

April 15, 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), on behalf of Union Pacific Railroad Company (UPRR), is pleased to provide this monthly status update for March 2021 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 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 March 2021 (photographs from the weekly inspections are provided in Attachment A):

No NAPL was 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 March. Water continues to accumulate in the NAPL collection sumps. The water appears to be related to rainfall where some of the storm water enters from the surface through the covers for the sumps. As indicated in the January 2021 monthly update, UPRR proposed to cease the sporadic pump down events that removed the water in the sumps. The pump downs had been performed to evaluate if removing the accumulated storm water had any effects on the NAPL accumulation in the sumps. From 2019 through January 2021, the sporadic pump down events do not appear to affect the amount of DNAPL recovered in the sumps. The sumps have continued to be checked for DNAPL using an interface probe every week. Even though no measurable DNAPL has been noted, a dipper tool has continued to be used in an attempt to

recover DNAPL from the bottom of each of the sumps during the weekly inspections. No DNAPL was recovered in March 2021. TCEQ issued a letter dated April 5, 2021 stating that the TCEQ disagreed with ceasing the pump downs of water from the sumps. UPRR is in the process of responding to the TCEQ letter and will continue to evaluate the water management in the sumps.

- After the pump down in January 2021, the water level in Sump 1 returned to the top of the sump by the January 22nd weekly inspection and has remained near the top of the sump through March 31, 2021. Water levels in Sumps 2 and 3 continue to fluctuate between rainfall events. The water level in both Sumps 2 and 3 was at the top of the sump on March 2, 2021. The levels then receded to 10 and 9.75 inches from the top of the sumps, respectively, by the March 10th inspection. On March 17, 2021, the water level in both Sumps 2 and 3 had again recovered to near surface level and receded to 6.5 and 7 inches respectively by March 31, 2021. 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 March.
- No tar-like NAPL seeps were observed within the NAPL Collection System area during the month of March. For areas outside the NAPL Collection System, a very small amount of tar-like material was observed on the concrete surface in stalls A022, B013, B057, B101, and B105 during at least one weekly inspection event in March with more seeps observed during the last two inspections of the month (March 24, 2021 and March 31, 2021). Tar-like material observed during the inspection events was recovered upon its observation. While the number of tar-like material seeps observed during inspections increased through the month of March as daily temperatures increased, a total amount of less than 0.1 gallons was removed from the concrete surface.
- No widespread seep water was observed in the paved areas during the March 2021 inspections.
  UPRR will continue to have USES pressure wash the areas where the brown staining and seeps are observed as needed.
- 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 (IM) Yard. Following the test pit activities, Golder inspects the repaired concrete areas where the test pits were excavated to assess if the NAPL seeps return as part of the pilot test. During the March 2021 weekly inspections, no NAPL seeps have been observed at the test pit locations. The seep observed in stall B013 during the March 24<sup>th</sup> inspection is located at the joint near the center of the slot, and not at the test pit location. The seep observed in slot B057 during the March 31<sup>st</sup> inspection is located at an asphalt crack near the western edge of the slot. The test pit locations will continue to be inspected on a weekly basis, and Golder, on behalf of UPRR, will prepare the Englewood IM Yard Test Pit Evaluation Report of the test pit findings including weekly inspections for submittal to the TCEQ as specified in the Initial Draft Permit.
- As indicated in the December 2020 monthly status update, a camera survey was performed on the storm sewer pipes in the Intermodal Yard as part of the Englewood IM Yard Test Pit Evaluation on December 8, 2020. The camera was unable to advance the full length of several drainpipes due to build-up of sediments and deposits (e.g., mud) within the drainpipes. Golder, on behalf of UPRR, coordinated with USES to remove the obstructions within sections of the storm system on December 21 and 22, 2020 using a power wash and vacuum system to contain and recover the water. The waste generated during the December obstruction removal effort was characterized, profiled, and transported and disposed of off-site on February 12, 2021. Another camera survey was performed on January 8, 2021. The camera was able to advance the full length and/or further than previously in some

drainpipes. However, some of the drainpipes still had mud buildup that prevented the camera from advancing the full length of the pipes. Another obstruction removal and camera survey event was conducted on February 24 through 26, 2021. Water and material from the obstruction removal effort were placed in five vacuum boxes and stored on-site in stalls C129 and C131 (Photos 9 and 40). Details on the camera and obstruction removal activities will be provided in the Englewood IM Yard Test Pit Evaluation Report indicated above.

