



May 12, 2025

Project No. US0039040.4227

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 POST-
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 April 2025 summarizing the weekly inspections being conducted at the Englewood Intermodal Yard (EIY) concrete cap area within the UPRR Houston Wood Preserving Works Facility (the Site). The weekly inspections are being conducted to evaluate the post-construction Focused Excavations as detailed in the *Revised Interim Measures Work Plan – Englewood Intermodal Yard (EIY)*, (Revised IMWP) dated October 20, 2023. In addition, a summary of the weekly Non-Aqueous Phase Liquid (NAPL) Collection System and concrete cap area inspections conducted at the EIY is provided as requested by the Texas Commission on Environmental Quality (TCEQ) in a letter dated March 20, 2018. Below is a summary of the weekly Focused Excavation and EIY inspections for April 2025.

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 Focused Excavation remediation activities. UPRR initiated the remediation activities on April 29, 2024, and completed IMWP construction activities on November 15, 2024. The last phase to be completed under the Revised IMWP is waste disposal, which is currently in progress. With the conclusion of the construction activities and pending waste disposal, detailed weekly construction summaries are no longer necessary. However, this submittal provides a summary of the weekly inspections of the completed Focused Excavation re-constructed cap areas as required in the Revised IMWP.

Weekly Focused Excavation Inspections

- WSP, on behalf of UPRR, conducted weekly inspections of the 13 completed Focused Excavation re-constructed cap areas on April 2, 9, 16, 23, and 30, 2025. Photographs from the weekly inspections are provided in Attachment A under Photo Numbers 1 through 76.
- WSP noted that the reconstructed Focused Excavation concrete and asphalt cap areas were in good condition during the weekly inspections. There were no tar-like material or NAPL seeps observed at the Focused Excavation areas.
- During the weekly inspection on April 2, WSP observed brown water staining in the cracks and joints of the asphalt immediately adjacent to the reconstructed concrete cap for FE-5, particularly the southern and southeastern corners of the cap (Photo Nos. 5 and 6). On April 4, UPRR remediation contractor E3 was mobilized to the site to pressure wash areas of brown water staining. During the next weekly inspection on April 9, WSP only noted new brown water staining at the southeastern corner of FE-5 (Photo No. 19). During the April 16 inspection, WSP observed brown water staining at FE-5 at the southern corner (Photo No. 32), the southeastern corner (Photo No. 33), and the southern joint (Photo No. 34). This brown staining was noted during the April 23 inspection, although the standing water in the joints was caused by rain water (Photo Nos. 49 and 50). The small amount of standing water was observed within the cracks and joints and additional brown staining was observed particularly the southern and southeastern corners of the reconstructed cap during the April 30 inspection (Photo Nos. 65, 66 and 67).
- During the weekly inspection on April 2, WSP observed minor brown staining along the western and southern edges of FE-6. On April 4, UPRR remediation contractor E3 was mobilized to the site to pressure wash areas of brown water staining. There was no staining noted during the weekly inspection on April 9. During the next weekly inspection on April 16, a small amount of standing water (brown water) was observed within the cracks and joints of the asphalt immediately adjacent to the reconstructed asphalt cap (Photo Nos. 36 and 37). The small amount of standing water within the cracks and joints was observed. WSP noted additional brown staining within the western joint of the reconstructed cap during the remaining April inspections (Photo No. 69).
- During the weekly inspection of April 30, WSP observed brown staining northeast of FE-1&3 (Photo Nos. 60 and 61). This staining was not within the joints along FE-1&3 but to the northeast of the reconstructed cap.
- No other brown water staining was observed near the FEs. Brown water staining was routinely observed during the Spring months in the asphalt pavement area surrounding FE-5 and FE-6 prior to the Focused Excavation activities. WSP will continue to monitor the brown water staining near FE-1&3.

Revised IWMP Waste Management and Disposal

- Soils/Miscellaneous
 - No soil/miscellaneous waste related to IMWP on site.
- Stormwater
 - A Temporary Discharge Authorization (TDA) was granted by the City of Houston (COH) Public Works on January 17, 2025, authorizing UPRR to discharge approximately 320,000 gallons of construction stormwater generated during the Focused Excavation activities into the City's

POTW through the permitted water treatment plant located at the UPRR Settegast Yard (Industrial Wastewater Treatment Plant (IWTP)).

- On April 1, E3 resumed discharge of the containerized stormwater into the Settegast IWTP and discharged approximately 16,300 gallons of stormwater each day.
- Stormwater from the FE activities was not discharged from April 18th through April 23rd due to Good Friday holiday and operational restrictions due to recent rain events.
- As of April 29, all construction stormwater associated with the FE activities was discharged. A total of 319,200 gallons of stormwater were discharged using the TDA at the UPRR Settegast Yard IWTP, with approximately 246,500 gallons discharged in April. The initial estimated volume of stormwater stored in the frac tanks (about 400,000 gallons) was overestimated due to the volume calculations of the frac tanks.
- As of April 30, the remaining FE waste to be managed is a mixture of sediment and stormwater which settled out of suspension within the construction stormwater frac tanks. UPRR is currently in the process of characterizing the sediment for disposal, which is anticipated to occur in June.

