Couvillion Group, LLC

MC-20 Hydrocarbon Pump-Off #49 Results Report

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5/17/2023

Revision	Date	By	Check	Approve	Remarks
0	5/17/2023	[redacted]			Initial Document

Summary:

Couvillion Group's Rapid Response Collection System initiated its forty-ninth collection cycle on 3/5/2023 and completed the cycle on 4/7/2023 resulting in a collection duration of 33.1 days. Using the OSV Brandon Bordelon the collected hydrocarbon fluid that was recovered from the subsea oil containment vessels was taken to the Couvillion Dock in Port Fourchon, Louisiana. Vessel to Dockside Transfer commenced on 4/10/2023, with 647.4 bbl of hydrocarbon fluids transferred to onshore frac tanks 1-3 according to NRC frac tank strapping.

On 5/8/2023, Couvillion Group confirmed the initial measurement of 647.4 bbl of hydrocarbon fluids in frac tanks 1-3 via strap measurements. After a confirmation measurement was recorded, the decanting process began. From frac tanks 1-3, a total of 15.5 bbl of water was decanted on 5/8/2023. This 15.5 bbl of water was sent to the fourth frac tank for disposal at a later time. A gross total of 611.0 bbl of fluids according to NRC strapping measurements was sent to Acadiana oil using tank trucks from frac tanks 1-3. After temperature and BS&W deductions a net total of 592.2 bbl of oil was transferred from tanks 1-3 in the Port Fourchon yard to the Acadiana Oil Company.

Procedures Followed:

Couvillion Group and the associated companies participating in the collection and transportation of hydrocarbon fluids from the MC-20 site to the Acadiana Oil Company site have compiled a set of procedures that are followed throughout the process. The MC-20 Response Disposal Plan with associated documentation pertaining to custody transfer and hydrocarbon fluids measurements for this report are in Appendix I. Appendix II includes the NRC waste handling documentation.

Execution:

Offshore Collection of Hydrocarbon Fluids at MC-20 Site:

The Brandon Bordelon OSV moved in place on location at MC-20 on 4/7/2023 at 16:16 hrs. An as-found ROV survey was conducted prior to commencement of pump off operations. To begin pump off operations ROV's were launched and thereafter the hydraulic subsea pump and hoses were over boarded. The inlet hose to the hydraulic subsea pump was connected to the offload outlet on the subsea oil storage containers. On 4/7/2023 the ATI/BTI were closed at 17:47, marking the end of the 49th collection cycle. Pumping commenced at 02:40 on 4/8/2023 and ended at 10:20 on 4/8/2023. Fluids were sampled on the vessel every 20 minutes for field analysis to determine the estimated oil to water ratios until water breakthrough occurred and collection operations were then stopped. **A total of 651.9 bbl of hydrocarbon fluid was collected according to the tank strap measurement taken offshore.** Upon pump off completion the hoses and pump were surfaced and flushed with saltwater that was sent to a filtration system for treatment and over boarding.

Vessel to Dockside Transfer

The Brandon Bordelon arrived at the Couvillion Dock in Port Fourchon, Louisiana on 4/10/2023. On the morning of 4/10/2023 hoses were run from the tanks on the vessel through a diaphragm pump and then run to 500 bbl frac tanks. The pump-off process was begun and continued until all MPT tanks aboard the OSV Brandon Bordelon were empty. Tankermen from Team Services verified that the MPT tanks onboard the vessel were emptied, then an NRC representative strapped the dockside frac tanks to determine **the total quantity transferred which was 647.4 bbl.** With the dockside transfer complete, the fluid was allowed to settle out water from the oil over a period of time before the transfer of the oil from the frac tanks to tank trucks.

