

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

- Sump 1 (B099/B100 slots), Sump 2 (B103/B104 slots), and Sump 3 (B107/B108 slots) were pumped down on July 15, 2021. The water level in Sump 1 recovered to the top of the sump by July 21, 2021 and has remained there through August 25, 2021. The water levels in Sumps 2 and 3 increased through the month of August, recovering to 20 and 22 inches from the top of the sumps, respectively, by the August 25<sup>th</sup> inspection. Water level data for the sumps are available in Table 1. The water in the sumps was observed as being brown in color. A sheen was observed on the water in Sumps 2 and 3 on August 4, 2021 (Photo Nos. 6 and 8). No odors were reported during the August 2021 inspections.
- 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

Golder Associates Inc.

2201 Double Creek Dr, Suite 4004, Round Rock, Texas, USA 78664

T: +1 512 671-3434 F: +1 512 671-3446

Texas Commission on Environmental Quality

September 15, 2021

the weekly inspections. No DNAPL was observed or encountered using the dipper tool during the weekly inspection during August.

- 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 August (August 4th and 25th) (Photo Nos. 7 and 31). A very small amount of tar-like NAPL was also observed near the NAPL Collection System area in stalls B103 (Photo No. 15) and B107 (Photo No. 16) during the August 11th inspection. 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 three of the four inspections in August (August 4th, 18th, and 25th). A small amount of tar-like NAPL was observed in stall B057 on August 25th and stall B101 on August 4th and August 25th. Tar-like material observed during the inspection events was recovered using a hand tool to scrape up the material. During August, the number of tar-like material seeps observed during inspections and the total amount of material removed from the concrete surface increased compared to the July inspections. A total of approximately 2.4 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).
- Standing water with brown staining mainly located within stalls A001-A050 and B096-B101 was observed during the August 11th inspection. The remediation contractor was called to mobilize to the Site on August 13th and pressure wash the area; however, Golder personnel arrived on the morning of August 13th and the standing water was not present. As a result, the area was not pressure washed and no water was recovered. 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 August 2021, no NAPL seeps have been observed at the seven test pit locations (slots A010, A021, A098, B013, B057, B096, and B108). The seep observed in slot B057 during the August 25th inspection is located at an asphalt crack near the western edge of the slot (Photo No. 28) and not at the test pit location. 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. During the August 11th weekly inspection, brown stained water had collected within the damaged concrete area at the test pit in B096 slot. UPRR is scheduling repairs to the test pit concrete patches and it is anticipated that those repairs will be conducted in September.
- 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 August 2021.



2

September 15, 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

	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
8/14/2019 8/21/2019	2.5 0	28 27.5	29 26.5	Not measurable  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	water nom samps pumped out
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
					Sheen visible in B107/B108 sump, less than 0.1 gal of
10/2/2019	2.5	42.5	42	Not measurable	DNAPL recovered
					Sheen visible in B107/B108 sump, less than 0.1 gal of
10/9/2019	3	42	41.5	Not measurable	DNAPL recovered
	_				Less than 0.1 gal of DNAPL recovered from B107/B108
10/16/2019	0	39.5	39	Not measurable	Sump
40/24/2040	2	25	25	No. 1	Less than 0.1 gal of DNAPL recovered from B107/B108
10/24/2019 10/29/2019	<u>3</u> 0	35 24	25 23	Not measurable  Not measurable	Sump Water from sumps pumped out
10/29/2019	0	40	39	Not measurable	Slight sheen visible in B107/B108 sump
11/6/2019	9	39	38.5	Not measurable	Slight sheen visible in b107/b100 sump
11/0/2019	<u> </u>	39	36.5	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108
11/13/2019	7	30	29	Not measurable	Sump
11/19/2019	4	26	25.5	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
					Less than 0.1 gal of DNAPL recovered from B107/B108
12/11/2019	1.5	17	16.54	Not measurable	Sump
12/17/2019	5	19.5	17.5	Not measurable	
12/23/2019		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 1/21/2020	0 2.5	32 26.5	31.5 26	Not measurable  Not measurable	
1/21/2020	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 4/28/2020	0	21 23	21 22	Not measurable  Not measurable	
4/28/2020	0	25	22	Not measurable	Measurements were not taken; the inspector was
5/4/2020	_	_	_	Not Measured	unable to open the sumps
5/12/2020	0	20	19	Not measurable	and to open the sumps
5/19/2020	0	15.75	14.25	Not measurable	Sump 1 pumped down (May 22nd)
5/27/2020	0	14	13	Not measurable	<u> </u>
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
_ /- /		<b>-</b> -			Less than 0.1 gal of DNAPL recovered from B107/B108
7/8/2020	34	24.5	24	Not measurable	Sump
					Chann visible in 200/2400 0 2407/2400
7/45/2020	22	30.5	20	Not mossific	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
7/22/2020	0	22	22.5	Not massured	Less than 0.1 gal of DNAPL recovered from B107/B108
7/23/2020	0	23 11	22.5 10	Not measured Not measurable	Sump
7/31/2020 8/5/2020	0	7	5	Not measurable  Not measurable	
8/3/2020	1	11	10	Not measurable	
8/13/2020	0	7	6	Not measurable	
0/ 13/ 2020	U	<u>'</u>	U	וזטנ ווובמטעומטופ	