Non-Aqueous Phase Liquid (NAPL) Collection System and EIY Concrete Cap Inspections

The NAPL Collection System was installed in the EIY in January 2019 to address the tar-like NAPL 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 area and EIY concrete cap outside the collection system for April 2025 (select photographs from the weekly inspections are provided in Attachment A):

NAPL Collection System Area

The NAPL Collection System Sump 1 (B099/B100 stalls), Sump 2 (B103/B104 stalls), and Sump 3 (B107/B108 stalls) have continued to be inspected weekly for NAPL. Field personnel measure freeboard levels visually and use a shovel to scrape the bottoms of the sumps and inspect for the presence of NAPL during the weekly inspections. If present, the accumulated NAPL is recovered with the shovel. No NAPL was detected or recovered from Sumps 1, 2 and 3 during the April 2025 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). Storm water that infiltrates through the cracks in the concrete pavement and nearby railroad ballast tends to collect in the NAPL Collection System. Water levels in NAPL Collection System Sump 1, Sump 2, and Sump 3 were measured below the top of the manholes as summarized in the following table:

Date	Sump 1 (DTW, inches)	Sump 2 (DTW, inches)	Sump 3 (DTW, inches)	Photo Nos (Attachment A)
April 2	0.0	7.5	7.0	77, 78, and 79
April 9	27.0	36.0	35.0	80, 81, and 82
April 16	22.5	35.5	35.5	83, 84, and 85

April 23	NM	31.0	30.5	86, 87, and 88
April 30	1.0	28.5	29.0	89, 90, and 91

DTW – depth to water below the top of the manhole.

NM – not measured. The water level of Sump 1 was unable to be measured on April 23, 2025 due to pooled rainwater on the sump cover.

- UPRR remediation contractor E3 pumped down the water in the sumps on April 4, 2025. Recovered water was transported and disposed of at the McCarty Landfill facility.
- During the April 2025 inspections, the water in Sump 1 was observed to be clear, brown, or dark brown in color. The water in Sump 2 was observed to be tan, brown, or dark brown. The water in Sump 3 was observed to be clear, tan, or brown. A sheen was observed in Sump 1 on April 30, but no odors or other sheens were reported during the April inspections. After the sump down event, the color of the water became much darker.
- NAPL seeps were not observed along the concrete joints near the NAPL Collection System (including Stall B107) during the April 2 and 9 inspections. Approximately 3 cubic inches of NAPL were recovered from B107 during inspections on April 16, 23, and 30; a total of 9 cubic inches of NAPL was recovered during April. The seep at B107 was last active on September 4, 2024, and a NAPL seep has not been observed since November 20, 2024.

Areas Outside NAPL Collection System Inspections

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

- NAPL seeps were not observed at Track 802 or any areas outside the NAPL Collection System except for the seep at B107 during the weekly inspection events in April 2025 (Photo Nos. 92 through 101). The volume of NAPL from the surface seep at B107 increased from 0 gallons over 4 inspections in March to 0.04 gallons over 5 inspections in April. In comparison prior to implementing the Focused Excavations, approximately 0.25 gallons of NAPL were collected from the surface seeps during April 2024. The material recovered was placed in a drum staged at the CSA for disposal.
- The previously observed seeps at stalls B100/B101/B105 (FE-1&3), B102 (FE-2), B056/B057 (FE-4), A021/A022 (FE-5), A010/A011 (FE-6), B096 (FE-7), B042 (FE-8), B016 (FE-9), and RD-14 (FE-13) have been addressed through the Focused Excavation activities.
- During the April 2025 inspections, no NAPL seeps were observed at the remaining test pit locations that were not excavated as part of the Focused Excavations (stalls A098 (TP-02), B013 (TP (B013)), B057 (TP-04), and B108 (TP (B108) and TP-01).
- In addition to the brown water staining observed near the Focused Excavations discussed previously, WSP also observed brown water staining along the asphalt joints running between stalls A050 and A070 and B014 and B029 during the weekly inspection on April 2 (Photo Nos. 102 through 105). UPRR remediation contractor E3 was mobilized to the site on April 4 to pressure wash areas of brown water staining and to collect any water generated during pressure washing or from the brown water seeps to be properly disposed (Photo No. 106). During the next weekly inspection on April 9, WSP noted that the brown water staining had been removed except for small amounts in cracks of the asphalt (Photo Nos. 107 and 110). By the next weekly inspection on April 16, the brown water staining had returned along the asphalt joints running between stalls A050 and A070 and B014 and B029, but the stained locations were all dry (Photo Nos. 111 and 112). WSP noted additional

brown staining between stalls A050 and A070 and B014 and B029 during the remaining April inspections (Photo Nos. 113 through 120). UPRR remediation contractor E3 will be mobilized to the site in early May to pressure wash areas of brown water staining and to collect any water generated during pressure washing or from the brown water seeps to be properly disposed.

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	

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
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
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
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 B013/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.
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.

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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
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	Sump pumpdown on Nov 15. 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.

