAPL observed at joints.	
Lat: 29.784714 Long: -95.319628	



Photo No. 32	Inspection Date: 12/18/2024
Description: FE-5 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.7852430 Long: -95.318487	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 33	Inspection Date: 12/18/2024
Description: FE-6 weekly inspection of asphalt cap. No NAPL observed at joints.	
Lat: 29.785461 Long: -95.318251	



Photo No. 34	Inspection Date: 12/18/2024
Description: FE-7 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784129 Long: -95.320628	





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: 12/18/2024
Description: FE-8 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784859 Long: -95.319138	



Photo No. 36	Inspection Date: 12/18/2024
Description: FE-9 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.785206 Long: -95.318410	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad **Site Location:** Englewood Intermodal Yard, Houston, Texas **Project No.:** 31406585.016

Photo No.: 37 **Inspection Date:** 12/18/2024

Description:
FE-10 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784849
Long: -95.317733



Photo No.: 38 **Inspection Date:** 12/18/2024

Description:
FE-11 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784284
Long: -95.319526





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 39	Inspection Date: 12/18/2024
Description: FE-12 weekly inspection of concrete cap. No NAPL observed at joints. Lat: 29.785541 Long: -95.318786	



Photo No. 40	Inspection Date: 12/18/2024
Description: FE-13 weekly inspection of concrete cap. No NAPL observed at joints. Lat: 29.785098 Long: -95.321255	





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
41

Inspection Date:
12/18/2024

Description:
Track 802 weekly inspection. No NAPL observed at joints.

Lat: 29.784955
Long: -95.321232



Photo No.
42

Inspection Date:
12/18/2024

Description:
Joint B-107 weekly inspection. No NAPL observed at joints.

Lat: 29.784143
Long: -95.320944





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 43	Inspection Date: 12/23/2024
Description: FE-1&3 weekly inspection of asphalt cap. No NAPL observed at joints.	
Lat: 29.784239 Long: -95.321070	



Photo No. 44	Inspection Date: 12/23/2024
Description: FE-2 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784119 Long: -95.320919	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 45	Inspection Date: 12/23/2024
Description: FE-4 weekly inspection of asphalt cap. No NAPL observed at joints.	
Lat: 29.784709 Long: -95.319614	



Photo No. 46	Inspection Date: 12/23/2024
Description: FE-5 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.785249 Long: -95.318712	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 47	Inspection Date: 12/23/2024
Description: FE-6 weekly inspection of asphalt cap. No NAPL observed at joints.	
Lat: 29.785343 Long: -95.318364	



Photo No. 48	Inspection Date: 12/23/2024
Description: FE-7 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784169 Long: -95.320641	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 49	Inspection Date: 12/23/2024
Description: FE-8 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784885 Long: -95.319114	



Photo No. 50	Inspection Date: 12/23/2024
Description: FE-10 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784885 Long: -95.317794	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 51	Inspection Date: 12/23/2024
Description: FE-11 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784284 Long: -95.319562	



Photo No. 52	Inspection Date: 12/23/2024
Description: FE-12 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.785459 Long: -95.318669	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad
Site Location: Englewood Intermodal Yard, Houston, Texas
Project No.: 31406585.016

Photo No.: 53
Inspection Date: 12/23/2024

Description:
FE-13 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784988
Long: -95.321258



Photo No.: 54
Inspection Date: 12/23/2024

Description:
Track 802 weekly inspection. No NAPL observed at joints.

Lat: 29.784957
Long: -95.321225





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
55

Inspection Date:
12/23/2024

Description:
Joint B-107 weekly inspection. No NAPL observed at joints.

Lat: 29.784137
Long: -95.320976



Photo No.
56

Inspection Date:
12/27/2024

Description:
FE-1&3 weekly inspection of asphalt cap. No NAPL observed at joints.

Lat: 29.784241
Long: -95.321182





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

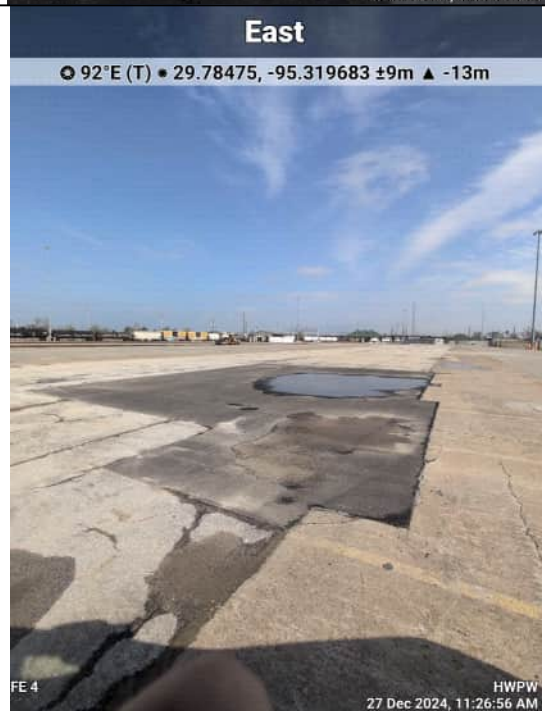
Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No. 57	Inspection Date: 12/27/2024
Description: FE-2 weekly inspection of concrete cap. No NAPL observed at joints.	
Lat: 29.784043 Long: -95.320812	



Photo No. 58	Inspection Date: 12/27/2024
Description: FE-4 weekly inspection of asphalt cap. No NAPL observed at joints.	
Lat: 29.784750 Long: -95.319683	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 59	Inspection Date: 12/27/2024
Description: FE-5 weekly inspection of concrete cap. No NAPL observed at joints. Lat: 29.785249 Long: -95.318767	