• Two frac tanks and a vacuum box (Photos 8 and 9) are staged at the Englewood Intermodal Yard that contain waste from UPRR activities not related to the Site. These wastes will be disposed of off-site in accordance with state and federal regulations.

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 March 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 1NAPL Measurements - NAPL Collection System - Englewood Intermodal YardUPRR Houston, tx - Wood Preserving Works

	Sump 1	Sump 2	Sump 3		
Measured	(B099/B100)	(B103/B104)	(B107/B108)	Depth to DNAPL	Commente
Date	Freeboard (in)	Freeboard (in)	Freeboard (in)	(in)	Comments
8/14/2019	2.5 0	28 27.5	29 26.5	Not measurable Not measurable	
8/21/2019	44.5	47.9	26.5 45	Not measurable	Water from sumps pumped out
8/28/2019					water from sumps pumped out
9/4/2019 9/13/2019	19 0	42 39.5	41.5 38	Not measurable Not measurable	
9/13/2019 9/20/2019	0	39.5	2.5	Not measurable	
9/20/2019	0	42	42.5	Not measurable	Water from sumps pumped out
9/25/2019	0	42	42.5	NOT MEASURADIE	Sheen visible in B107/B108 sump, less than 0.1 gal of
10/2/2019	2.5	42.5	42	Not measurable	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
					Less than 0.1 gal of DNAPL recovered from B107/B108
10/24/2019	3	35	25	Not measurable	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		26	25.5	Not measurable	Sump
	4	26	23.5	Not measurable	
11/27/2019	0	25	23	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108
12/3/2019	2	25.5	25	Not measurable	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 23	21 22	Not measurable	
4/28/2020	0	23	22	Not measurable	Maaguramonte ware not taken: the inspector was
E / / /2020				Not Measured	Measurements were not taken; the inspector was
5/4/2020	-	- 20	-	Not Measured	unable to open the sumps
5/12/2020	0		19	Not measurable	Sump 1 numped down (May 22nd)
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 10	5 9	Not measurable Not measurable	
6/10/2020 6/17/2020	0	10	9 11	Not measurable	
	1	0	0	Not measurable	
6/25/2020	0	0	0		
6/30/2020 7/1/2020	48	46	47	Not measured Not measurable	Sumps 1, 2, & 3 pumped down
//1/2020	40	40	4/		Jumps 1, 2, & 5 pumpeu uown

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

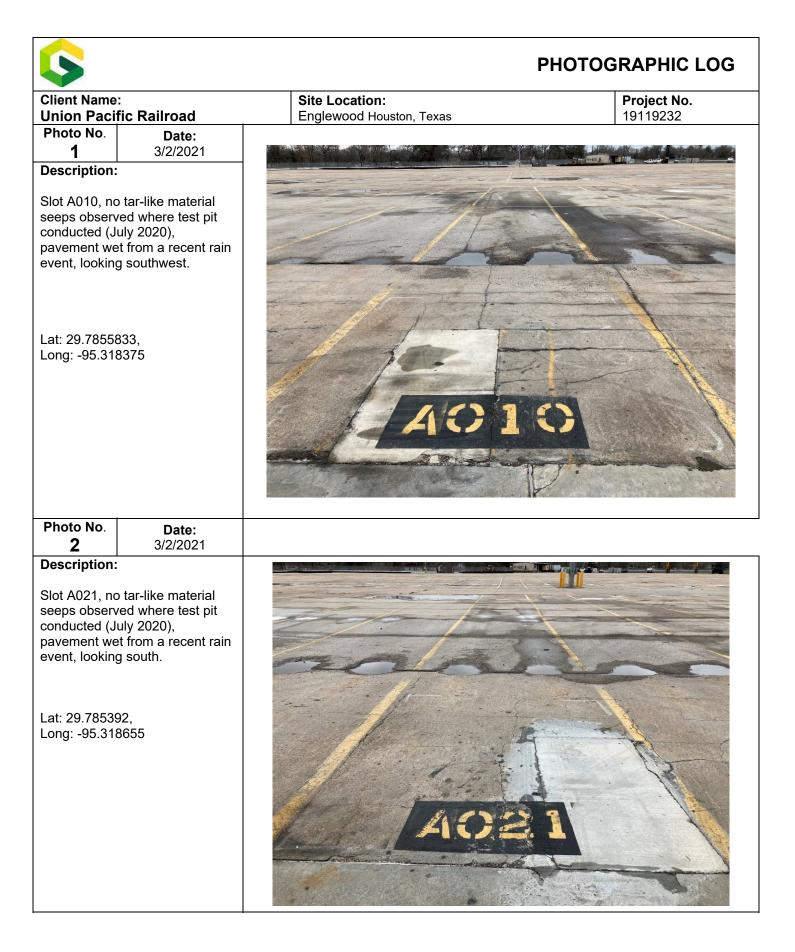
	Sump 1	Sump 2	Sump 3		
Measured	(B099/B100)	(B103/B104)	(B107/B108)	Depth to DNAPL	
Date	Freeboard (in)	Freeboard (in)	Freeboard (in)	(in)	Comments
					Less than 0.1 gal of DNAPL recovered from B107/B108
7/8/2020	34	24.5	24	Not measurable	Sump
					Sheen visible in B99/B100 sump & B107/B108 sump,
7/15/2020	32	29.5	29	Not measurable	less than 0.1 gal of DNAPL recovered B107/B108 sump
					Less than 0.1 gal of DNAPL recovered from B107/B108
7/23/2020	0	23	22.5	Not measured	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	
					Sumps 1, 2, & 3 pumped down (September 1); Sheen
9/2/2020	43	37	38	Not measurable	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	