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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.
1/3/2025	4.5	12	12	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.
1/8/2025	6	10.5	11	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.
1/15/2025	0	0	0	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. Due to extended rain events all sumps were full of water.
1/22/2025	1.5	4	3.5	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.
1/29/2025	0	0	0	Not measurable	Clear water color and sheen observed at B099/B100. Clear water color with no sheen observed at B103/B104. Clear water color and sheen observed at B107/B108. Due to extended rain events all sumps were full of water.
2/5/2025	9	8.5	1	Not measurable	No sheen observed at B099/B100, B103/B104, and B107/B108. Water color tan in B103/B104 and clear in B099/B100 and B107/B108.
2/12/2025	0	0	0	Not measurable	No sheen observed at B099/B100, B103/B104, and B107/B108. Water color clear in B099/B100, brown in B103/B104, and tan in B107/B108. Due to extended rain events all sumps were full of water.
2/19/2025	1	3	2.5	Not measurable	Clear water color with no sheen observed at B099/B100, B103/B104, and B107/B108.
2/26/2025	1.5	5	4.5	Not measurable	Clear water color with no sheen observed at B099/B100, B103/B104, and B107/B108.
3/5/2025	1.75	4.75	3.5	Not measurable	No sheen observed at B099/B100, B103/B104, and B107/B108. Water color tan in B099/B100 and B103/B104 and clear in B107/B108.
3/12/2025	2.25	11	10	Not measurable	No sheen observed at B099/B100, B103/B104, and B107/B108. Water color tan in B099/B100 and B103/B104 and clear in B107/B108.
3/19/2025	1.5	9	10	Not measurable	No sheen observed at B099/B100, B103/B104, and B107/B108. Water color tan in B103/B104 and clear in B099/B100 and B107/B108.
3/26/2025	2	7	6.5	Not measurable	No sheen observed at B099/B100, B103/B104, and B107/B108. Water color tan in B103/B104 and clear in B099/B100 and B107/B108.
4/2/2025	0	7.5	7	Not measurable	No sheen observed at B099/B100, B103/B104, and B107/B108. Water color tan in B103/B104 and clear in B099/B100 and B107/B108.
4/9/2025	27	36	35	Not measurable	Sump pumpdown on Apr 4. No sheen observed at B099/B100, B103/B104, and B107/B108. Water color dark brown in B099/B100, tan in B103/B104, and brown in B107/B108.
4/16/2025	22.5	35.5	35.5	Not measurable	No sheen observed at B099/B100, B103/B104, and B107/B108. Water color dark brown in B099/B100 and B103/B104, and brown in B107/B108.
4/23/2025	NM	31	30.5	Not measurable	Water ponded over Sump 1. No sheen observed at B103/B104 and B107/B108. Water color brown in B103/B104 and B107/B108.
4/30/2025	1	28.5	29	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and B103/B104, and tan in B107/B108.

TABLE 1
NAPL Measurements - NAPL Collection System - Englewood Intermodal Yard
UPRR Houston, tx - Wood Preserving Works

	Sump 1 (B099/B100)	Sump 2 (B103/B104)	Sump 3 (B107/B108)		
Measured Date	Freeboard (in)	Freeboard (in)	Freeboard (in)	Depth to DNAPL (in)	Comments

Note:

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

1. 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



PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

1

Inspection Date:

4/2/2025

Description:

FE-1&3 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northeast.

Lat: 29.784289

Long: -95.321068



Photo No.

2

Inspection Date:

4/2/2025

Description:

FE-2 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.784104

Long: -95.320772





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

3

Inspection Date:

4/2/2025

Description:

FE-4 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northeast.

Lat: 29.784807

Long: -95.319706



Photo No.

4

Inspection Date:

4/2/2025

Description:

FE-5 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Minimal brown water
staining along the southern joint of FE-5
observed. Facing southwest.

Lat: 29.785457

Long: -95.318503





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

5

Inspection Date:

4/2/2025

Description:

FE-5 brown water staining observed at the southern corner of the FE reconstructed cap, located within the red circle on Photo No. 4.

Lat: 29.785246

Long: -95.318716



Photo No.

6

Inspection Date:

4/2/2025

Description:

FE-5 brown water staining observed at the southeastern corner of the FE reconstructed cap, located within the yellow circle on Photo No. 4.

Lat: 29.785302

Long: -95.318584





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

7

Inspection Date:

4/2/2025

Description:

FE-6 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL observed at FE location. Minimal brown water staining along the edges of the FE cap observed. Facing northwest.

Lat: 29.785404

Long: -95.318313



Photo No.

8

Inspection Date:

4/2/2025

Description:

FE-7 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL observed at FE location. Facing northwest.

Lat: 29.784223

Long: -95.320624





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

9

Inspection Date:

4/2/2025

Description:

FE-8 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing north.

Lat: 29.784913

Long: -95.319097



Photo No.

10

Inspection Date:

4/2/2025

Description:

FE-9 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.785250

Long: -95.318364





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

11

Inspection Date:

4/2/2025

Description:

FE-10 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing west.

Lat: 29.784961

Long: -95.317681



Photo No.

12

Inspection Date:

4/2/2025

Description:

FE-11 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.784321

Long: -95.319536





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

13

Inspection Date:

4/2/2025

Description:

FE-12 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing south.

Lat: 29.785602

Long: -95.318715



Photo No.

14

Inspection Date:

4/2/2025

Description:

FE-13 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing east.

Lat: 29.785043

Long: -95.321307





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

15

Inspection Date:

4/9/2025

Description:

FE-1&3 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northeast.

Lat: 29.784243

Long: -95.321010



Photo No.

16

Inspection Date:

4/9/2025

Description:

FE-2 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.784074

Long: -95.320776





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

17

Inspection Date:

4/9/2025

Description:

FE-4 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northeast.

Lat: 29.784779

Long: -95.319688



Photo No.

18

Inspection Date:

4/9/2025

Description:

FE-5 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Minimal brown water
staining along the southern joint of FE-5
observed. Facing southwest.

Lat: 29.785410

Long: -95.318505





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

19

Inspection Date:

4/9/2025

Description:

FE-5 brown water staining observed at the southeastern corner of the FE reconstructed cap. Facing southwest.