Dockside Frac Tanks to Truck Transfers

On the morning of 5/10/2023 at 07:00 hrs the first round of frac tanks to tank truck transfers commenced. A hose was attached to the frac tank and ran through a diaphragm pump into a tank truck. Pumping commenced and the first truck received 147.2 bbls, the second truck received 157.3 bbls of hydrocarbon fluids. The second day of truck transfers began on 5/11/2023 at 07:00. The third truck received 150.8 bbls and final truck of pumpoff 49 received 155.7 bbls of hydrocarbon fluids. There was a total of 20.9 bbls of residual fluids which remained in frac tanks 1-3 and was later pumped into tank 4. All values were recorded in the appropriate forms in the MC-20 Response Disposal Plan (see report Appendix I). Total fluid reconciliation for frac tanks 1-3 was within 0.0%.

Truck to Facility Transfer

Upon arrival at the Acadiana Oil Company site each truck enters a loading bay. Before any fluids are transferred an Acadiana Oil Representative straps their tank for an initial measurement and then transfer of fluid begins. While the pump off is underway an Acadiana Oil Company Representative takes three fluid samples during the transfer process from the pump outlet from which hydrocarbon fluid is flowing. These samples are taken at the beginning of the transfer, mid-way through the transfer, and at the end of the transfer process to ensure a full mixture. The sample is then taken to their testing area where tests are run to determine: % BS&W content, temperature, and specific gravity. Temperature and specific gravity are recorded via the use of a hydrometer, while BS&W content is determined via the use of a centrifuge with a 50/50 mixture of the sample with mineral spirits. Once all sampling is completed and recorded (see copy in Appendix I) the Acadiana Oil Company Representative again straps their tank to obtain a post transfer level. The gross fluids that are recorded is determined by subtracting the initial pump off tank strap level from the post transfer tank strap level. This gross fluid value is corrected for temperature, specific gravity and BS&W content to determine the net oil value that is recorded. This process is repeated for each truck offload.

Summary Tally and Running Totals:

The tables below show an oil tally, a total fluid reconciliation, and a flow rate calculation. In total 647.4 bbl of hydrocarbon fluid was transferred from the Brandon Bordelon into an onshore frac tank. Tank trucks transported a gross total of 611.0 bbl to the Acadiana Oil Company, which netted out to a total of 592.2 bbl. From a total fluid reconciliation standpoint, measurements at different site locations were within 0.0% for frac tanks 1-3. The calculated flow rate during the 33.1-day collection cycle offshore was 17.9 bbl/day or 751.8 gal/day. Monthly pump off collection rates reflects collection rates which are not inclusive of product that remains in the residual tank. This causes monthly collection rates to appear slightly lower than the historic average. As of the end of this pump off campaign 1,250,016.6 gallons of salvaged crude oil have been contained from the MC-20 site.

