



August 13, 2021

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), a member of WSP, on behalf of Union Pacific Railroad Company (UPRR), is pleased to provide this monthly status update for July 2021 for inspections conducted at the Englewood Intermodal Yard concrete cap area within the UPRR Houston Wood Preserving Works Facility (the Site). Monthly status updates were requested by the Texas Commission on Environmental Quality (TCEQ) in a letter dated March 20, 2018.

The non-aqueous phase liquid (NAPL) Collection System was installed in the Englewood Intermodal Yard in January 2019 to address the tar-like substance seeps within parking 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 July 2021 (photographs from the weekly inspections are provided in Attachment A):

- The water levels in Sump 1 (B099/B100 slots), Sump 2 (B103/B104 slots), and Sump 3 (B107/B108 slots) were at the top of the sumps during the July 7th and July 14th weekly inspections. The sumps were pumped down on July 15, 2021. Approximately 10,000 gallons were removed from the sumps during the pump down event. The water level in Sump 1 recovered to the top of the sump by July 21, 2021. The water levels in Sumps 2 and 3 recovered to 37 inches and 35.5 inches from the top of the sumps, respectively, by July 29, 2021. Water level data for the sumps are available in Table 1. The water in the sumps was observed as being brown in color. No sheens or odors were reported during the July 2021 inspections or pump down.
- The NAPL collection sumps have continued to be checked weekly for DNAPL using an interface probe. Even though no measurable DNAPL has been noted, a dipper tool has continued to be used to further evaluate the presence of and recover DNAPL, if present, from the bottom of each of the sumps during the weekly inspections. However, no DNAPL was observed or encountered using the dipper tool during

the weekly inspection during July. In addition, no DNAPL was visually observed or recovered from Sump 1, 2, or 3 during the July pump down event.

- A very small tar-like NAPL surface seep was observed near the NAPL Collection System area in stall B105 during two of the four inspections in July (July 7th and 29th) (Photo Nos. 7 and 37). For areas outside the NAPL Collection System, small amounts of tar-like material were observed on the concrete surface in stalls A022 and B102 during each inspection event in July. Tar-like material observed during the inspection events was recovered using a hand tool to scrape up the material. During July, the number of tar-like material seeps observed during inspections and the total amount of material removed from the concrete surface decreased compared to the June inspections. A total of approximately 1.2 gallons of tar-like material was recovered for the month and placed in a drum for disposal. The drum is staged at the Container Storage Area (CSA).
- No widespread brown water seeping or staining was observed during the July inspections. UPRR will continue to have a remediation contractor pressure wash the areas where the brown staining and seeps are observed as needed.
- Golder, on behalf of UPRR, submitted to the TCEQ the Englewood IM Yard Test Pit Evaluation Report dated June 2, 2021 summarizing the findings from the test pits installed in July 2020 including weekly inspections since the installation. During the weekly inspections through July 2021, no NAPL seeps have been observed at the seven test pit locations (slots A010, A021, A098, B013, B057, B096, and B108). During the June 30, 2021 inspection, concrete patches covering test pits in slots B013 and B096 were observed to be damaged. During the July 7, 2021 inspection, concrete patches in slots A010 and B057 were observed to be damaged. The A021 concrete patch was observed to be damaged on July 29, 2021. UPRR will coordinate with a subcontractor to repair the concrete patches.
- Weekly site inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system will continue to be conducted. 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 July 2021.

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 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	