Lat: 29.785313

Long: -95.318523



Photo No.

20

Inspection Date:

4/9/2025

Description:

FE-6 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing northwest.

Lat: 29.785387

Long: -95.318311





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

21

Inspection Date:

4/9/2025

Description:

FE-7 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.784192

Long: -95.320622



Photo No.

22

Inspection Date:

4/9/2025

Description:

FE-8 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing north.

Lat: 29.784880

Long: -95.319090





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

23

Inspection Date:

4/9/2025

Description:

FE-9 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.785233

Long: -95.318379



Photo No.

24

Inspection Date:

4/9/2025

Description:

FE-10 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing west.

Lat: 29.784956

Long: -95.317660





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

25

Inspection Date:

4/9/2025

Description:

FE-11 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.784300

Long: -95.319549



Photo No.

26

Inspection Date:

4/9/2025

Description:

FE-12 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing south.

Lat: 29.785545

Long: -95.318709





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

27

Inspection Date:

4/9/2025

Description:

FE-13 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northeast.

Lat: 29.785012

Long: -95.321294



Photo No.

28

Inspection Date:

4/16/2025

Description:

FE-1&3 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northeast.

Lat: 29.781838

Long: -95.324365





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

29

Inspection Date:

4/16/2025

Description:

FE-2 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.781318

Long: -95.319039



Photo No.

30

Inspection Date:

4/16/2025

Description:

FE-4 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northeast.

Lat: 29.786505

Long: -95.316875





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

31

Inspection Date:

4/16/2025

Description:

FE-5 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Brown water staining
along the southern joint of FE-5 observed.
Facing southwest.

Lat: 29.786569

Long: -95.316758



Photo No.

32

Inspection Date:

4/16/2025

Description:

FE-5 brown water staining observed at the
southern corner of the FE reconstructed cap,
located within the red circle on Photo No. 31.

Lat: 29.787883

Long: -95.316833





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

33

Inspection Date:

4/16/2025

Description:

FE-5 brown water staining observed at the southeastern corner of the FE reconstructed cap, located within the blue circle on Photo No. 31.

Lat: 29.787937

Long: -95.316812



Photo No.

34

Inspection Date:

4/16/2025

Description:

FE-5 brown water staining observed along the southern joint of the FE reconstructed cap, located within the yellow circle on Photo No. 31.

Lat: 29.781303

Long: -95.319982





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

35

Inspection Date:

4/16/2025

Description:

FE-6 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Brown water staining along the western joint of FE-6 observed. Facing northwest.

Lat: 29.786619

Long: -95.316882



Photo No.

36

Inspection Date:

4/16/2025

Description:

FE-6 brown water staining observed along the western joint of the FE reconstructed cap, located within the red circle on Photo No. 35.

Lat: 29.787921

Long: -95.316801





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

37

Inspection Date:

4/16/2025

Description:

FE-6 brown water staining and standing water observed along the western joint of the FE reconstructed cap.

Lat: 29.787918

Long: -95.316801

237°SW (T) • 29.787918, -95.316801 ±29m ▲ -14m



Photo No.

38

Inspection Date:

4/16/2025

Description:

FE-7 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing northwest.

Lat: 29.786205

Long: -95.317036

NW • 29.786205, -95.317036 ±104m ▲ -13m





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

39

Inspection Date:

4/16/2025

Description:

FE-8 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing north.

Lat: 29.787118

Long: -95.316750



Photo No.

40

Inspection Date:

4/16/2025

Description:

FE-9 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.786858

Long: -95.316869





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

41

Inspection Date:

4/16/2025

Description:

FE-10 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing west.

Lat: 29.786180

Long: -95.316994



Photo No.

42

Inspection Date:

4/16/2025

Description:

FE-11 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.782830

Long: -95.317458





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

43

Inspection Date:

4/16/2025

Description:

FE-12 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing south.

Lat: 29.786286

Long: -95.316987



Photo No.

44

Inspection Date:

4/16/2025

Description:

FE-13 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing east.

Lat: 29.786331

Long: -95.316955





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

45

Inspection Date:

4/23/2025

Description:

FE-1&3 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northeast.
Standing water from recent and on-going rain
event.

Lat: 29.784222

Long: -95.321035



Photo No.

46

Inspection Date:

4/23/2025

Description:

FE-2 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.
Standing water from recent and on-going rain
event.

Lat: 29.784062

Long: -95.320763





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

47

Inspection Date:

4/23/2025

Description:

FE-4 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL observed at FE location. Facing northeast.
Standing water from recent and on-going rain event.

Lat: 29.784786

Long: -95.319715



Photo No.

48

Inspection Date:

4/23/2025

Description:

FE-5 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL observed at FE location. Brown water staining along the southern joint of FE-5 observed.
Facing southwest. Standing water from recent and on-going rain event.

Lat: 29.785409

Long: -95.318513





PHOTOGRAPH LOG

Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. US0039040.4227
Photo No. 49	Inspection Date: 4/23/2025	<p>Description: FE-5 brown water staining observed at the southern corner of the FE reconstructed cap. Standing water from recent and on-going rain event.</p> <p>Lat: 29.785258 Long: -95.318708</p>	
Photo No. 50		<p>Description: FE-5 brown water staining observed at the joint between the concrete and asphalt pavement and the reconstructed FE-5 concrete cap. Standing water from recent and on-going rain event.</p> <p>Lat: 29.785322 Long: -95.318734</p>	





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

51

Inspection Date:

4/23/2025

Description:

FE-6 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL observed at FE location. Brown water staining along the western joint of FE-6 observed. Facing northwest. Standing water from recent and on-going rain event.

