



December 10, 2020

Project No. 19119232

Ms. Maureen Hatfield

Texas Commission on Environmental Quality
MC-127
VCP-CA Section, Team 1, Remediation Division
P.O. Box 13087
Austin, Texas 78711-3087

**RE: MONTHLY STATUS UPDATE – ENGLEWOOD INTERMODAL YARD – NAPL COLLECTION SYSTEM/CONCRETE CAP REPAIRS
UNION PACIFIC RAILROAD HOUSTON WOOD PRESERVING WORKS FACILITY
4910 LIBERTY ROAD FACILITY, HOUSTON, TEXAS
POST-CLOSURE CARE PERMIT NO. HW-50343; INDUSTRIAL SWR NO. 31547**

Dear Ms. Hatfield:

Golder Associates, Inc. (Golder), on behalf of Union Pacific Railroad Company (UPRR), is pleased to provide this monthly status update for November 2020 for the implementation of the cap repairs identified in the Updated Post-Response Action Care Report (PRACR) dated January 16, 2018 for the UPRR Houston Wood Preserving Works Facility (the Site). Monthly status updates were requested by the Texas Commission on Environmental Quality (TCEQ) in a letter dated March 20, 2018.

The non-aqueous phase liquid (NAPL) Collection System was installed in the Englewood Intermodal Yard to address the tar-like substance seeps within parking slots B100 to B109 (for container trailers). The following is a summary of the observations from the weekly inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system for November 2020 (photographs from the weekly inspections are provided in Attachment A):

- No significant amount of NAPL has been visually observed or recovered from Sump 1 (B099/B100 slots), Sump 2 (B103/B104 slots), or Sump 3 (B107/B108 slots) during the month of November. Water continues to accumulate in the NAPL collection sumps.
- All three Sumps were last pumped down on September 1, 2020 and the recovered water is stored in the on-site frac tank. Water levels in Sumps 1, 2, and 3 fluctuated in November, decreasing from their October 2020 levels to 7, 14, and 13.5 inches from the top of the sumps, respectively, by November 24, 2020 and recovering to 2, 7 and 6 inches from the top of the sumps, respectively, by November 30, 2020. The water in Sumps 1, 2, and 3 was observed as being brown in color. No sheen or odor was reported during the inspections in the month of November.

- No tar-like NAPL seeps were observed within the NAPL Collection System area during the month of November. For areas outside the NAPL Collection System, very small amounts of tar-like material were occasionally noted on the concrete surface in stalls A022, B057, B101, and B102 where previous seeps have been observed. The overall amount of material recovered during November 2020 decreased from October 2020 with a total of less than 0.5 gallons of the tar-like material recovered in November.
- No seep water was observed in the paved areas during the November 2020 inspections. UPRR will continue to have USES pressure wash the areas where the brown staining and seeps are observed as needed. Recovered wash water stored in a tote from previous events was removed from site by UPRR contractor NRC on November 30, 2020 and taken to Seabreeze Landfill for disposal. The final manifests will be provided in the December monthly update.
- During the week of July 13, 2020, Golder, on behalf of UPRR, coordinated with USES to excavate seven test pits in areas where historical NAPL seeps (Slots A010, A021, A098, B013, B057, B096, and B108) had been observed in the Englewood Intermodal Yard. During the November 2020 weekly inspections, no NAPL seeps have been observed at the test pit locations. The NAPL noted at Slot B057 is outside of the test pit area conducted in Slot B057. The test pit locations will continue to be inspected on a weekly basis, and Golder, on behalf of UPRR, will prepare a summary report of the test pit findings including weekly inspections for submittal to the TCEQ following the pilot test period specified in the Response Action Plan (RAP) (August 31, 2020) (January 2021).

Weekly site inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system will continue to be conducted. In response to the TCEQ letter dated August 9, 2019, 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. No measurable NAPL has been detected in the sumps using the interface probe through November 2020.

If you have any questions or need additional information, please feel free to call us at (512) 671-3434 or Mr. Kevin Peterburs of UPRR at (414) 267-4164.

Sincerely,

Golder Associates Inc.



Eric C. Matzner, P.G.
Principal / Program Leader



Eric Pastor, P.E.
Principal / Program Leader

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

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

TABLE

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
10/24/2019	3	35	25	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108
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
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
12/11/2019	1.5	17	16.54	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108
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
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
7/31/2020	0	11	10	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
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	

Note:

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

ATTACHMENT A

Weekly Inspection Photolog



PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No. 19119232
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Photo No. 1	Date: 11/04/2020
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Description:

Frac tank for storage of pumped down water from NAPL Collection Sumps (in Slot B110) and tote for storage of recovered pressure wash water/brown water, looking northwest.

Lat: 29.7841028
Long: - 95.3209833



Photo No. 2	Date: 11/04/2020
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Description:

Slot A021, no tar-like material seeps observed where test pit (July 2020) conducted, looking south.

