



March 16, 2026

Project No. US0039040.3990

**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 – REVISED INTERIM MEASURES WORK PLAN POST-CONSTRUCTION AND NAPL COLLECTION SYSTEM/CONCRETE CAP REPAIR INSPECTIONS  
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 February 2026 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 February 2026.

**Focused Excavation Inspections**

UPRR initiated the interim measure remediation activities detailed in the Revised IMWP on April 29, 2024, and completed construction activities on November 15, 2024. The Response Action Completion Report (RACR) summarizing the Focused Excavation response actions was submitted to the TCEQ on July 17, 2025.

Following completion of the remediation activities, WSP, on behalf of UPRR, began conducting weekly inspections of the 13 completed Focused Excavation (FE) re-constructed cap areas. For February 2026, weekly inspections were conducted on February 4, 11, 18, and 25, 2026. Figure 1 shows the locations of the FE areas. Photographs from the weekly inspections of the FE areas are provided in Attachment A under Photo Numbers 1 through 48. Observations from the weekly inspections included the following:

- WSP noted that the reconstructed FE concrete and asphalt cap areas were in good condition during the weekly inspections. WSP personnel did not observe any tar-like material or NAPL seeps at the FE locations.

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- No brown water staining was observed near the FEs.

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

The following is a summary of the observations from the weekly inspections in February 2026 of the NAPL Collection System area and EIY concrete/asphalt cap outside the NAPL Collection System. Photographs from the weekly inspections of the NAPL Collection System are provided in Attachment A under Photo Numbers 49 through 60.

#### NAPL Collection System Area

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 NAPL Collection System includes three sumps, Sump 1 (B099/B100 stalls), Sump 2 (B103/B104 stalls), and Sump 3 (B107/B108 stalls), that have continued to be inspected weekly for NAPL accumulation. Field personnel use a shovel to scrape the bottom of the sumps and inspect for the presence of NAPL during the weekly inspections. If present, the accumulated NAPL is recovered with the shovel. 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 tends to collect in the NAPL Collection System. WSP field personnel measure weekly freeboard levels in NAPL Collection System Sump 1, Sump 2, and Sump 3 below the top of the manholes, as summarized for the February weekly inspections in the following table:

Date	Sump 1 (DTW, inches)	Sump 2 (DTW, inches)	Sump 3 (DTW, inches)	Photo Nos. (Attachment A)
February 4	0	0.9	0.1	49, 50, and 51
February 11	1.9	10.5	9.3	52, 53, and 54
February 18	0	8.7	7.7	55, 56, and 57
February 25	2.0	11.0	10.5	58, 59, and 60

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

Observations from the weekly inspections included the following:

- No NAPL was recovered from Sumps 1, 2, and 3 during the February 2026 weekly inspections. During the February inspections, the small amount of NAPL accumulated on the underside of the inflow protector for Sump 1 was similar in appearance to the amount observed in January (Attachment A, Photo Number 49).
- Water in Sump 1 was observed to be light brown. Water in Sump 2 was observed to be clear, light brown, or brown, and water in Sump 3 was observed to be clear or brown depending on the inspection date. No indications of a sheen were observed in Sump 1, 2 or 3 during the February inspections. No odors were reported during the February inspections.
- No active seeps were noted at Stall B107 during the February weekly inspections (Photo Numbers 61 through 64). No NAPL seeps were observed along the concrete joints near the NAPL Collection System during the February inspections.

Areas Outside the NAPL Collection System/EIY Concrete/Asphalt Cap Inspections

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

- Tar-like material seeps at the following two locations:
  - A tar-like material seep was observed at Track 802 on February 18 and 25, 2026. Approximately 5.25 cubic inches (approximately 2.9 fluid ounces) of NAPL were recovered. No seep activity was noted at Track 802 during the other February weekly inspections (Photo Numbers 65 through 70).
  - No seep activity was noted at Stall B102 during the February weekly inspections (Photo Numbers 71 through 74).
- Overall, the volume of NAPL recovered from the surface seeps increased from January to February 2026 (approximately 0 fluid ounces in January compared to 2.9 fluid ounces in February). Annual increases in NAPL recovery volume are anticipated and considered normal at this site as ambient temperatures increase. In comparison, prior to implementing the Focused Excavations, approximately 8 fluid ounces (approximately 0.1 gallons) of NAPL were collected from the surface seeps during February 2024.
- The previously observed seeps at stalls B100/B101/B105 (FE-1&3), B102 (joint) (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 February 2026 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).
- No brown water staining was observed within the EIY in February.
- Tar-like NAPL material that was observed on May 7 at a concrete joint near stall H020 has not recurred since that observation. WSP staff collected samples in May and August 2025 at the UPRR EIY within the Site from a black, tar-like material adjacent to, and possibly spilled from, an abandoned 5-gallon bucket. The bucket had no labels or markings that could assist with identifying the material. Through previous investigations at the Site, the known petroleum-hydrocarbon materials at the Site include creosote and Bunker C (No. 6) fuel oil only. Based on a comparison of sample chromatograms of the samples collected in May and August 2025 to reference chromatograms, it is concluded that the material sampled is likely a motor oil and not creosote or No. 6 fuel oil, as described in Attachment B.

A figure showing the active and historical seep locations is provided on Figure 1.

A table tallying the active seeps observed in February 2026 is provided in Table 2.

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.

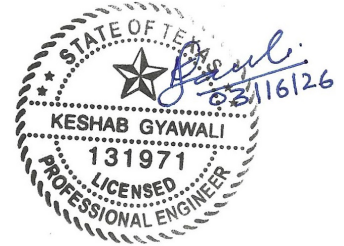
Sincerely,  
WSP USA Inc.



Manny Higa  
Lead Consultant, Geologist



Keshab Gyawali, PE  
Lead Consultant, Civil Engineer



CC: Kevin Peterburs, UPRR – Milwaukee, WI  
Waste Section Manager, TCEQ Region 12, Houston

Attachment Table 1 – NAPL Measurements – NAPL Collection System  
Table 2 – NAPL Seep Detection Tracker for Weekly Cap Inspections  
Figure 1 – Englewood Intermodal Capped Areas Seeps  
Attachment A – Weekly Inspection Photolog  
Attachment B – Evaluation of Petroleum Hydrocarbon Samples Collected at Union Pacific Railroad Houston Wood Preserving Works – Englewood Intermodal Yard – Near Parking Slot H020 and Abandoned Bucket Technical Memorandum

## Tables

**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	
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	

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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
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	
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	

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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
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	
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.

**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
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.
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.

**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
3/13/2024	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.
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	-	-	-	Not Measured	Freeboard not measured on 5/22/2024 due to the ongoing excavations as part of the Interim Measures Work Plan Construction Activities.
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.
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/B104. Light brown and no sheen observed at B107/B108.
8/21/2024	22.5	42.5	41.5	Not measurable	Brown water color and no sheen observed at B099/B100, B103/B104 and at B107/B108.
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/B104. Light brown and no sheen observed at B107/B108.
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 at B107/B108.
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.

**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
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.
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	-	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.
5/7/2025	0	20.9	18	Not measurable	No sheen observed. Water color tan in B099/B100, B103/B104, and B107/B108.
5/14/2025	0	16.5	17	Not measurable	Sheen only observed at B099/B100. Water color tan in B099/B100, B103/B104 and B107/B108.
5/21/2025	0	17.5	17	Not measurable	No sheen observed. Water color brown in B099/B100 and tan in B103/B104 and B107/B108.
5/28/2025	-	-	-	Not measured	Not measured due to lightning standdowns.
6/4/2025	0	9.5	9	Not measurable	No sheen observed. Water color dark brown in B099/B100 and tan in B103/B104 and B107/B108.
6/11/2025	0	0	0	Not measurable	No sheen observed. Water color brown in B099/B100 and tan in B103/B104 and B107/B108. Due to extended rain events all sumps were full of water.
6/18/2025	1.5	6.5	6	Not measurable	No sheen observed. Water color dark brown in B099/B100 and tan in B103/B104 and B107/B108.
6/25/2025	0	6.5	6	Not measurable	No sheen observed. Water color brown dark brown in B099/B100 and brown in B103/B104 and B107/B108.
7/2/2025	0	7.5	7	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear with a brown tint in B103/B104 and B107/B108.
7/9/2025	0	3.5	3	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear with a brown tint in 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
7/16/2025	0	8.5	8	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear in B103/B104 and B107/B108.
7/23/2025	1	10.5	10	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear in B103/B104 and B107/B108.
7/30/2025	0	9.5	9	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear with a brown tint in B103/B104 and B107/B108.
8/6/2025	0	0.1	0.5	Not measurable	Heavy sheen and soft bottom of sump only observed at B099/B100. No indication of DNAPL from the Interphase probe. Water color brown in B099/B100 and clear in B103/B104 and B107/B108.
8/13/2025	1.5	8.5	8	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear in B103/B104 and B107/B108.
8/20/2025	1.5	5.5	5	Not measurable	Sheen and tar on plastic lid only observed at B099/B100. Water color brown in B099/B100 and clear in B103/B104 and B107/B108.
8/27/2025	24	43	42.5	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear with a brown tint in B103/B104 and B107/B108. Pumpdown conducted 08/21/2025. Less than 0.5 gallons of tar recovered from Sump 1 during pumpdown.
9/3/2025	0	36	35.5	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear in B103/B104 and B107/B108.
9/10/2025	0	35	34.5	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color brown in B099/B100, clear with a brown tint in B103/B104, and clear in B107/B108.
9/17/2025	2.5	35	34.5	Not measurable	Sheen only observed at B099/B100. Water color brown in B099/B100 and clear with a brown tint in B103/B104 and B107/B108.
9/24/2025	0	34.5	34	Not measurable	Sheen only observed at B099/B100. Water color clear with a brown tint in B099/B100 and clear in B103/B104 and B107/B108.
10/1/2025	2	33	32.5	Not measurable	Inflow protector only replaced at B099/B100. Water color brown in B099/B100 and clear with a brown tint in B103/B104 and B107/B108.
10/8/2025	3.5	33.5	33	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color brown in B099/B100, clear with a brown tint in B103/B104, and clear in B107/B108.
10/15/2025	5	33.5	33	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color brown in B099/B100, and clear in B103/B104 and B107/B108.
10/22/2025	7	34	33	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color light brown in B099/B100 and in B103/B104, and clear in B107/B108.
10/29/2025	0	29	29	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color light brown in B099/B100 and in B103/B104, and clear in B107/B108.
11/5/2025	5	29	28.5	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color clear with a brown tint in B099/B100, and clear in B103/B104 and B107/B108.
11/12/2025	8	29.5	29	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color clear with a brown tint in B099/B100, and clear in B103/B104 and B107/B108.
11/19/2025	7	30.5	30	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color clear with a brown tint in B099/B100, and clear in B103/B104 and B107/B108.
11/26/2025	2	32	31.5	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color clear with a brown tint in B099/B100, and clear in B103/B104 and B107/B108.
12/3/2025	3	29.5	29	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color clear with a brown tint in B099/B100, and clear in B103/B104 and B107/B108.
12/10/2025	4.5	10.5	10	Not measurable	Tar on inflow protector only observed at B099/B100. Water color brown-tinted in B099/B100, clear with a slight brown tint in B103/B104, and clear in B107/B108.
12/17/2025	0	12	11.5	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color brown-tinted in B099/B100, and clear in B103/B104 and B107/B108.
12/24/2025	2.5	12.5	12	Not measurable	Tar on inflow protector only observed at B099/B100. Water color brown-tinted in B099/B100 and clear in B103/B104 and B107/B108.
12/31/2025	5.5	13	12.5	Not measurable	Tar on inflow protector only observed at B099/B100. Water color clear with a brown tint in B099/B100, and clear in B103/B104 and B107/B108.
1/7/2026	6.5	14.5	14	Not measurable	Sheen and tar on inflow protector only observed at B099/B100. Water color brown in B099/B100, light brown in B103/B104, and clear in B107/B108.
1/14/2026	3.6	14	13.5	Not measurable	Tar on inflow protector only observed at B099/B100. Water color light brown in B099/B100, and clear in B103/B104 and B107/B108.
1/21/2026	0	0	0	Not measurable	Tar on inflow protector only observed at B099/B100. Water color light brown in B099/B100, and clear in B103/B104 and B107/B108. Due to extended rain events all sumps were full of water.
1/28/2026	3.9	10.3	9.4	Not measurable	Tar on inflow protector only observed at B099/B100. Water color clear in B099/B100, B103/B104 and B107/B108.
2/4/2026	0	0.9	0.1	Not measurable	Tar on inflow protector only observed at B099/B100. Water color light brown in B099/B100, and clear in B103/B104 and B107/B108.
2/11/2026	1.9	10.5	9.3	Not measurable	Tar on inflow protector only observed at B099/B100. Water color light brown in B099/B100 and B103/B104, and clear in B107/B108.
2/18/2026	0	8.7	7.7	Not measurable	Tar on inflow protector only observed at B099/B100. Water color light brown in B099/B100, and clear in B103/B104 and B107/B108.
2/25/2026	2	11	10.5	Not measurable	Tar on inflow protector only observed at B099/B100. Water color light brown in B099/B100, and brown in B103/B104 and B107/B108.