Lat: 29.785381

Long: -95.318286



Photo No.

52

Inspection Date:

4/23/2025

Description:

FE-7 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL observed at FE location. Facing northwest. Standing water from recent and on-going rain event.

Lat: 29.784155

Long: -95.320620





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

53

Inspection Date:

4/23/2025

Description:

FE-8 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing north. Standing
water from recent and on-going rain event.

Lat: 29.784847

Long: -95.319111



Photo No.

54

Inspection Date:

4/23/2025

Description:

FE-9 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.
Standing water from recent and on-going rain
event.

Lat: 29.785229

Long: -95.318387





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

55

Inspection Date:

4/23/2025

Description:

FE-10 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing west. Standing
water from recent and on-going rain event.

Lat: 29.784929

Long: -95.317697



Photo No.

56

Inspection Date:

4/23/2025

Description:

FE-11 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.
Standing water from recent and on-going rain
event.

Lat: 29.784291

Long: -95.319538





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

57

Inspection Date:

4/23/2025

Description:

FE-12 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing south. Standing
water from recent and on-going rain event.

Lat: 29.785555

Long: -95.318722



Photo No.

58

Inspection Date:

4/23/2025

Description:

FE-13 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing southeast.
Standing water from recent and on-going rain
event.

Lat: 29.785079

Long: -95.321280





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

59

Inspection Date:

4/30/2025

Description:

FE-1&3 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing southwest.

Lat: 29.784331

Long: -95.320739

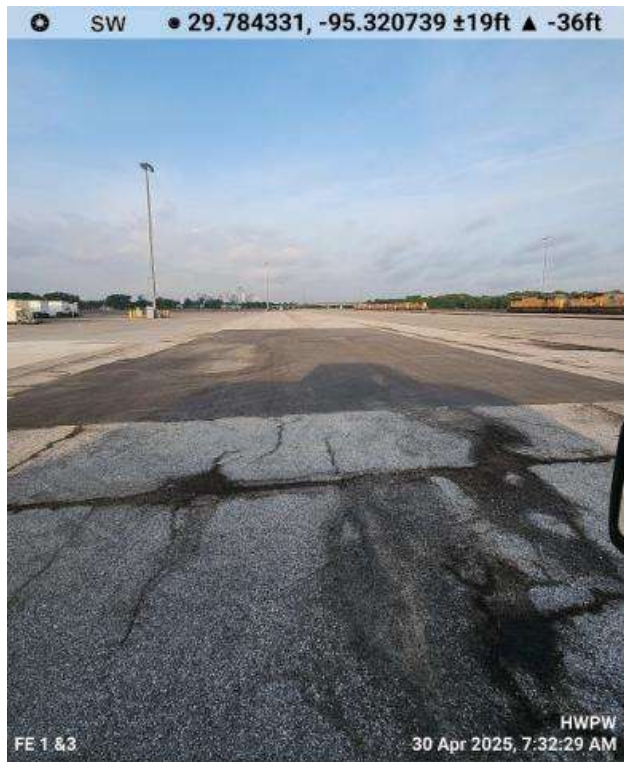


Photo No.

60

Inspection Date:

4/30/2025

Description:

FE-1&3 brown water staining observed northeast
of the FE reconstructed cap. Staining was not
observed on or in the joints of FE-1&3.

Lat: 29.784330

Long: -95.320746





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

61

Inspection Date:

4/30/2025

Description:

FE-1&3 brown water staining observed north of the FE reconstructed cap. Staining was not observed on or in the joints of FE-1&3.

Lat: 29.784417

Long: -95.320794



Photo No.

62

Inspection Date:

4/30/2025

Description:

FE-2 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing northwest.

Lat: 29.784050

Long: -95.320766





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

63

Inspection Date:

4/30/2025

Description:

FE-4 weekly inspection of asphalt cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing southwest.

Lat: 29.784867

Long: -95.319451



Photo No.

64

Inspection Date:

4/30/2025

Description:

FE-5 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Brown water staining
along the southern joint of FE-5 observed.
Facing southwest.

Lat: 29.785424

Long: -95.318477





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

65

Inspection Date:

4/30/2025

Description:

FE-5 brown water staining observed at the southern joint of the FE reconstructed cap, located within the red circle on Photo No. 64.

Lat: 29.785326

Long: -95.318579

230°SW (T) • 29.785326, -95.318579 ±9ft ▲ -45ft



B 14 through B 29

HWPW
30-Apr 2025, 8:25:52 AM

Photo No.

66

Inspection Date:

4/30/2025

Description:

FE-5 brown water staining observed at the southern joint of the FE reconstructed cap, located within the blue circle on Photo No. 64.

Lat: 29.785271

Long: -95.318713

237°SW (T) • 29.785271, -95.318713 ±9ft ▲ -42ft



B 14 through B 29

HWPW
30-Apr 2025, 8:26:04 AM



PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

67

Inspection Date:

4/30/2025

Description:

FE-5 brown water staining observed at the joint between the concrete and asphalt pavement and the FE reconstructed cap, located within the yellow circle on Photo No. 64.

Lat: 29.785306

Long: -95.318773

245°SW (T) • 29.785306, -95.318773 ±9ft ▲ -45ft



Photo No.