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	
12/10/2020	5	10.5	10	Not measurable	
12/18/2020	4	10	9	Not measurable	
12/23/2020	1	9	7.5	Not measurable	
12/31/2020	0	4	3.5	Not measurable	
1/6/2021	4	10.5	9	Not measurable	
1/15/2021	43	39	37.5	Not measurable	Sumps 1, 2, & 3 pumped down
1/22/2021	0	34	33	Not measurable	Sheen visible in B107/B108 sump
1/29/2021	2	31	30	Not measurable	Sheen visible in B107/B108 sump
2/4/2021	4	30	29.5	Not measurable	Sheen visible in B099/B100 sump
2/10/2021	0	27	25.5	Not measurable	
2/17/2021	0	0	0	Not measurable	
2/24/2021	2	10	9.5	Not measurable	
3/2/2021	0	0	0	Not measurable	
3/10/2021	0	10	9.75	Not measurable	
3/17/2021	0	2	1	Not measurable	
3/24/2021	0	3.5	2	Not measurable	
3/31/2021	0	6.5	7	Not measurable	
4/8/2021	0	7.5	7	Not measurable	
4/14/2021	0	6.5	6	Not measurable	Less than 0.1 gal of DNAPL recovered B107/B108 sump; Sheen visible in B103/104 and B107/B108 sumps
4/21/2021	0.5	9	8.5	Not measurable	
4/28/2021	0	8.5	8	Not measurable	
5/5/2021	0	7.5	7	Not measurable	
5/12/2021	0	8	7.5	Not measurable	
5/19/2021	0	0	0	Not measurable	
5/26/2021	0	2	0.5	Not measurable	
5/27/2021	41	32	26	Not measurable	Sumps 1,2, & 3 pumped down
6/2/2021	0	40	38	Not measurable	Sheen visible in B107/108 sump
6/9/2021	0	30	28.5	Not measurable	
6/16/2021	0	24	25	Not measurable	
6/23/2021	0	12	13	Not measurable	
6/30/2021	0	3	1	Not measurable	
7/7/2021	0	0	0	Not measurable	
7/14/2021	0	0	0	Not measurable	Sumps 1,2, & 3 pumped down (July 15)
7/21/2021	0	39	37	Not measurable	
7/29/2021	0	37	35.5	Not measurable	

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
---	---	---------------------------------

Photo No. 1	Date: 7/7/2021
-----------------------	--------------------------

Description:

Slot A010, no tar-like material seeps observed where test pit conducted (July 2020), test pit pavement damaged, water from recent rain event, looking southeast.

Lat: 29.7855833,
Long: -95.318375



Photo No. 2	Date: 7/7/2021
-----------------------	--------------------------

Description:



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

Lat: 29.785392,
Long: -95.318655





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad		Site Location: Englewood Houston, Texas	Project No.: 19119232
Photo No.: 3	Date: 7/7/2021		
Description: Slot B057, no tar-like material seeps observed where test pit conducted (July 2020), test pit pavement damaged, water from recent rain event, looking northwest. Lat: 29.7847472 Long: - 95.3195417			
Photo No.: 4	Date: 7/7/2021		
Description: Slot B096, no tar-like material seeps observed where test pit conducted (July 2020), test pit pavement damaged, water from recent rain event, looking northwest. Lat: 29.7842528 Long: - 95.3206250			



PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
---	---	---------------------------------

Photo No. 5	Date: 7/7/2021
Description: Slot B101, no tar-like material seeps observed, historical seep location covered by shipping container, water from recent rain event, looking northwest. Lat: 29.784275 Long: - 95.320813	



Photo No. 6	Date: 7/7/2021
Description: Slot B102, small amount of tar-like material seeping at pavement joint, material was removed, water from recent rain event. Lat: 29.7842203 Long: - 95.320827	





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
7

Date:
7/7/2021

Description:

Slot B105, very small amount of tar-like material seeping at asphalt crack, material was removed.

Lat: 29.7841472
Long: - 95.3208777



Photo No.
8

Date:
7/7/2021

Description:

Sump 3 (B107/B108), 0 inches of freeboard in sump. No sheen or odors noted. No tar-like material recovered.

Lat: 29.7842861
Long: - 95.3208611





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
9

Date:
7/14/2021

Description:

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

Lat: 29.785392,
Long: -95.318655



Photo No.
10

Date:
7/14/2021

Description:

Slot B013, no tar-like material seeps observed where test pit conducted (July 2020), test pit pavement damaged, water from recent rain event, looking northwest.

Lat: 29.785217
Long: - 95.318261





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
11

Date:
7/14/2021

Description:

Slot B057, no tar-like material seeps observed where test pit conducted (July 2020), historical seep location covered by shipping container, test pit pavement damaged, water from recent rain event, looking northwest.

Lat: 29.7847472
Long: - 95.3195417



Photo No.
12

Date:
7/14/2021

Description:

Slot B097, no brown staining observed, water from recent rain event, looking northwest.