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

**TABLE 2**  
**NAPL Seep Detection Tracker for Weekly Cap Inspections**  
**UPRR Houston, TX - Wood Preserving Works**

Location	B108 (Asphalt)	B107 (Asphalt)	B105 (Asphalt)	B103 (Asphalt)	B100 (Asphalt)	B102 Center (Asphalt)	B102 (Joint)	B101 (Asphalt)	B096 (Joint)	A022 (Asphalt)	A021 (Joint)	A010 (Joint)	A011 (Asphalt)	B056 (Asphalt)	B057 (Asphalt)	B042 (Joint)	Track 802 (Ballast)	RD-14 (Joint)	B016 (Asphalt)	B013 (Joint)	
Date of Last Observation of Active Seep	7/8/2020	11/5/2025	9/13/2023; Removed by FE-1&3	8/11/2021	4/17/2024; Removed by FE-1&3	11/5/2025	5/1/2024; Removed by FE-2	6/21/2023; Removed by FE-1&3	4/17/2024; Removed by FE-7	6/5/2024; Removed by FE-5	7/8/2020; Removed by FE-5	7/8/2020; Removed by FE-6	6/5/2024; Removed by FE-6	5/29/2024; Removed by FE-4	5/22/2024; Removed by FE-4	4/17/2024; Removed by FE-8	2/25/2026	6/12/2024; Removed by FE-13	8/28/2019; Removed by FE-9	8/17/2022	
02/04/2026*	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
02/11/2026*	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
02/18/2026	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	1	NP	NP	NP	NP
02/25/2026	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	1	NP	NP	NP	NP

**Notes**

NP - Seep was not present at time of weekly inspection

An active NAPL seep is noted with a 1 on the date of inspection and location of seep.

A weekly inspection in which no seeps were observed is noted with an asterisk after the date.

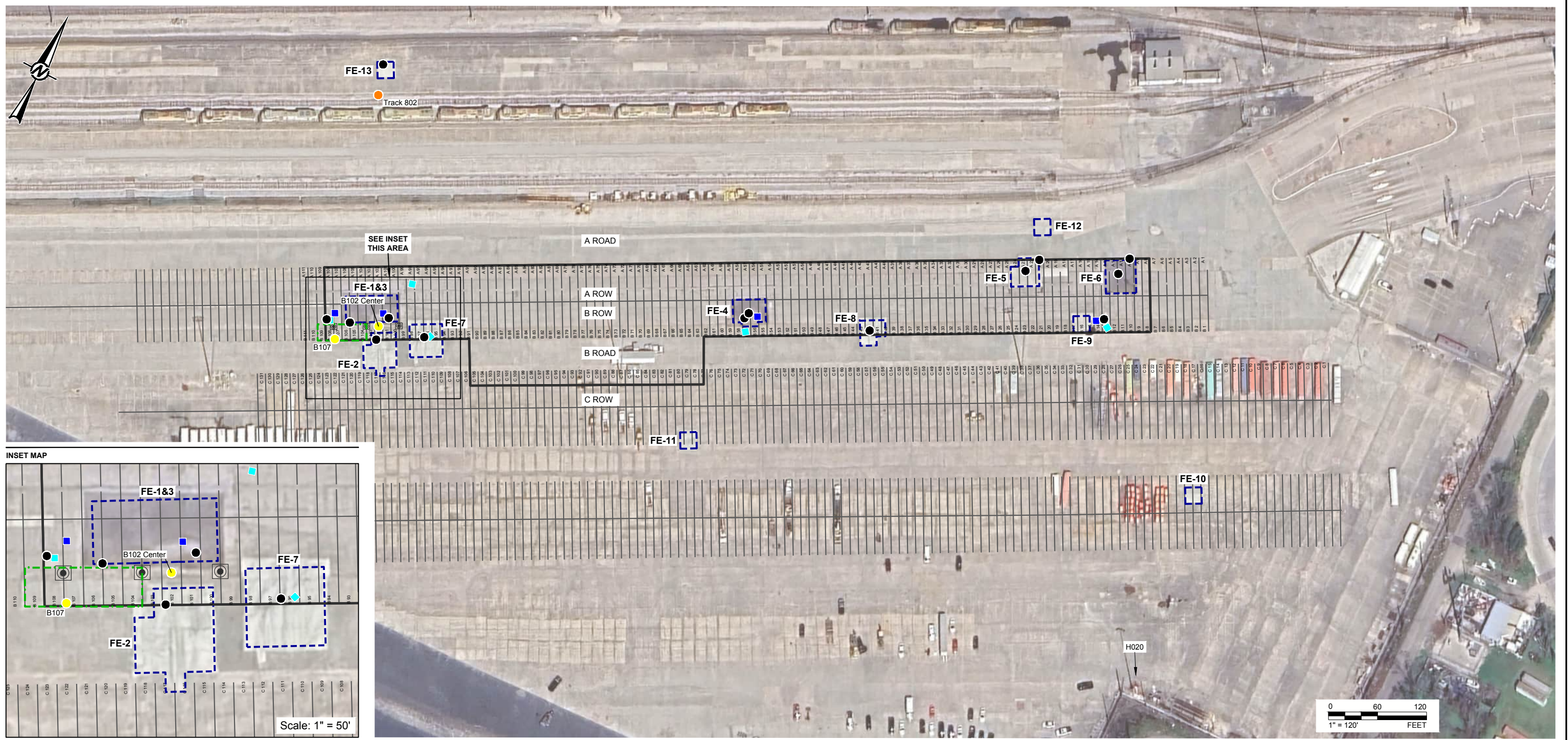
If a seep is in or adjacent to the Sump Collection System, it is highlighted in orange.

If a seep is in the vicinity of the Sump Collection System, it is highlighted in yellow.

If a seep is not in the vicinity of the Sump Collection System, it is highlighted in light blue.

Figure

Path: \\wsp-jshwan\net\US\Clients\Dallas\USDA\4007\Task\AreaSeeps - Round Rock\_2019\1911\2025 - HWRP\2025\101 - File Name: 2 - Englewood Intermodal Capped Area Seeps.dwg | Last Edited By: user071305 | Date: 2025-10-19 2:29:33 PM | Printed By: USA0701305 | Date: 2025-10-20 1:52:26 PM



**LEGEND**

	EXISTING NAPL COLLECTION SYSTEM (CONSTRUCTED FEB. 2019)
	HISTORICAL LIMIT OF BROWN LIQUID SURFACING
	HISTORICAL NAPL SEEP LOCATION
	2025 ACTIVE NAPL SEEP LOCATION
	2026 ACTIVE NAPL SEEP LOCATION
	EXISTING NAPL COLLECTION SUMP
	TEST PIT LOCATION (2019)
	TEST PIT LOCATION (JULY 2020)
	AS-BUILT EXTENT FOCUSED EXCAVATION AREA

**REFERENCE(S)**  
 BASE MAP TAKEN FROM GOOGLE EARTH, DATED 3/12/25.  
 THE DETAILS OF THE "AS-BUILT EXTENT FOCUSED EXCAVATION AREAS" ARE PROVIDED IN THE RACR DATED JULY 17, 2025.

**NOTE(S)**  
 1. WSP IS CURRENTLY EVALUATING THE ORIGIN OF THE TAR-LIKE NAPL MATERIAL OBSERVED AT H020.  
 2. THE HISTORICAL NAPL SEEP LOCATIONS WITHIN AS-BUILT EXTENT OF FOCUSED EXCAVATION AREAS HAVE BEEN ADDRESSED.

CLIENT  
**UNION PACIFIC RAILROAD CO**

PROJECT  
**HOUSTON WOOD PRESERVING WORKS  
 ENGLEWOOD INTERMODAL YARD**

TITLE  
**ENGLEWOOD INTERMODAL YARD CAPPED AREA SEEPS**

CONSULTANT	WSP	YYYY-MM-DD	2026-03-02
DESIGNED		AJD	
PREPARED		AJD	
REVIEWED		CT	
APPROVED		ECM	

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B



**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:**  
02/04/2026



☼ 206°SW (T) ● 29°47'3"N, 95°19'14"W ±9ft ▲ 49ft

**Description:**  
FE-1&3 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Standing water from recent rain event. Facing southwest.

Lat: 29.78417  
Long: -95.32056



**Photo No.**  
2

**Inspection Date:**  
02/04/2026



☼ 199°S (T) ● 29°47'3"N, 95°19'14"W ±13ft ▲ 50ft

**Description:**  
FE-2 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.78417  
Long: -95.32056





# PHOTOGRAPH LOG

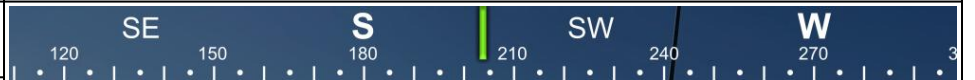
**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
3

**Inspection Date:**  
02/04/2026



**Description:**  
FE-4 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Standing water from recent rain event. Facing southwest.