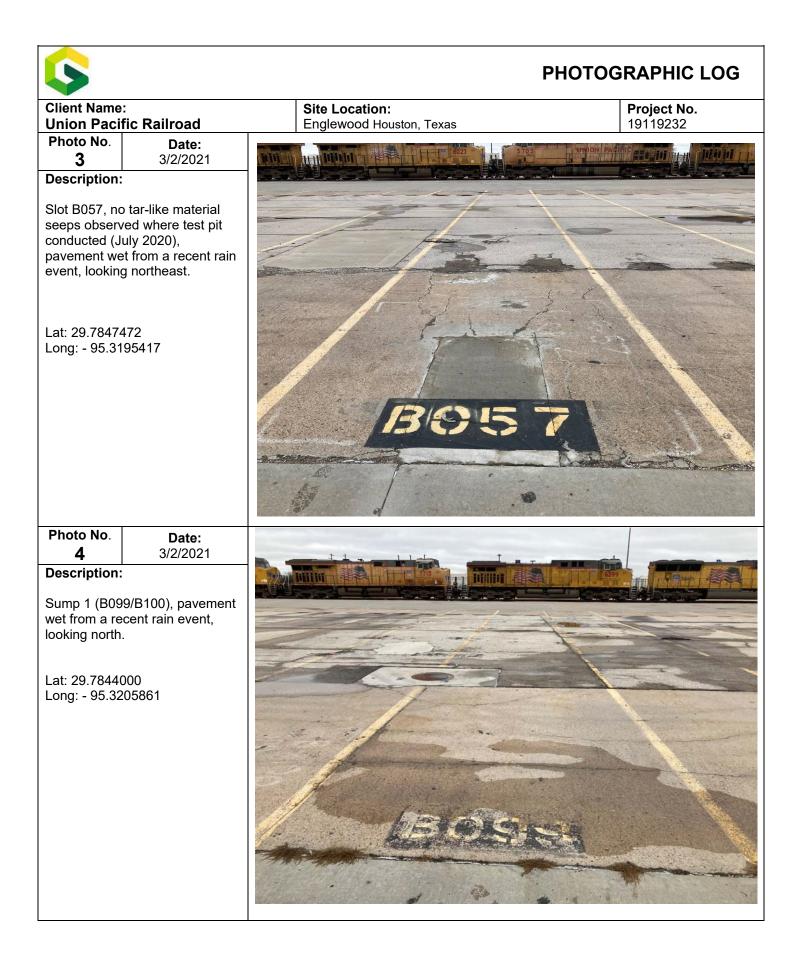
#### Note:

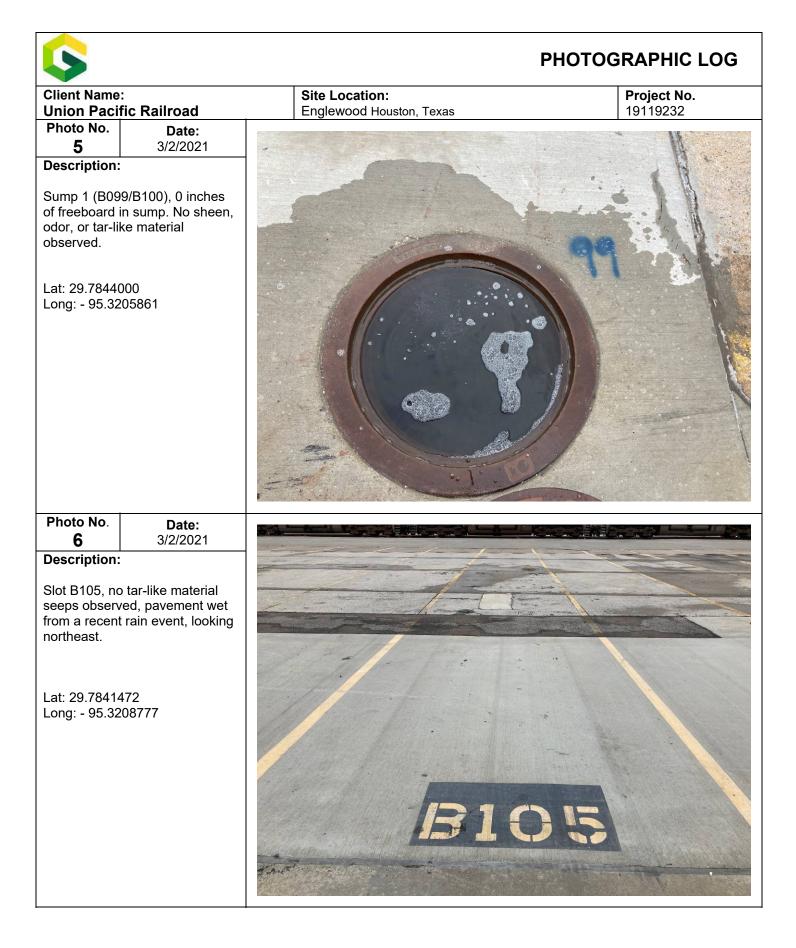
Freeboard in sumps is measured as depth to water from top rim of sump, measured in inches