68

Inspection Date:

4/30/2025

Description:

FE-6 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Brown water staining along the western joint of FE-6 observed. Facing southwest.

Lat: 29.785508

Long: -95.318249

SW • 29.785508, -95.318249 ±23ft ▲ -45ft





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

69

Inspection Date:

4/30/2025

Description:

FE-6 brown water staining observed at the southern corner of the FE reconstructed cap.

Lat: 29.785395

Long: -95.318326



Photo No.

70

Inspection Date:

4/30/2025

Description:

FE-7 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing west.

Lat: 29.784246

Long: -95.320542





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

71

Inspection Date:

4/30/2025

Description:

FE-8 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing southwest.

Lat: 29.784995

Long: -95.319012



Photo No.

72

Inspection Date:

4/30/2025

Description:

FE-9 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing northwest.

Lat: 29.785199

Long: -95.318385





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

73

Inspection Date:

4/30/2025

Description:

FE-10 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing southwest.

Lat: 29.784930

Long: -95.317656

214°SW (T) • 29.78493, -95.317656 ±26ft ▲ -42ft



FE 10

HWPW
30 Apr 2025, 7:38:42 AM

Photo No.

74

Inspection Date:

4/30/2025

Description:

FE-11 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing south.

Lat: 29.784358

Long: -95.319528

208°S (T) • 29.784358, -95.319528 ±23ft ▲ -45ft



FE 11

HWPW
30 Apr 2025, 7:39:20 AM



PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

75

Inspection Date:

4/30/2025

Description:

FE-12 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing south.

Lat: 29.785536

Long: -95.318644

200°S (T) • 29.785536, -95.318644 ±9ft ▲ -45ft



Photo No.

76

Inspection Date:

4/30/2025

Description:

FE-13 weekly inspection of concrete cap.
Reconstructed cap in good condition. No NAPL
observed at FE location. Facing south.

Lat: 29.785041

Long: -95.321188

188°S (T) • 29.785041, -95.321188 ±13ft ▲ -42ft





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

77

Inspection Date:

4/2/2025

Description:

Sump 1 (B99/B100), 0.0 inches of freeboard in sump. Color is clear, and no sheen or odor observed.

Lat: 29.784240

Long: -95.320856



Photo No.

78

Inspection Date:

4/2/2025

Description:

Sump 2 (B103/B104), 7.5 inches of freeboard in sump. Color is tan, and no sheen or odor observed.

Lat: 29.784238

Long: -95.320864





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

79

Inspection Date:

4/2/2025

Description:

Sump 3 (B107/B108), 7.0 inches of freeboard in sump. Color is clear, and no sheen or odor observed.

Lat: 29.784188

Long: -95.320982



Photo No.

80

Inspection Date:

4/9/2025

Description:

Sump 1 (B99/B100), 27.0 inches of freeboard in sump. Color is dark brown, and no sheen or odor observed.

Lat: 29.784314

Long: -95.320725





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

81

Inspection Date:

4/9/2025

Description:

Sump 2 (B103/B104), 36.0 inches of freeboard in sump. Color is tan, and no sheen or odor observed.

Lat: 29.784207

Long: -95.320894



Photo No.

82

Inspection Date:

4/9/2025

Description:

Sump 3 (B107/B108), 35.0 inches of freeboard in sump. Color is brown, and no sheen or odor observed.

Lat: 29.784174

Long: -95.320986





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

83

Inspection Date:

4/16/2025

Description:

Sump 1 (B99/B100), 22.5 inches of freeboard in sump. Color is dark brown, and no sheen or odor observed.

Lat: 29.787941

Long: -95.316857



Photo No.

84

Inspection Date:

4/16/2025

Description:

Sump 2 (B103/B104), 35.5 inches of freeboard in sump. Color is dark brown, and no sheen or odor observed.

Lat: 29.788035

Long: -95.316069





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

85

Inspection Date:

4/16/2025

Description:

Sump 3 (B107/B108), 35.5 inches of freeboard in sump. Color is brown, and no sheen or odor observed.

Lat: 29.781310

Long: -95.318674



Photo No.

86

Inspection Date:

4/23/2025




Description:




Sump 1 (B99/B100), freeboard could not be measured due to ponding. Standing water from recent and on-going rain event.

Lat: 29.784240

Long: -95.320761



		PHOTOGRAPH LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	
		Project No. US0039040.4227	
Photo No. 87	Inspection Date: 4/23/2025	<div> <div> 280°W (T) • 29.784224, -95.320914 ±14m ▲ -14m </div>  <div> B 103 / 104 </div> <div> HWPW 23 Apr 2025, 1:38:02 PM </div> </div>	
Description: Sump 2 (B103/B104), 31.0 inches of freeboard in sump. Color is brown, and no sheen or odor observed.			
Lat: 29.784224 Long: -95.320914			
Photo No. 88	Inspection Date: 4/23/2025	<div> <div> 298°W (T) • 29.784159, -95.321018 ±19m ▲ -11m </div>  <div> B 107 / 108 </div> <div> HWPW 23 Apr 2025, 1:35:45 PM </div> </div>	
Description: Sump 3 (B107/B108), 30.5 inches of freeboard in sump. Color is brown, and no sheen or odor observed.			
Lat: 29.784159 Long: -95.321018			