Lat: 29.78472  
Long: -95.31944



**Photo No.**  
4

**Inspection Date:**  
02/04/2026



**Description:**  
FE-5 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.78528  
Long: -95.31861





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
5

**Inspection Date:**  
02/04/2026

SE S SW W  
120 150 180 210 240 270

☀ 201°S (T) ● 29°47'8"N, 95°19'5"W ±6ft ▲ 54ft

FE-6

UPRR-HWPW  
04 Feb 2026, 11:11:29

**Description:**  
FE-6 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Standing water from recent rain event. Facing south.

Lat: 29.78556  
Long: -95.31806

**Photo No.**  
6

**Inspection Date:**  
02/04/2026

SE S SW W  
120 150 180 210 240 270 300

☀ 205°SW (T) ● 29°47'3"N, 95°19'14"W ±9ft ▲ 57ft

FE-7

UPRR-HWPW  
04 Feb 2026, 11:37:12

**Description:**  
FE-7 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing southwest.

Lat: 29.78417  
Long: -95.32056



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
7

**Inspection Date:**  
02/04/2026



☀ 206°SW (T) ● 29°47'6"N, 95°19'8"W ±6ft ▲ 54ft



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

Lat: 29.785  
Long: -95.31889

**Photo No.**  
8

**Inspection Date:**  
02/04/2026



☀ 201°S (T) ● 29°47'7"N, 95°19'6"W ±13ft ▲ 58ft



**Description:**  
FE-9 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.78528  
Long: -95.31833



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
9

**Inspection Date:**  
02/04/2026



☉ 209°SW (T) ● 29°47'5"N, 95°19'3"W ±13ft ▲ 58ft



**Description:**

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

Lat: 29.78472  
Long: -95.3175

**Photo No.**  
10

**Inspection Date:**  
02/04/2026



☉ 205°SW (T) ● 29°47'3"N, 95°19'10"W ±6ft ▲ 57ft



**Description:**

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

Lat: 29.78417  
Long: -95.31944



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
11

**Inspection Date:**  
02/04/2026



☀ 187°S (T)    🌑 29°47'8"N, 95°19'7"W ±9ft    ▲ 55ft



**Description:**

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

Lat: 29.78556  
Long: -95.31861

**Photo No.**  
12

**Inspection Date:**  
02/04/2026



☀ 205°SW (T)    🌑 29°47'6"N, 95°19'16"W ±13ft    ▲ 59ft



**Description:**

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

Lat: 29.785  
Long: -95.32111



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
13

**Inspection Date:**  
02/11/2026



☉ 206°SW (T) LAT: 29.784419 LON: -95.320790 ±9ft ▲ 76ft

**Description:**

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

Lat: 29.78442  
Long: -95.32079



**Photo No.**  
14

**Inspection Date:**  
02/11/2026



☉ 206°SW (T) LAT: 29.784292 LON: -95.320761 ±6ft ▲ 59ft

**Description:**

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

Lat: 29.78429  
Long: -95.32076





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
15

**Inspection Date:**  
02/11/2026



☉ 205°SW (T) LAT: 29.784920 LON: -95.319512 ±13ft ▲ 71ft



**Description:**

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

Lat: 29.78492  
Long: -95.31951

**Photo No.**  
16

**Inspection Date:**  
02/11/2026



☉ 197°S (T) ☉ 29°47'7"N, 95°19'7"W ±13ft ▲ 64ft



**Description:**

FE-5 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Standing water from recent rain event. Facing south.

Lat: 29.78528  
Long: -95.31861



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
17

**Inspection Date:**  
02/11/2026



☉ 195°S (T) ● 29°47'8"N, 95°19'5"W ±13ft ▲ 59ft

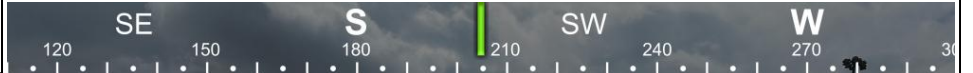
**Description:**  
FE-6 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Standing water from recent rain event. Facing south.

Lat: 29.78556  
Long: -95.31806



**Photo No.**  
18

**Inspection Date:**  
02/11/2026



☉ 205°SW (T) LAT: 29.784396 LON: -95.320589 ±9ft ▲ 74ft

**Description:**  
FE-7 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Standing water from recent rain event. Facing southwest.

Lat: 29.7844  
Long: -95.32059





# PHOTOGRAPH LOG

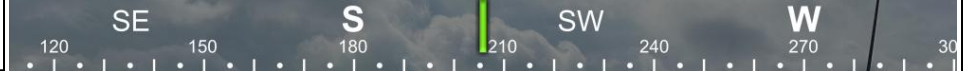
**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
19

**Inspection Date:**  
02/11/2026



☉ 206°SW (T) LAT: 29.785040 LON: -95.319074 ±9ft ▲ 79ft



**Description:**

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

Lat: 29.78504  
Long: -95.31907

**Photo No.**  
20

**Inspection Date:**  
02/11/2026



☉ 196°S (T) ☉ 29°47'7"N, 95°19'6"W ±9ft ▲ 58ft



**Description:**

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

Lat: 29.78528  
Long: -95.31833



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
21

**Inspection Date:**  
02/11/2026



☀ 225°SW (T)    🌑 29°47'5"N, 95°19'3"W ±6ft    ▲ 67ft



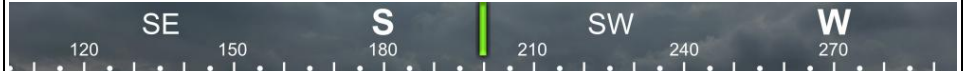
**Description:**

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

Lat: 29.78472  
Long: -95.3175

**Photo No.**  
22

**Inspection Date:**  
02/11/2026



☀ 200°S (T)    LAT: 29.784420    LON: -95.319557 ±9ft    ▲ 63ft



**Description:**

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

Lat: 29.78442  
Long: -95.31956



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
23

**Inspection Date:**  
02/11/2026



☉ 206°SW (T) ● 29°47'8"N, 95°19'7"W ±13ft ▲ 63ft



**Description:**

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

Lat: 29.78556  
Long: -95.31861

**Photo No.**  
24

**Inspection Date:**  
02/11/2026



☉ 202°S (T) ● 29°47'6"N, 95°19'16"W ±13ft ▲ 69ft



**Description:**

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

Lat: 29.785  
Long: -95.32111



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
25

**Inspection Date:**  
02/18/2026



☉ 203°SW (T) LAT: 29.784388 LON: -95.320915 ±32ft ▲ -11ft

**Description:**

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

Lat: 29.78439  
Long: -95.32092



**Photo No.**  
26

**Inspection Date:**  
02/18/2026



☉ 201°S (T) LAT: 29.784297 LON: -95.320761 ±9ft ▲ 80ft

**Description:**

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

Lat: 29.7843  
Long: -95.32076





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
27

**Inspection Date:**  
02/18/2026



☉ 199°S (T) LAT: 29.784946 LON: -95.319519 ±6ft ▲ 60ft



**Description:**

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

Lat: 29.78495  
Long: -95.31952

**Photo No.**  
28

**Inspection Date:**  
02/18/2026



☉ 205°SW (T) LAT: 29.785466 LON: -95.318654 ±9ft ▲ 59ft



**Description:**

FE-5 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing southwest.

Lat: 29.78547  
Long: -95.31865



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
29

**Inspection Date:**  
02/18/2026



☉ 197°S (T) LAT: 29.785605 LON: -95.318328 ±9ft ▲ 69ft

**Description:**  
FE-6 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.78561  
Long: -95.31833



**Photo No.**  
30

**Inspection Date:**  
02/18/2026



☉ 199°S (T) LAT: 29.784401 LON: -95.320636 ±9ft ▲ 59ft

**Description:**  
FE-7 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.7844  
Long: -95.32064





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
31

**Inspection Date:**  
02/18/2026



☉ 201°S (T) LAT: 29.784977 LON: -95.318916 ±32ft ▲ -19ft

**Description:**  
FE-8 weekly inspection of concrete cap.  
Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.78498  
Long: -95.31892



**Photo No.**  
32

**Inspection Date:**  
02/18/2026



☉ 192°S (T) LAT: 29.785368 LON: -95.318378 ±9ft ▲ 57ft

**Description:**  
FE-9 weekly inspection of concrete cap.  
Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.78537  
Long: -95.31838





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
33

**Inspection Date:**  
02/18/2026



☉ 199°S (T) LAT: 29.784990 LON: -95.317712 ±9ft ▲ 75ft



**Description:**

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

Lat: 29.78499  
Long: -95.31771

**Photo No.**  
34

**Inspection Date:**  
02/18/2026



☉ 203°SW (T) LAT: 29.784443 LON: -95.319556 ±6ft ▲ 58ft



**Description:**

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

Lat: 29.78444  
Long: -95.31956



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
35

**Inspection Date:**  
02/18/2026



☉ 194°S (T) LAT: 29.785589 LON: -95.318675 ±9ft ▲ 54ft



**Description:**

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

Lat: 29.78559  
Long: -95.31868

**Photo No.**  
36

**Inspection Date:**  
02/18/2026



☉ 188°S (T) LAT: 29.785133 LON: -95.321106 ±32ft ▲ -3ft



**Description:**

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

Lat: 29.78513  
Long: -95.32111



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
37

**Inspection Date:**  
02/25/2026



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

Lat: 29.78432  
Long: -95.32076

**Photo No.**  
38

**Inspection Date:**  
02/25/2026



**Description:**  
FE-2 weekly inspection of concrete cap.  
Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.78426  
Long: -95.32076



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
39

**Inspection Date:**  
02/25/2026



**Description:**

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

Lat: 29.78491  
Long: -95.3195

**Photo No.**  
40

**Inspection Date:**  
02/25/2026



**Description:**

FE-5 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing southwest.

Lat: 29.78546  
Long: -95.31861



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
41

**Inspection Date:**  
02/25/2026



**Description:**  
FE-6 weekly inspection of asphalt cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing southwest.

Lat: 29.7856  
Long: -95.3183

**Photo No.**  
42

**Inspection Date:**  
02/25/2026



**Description:**  
FE-7 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing south.

Lat: 29.78439  
Long: -95.32058



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
43

**Inspection Date:**  
02/25/2026



☉ 320°NW (T) • 29.784953, -95.319043 ±3m ▲ -5m



**Description:**

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

Lat: 29.78495  
Long: -95.31904

**Photo No.**  
44

**Inspection Date:**  
02/25/2026



☉ 210°S (T) • 29.785359, -95.318367 ±3m ▲ -5m



**Description:**

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

Lat: 29.78536  
Long: -95.31837



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
45

**Inspection Date:**  
02/25/2026



**Description:**

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

Lat: 29.78499  
Long: -95.31773

**Photo No.**  
46

**Inspection Date:**  
02/25/2026



**Description:**

FE-11 weekly inspection of concrete cap. Mislabeled FE-8. Reconstructed cap in good condition. No NAPL observed at FE location. Facing northeast.