ATTACHMENT A

Weekly Inspection Photolog

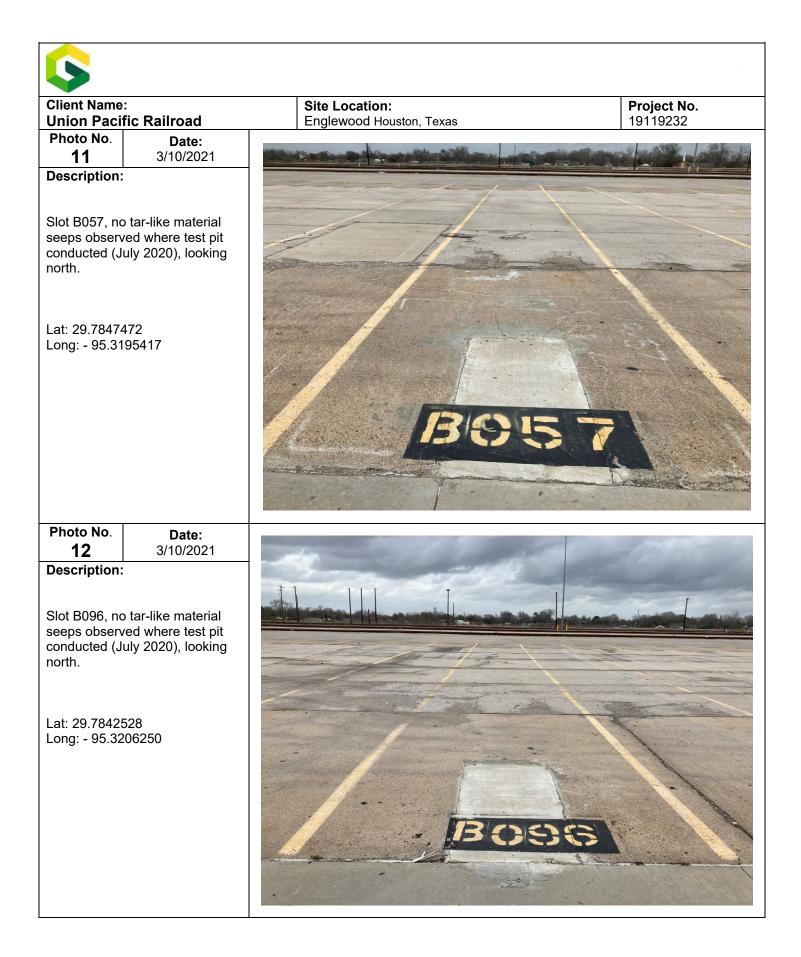


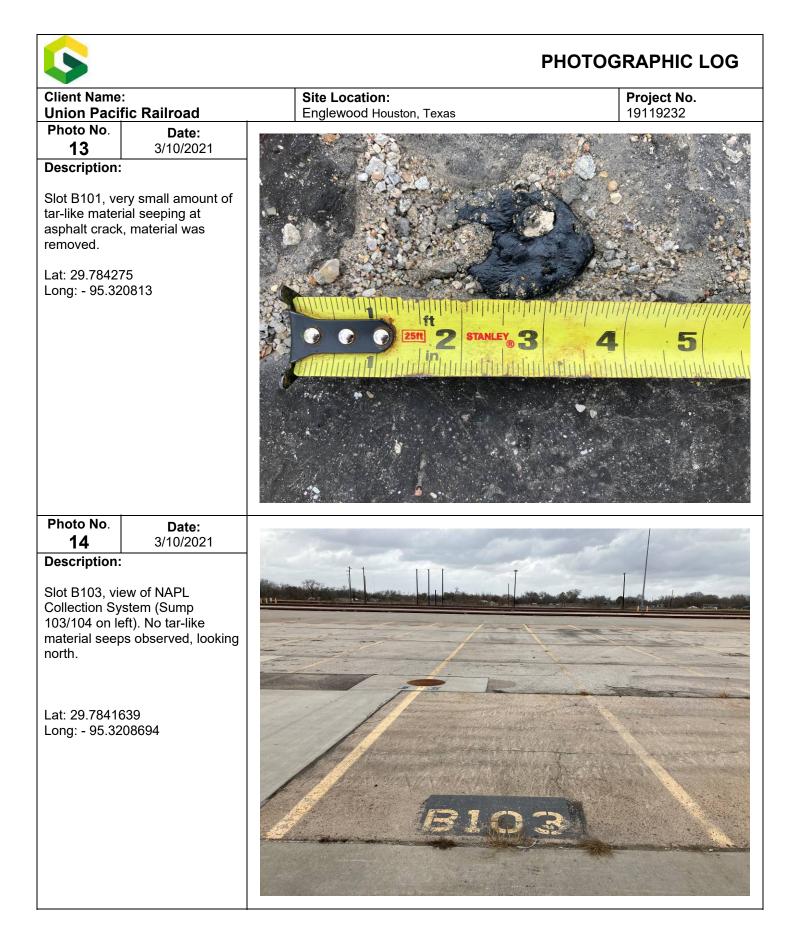


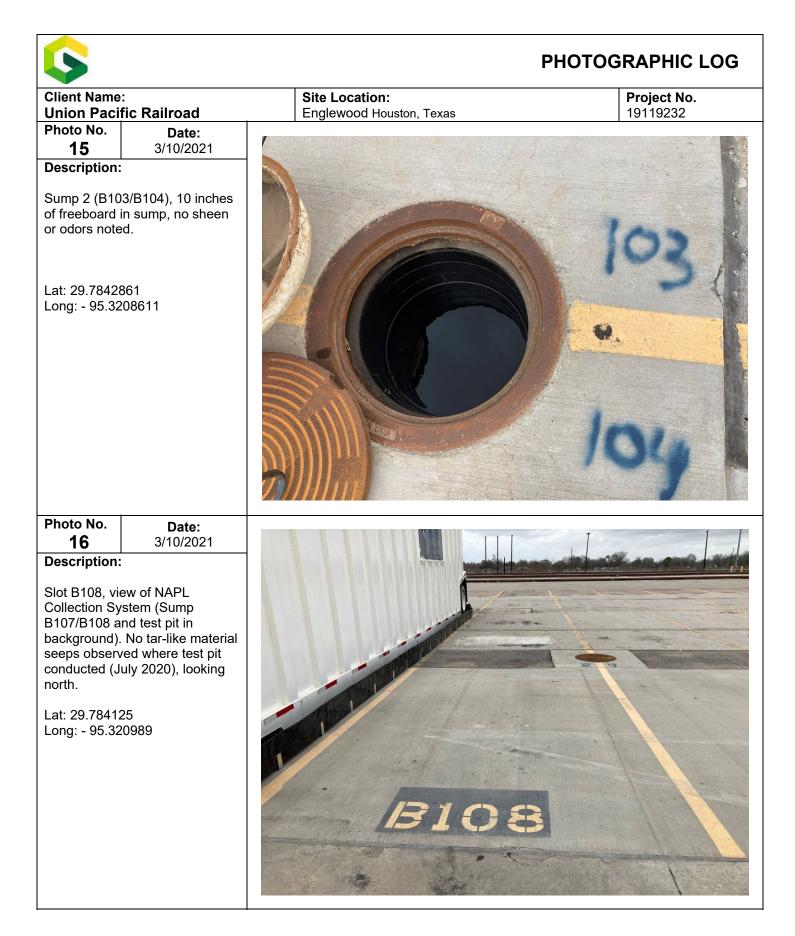








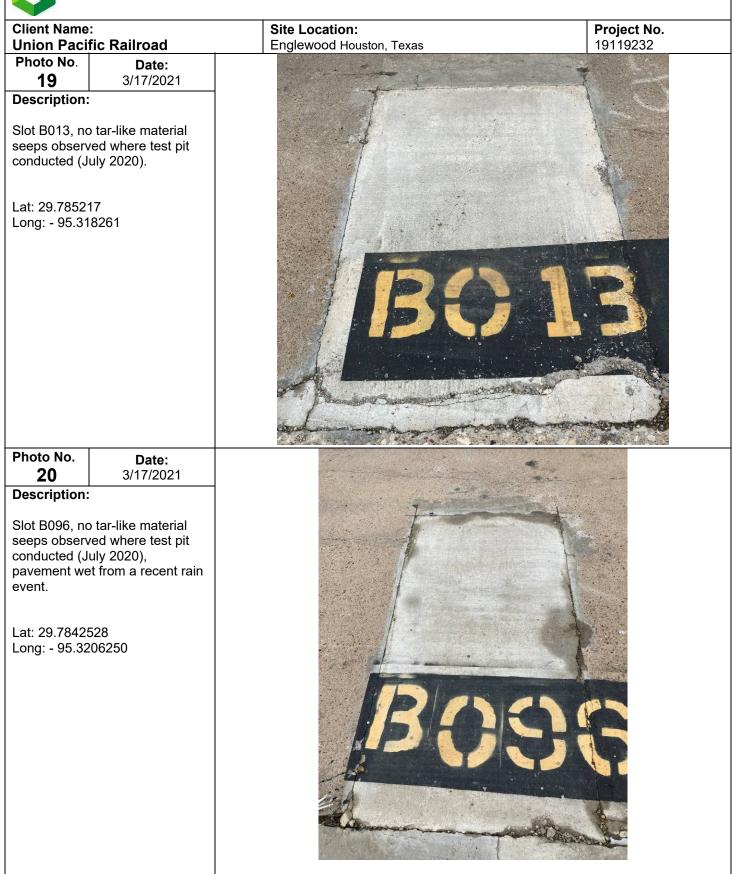






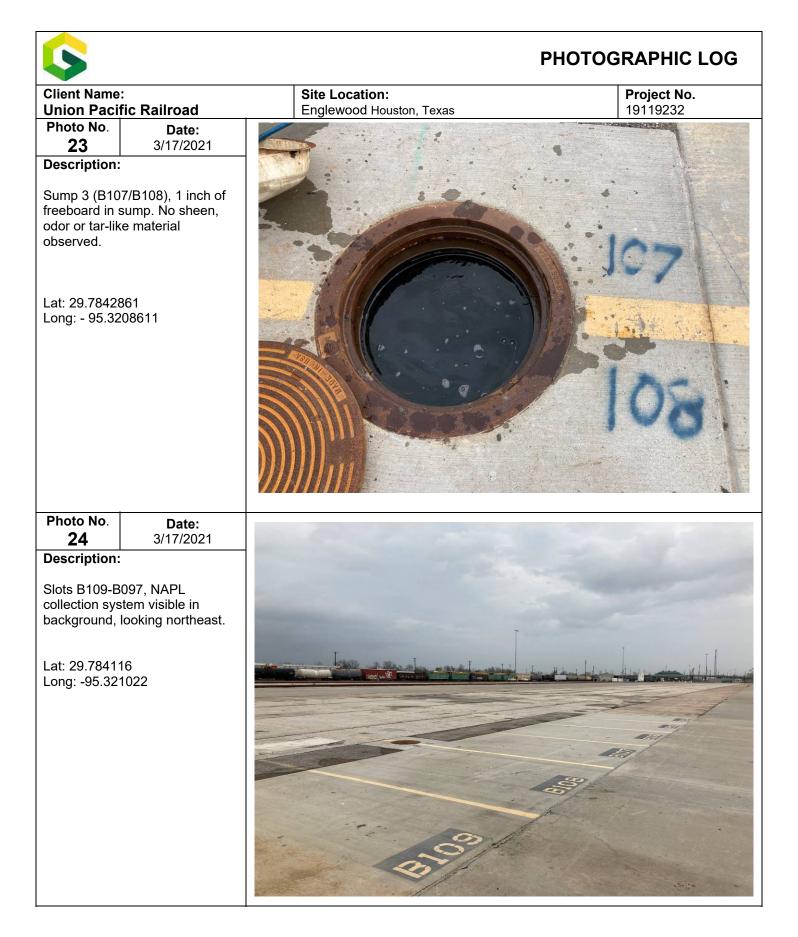
Client Name	e: ific Railroad	Site Location: Englewood Houston, Texas	<b>Project No.</b> 19119232
Photo No. 17	Date: 3/17/2021	Eligiewood Houston, Texas	19119232
<b>Description:</b> Slot A010, no tar-like material seeps observed where test pit conducted (July 2020), pavement wet from a recent rain event.			
Lat: 29.7855 Long: -95.31 <b>Photo No</b> .	8375		
<b>18</b>	<b>Date:</b> 3/17/2021		
Description: Slot A021, no tar-like material seeps observed where test pit conducted (July 2020), pavement wet from a recent rain event. Lat: 29.785392,			
Long: -95.31	8655		