Lat: 29.785392,
Long: -95.318655





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 3	Date: 11/04/2020
Description: Slot B057, no tar-like material seeps observed where test pit (July 2020) conducted, looking north. Lat: 29.7847472 Long: - 95.3195417	



Photo No. 4	Date: 11/04/2020
Description: Slot B101, no tar-like material seeps observed, looking north. Lat: 29.784275 Long: - 95.320813	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 5	Date: 11/04/2020
Description: Slot B102, small amount of tar-like material seeping at asphalt joint, material was removed. Lat: 29.7842203 Long: - 95.320827	



Photo No. 6	Date: 11/04/2020
Description: Slot B105, no tar-like material seeps observed, looking north. Lat: 29.7841472 Long: - 95.3208777	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No.: 7	Date: 11/04/2020
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Description:

Slot B108, view of NAPL Collection System (Sump B107/B108 and test pit in background). No tar-like material seeps observed, looking north.

Lat: 29.784125
Long: - 95.320989



Photo No.: 8	Date: 11/04/2020
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Description:

Sump 3 (B107/B108), 12 inches of freeboard in sump. No sheen, odor or tar-like material observed.

Lat: 29.7842861
Long: - 95.3208611





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
9

Date:
11/11/2020

Description:

Slot A022, very small amount of tar-like material seeping at joint, material was removed.

Lat: 29.785392,
Long: -95.318655



Photo No.
10

Date:
11/11/2020

Description:

Slot B057, very small amount of tar-like material seeping at asphalt crack (not near July 2020 test pit), material was removed.

Lat: 29.7847472
Long: - 95.3195417





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 11	Date: 11/11/2020
Description: Slot B096, no tar-like material seeps observed where test pit (July 2020) conducted, looking north. Lat: 29.7842528 Long: - 95.3206250	



Photo No. 12	Date: 11/11/2020
Description: Slot B101, very small amount of tar-like material seeping at asphalt crack. Material was removed. Lat: 29.784275 Long: - 95.320813	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 13	Date: 11/11/2020
Description: Slot B102, small amount of tar-like material seeping at asphalt joint, material was removed.	
Lat: 29.7842203 Long: - 95.320827	



Photo No. 14	Date: 11/11/2020
Description: Slot B103, view of NAPL Collection System (Sump 103/104 on left). No tar-like material seeps observed, looking north.	
Lat: 29.7841639 Long: - 95.3208694	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No. 19119232
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Photo No. 15	Date: 11/11/2020
Description: Slot B105, no tar-like material seeps observed, looking north Lat: 29.7841472 Long: - 95.3208777	



Photo No. 16	Date: 11/11/2020
Description: Slot B108, view of NAPL Collection System (Sump B107/B108 and test pit in background). No tar-like material seeps observed, looking north. Lat: 29.784125 Long: - 95.320989	





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
17

Date:
11/18/2020

Description:

Slot A010, no tar-like material seeps observed where test pit (July 2020) conducted, looking south.

Lat: 29.7855833,
Long: -95.318375



Photo No.
18

Date:
11/18/2020

Description:

Slot B013, no tar-like material seeps observed where test pit (July 2020) conducted, looking north.

Lat: 29.785217
Long: - 95.318261





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 19	Date: 11/18/2020
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Description:

Slot B057, very small amount of tar-like material seeping at asphalt crack (not near July 2020 test pit), material was removed.

Lat: 29.7847472
Long: - 95.3195417



Photo No. 20	Date: 11/18/2020
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Description:

Slot B096, no tar-like material seeps observed where test pit (July 2020) conducted, looking north.

Lat: 29.7842528
Long: - 95.3206250





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 21	Date: 11/18/2020
Description: Sump 1 (B099/B100), 3.5 inches of freeboard in sump, no sheen or odor noted. Lat: 29.7844000 Long: - 95.3205861	



Photo No. 22	Date: 11/18/2020
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Description: Sump 2 (B103/B104), 12 inches of freeboard in sump, no sheen or odors noted. Lat: 29.7842861 Long: - 95.3208611	
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PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 23	Date: 11/18/2020
Description: Slot B105, no tar-like material seeps observed, looking north. Lat: 29.7841472 Long: -95.3208777	