Lat: 29.7844  
Long: -95.31952



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
47

**Inspection Date:**  
02/25/2026



**Description:**  
FE-12 weekly inspection of concrete cap. Reconstructed cap in good condition. No NAPL observed at FE location. Facing northwest.

Lat: 29.78547  
Long: -95.31871

**Photo No.**  
48

**Inspection Date:**  
02/25/2026



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

Lat: 29.78503  
Long: -95.32116



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

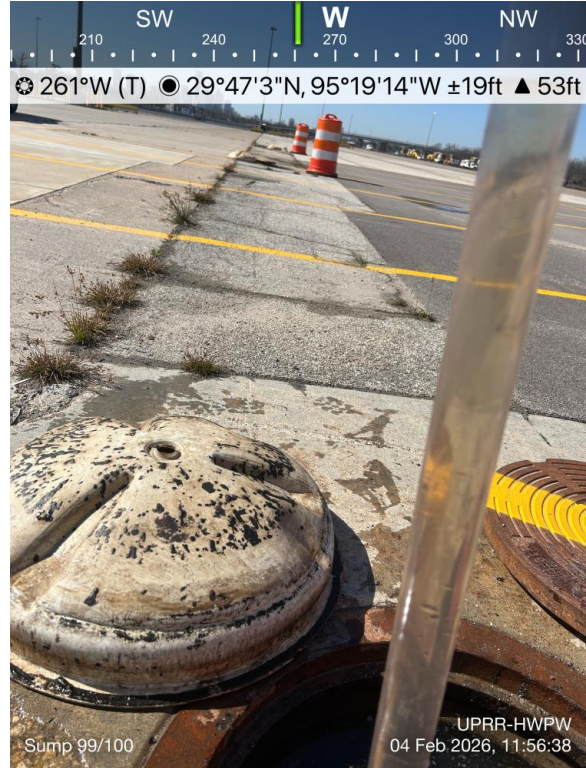
**Photo No.**  
49

**Inspection Date:**  
02/04/2026

**Description:**

Sump 1 (B99/B100), 0 inches of freeboard in sump. Color is light brown, and no sheen or odor was reported.

Lat: 29.78417  
Long: -95.32056



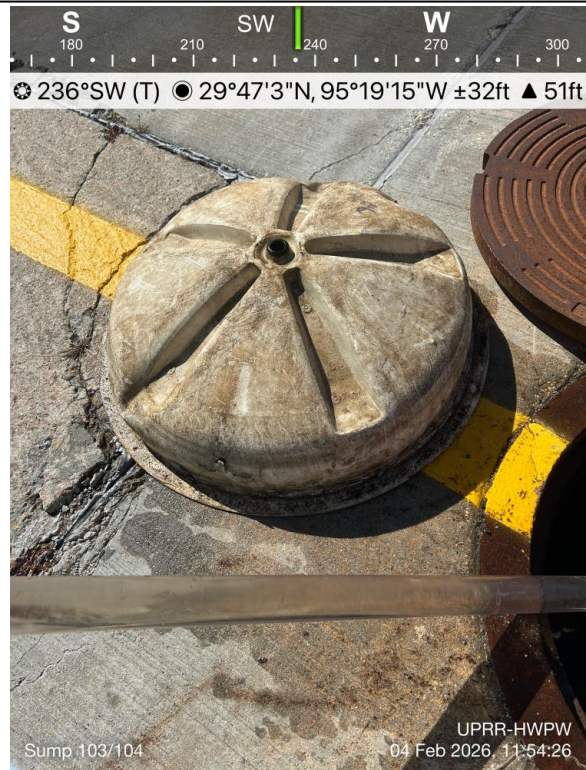
**Photo No.**  
50

**Inspection Date:**  
02/04/2026

**Description:**

Sump 2 (B103/B104), 0.9 inches of freeboard in sump. Color is clear, and no sheen or odor was reported.

Lat: 29.78417  
Long: -95.32083





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

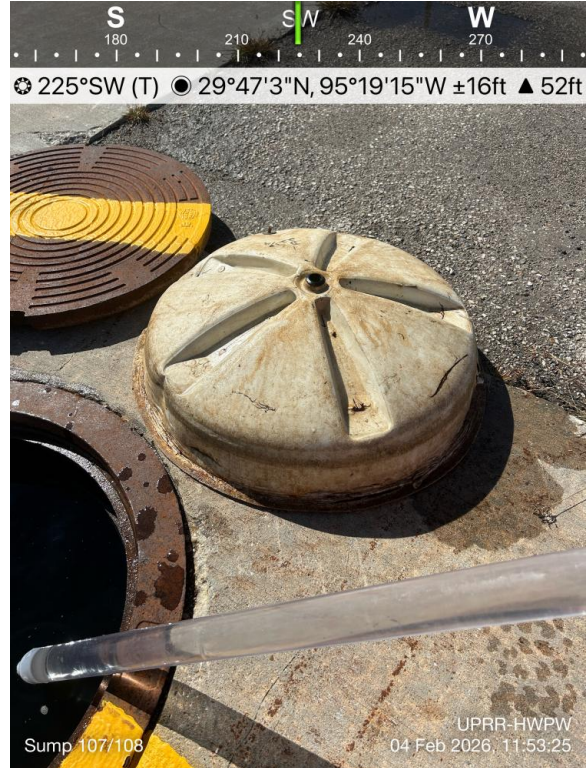
**Photo No.**  
51

**Inspection Date:**  
02/04/2026

**Description:**

Sump 3 (B107/B108), 0.1 inches of freeboard in sump. Color is clear, and no sheen or odor was reported.

Lat: 29.78417  
Long: -95.32083



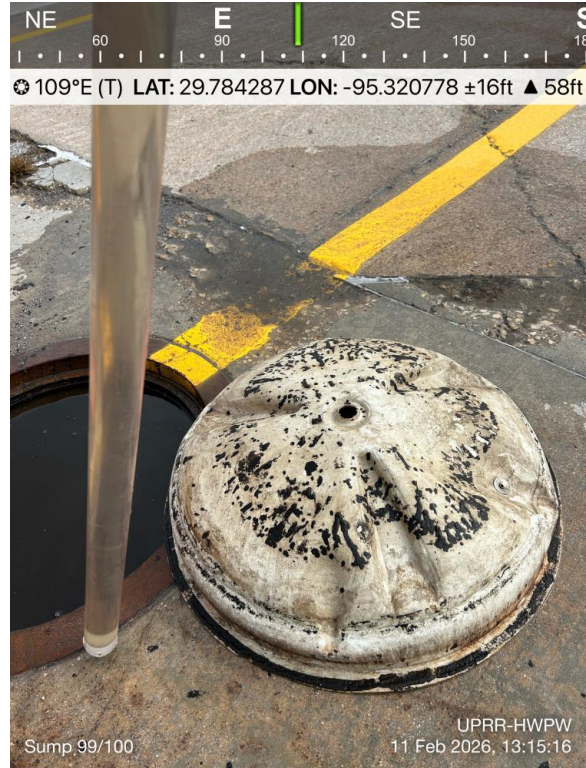
**Photo No.**  
52

**Inspection Date:**  
02/11/2026

**Description:**

Sump 1 (B99/B100), 1.9 inches of freeboard in sump. Color is light brown, and no sheen or odor was reported.

Lat: 29.78429  
Long: -95.32078





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

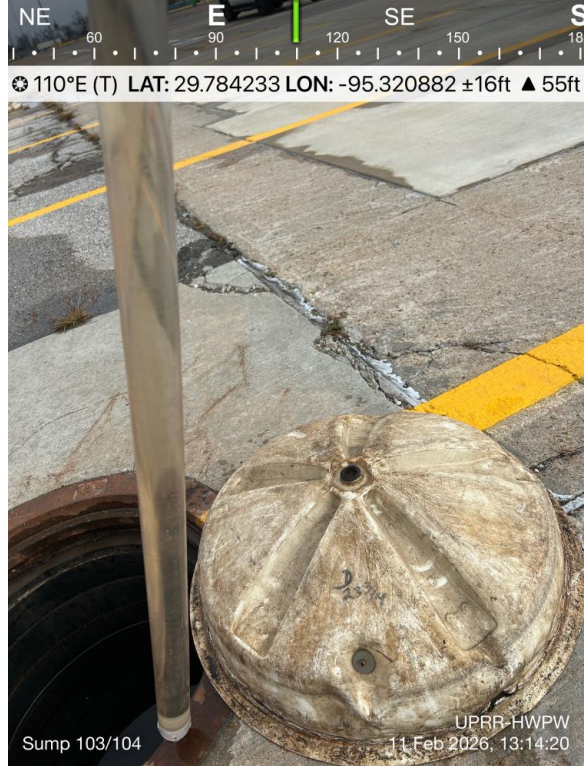
**Photo No.**  
53

**Inspection Date:**  
02/11/2026

**Description:**

Sump 2 (B103/B104), 10.5 inches of freeboard in sump. Color is light brown, and no sheen or odor was reported.

Lat: 29.78423  
Long: -95.32088



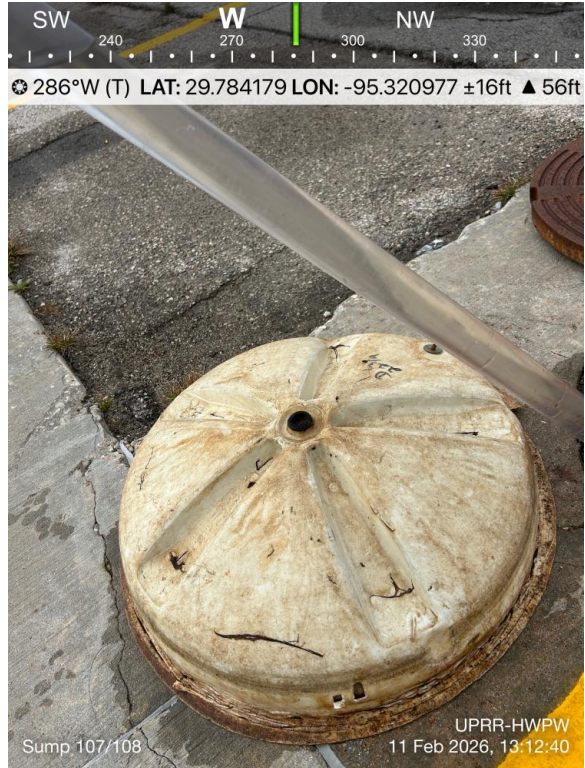
**Photo No.**  
54

**Inspection Date:**  
02/11/2026

**Description:**

Sump 3 (B107/B108), 9.3 inches of freeboard in sump. Color is clear, and no sheen or odor was reported.