Photo No. 60	Inspection Date: 12/27/2024
Description: FE-6 weekly inspection of asphalt cap. No NAPL observed at joints. Lat: 29.785395 Long: -95.318339	





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
61

Inspection Date:
12/27/2024

Description:
FE-7 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784156
Long: -95.320639



Photo No.
62

Inspection Date:
12/27/2024

Description:
FE-8 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.784869
Long: -95.319133





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 63	Inspection Date: 12/27/2024
Description: FE-9 weekly inspection of concrete cap. No NAPL observed at joints. Lat: 29.785219 Long: -95.318403	



Photo No. 64	Inspection Date: 12/27/2024
Description: FE-10 weekly inspection of concrete cap. No NAPL observed at joints. Lat: 29.784869 Long: -95.317793	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 65	Inspection Date: 12/27/2024
Description: FE-11 weekly inspection of concrete cap. No NAPL observed at joints. Lat: 29.784294 Long: -95.319568	



Photo No. 66	Inspection Date: 12/27/2024
Description: FE-12 weekly inspection of concrete cap. No NAPL observed at joints. Lat: 29.785452 Long: -95.318694	





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
67

Inspection Date:
12/27/2024

Description:
FE-13 weekly inspection of concrete cap. No NAPL observed at joints.

Lat: 29.785097
Long: -95.321272



Photo No.
68

Inspection Date:
12/27/2024

Description:
Track 802 weekly inspection. No NAPL observed at joints.

Lat: 29.784962
Long: -95.321242





PHOTOGRAPHIC LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

31406585.016

Photo No.

69

Inspection Date:

12/27/2024

Description:

Joint B-107 weekly inspection. No NAPL observed at joints.

Lat: 29.784143

Long: -95.320984



Photo No.

70

Inspection Date:

12/4/2024

Description:

Sump 1 (B99/B100), 10.0 inches of freeboard in sump. Color is clear, and no odor observed. Sheen observed on the surface.

Lat: 29.784370

Long: -95.320807





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 71	Inspection Date: 12/4/2024
Description: Sump 2 (B103/B104), 35.0 inches of freeboard in sump. Color is clear, and no odor observed. Sheen observed on the surface.	
Lat: 29.784213 Long: -95.320900	



Photo No. 72	Inspection Date: 12/4/2024
Description: Sump 3 (B107/B108), 33.5 inches of freeboard in sump. Color is clear, and no sheen or odor observed.	
Lat: 29.784092 Long: -95.320976	





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
73

Inspection Date:
12/11/2024

Description:
Sump 1 (B99/B100), 4.0 inches of freeboard in sump. Color is clear, and no odor observed. Sheen observed on the surface.

Lat: 29.784291
Long: -95.320793



Photo No.
74

Inspection Date:
12/11/2024

Description:
Sump 2 (B103/B104), 26.0 inches of freeboard in sump. Color is clear, and no sheen or odor observed.

Lat: 29.784229
Long: -95.320910





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad **Site Location:** Englewood Intermodal Yard, Houston, Texas **Project No.:** 31406585.016

Photo No.: 75 **Inspection Date:** 12/11/2024

Description:
Sump 3 (B107/B108), 26.0 inches of freeboard in sump. Color is clear, and no sheen or odor observed.

Lat: 29.784191
Long: -95.321005



Photo No.: 76 **Inspection Date:** 12/18/2024

Description:
Sump 1 (B99/B100), 5.0 inches of freeboard in sump. Color is clear, and no odor observed. Sheen observed on the surface.

Lat: 29.784281
Long: -95.320786





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.:
31406585.016

Photo No.:
77

Inspection Date:
12/18/2024

Description:
Sump 2 (B103/B104), 23.0 inches of freeboard in sump. Color is clear, and no sheen or odor observed.

Lat: 29.781910
Long: -95.323231



Photo No.:
78

Inspection Date:
12/18/2024

Description:
Sump 3 (B107/B108), 22.0 inches of freeboard in sump. Color is clear, and no sheen or odor observed.

Lat: 29.784232
Long: -95.320950





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No.: 31406585.016
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Photo No. 79	Inspection Date: 12/23/2024
Description: Sump 1 (B99/B100), 4.5 inches of freeboard in sump. Color is clear, and no sheen or odor observed. Lat: 29.784261 Long: -95.320776	



Photo No. 80	Inspection Date: 12/23/2024
Description: Sump 2 (B103/B104), 23.5 inches of freeboard in sump. Color is clear, and no sheen or odor observed. Lat: 29.784199 Long: -95.320862	





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No.
81

Inspection Date:
12/23/2024

Description:
Sump 3 (B107/B108), 22.5 inches of freeboard in sump. Color is clear, and no sheen or odor observed.

Lat: 29.784179
Long: -95.320993



Photo No.
82

Inspection Date:
12/27/2024

Description:
Sump 1 (B99/B100), 2.0 inches of freeboard in sump. Color is clear, and no sheen or odor observed.

Lat: 29.784267
Long: -95.320756





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
31406585.016

Photo No. 83	Inspection Date: 12/27/2024
Description: Sump 2 (B103/B104), 12.0 inches of freeboard in sump. Color is clear, and no sheen or odor observed. Lat: 29.784227 Long: -95.320916	



Photo No. 84	Inspection Date: 12/27/2024
Description: Sump 3 (B107/B108), 11.5 inches of freeboard in sump. Color is clear, and no sheen or odor observed. Lat: 29.784144 Long: -95.321022	