		PHOTOGRAPH LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	
Project No. US0039040.4227			
Photo No. 89	Inspection Date: 4/30/2025	<div> <div> \odot 302°W (T) • 29.784279, -95.320715 ±23ft ▲ -45ft </div>  <div> B 99 / 100 HWPW 30 Apr 2025, 2:41:52 PM </div> </div>	
Description: Sump 1 (B99/B100), 1.0 inches of freeboard in sump. Color is brown. Sheen was observed, and odor was not observed.			
Lat: 29.784279 Long: -95.320715			
Photo No. 90	Inspection Date: 4/30/2025	<div> <div> \odot 283°W (T) • 29.784184, -95.320895 ±29ft ▲ -45ft </div>  <div> B 103 / 104 HWPW 30 Apr 2025, 2:40:34 PM </div> </div>	
Description: Sump 2 (B103/B104), 28.5 inches of freeboard in sump. Color is brown, and no sheen or odor observed.			
Lat: 29.784184 Long: -95.320895			

Project No.

US0039040.4227

Inspection Date:
4/30/2025

• 223°SW (T) • 29.78414, -95.320972 ±26ft ▲ -42ft
 B 107/ 108
 HWPW
 30-Apr-2025, 2:38:45 PM

Inspection Date:
4/2/2025

176°S (T) • 29.784967, -95.321207 ±3m ▲ -13m
 Track 802
 HWPW
 02 Apr 2025, 0:38:35 AM



PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

93

Inspection Date:

4/2/2025

Description:

B107 weekly inspection of joint. Surrounding concrete in good condition. No NAPL observed along joint.

Lat: 29.784163

Long: -95.320946



Photo No.

94

Inspection Date:

4/9/2025

Description:

Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. No NAPL observed at location.

Lat: 29.784949

Long: -95.321205





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

95

Inspection Date:

4/9/2025

Description:

B107 weekly inspection of joint. Surrounding concrete in good condition. No NAPL observed along joint.

Lat: 29.784105

Long: -95.320968

7°N (T) • 29.784105, -95.320968 ±3m ▲ -20m



B 107

HWPW
09 Apr 2025, 10:26:19 AM

Photo No.

96

Inspection Date:

4/16/2025

Description:

Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. No NAPL observed at location.

Lat: 29.786190

Long: -95.317037

147°SE (T) • 29.78619, -95.317037 ±135m ▲ -11m



Track 802

HWPW
16 Apr 2025, 10:33:25 AM



PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

97

Inspection Date:

4/16/2025

Description:

B107 weekly inspection of joint. Surrounding concrete in good condition. Approximately 3 cubic inches of NAPL observed along joint.

Lat: 29.781817

Long: -95.323525



Photo No.

98

Inspection Date:

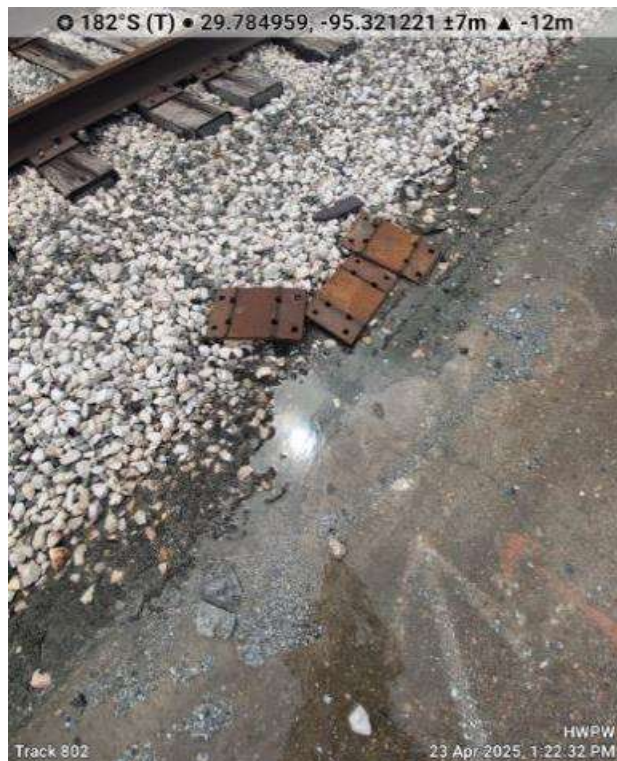
4/23/2025

Description:

Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. No NAPL observed at location. Standing water from recent and on-going rain event.

Lat: 29.784959

Long: -95.321221





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

99

Inspection Date:

4/23/2025

Description:

B107 weekly inspection of joint. Surrounding concrete in good condition. Approximately 3 cubic inches of NAPL observed along joint.

Lat: 29.784137

Long: -95.320975



Photo No.

100

Inspection Date:

4/30/2025

Description:

Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. No NAPL observed at location.

Lat: 29.784922

Long: -95.321210





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

101

Inspection Date:

4/30/2025

Description:

B107 weekly inspection of joint. Surrounding concrete in good condition. Approximately 3 cubic inches of NAPL observed along joint.

Lat: 29.784147

Long: -95.320963



Photo No.

102

Inspection Date:

4/2/2025

Description:

Brown water staining along the joint that runs from A050 through A070. Facing southwest.

Lat: 29.784871

Long: -95.319724





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

103

Inspection Date:

4/2/2025

Description:

Brown water staining along the joint that runs from A050 through A070. Facing southwest.

Lat: 29.784808

Long: -95.319820



Photo No.