Lat: 29.78418  
Long: -95.32098





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
55

**Inspection Date:**  
02/18/2026

**Description:**  
Sump 1 (B99/B100), 0 inches of freeboard in sump. Color is light brown, and no sheen or odor was reported.

Lat: 29.78418  
Long: -95.32085

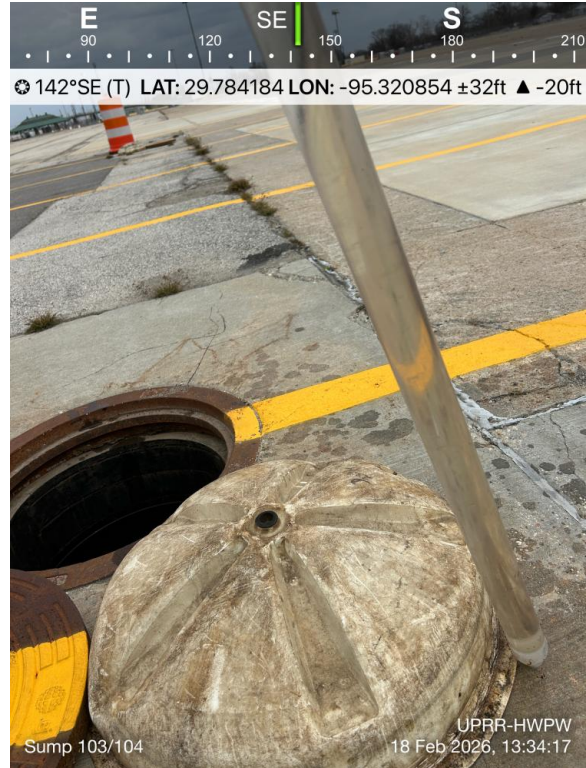


**Photo No.**  
56

**Inspection Date:**  
02/18/2026

**Description:**  
Sump 2 (B103/B104), 8.7 inches of freeboard in sump. Color is clear, and no sheen or odor was reported.

Lat: 29.78418  
Long: -95.32085





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

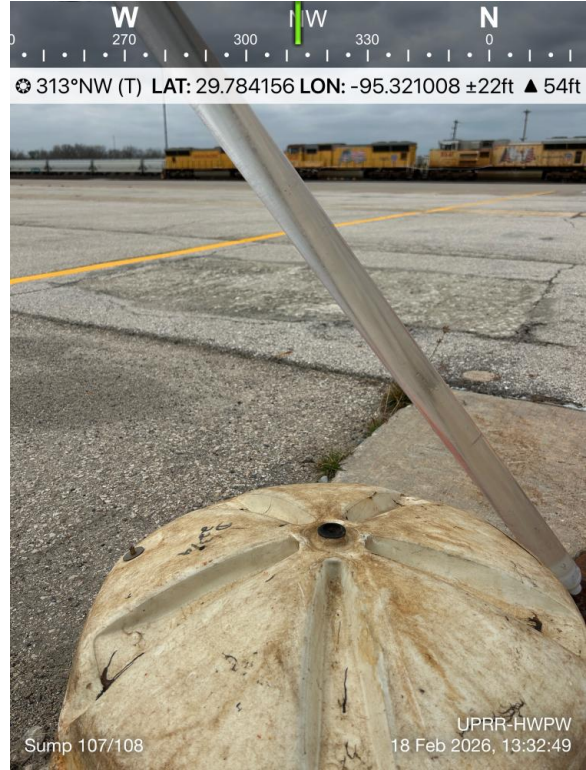
**Photo No.**  
57

**Inspection Date:**  
02/18/2026

**Description:**

Sump 3 (B107/B108), 7.7 inches of freeboard in sump. Color is clear, and no sheen or odor was reported.

Lat: 29.78416  
Long: -95.32101



**Photo No.**  
58

**Inspection Date:**  
02/25/2026

**Description:**

Sump 1 (B99/B100), 2 inches of freeboard in sump. Color is light brown, and no sheen or odor was reported.

Lat: 29.7843  
Long: -95.32077





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
59

**Inspection Date:**  
02/25/2026



**Description:**

Sump 2 (B103/B104), 11 inches of freeboard in sump. Color is brown, and no sheen or odor was reported.

Lat: 29.78426  
Long: -95.32089

**Photo No.**  
60

**Inspection Date:**  
02/25/2026



**Description:**

Sump 3 (B107/B108), 10.5 inches of freeboard in sump. Color is brown, and no sheen or odor was reported.

Lat: 29.78422  
Long: -95.321



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
61

**Inspection Date:**  
02/04/2026



☀ 233°SW (T) ● 29°47'2"N, 95°19'15"W ±9ft ▲ 51ft

**Description:**

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

Lat: 29.78389  
Long: -95.32083



**Photo No.**  
62

**Inspection Date:**  
02/11/2026



☀ 147°SE (T) LAT: 29.784163 LON: -95.320949 ±9ft ▲ 73ft

**Description:**

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

Lat: 29.78416  
Long: -95.32095





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
63

**Inspection Date:**  
02/18/2026



☀ 140°SE (T) LAT: 29.784128 LON: -95.320953 ±9ft ▲ 76ft

**Description:**

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

Lat: 29.78413  
Long: -95.32095



**Photo No.**  
64

**Inspection Date:**  
02/25/2026



☀ 327°NW (T) ☉ 29.784153, -95.320957 ±3m ▲ -12m

**Description:**

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

Lat: 29.78415  
Long: -95.32096





# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
65

**Inspection Date:**  
02/04/2026

Track 802

UPRR-HWPW  
04 Feb 2026 10:55:02

**Description:**  
Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. No active NAPL seep observed along joint.

Lat: 29.78472  
Long: -95.32111

**Photo No.**  
66

**Inspection Date:**  
02/11/2026

Track 802

UPRR-HWPW  
11 Feb 2026 12:13:07

**Description:**  
Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. No active NAPL seep observed along joint.

Lat: 29.78472  
Long: -95.32111



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
67

**Inspection Date:**  
02/18/2026



☉ 240°SW (T) LAT: 29.784939 LON: -95.321200 ±16ft ▲ 51ft



**Description:**

Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. Approximately 2.25 cubic inches of NAPL observed at seep location.

Lat: 29.78494  
Long: -95.3212

**Photo No.**  
68

**Inspection Date:**  
02/18/2026



☉ 228°SW (T) LAT: 29.785056 LON: -95.321196 ±32ft ▲ -23ft



**Description:**

Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. Approximately 2.25 cubic inches of NAPL observed at seep location.

Lat: 29.78506  
Long: -95.3212



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
69

**Inspection Date:**  
02/25/2026



**Description:**

Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. Approximately 3 cubic inches of NAPL observed at seep location.

Lat: 29.78492  
Long: -95.3212

**Photo No.**  
70

**Inspection Date:**  
02/25/2026



**Description:**

Track 802 weekly inspection of track. Surrounding concrete and ballast in good condition. Approximately 3 cubic inches of NAPL observed at seep location.

Lat: 29.78496  
Long: -95.32121



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
71

**Inspection Date:**  
02/04/2026



☉ 162°S (T) ● 29°47'3"N, 95°19'15"W ±16ft ▲ 51ft



B102 Center

UPRR-HWPW  
04 Feb 2026 11:41:44

**Description:**

B102 Center weekly inspection of previously identified seep. Surrounding asphalt in good condition. No active NAPL seep observed along joint.

Lat: 29.78417  
Long: -95.32083

**Photo No.**  
72

**Inspection Date:**  
02/11/2026



☉ 167°S (T) LAT: 29.784254 LON: -95.320841 ±13ft ▲ 71ft



B102 Center

UPRR-HWPW  
11 Feb 2026 13:04:14

**Description:**

B102 Center weekly inspection of previously identified seep. Surrounding asphalt in good condition. No active NAPL seep observed along joint.

Lat: 29.78425  
Long: -95.32084



# PHOTOGRAPH LOG

**Client Name:**  
Union Pacific Railroad

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

**Project No.**  
US0039040.4227

**Photo No.**  
73

**Inspection Date:**  
02/18/2026



☉ 148°SE (T) LAT: 29.784236 LON: -95.320855 ±9ft ▲ 71ft

**Description:**

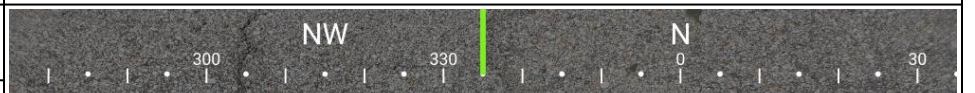
B102 Center weekly inspection of previously identified seep. Surrounding asphalt in good condition. No active NAPL seep observed along joint.

Lat: 29.78424  
Long: -95.32086



**Photo No.**  
74

**Inspection Date:**  
02/25/2026



☉ 335°NW (T) ☉ 29.78426, -95.32085 ±3m ▲ -12m

**Description:**

B102 Center weekly inspection of previously identified seep. Surrounding asphalt in good condition. No active NAPL seep observed along joint.

Lat: 29.78426  
Long: -95.32085





**ATTACHMENT B**

**Evaluation of Petroleum  
Hydrocarbon Samples Collected at  
Union Pacific Railroad Houston  
Wood Preserving Works –  
Englewood Intermodal Yard – Near  
Parking Slot H020 and Abandoned  
Bucket Technical Memorandum**



## MEMORANDUM

**DATE** March 6, 2026  
**TO** Emmanuel Higa, WSP  
**CC:** Eric Matzner, Ensolum  
**FROM** Brenda Basile

### **EVALUATION OF PETROLEUM HYDROCARBON SAMPLES COLLECTED AT UNION PACIFIC RAILROAD HOUSTON WOOD PRESERVING WORKS – ENGLEWOOD INTERMODAL YARD - NEAR PARKING SLOT H020 AND ABANDONED BUCKET**

WSP staff collected samples in May and August 2025 at the Union Pacific Railroad (UPRR) Englewood Intermodal Yard (EIY) within the Houston Wood Preserving Works site (the Site) from a black, tar-like material adjacent to, and possibly spilled from, an abandoned 5-gallon bucket. The bucket had no labels or markings that could assist with identifying the material. Through previous investigations at the Site, the known petroleum-hydrocarbon materials at the Site include creosote and Bunker C (No. 6) fuel oil only. Based on a comparison of sample chromatograms of the samples collected in May and August 2025 to reference chromatograms, it is concluded that the material sampled is likely a motor oil and not creosote or No. 6 fuel oil, as described in more detail below.

Samples were analyzed by ALS Environmental in Houston, Texas using the Texas Commission on Environmental Quality (TCEQ) Method 1006 (Total Petroleum Hydrocarbons, Revision 03, June 1, 2001). The method is designed to determine concentrations of total petroleum hydrocarbons (TPH) using gas chromatography with a flame ionization detector. This method can be used for the quantitative analysis of petroleum hydrocarbons in the gasoline and diesel ranges and portions of the heavier fuel and lubricating oil range, which have approximate boiling points between n-hexane (nC6) and n-pentatriacontane (nC35). In addition, the chromatograms generated during the analyses can be compared to reference chromatograms of known hydrocarbon-based materials to make a preliminary determination of the hydrocarbon type.