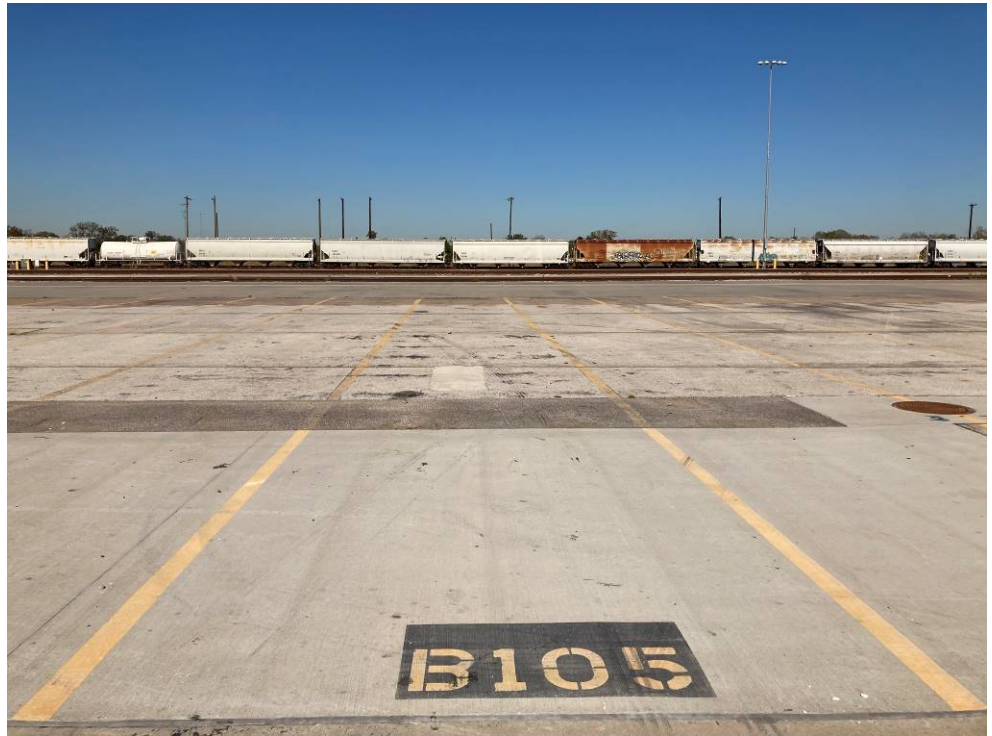


Photo No. 24	Date: 11/18/2020
Description: Slots B109-B097, NAPL collection system visible in background, residual brown staining observed along the crack in the asphalt, looking northeast. Lat: 29.784116 Long: -95.321022	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 25	Date: 11/24/2020
Description Slot A022, very small amount of tar-like material seeping at joint, material was removed. Lat: 29.785392, Long: -95.318655	



Photo No. 26	Date: 11/24/2020
Description: Slot B013, no tar-like material seeps observed where test pit (July 2020) conducted, looking north. Lat: 29.785217 Long: - 95.318261	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 27	Date: 11/24/2020
Description: Slot B057, no tar-like material seeps observed, looking north. Lat: 29.7847472 Long: - 95.3195417	



Photo No. 28	Date: 11/24/2020
Description: Slot B100, view of NAPL Collection System (Sump 099/100 in background). No tar-like material seeps observed, looking north. Lat: 29.7842472 Long: - 95.3206944	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No.: 29	Date: 11/24/2020
Description: Slot B101, no tar-like material seeps observed, looking north. Lat: 29.784275 Long: - 95.320813	



Photo No.: 30	Date: 11/24/2020
Description: Slot B102, very small amount of tar-like material seeping at joint, material was removed. Lat: 29.7842203 Long: - 95.320827	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 31	Date: 11/24/2020
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Description:

Slots B096-B109, NAPL collection system visible in background, residual brown staining observed along the crack in the asphalt, looking northwest.

Lat: 29.7842528
Long: - 95.3206250



Photo No. 32	Date: 11/24/2020
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Description:

Sump 3 (B107/B108), 13.5 inches of freeboard in sump. No sheen, odor, or tar-like material observed.

Lat: 29.7842861
Long: - 95.3208611





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
33

Date:
11/30/2020

Description:

Slot A021, no tar-like material seeps observed where test pit (July 2020) conducted, looking south.

Lat: 29.785392,
Long: -95.318655



Photo No.
34

Date:
11/30/2020

Description:

Slot A022, no tar-like material seeps observed, looking south.

Lat: 29.785392,
Long: -95.318655





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No. 35	Date: 11/30/2020
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Description:

Slots B108-B096, NAPL collection system visible in background, residual brown staining observed along the crack in the asphalt, looking northeast.

Lat: 29.7842861
Long: - 95.3208611



Photo No. 36	Date: 11/30/2020
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Description:

Sump 1 (B099/B100), 2 inches of freeboard in sump, no sheen or odor noted.

Lat: 29.7844000
Long: - 95.3205861





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
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Photo No.: 37	Date: 11/30/2020
Description: Slot B102, very small amount of tar-like material seeping at asphalt joint, material was removed. Lat: 29.7842203 Long: - 95.320827	



Photo No.: 38	Date: 11/30/2020
Description: Slot B103, view of NAPL Collection System (Sump 103/104 on left). No tar-like material seeps observed, looking north. Lat: 29.7841639 Long: - 95.3208694	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No. 19119232
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Photo No. 39	Date: 11/30/2020
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Description:

Sump 2 (B103/B104), 7 inches of freeboard in sump, no sheen or odors noted.

Lat: 29.7842861
Long: - 95.3208611



Photo No. 40	Date: 11/30/2020
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Description:

Slot B108, view of NAPL Collection System (Sump B107/B108 and test pit in background). No tar-like material seeps observed, looking north.

Lat: 29.784125
Long: - 95.320989