## TABLE 1 NAPL Measurements - NAPL Collection System - Englewood Intermodal Yard UPRR 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
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	
4/8/2021	0	7.5	7	Not measurable	
					Less than 0.1 gal of DNAPL recovered B107/B108 sump;
4/14/2021	0	6.5	6	Not measurable	Sheen visible in B103/104 and B107/B108 sumps
4/21/2021	0.5	9	8.5	Not measurable	Sheeff visible in B103/104 and B107/B108 sumps
4/28/2021	0.5	8.5	8	Not measurable	
5/5/2021	0	7.5	7	Not measurable	
5/12/2021	0	7.5 8	7.5	Not measurable	
5/12/2021	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
					Depth to DNAPL measurements were not taken; the
8/11/2021	0	33	32	Not Measured	interface probe was not functioning properly
8/18/2021	0	25	23	Not measurable	,
8/25/2021	0	20	22	Not measurable	
. ,					1

## 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:** 

**Union Pacific Railroad** 

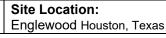
Photo No.

**Date:** 8/4/2021

#### Description:

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

Lat: 29.7855833, Long: -95.318375



**Project No.** 19119232



Photo No.

**Date:** 8/4/2021

#### Description:

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

Lat: 29.785392, Long: -95.318655





Project No.

**Client Name:** 

**Union Pacific Railroad** 

Date: 8/4/2021 Site Location:

Photo No. 3

#### **Description:**

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

Lat: 29.7842528 Long: - 95.3206250

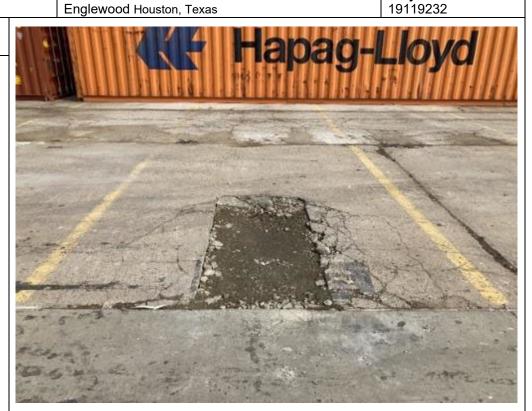


Photo No.

Date: 8/4/2021

#### **Description:**

Slot B101, small amount of tarlike material seeping at asphalt crack, material was removed.

Lat: 29.784275 Long: - 95.320813





Project No.

**Client Name:** 

**Union Pacific Railroad** 

Photo No. Date: 8/4/2021

#### **Description:**

Slot B102, small amount of tarlike material seeping at pavement joint, material was removed.

Lat: 29.7842203 Long: - 95.320827



Site Location:

Photo No.

**Date:** 8/4/2021

#### Description:

Sump 2 (B103/B104), 36 inches of freeboard in sump. Sheen visible on water in sump. No odors noted.

Lat: 29.7842861 Long: - 95.3208611





Project No.

19119232

**Client Name:** 

**Union Pacific Railroad** 

Photo No.

**Date:** 8/4/2021

Site Location:

Englewood Houston, Texas

#### **Description:**

Slot B105, small amount of tarlike material seeping at asphalt crack, material was removed.

Lat: 29.7841472 Long: - 95.3208777



Photo No.

**Date:** 8/4/2021

#### Description:

Sump 3 (B107/B108), 34 inches of freeboard in sump. Sheen visible on water in sump. No odors noted. No tar-like material recovered.

Lat: 29.7842861 Long: - 95.3208611





**Union Pacific Railroad** 

road Date: Site Location:

Photo No.

**Date:** 8/11/2021

#### **Description:**

Slot A011, brown water observed in depressions in asphalt, looking southeast.

Lat: 29.785392, Long: -95.318655



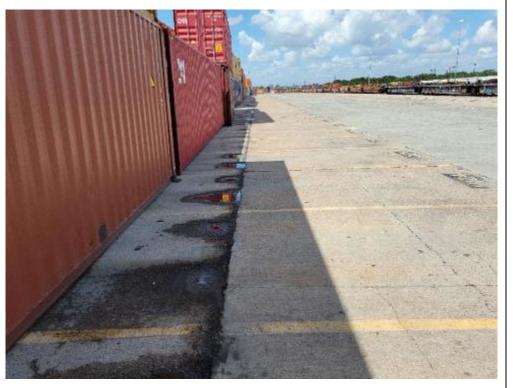
Photo No.

**Date:** 8/11/2021

#### Description:

Slot A022-A050, brown water observed in depressions in asphalt, looking west.

Lat: 29.785392, Long: -95.318655



Project No.



**Union Pacific Railroad** 

**Site Location:**Englewood Houston, Texas

**Project No.** 19119232

Photo No.