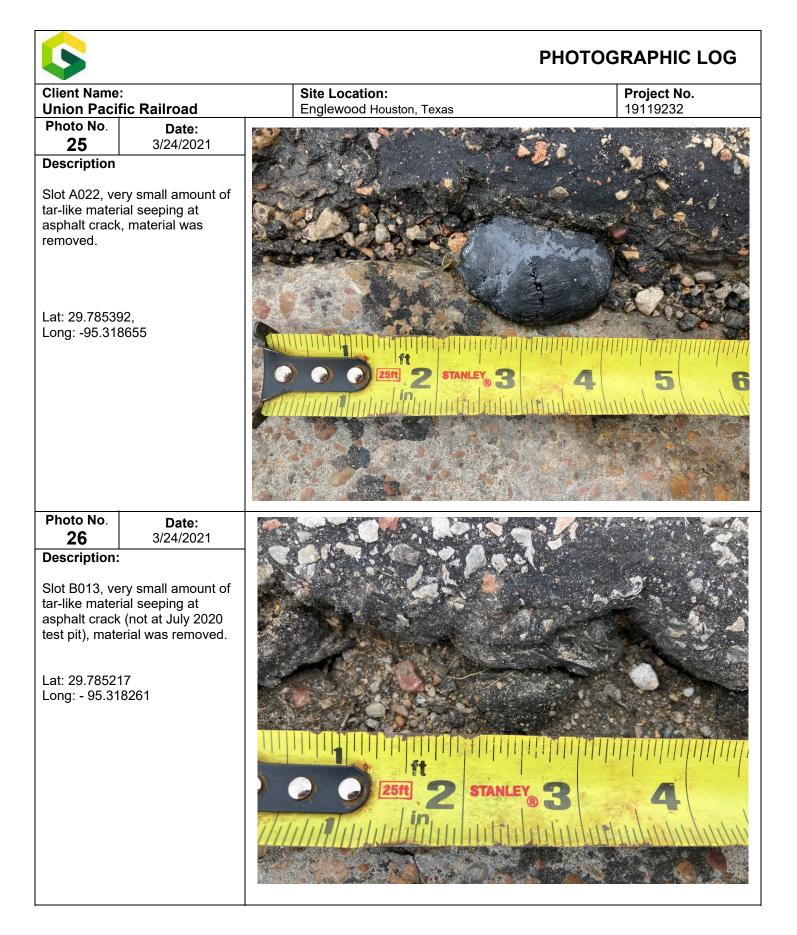


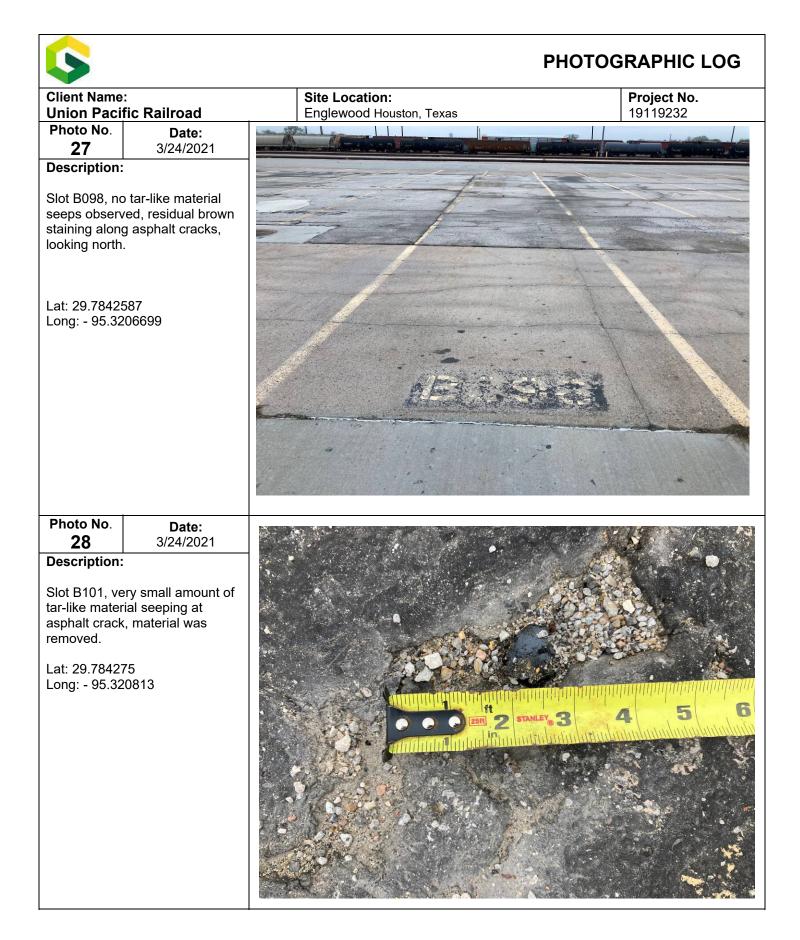




## PHOTOGRAPHIC LOG Client Name: Site Location: Project No. Union Pacific Railroad 19119232 Englewood Houston, Texas Photo No. Date: 21 3/17/2021 **Description:** Slot B101, very small amount of tar-like material seeping at asphalt crack, material was removed. Lat: 29.784275 Long: - 95.320813 Photo No. Date: 22 3/17/2021 Description: Sump 1 (B099/B100), 0 inches of freeboard in sump, no sheen or odor noted. Lat: 29.7844000 Long: - 95.3205861









### PHOTOGRAPHIC LOG

Client Name Union Paci	: fic Railroad	Site Location: Englewood Houston, Texas	<b>Project No.</b> 19119232
Photo No. <b>29</b>	<b>Date:</b> 3/24/2021		
Description			the second secon
Slot B102, no tar-like material seeps observed, looking north.			
Lat: 29.7842203 Long: - 95.320827			
			2
Photo No.	Date:		
30 Description:	3/24/2021		
Sump 2 (B103/B104), 3.5 inches of freeboard in sump. No sheen or odor observed.			103
Lat: 29.7842861 Long: - 95.3208611			101

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<b>Client Name</b>	:	Site Location:	Project No.	
<b>Union Paci</b>	fic Railroad	Englewood Houston, Texas	19119232	
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31	3/24/2021			
Description:			Re- States	
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32	<b>Date:</b> 3/24/2021			
Description:			and the state of the	
-				
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Slot B108, VI				
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Collection Sy B107/B108 a background) seeps observ	nd test pit in . No tar-like material /ed where test pit			
Collection Sy B107/B108 a background) seeps observ (July 2020) c	nd test pit in No tar-like material			
Collection Sy B107/B108 a background) seeps observ (July 2020) c	nd test pit in . No tar-like material /ed where test pit			
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Collection Sy B107/B108 a background) seeps observ (July 2020) c north. Lat: 29.78412	nd test pit in No tar-like material ved where test pit onducted, looking 25	Bige		
Collection Sy B107/B108 a background) seeps observ (July 2020) c north. Lat: 29.7841	nd test pit in No tar-like material ved where test pit onducted, looking 25	Bigs		

PHOTOGRAPHIC LOG