#### **Background**

In May 2025, WSP personnel observed a small amount of tar-like material near the parking stall H020 within the EIY. WSP personnel collected a sample (Sample ID NAPL-1620-H20-20250605) of the material May 9, 2025 to be analyzed for TPH by TX Method 1006. An abandoned bucket with no labels or markings was observed near the area where the tar-like material was observed near stall H020. WSP collected a sample (Sample ID NAPL-1620-H20-TB 20250822) from the bucket on August 22, 2025. That sample was also analyzed for TPH by TX1006 Method. A summary of the TPH aliphatic and aromatic composition for the two samples are summarized in the following table.

**Table 1 – TPH Method 1006 Results (mg/kg)**

Location ID	NAPL-1620-H20-20250605	NAPL-1620-H20-TB 20250822
Sample Description	On asphalt near Slot H020	From 5-gallon bucket
6 C aliphatics	NR	<49
>6-8 C aliphatics	<50	<49
>8-10 C aliphatics	<50	<49
>10-12 C aliphatics	<50	<49
>12-16 C aliphatics	<50	<49
>16-21 C aliphatics	<50	<49
>21-35 C aliphatics	2,800	1,400
>7-8 C aromatics	<50	<49
>8-10 C aromatics	<50	<49
>10-12 C aromatics	<50	<49
>12-16 C aromatics	100	<49
>16-21 C aromatics	<50	<49
>21-35 C aromatics	4,400	1,700
<i>Total Aliphatic Fraction</i>	<i>2,800</i>	<i>1,400</i>
<i>Total Aromatic Fraction</i>	<i>4,500</i>	<i>1,700</i>
<b>Total TPH</b>	<b>7,300</b>	<b>3,100</b>

In addition to the TPH Method 1006 analyses, WSP requested chromatograms from the laboratory from the two analyses and assessed the information provided on those chromatograms. **Figure 1** shows the TPH chromatogram for the May sample event and **Figure 2** shows the expanded chromatogram with the y-axis magnified. The numbers on the x-axis are the times from 1 to 21 minutes and the numbers on the y-axis are the responses of the flame ionization detector to the material entering the detector. The peaks between 1 and 3 minutes are the pentane solvent used to dissolve the sample for gas chromatography; these peaks are not considered in the chromatographic interpretation. The numbers above the peaks in **Figure 2** are the retention times for each peak. Three red lines with circles on **Figure 2** mark the retention times for the markers in the TCEQ TPH method, i.e., n-dodecane (nC12) at 6.8 minutes, n-octacosane (nC28) at 14.8 minutes, and n-pentatriacontane (nC35) at 17.8 minutes.

**Figure 3** provides a reference of hydrocarbon ranges for various petroleum products from natural gas to heavy fuels, greases, waxes and asphalt (BV 2025). **Figure 4** provides a chromatogram of normal alkanes from n-octane (C8) to hexatriacontane (nC36) (Basile, 1996). The **Figure 4** chromatogram shows that normal alkanes elute from the gas chromatographic column in a linear manner. Therefore, the hydrocarbon ranges can be extrapolated from nC12, nC28 and nC35 markers shown on **Figure 5**. Three red lines with squares mark the approximate retention times for the markers in the **Figure 5** chromatogram: n-decane (nC10) at 4.8 minutes, n-hexadecane (nC16) at 8.8 minutes, and n-tetraatriacontane (nC34) at 16.8 minutes.

### May 2025 Sample (ALS HS25060248)

**Figure 5** shows the area used for interpretation highlighted in yellow. This area corresponds to approximately the C22 to C42 carbon range. Since the known petroleum hydrocarbons encountered at the Site are creosote and No. 6 fuel oil, the sample chromatogram was compared to the reference chromatograms for creosote and No. 6 fuel oil. **Figures 6** and **7** provide the reference chromatograms for creosote and No. 6 fuel oil, respectively (BV, 2025). Comparison of these profiles to the May 2025 sample chromatogram show that the peaks and profiles in creosote and No. 6 fuel oil do not match the sample chromatogram.

Since creosote and No. 6 fuel oil were eliminated as the unknown product, reference chromatograms were reviewed for similar chromatographic profiles and carbon ranges. **Figure 8** repeats the sample chromatogram shown in **Figure 5**, **Figure 9** provides the reference chromatograms for motor oils (BV 2025), and **Figure 10** provides a closeup of the motor oil chromatograms between C16 and C50. Comparison of the profiles of the sample chromatogram and motor oils indicates the closest matches are the 10W30 and 15W40 motor oils.

### August 2025 Sample (ALS HS25081177)

The chromatogram of the sample collected from the abandoned bucket near stall H020 in August 2025 is shown on **Figure 11**, and **Figure 12** provides the May 2025 sample chromatogram. The profiles of the two samples are similar with the August 2025 sample having the unresolved peak area extending into the end of the chromatogram.

### Conclusions

Based on a comparison of the May and August sample chromatograms to reference chromatograms, it is concluded that the sample is likely a motor oil and not creosote or No. 6 fuel oil.

### References

Basile, Brenda (Basile). 1996. Chromatogram of n-Alkane Mixture. Personal Communication.

Bureau Veritas (BV). 2025. Chromatogram Guide

<https://bvsolutions.freshdesk.com/en/support/solutions/articles/43000374875-chromatogram-interpretation-hydrocarbon-forensics>.

Figure 1 – May 2025 Sample Chromatogram

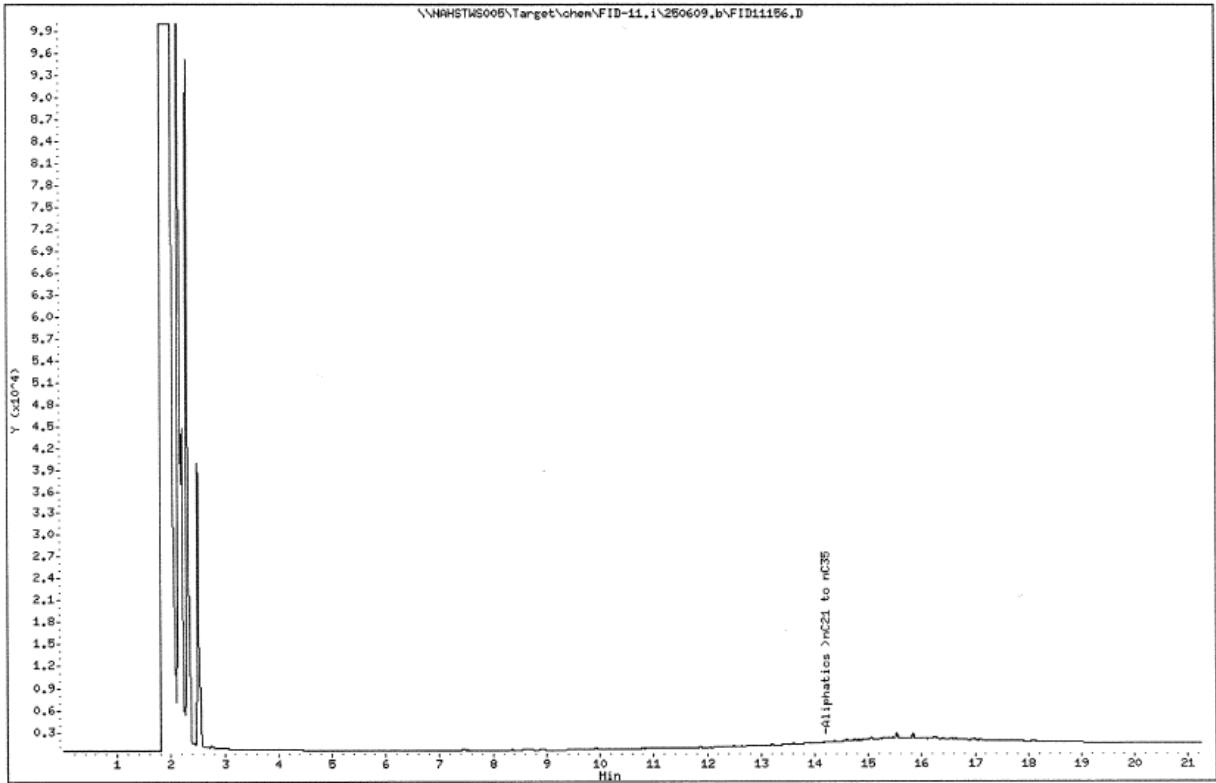


Figure 2 – May 2025 Sample Expanded Chromatogram

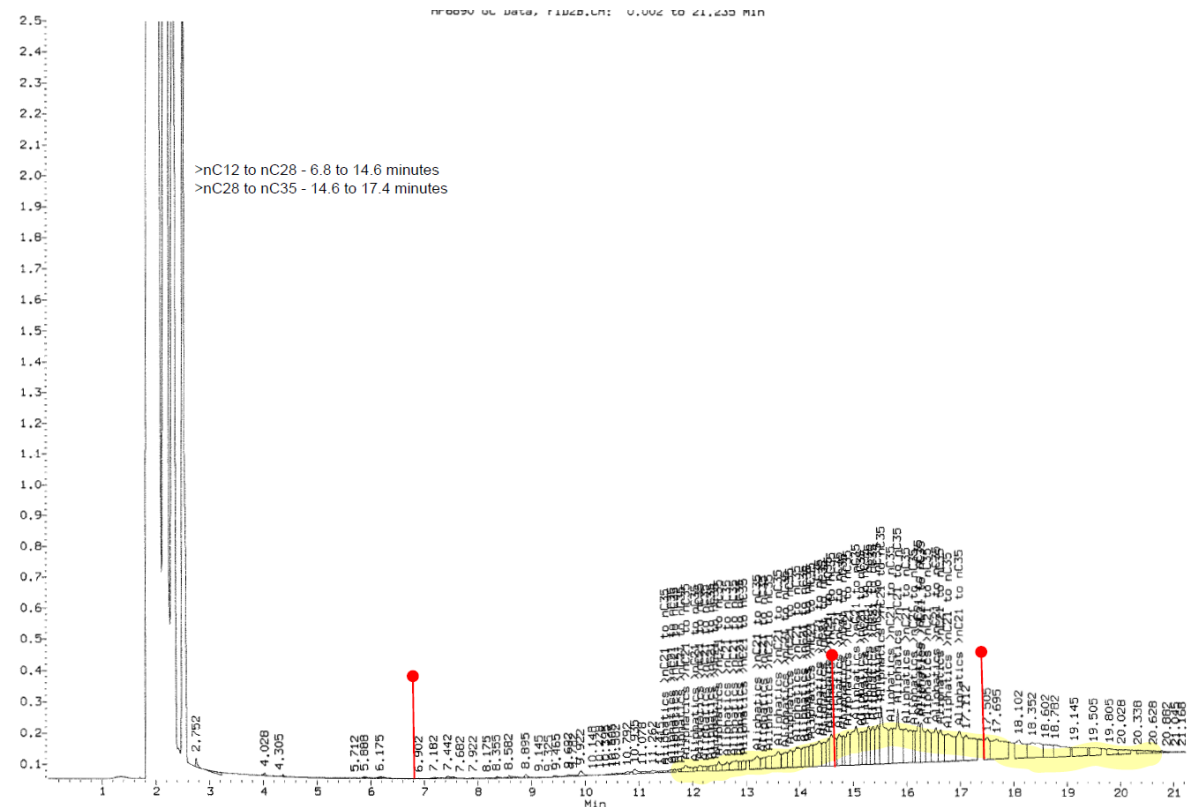


Figure 3 – Petroleum Hydrocarbon Reference (Bureau Veritas)