**Date:** 8/11/2021

#### **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 north.

Lat: 29.785217 Long: - 95.318261



Photo No.

**Date:** 8/11/2021

#### 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





**Union Pacific Railroad** 

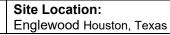
Photo No.

**Date:** 8/11/2021

#### Description:

Slot B096-B085, brown water observed in damaged B096 test pit pavement and along asphalt cracks, looking northeast.

Lat: 29.7842528 Long: - 95.3206250



**Project No.** 19119232



Photo No.

**Date:** 8/11/2021

#### Description:

Slot B100, brown stained water observed on standing on pavement and on B099/B100 sump, looking northwest.

Lat: 29.7842203 Long: - 95.320827





**Union Pacific Railroad** 

Site Location: Englewood Houston, Texas **Project No.** 19119232

Photo No.

**Date:** 8/11/2021

#### Description:

Slot B103, very small amount of tar-like material seeping at asphalt crack, material was removed.

Lat: 29.7841639 Long: - 95.3208694



Photo No.

**Date:** 8/11/2021

## Description:

Slot B107, small amount of tarlike material seeping at asphalt crack, material was removed.

Lat: 29.7841457 Long: -95.3209695





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

**Date:** 8/18/2021

#### **Description:**

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

Lat: 29.7855833, Long: -95.318375



**Project No.** 19119232



Photo No. 18

**Date:** 8/18/2021

## Description:

Slot A022, very small amount of tar-like material seeping at asphalt crack, material was removed, pavement wet from recent rain event.

Lat: 29.785392, Long: -95.318655





**Union Pacific Railroad** 

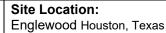
Photo No.

**Date:** 8/18/2021

#### Description:

Slot B057, no tar-like material seeps observed where test pit conducted (July 2020), test pit pavement damaged, water on pavement from recent rain event, looking northwest.

Lat: 29.7847472 Long: - 95.3195417



**Project No.** 19119232



Photo No. 20

**Date:** 8/18/2021

#### Description:

Sump 1 (B099/B100), 0 inches of freeboard in sump, no sheen or odor noted, water on pavement from recent rain event.

Lat: 29.7844000 Long: - 95.3205861





**Union Pacific Railroad** 

Photo No. 21

**Date:** 8/18/2021

## Description:

Slot B101, no tar-like material seeps observed, water on pavement from recent rain event, looking northwest.

Lat: 29.784275 Long: - 95.320813



**Project No.** 19119232



Photo No. 22

**Date:** 8/18/2021

#### **Description:**

Slot B102, small amount of tarlike material seeping at pavement joint, material was removed, water on pavement from recent rain event.

Lat: 29.7842203 Long: - 95.320827





**Client Name:** 

**Union Pacific Railroad** 

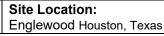
Photo No.

**Date:** 8/18/2021

#### Description:

Sump 2 (B103/B104), 25 inches of freeboard in sump. No sheen or odors noted. Pavement wet from recent rain event.

Lat: 29.7842861 Long: - 95.3208611



**Project No.** 19119232



Photo No. 24

**Date:** 8/18/2021

#### **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, water on pavement from recent rain event, looking northwest.

Lat: 29.784125 Long: - 95.320989





**Client Name:** 

**Union Pacific Railroad** 

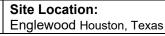
Photo No. **25** 

**Date:** 8/25/2021

#### **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



**Project No.** 19119232



Photo No. 26

**Date:** 8/25/2021

#### Description:

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

Lat: 29.785392, Long: -95.318655





Project No.

19119232

**Client Name:** 

**Union Pacific Railroad** 

Photo No. 27

**Date:** 8/25/2021

Site Location:

Englewood Houston, Texas

#### 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. Date: 8/25/2021

## Description:

Slot B057, small amount of tarlike material seeping at asphalt crack (not at July 2020 test pit location), material was removed.

Lat: 29.7847472 Long: - 95.3195417





Project No.

19119232

**Client Name:** 

**Union Pacific Railroad** 

Photo No. 29

**Date:** 8/25/2021

Site Location:

Englewood Houston, Texas

#### **Description:**

Slot B101, small amount of tarlike material seeping at asphalt crack, material was removed.

Lat: 29.784275 Long: - 95.320813



Photo No. 30

**Date:** 8/25/2021

#### Description:

Slot B102, small amount of tarlike material seeping at pavement joint, material was removed.

Lat: 29.7842203 Long: - 95.320827





**Client Name:** 

**Union Pacific Railroad** 

Photo No.

Iroad Englewood Houston, Texas

Date:

Site Location:

**Project No.** 19119232

#### **Description:**

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

8/25/2021

Lat: 29.7841472 Long: - 95.3208777



Photo No. 32

**Date:** 8/25/2021

#### Description:

Sump 3 (B107/B108), 22 inches of freeboard in sump. No sheen or odors noted. No tar-like material recovered.

Lat: 29.7842861 Long: - 95.3208611