104

Inspection Date:

4/2/2025

Description:

Brown water staining along the joint that runs from B014 through B029. Facing southwest.

Lat: 29.785309

Long: -95.318504





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

105

Inspection Date:

4/2/2025

Description:

Brown water staining along the joint that runs from B014 through B029. Facing southwest.

Lat: 29.785210

Long: -95.318728



Photo No.

106

Inspection Date:

4/4/2025

Description:

Area shown in Photo 105 directly after pressure washing. Facing southwest.

Lat: 29.785210

Long: -95.318728





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

107

Inspection Date:

4/7/2025

Description:

Area shown in Photo 105 after pressure washing. Facing southwest.

Lat: 29.785210

Long: -95.318728



Photo No.

108

Inspection Date:

4/9/2025

Description:

Minimal brown water staining along the joint that runs from A050 through A070 that remained after pressure washing. Facing southwest.

Lat: 29.784860

Long: -95.319690





PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

109

Inspection Date:

4/9/2025

Description:

Minimal brown water staining along the joint that runs from A050 through A070 that remained after pressure washing. Facing northeast.

Lat: 29.784753

Long: -95.319927

74°NE (T) • 29.784753, -95.319927 ±3m ▲ -23m



A.50 through A.70

HWPW
09 Apr 2025, 12:02:27 PM

Photo No.

110

Inspection Date:

4/9/2025

Description:

Area shown in Photo 105 after pressure washing. Facing northeast.

Lat: 29.785149

Long: -95.318764

63°NE (T) • 29.785149, -95.318764 ±3m ▲ -24m



B.14 through B.29

HWPW
09 Apr 2025, 12:05:46 PM



PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

111

Inspection Date:

4/16/2025

Description:

Brown water staining along the joint that runs from B014 through B029. Facing northeast.

Lat: 29.787972

Long: -95.316719



Photo No.

112

Inspection Date:

4/16/2025




Description:




Brown water staining along the joint that runs from B014 through B029. Facing northeast.

Lat: 29.787924

Long: -95.317028



		PHOTOGRAPH LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	
		Project No. US0039040.4227	
Photo No. 113	Inspection Date: 4/23/2025	<div> <div> 243°SW (T) • 29.784888, -95.319694 ±3m ▲ -10m </div>  <div> A 50 through A 70 <div> HWPW 23 Apr 2025, 1:45:22 PM </div> </div> </div>	
Description: Brown water staining along the joint that runs from A050 through A070. Facing southwest. Standing water from recent and on-going rain event.			
Lat: 29.784888 Long: -95.319694			
Photo No. 114	Inspection Date: 4/23/2025	<div> <div> 106°E (T) • 29.784829, -95.319896 ±4m ▲ -11m </div>  <div> A 50 through A 70 <div> HWPW 23 Apr 2025, 1:45:50 PM </div> </div> </div>	
Description: Brown water staining within the cracks near the joint that runs from A050 through A070. Standing water from recent and on-going rain event.			
Lat: 29.784829 Long: -95.319896			

		PHOTOGRAPH LOG	
Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	
		Project No. US0039040.4227	
Photo No. 115	Inspection Date: 4/23/2025	<div> <div>  </div> <div> <p> 238°SW (T) • 29.785311, -95.318566 ±3m ▲ -14m </p> <p> B 14 through B 29 </p> <p> HWPW 23 Apr 2025, 3:52:46 PM </p> </div> </div>	
Description: Brown water staining along the joint that runs from B014 through B029. Facing southwest. Standing water from recent and on-going rain event.			
Lat: 29.785311 Long: -95.318566			
Photo No. 116	Inspection Date: 4/30/2025	<div> <div>  </div> <div> <p> 234°SW (T) • 29.784831, -95.319755 ±9ft ▲ -26ft </p> <p> A 50 through A 70 </p> <p> HWPW 30 Apr 2025, 8:20:31 AM </p> </div> </div>	
Description: Brown water staining along the joint that runs from A050 through A070. Facing southwest.			
Lat: 29.784831 Long: -95.319755			



PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

117

Inspection Date:

4/30/2025

Description:

Brown water staining along the joint that runs from A050 through A070. Facing southwest.

Lat: 29.784745

Long: -95.319995

☉ 234°SW (T) • 29.784745, -95.319995 ±9ft ▲ -26ft



A 50 through A 70

Photo No.

118

Inspection Date:

4/30/2025

Description:

Brown water staining along the joint that runs from A050 through A070. Facing southwest.

Lat: 29.784735

Long: -95.320055

☉ 248°SW (T) • 29.784735, -95.320055 ±9ft ▲ -32ft



A 70 through A 80



PHOTOGRAPH LOG

Client Name:

Union Pacific Railroad

Site Location:

Englewood Intermodal Yard, Houston, Texas

Project No.

US0039040.4227

Photo No.

119

Inspection Date:

4/30/2025

Description:

Brown water staining along the joint that runs from B014 through B029. FE-5 in the background. Facing southwest.

Lat: 29.785338

Long: -95.318472

225°SW (T) • 29.785338, -95.318472 ±9ft ▲ -45ft



B 14 through B 29

HWPW
30 Apr 2025, 8:25:43 AM

Photo No.

120

Inspection Date:

4/30/2025

Description:

Area shown in Photo 105. Facing southwest.

Lat: 29.785221

Long: -95.318779

248°SW (T) • 29.785221, -95.318779 ±9ft ▲ -39ft



B 14 through B 29

HWPW
30 Apr 2025, 8:26:22 AM