Lat: 29.784300
Long: -95.320711





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
13

Date:
7/14/2021

Description:

Slot B101, no tar-like material seeps observed, historical seep location covered by shipping container, water from recent rain event, looking northwest.

Lat: 29.784275
Long: - 95.320813



Photo No.
14

Date:
7/14/2021

Description:

Slot B102, small amount of tar-like material seeping at pavement joint, material was removed.

Lat: 29.7842203
Long: - 95.320827





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
15

Date:
7/14/2021

Description:

Slot B105, no tar-like material seeps observed, looking northwest.

Lat: 29.7841472
Long: - 95.3208777



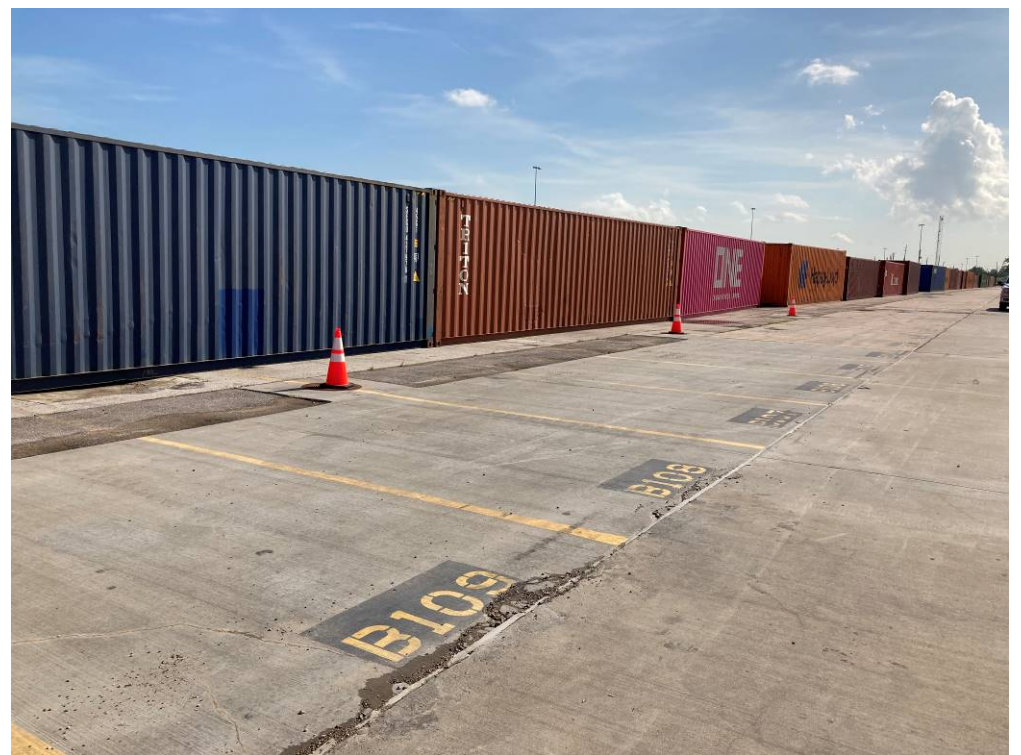
Photo No.
16

Date:
7/14/2021

Description:

View of slots B109-B097, NAPL collection system visible in background, looking northeast.

Lat: 29.784358
Long: -95.320611





PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
17

Date:
7/15/2021

Description:

Sump 1 (B099/B100), prior to pump down event, 0 inches of freeboard in sump, no sheen or odor noted.

Lat: 29.7844000
Long: - 95.3205861



Photo No.
18

Date:
7/15/2021

Description:

Sump 1 (B099/B100), emptied during pump down event, no sheen or odor noted.

Lat: 29.7844000
Long: - 95.3205861





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
19

Date:
7/15/2021

Description:

Sump 3 (B107/B108), at the start of the pump down event, 0 inch of freeboard in sump. No sheen, odors, or tar-like material noted.

Lat: 29.7842861
Long: - 95.3208611



Photo No.
20

Date:
7/15/2021

Description:

Sump 3 (B107/B108), during pump down event. No sheen, odors, or tar-like material noted.