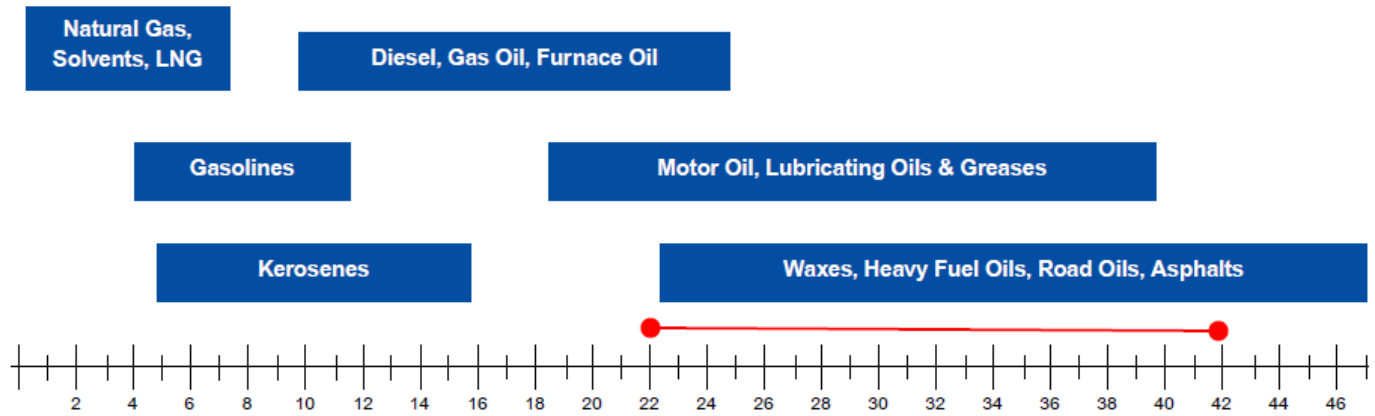


Figure 4 – Normal Alkane Distribution

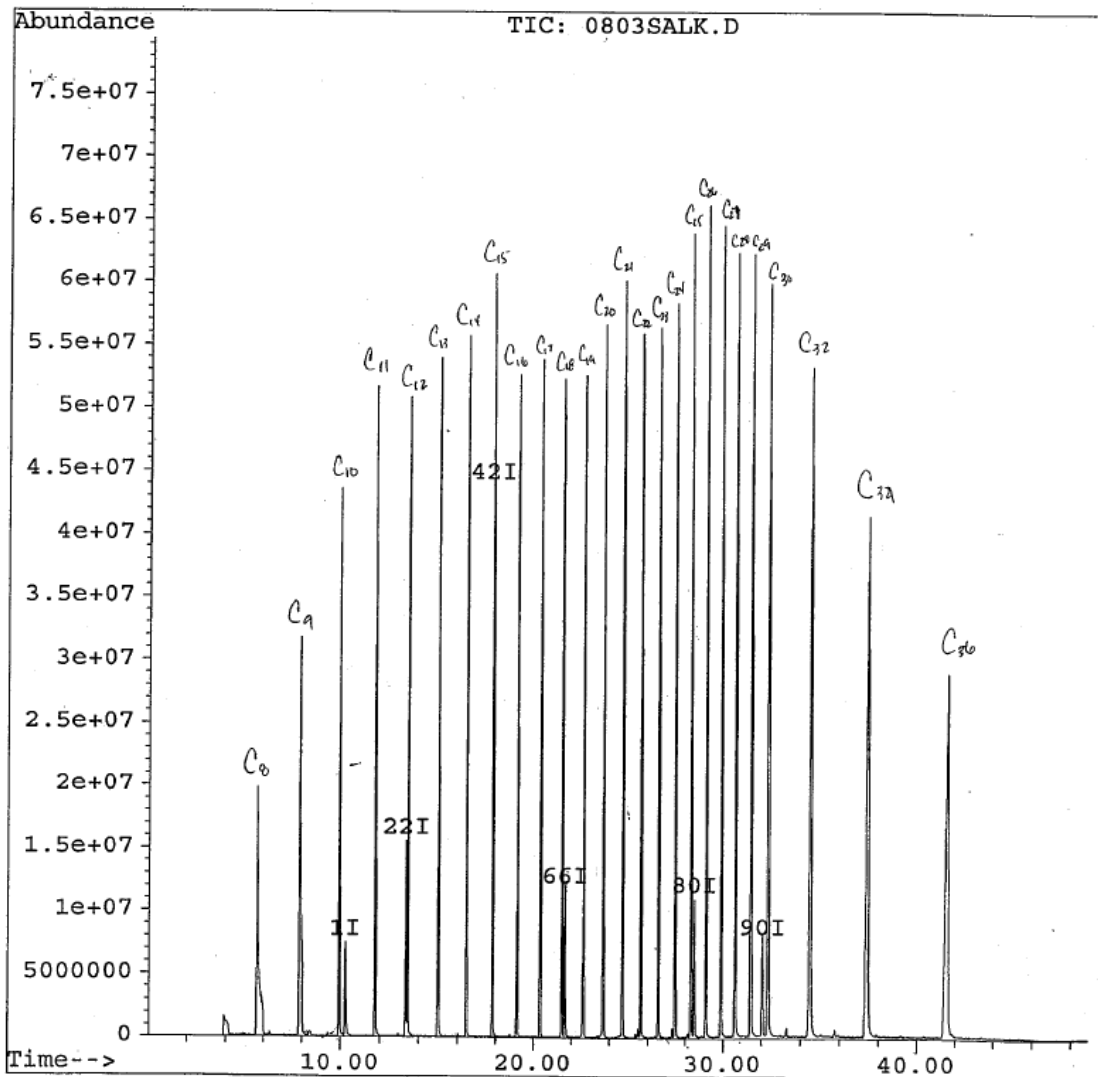


Figure 5 - May 2025 Sample Chromatogram with Retention Time Markers

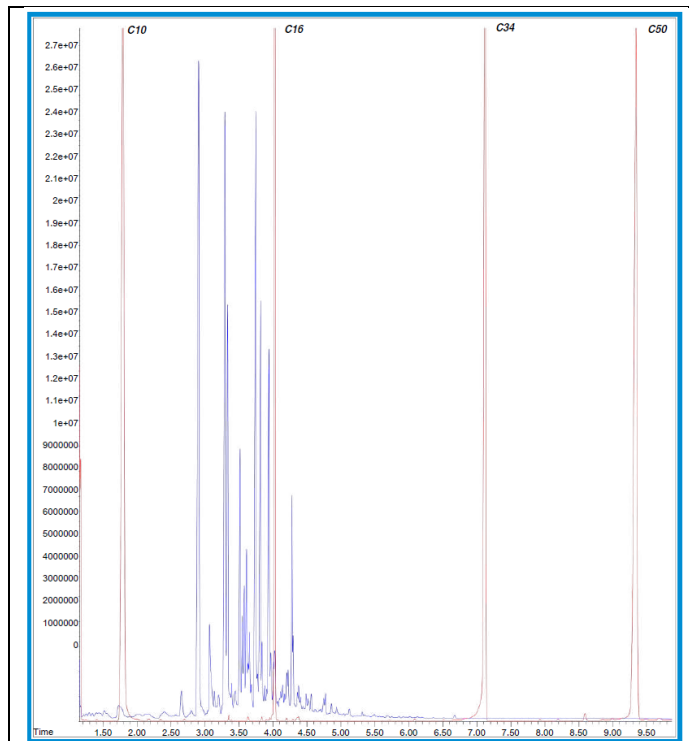
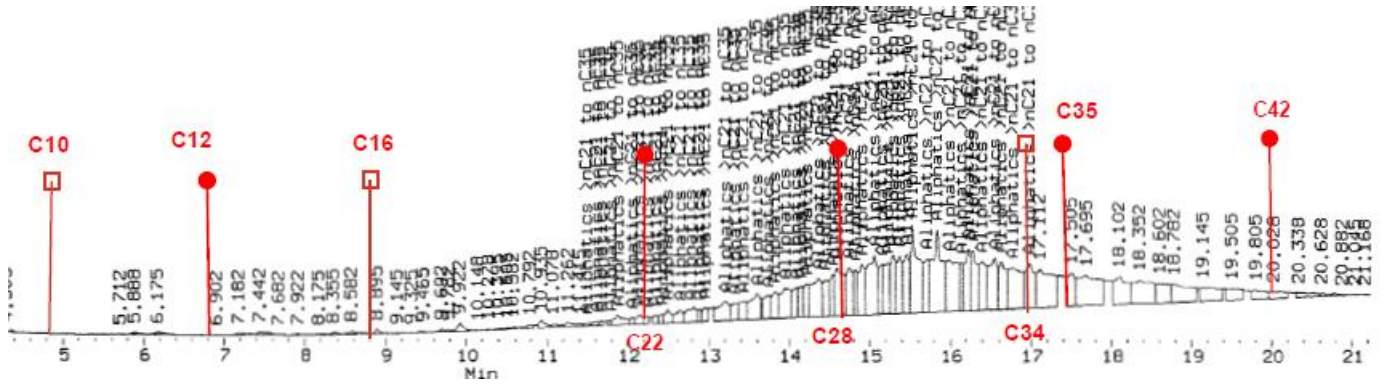