Lat: 29.7842861
Long: - 95.3208611





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
---	---	---------------------------------

Photo No. 21	Date: 7/15/2021
Description: Sump 2 (B103/B104), during pump down event after removing water from Sump 3, no sheen or odors observed. Lat: 29.7842861 Long: - 95.3208611	



Photo No. 22	Date: 7/15/2021
Description: Sump 2 (B103/B104), water entering sump during pump down event, no sheen or odors observed. Lat: 29.7842861 Long: - 95.3208611	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
---	---	---------------------------------

Photo No. 23	Date: 7/21/2021
-------------------------------	---------------------------

Description:

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

Lat: 29.7855833,
Long: -95.318375



Photo No. 24	Date: 7/21/2021
-------------------------------	---------------------------

Description:

Slot A022, small amount of tar-like material seeping at asphalt crack, material was removed.

Lat: 29.785392,
Long: -95.318655





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
25

Date:
7/21/2021

Description:

Slot B057, no tar-like material seeps observed where test pit conducted (July 2020), historical seep location covered by shipping container, test pit pavement damaged, looking northwest.

Lat: 29.7847472
Long: - 95.3195417



Photo No.
26

Date:
7/21/2021

Description:

Sump 1 (B099/B100), 0 inches of freeboard in sump, no sheen or odor noted.

Lat: 29.7844000
Long: - 95.3205861





Client Name:
Union Pacific Railroad

Site Location:
Englewood Houston, Texas

Project No.
19119232

Photo No.
27

Date:
7/21/2021

Description:

Slot B101, no tar-like material seeps observed, historical seep location covered by shipping container, looking northwest.

Lat: 29.784275
Long: - 95.320813



Photo No.
28

Date:
7/21/2021

Description:

Slot B102, small amount of tar-like material seeping at pavement 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

Photo No.
29

Date:
7/21/2021

Description:

Sump 2 (B103/B104), 39 inches of freeboard in sump. No sheen or odors noted.

Lat: 29.7842861
Long: - 95.3208611



Photo No.
30

Date:
7/21/2021

Description:

Slot B108, view of NAPL Collection System (Sump B107/B108 and test pit in background). No tar-like material seeps observed where test pit (July 2020) conducted, looking northwest.

Lat: 29.784125
Long: - 95.320989





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
---	---	---------------------------------

Photo No. 31	Date: 7/29/2021
Description: Slot A021, no tar-like material seeps observed where test pit conducted (July 2020), test pit pavement damaged. Lat: 29.785392, Long: -95.318655	



Photo No. 32	Date: 7/29/2021
Description: Slot A022, very small amount of tar-like material seeping at asphalt crack, material was removed. Lat: 29.785392, Long: -95.318655	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
---	---	---------------------------------

Photo No. 33	Date: 7/29/2021
Description Slot B013, no tar-like material seeps observed where test pit conducted (July 2020), test pit pavement damaged. Lat: 29.785217 Long: - 95.318261	



Photo No. 34	Date: 7/29/2021
Description: Slot B057, no tar-like material seeps observed where test pit conducted (July 2020), test pit pavement damaged. Lat: 29.7847472 Long: - 95.3195417	





PHOTOGRAPHIC LOG

Client Name: Union Pacific Railroad	Site Location: Englewood Houston, Texas	Project No.: 19119232
---	---	---------------------------------

Photo No. 35	Date: 7/29/2021
-------------------------------	---------------------------

Description:

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

Lat: 29.7842528
Long: - 95.3206250



Photo No. 36	Date: 7/29/2021
-------------------------------	---------------------------

Description:

Slot B102, small amount of tar-like material seeping at pavement 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
---	---	--------------------------------

Photo No. 37	Date: 7/29/2021
Description: Slot B105, small amount of tar-like material observed seeping observed at asphalt crack, material was removed. Lat: 29.7841472 Long: - 95.3208777	



Photo No. 38	Date: 7/29/2021
Description: Sump 3 (B107/B108), 35.5 inches of freeboard in sump. No sheen or odors noted. No tar-like material recovered. Lat: 29.7842861 Long: - 95.3208611	