Figure 6 – Creosote Reference Chromatogram

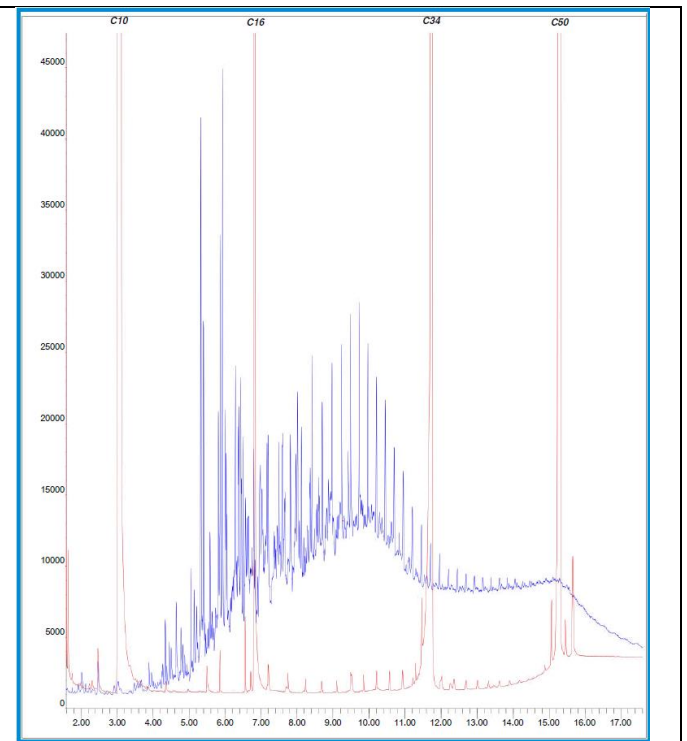


Figure 7 - #6 Fuel Oil Reference Chromatogram

Figure 8 - May 2025 Sample Chromatogram with Retention Time Markers

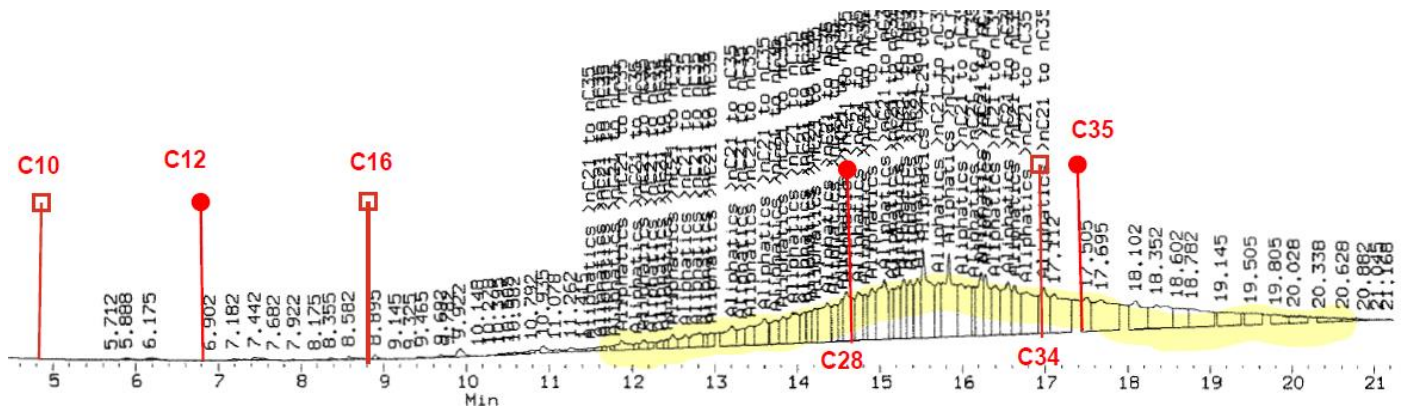


Figure 9 – Motor Oil Reference Chromatograms

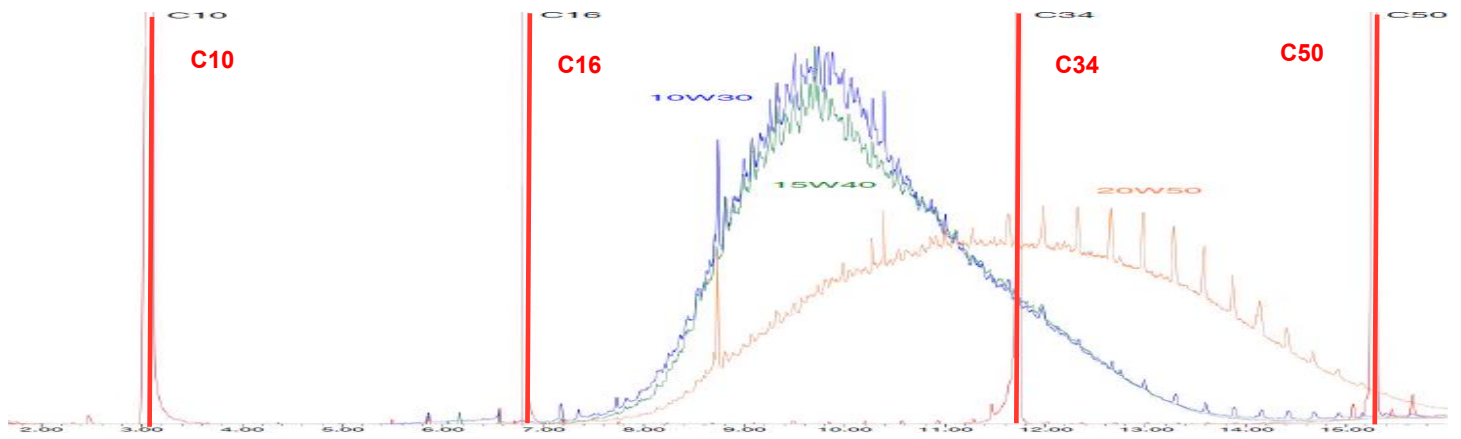


Figure 10 – Motor Oil Reference Chromatograms from C10 to C50

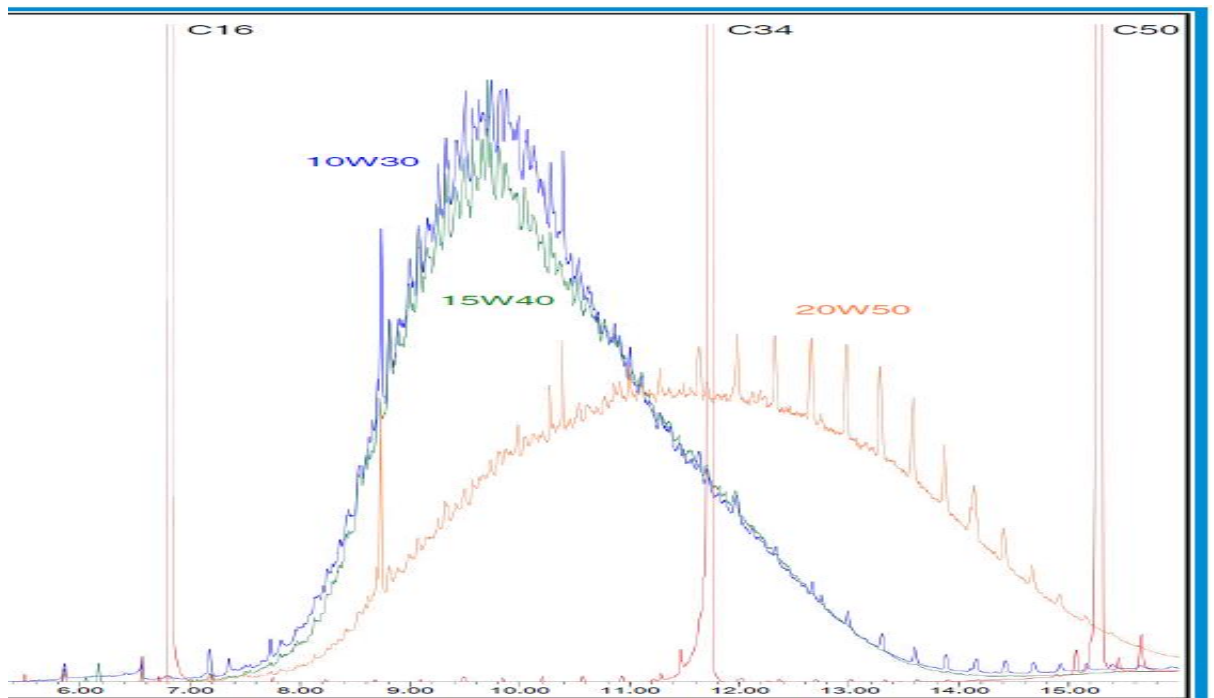


Figure 11 - August 2025 Sample Chromatogram

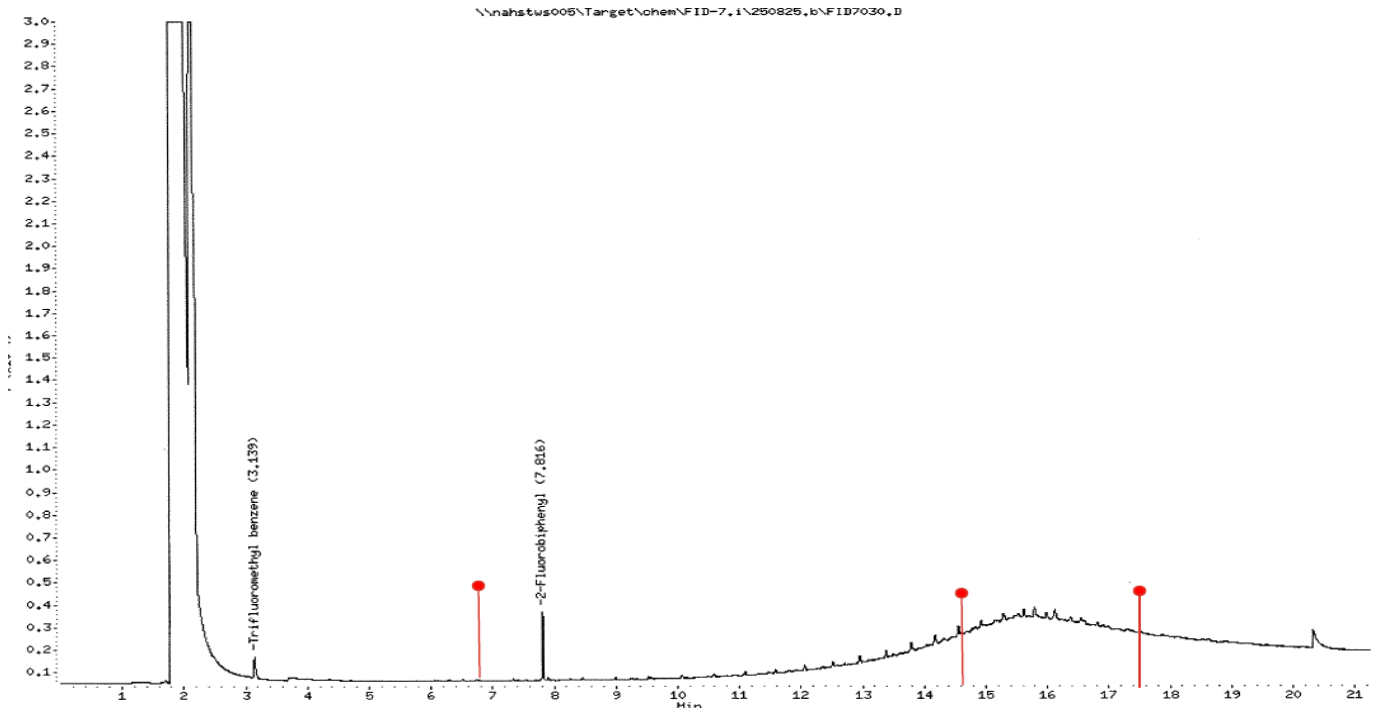


Figure 12 - May 2025 Sample Chromatogram