Oil Tally

					Truck 1				Truck 2				Truck 3				Truck 4					Running
Oil Tally	Date	Total Fluid Transfer by Legends (bbl)	Total Fluid Frac Tank Strap by NRC (bbl)	% Diff	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	% Diff	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	% Diff	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	% Diff	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	% Diff	Net Oil (bbl)	Total Net Oil (bbl)	Total Net Oil (bbl)
Pump Off #1	4/26/2019	220.0	215.7	-2.0																		
	5/6/2019				113.7	110.0	3.3	108.8	97.0	87.4	9.9	78.6									187.4	187.4
Pump Off #2	5/3/2019	246.3	223.5	-10.2																		
	5/8/2019				101.3	102.0	-0.7	99.7	82.8	83.8	-1.2	81.9									181.6	369.0
Pump Off #3	5/13/2019	335.0	331.2	-1.1																		
	5/16/2019				103.2	89.1	13.7	82.9	126.4	136.4	-7.9	132.1	108.5	99.5	8.3	80.7					295.7	664.8
Pump Off #4	6/19/2019	901.7	905.5	0.4	139.4	145.8	-4.6	143.0	138.7	139.4	-0.5	137.4										
	6/20/2019				137.7	136.2	1.1	113.0	140.7	141.4	-0.5	139.4	140.6	141.4	-0.6	134.2	144.1	141.4	1.9	138.4		
	6/21/2019				48.5	47.1	2.8	44.6													850.0	1,514.8
Pump Off #5	7/31/2019	1200.2	1196.6	-0.3	139.2	138.3	0.6	133.7	142.7	150.0	-5.1	146.5										
	8/1/2019				139.1	145.7	-4.7	135.1	140.7	138.4	1.6	131.9	146.0	142.0	2.7	81.3	138.0	142.0	-2.9	140.0		
	8/2/2019				99.8	112.9	-13.1	111.0	101.1	105.6	-4.5	104.2									983.7	2,498.5
Pump Off #6	8/26/2019	848.0	874.6	3.0	141.7	138.4	2.3	134.6	140.3	145.7	-3.8	140.6	141.5	145.7	-3.0	143.2						
	8/27/2019				140.5	138.4	1.5	135.5	137.2	142.0	-3.5	139.1	61.3	65.6	-7.0	64.2						
																					757.2	3,255.7
Pump Off #7	9/23/2019	891.9	880.4	-1.3	138.0	134.7	2.4	132.4	144.3	151.8	-5.2	148.9	142.6	142.0	0.4	139.7						
	9/24/2019				144.4	142.0	1.7	139.1	143.7	138.4	3.7	135.5	55.3	54.6	1.3	53.7					749.3	4,005.0
Pump off #8	10/21/2019	790.9	787.4	-0.4																		
	10/22/2019				143.9	131.0	9.0	129.1	154.3	151.9	1.5	149.7	144.0	136.2	5.4	134.2						
	10/23/2019				137.7	141.4	-2.7	139.2	130.0	125.7	3.3	123.6										
Residual Tank	10/23/2019		205.1										125.4	125.7	-0.2	123.6					799.4	4,804.4
Pump off #9	11/11/2019	772.3	757.8	-1.9																		
	11/19/2019				142.3	156.5	-10.0	153.6	143.8	131.0	8.9	128.8	145.3	142.0	2.3	139.9						
	11/20/2019				145.6	145.6	0.0	143.6	92.1	94.6	-2.8	93.3									659.1	5,463.5
Pump off #10	12/17/2019	940.7	942.8	0.2	142.0	138.4	2.5	136.9	71.4	69.2	3.1	68.5	146.4	145.7	0.5	144.2						
	12/18/2019				146.4	138.4	5.5	136.8	144.3	145.7	-1.0	144.4	144.0	142.0	1.4	140.8	47.4	47.4	0.0	47.0	818.6	6,282.1
Pump off #11	1/9/2020	697.7	691.0	-1.0	128.7	131.1	-1.9	128.3	128.0	131.1	-2.4	129.3	129.8	131.1	-1.0	129.6						
	1/10/2020				79.4	91.0	-14.6	90.0	92.6	91.1	1.6	90.0										
Residual Tank	1/8/2020				141.9	142.0	-0.1	140.0													707.2	6,989.3
Pump off #12	2/12/2020	725.4	722.5	-0.4	120.8	123.8	-2.5	115.8	102.1	101.9	0.2	100.4	99.0	101.9	-2.9	97.5						
	2/13/2020				149.5	160.2	-7	154	114.2	101.92	10.8	61.1										
Residual Tank	2/17/2020				108.2	105.6	2.4	101.3													630.1	7,619.4
Pump off #13	3/11/2020	583.7	570.2	-2.4																		
	3/12/2020				114.5	115.2	-0.6	112.7	138.3	136.2	1.5	134.3										
	3/13/2020				93.6	94.3	-0.7	91.9	120.0	120.4	-0.3	117.5									456.4	8,075.8
Pumpoff #14	4/16/2020	966.7	928.8	-4.1	147.2	146.5	0.5	144.6	145.2	141.2	2.8	139.4	148.0	146.5	1.0	143.7						
	4/17/2020				144.9	146.5	-1.1	144.3	144.1	141.2	2.0	139.1	87.4	88.9	-1.7	87.3					798.4	
Residual Tank	4/14/2020				149.9	151.9	-1.3	132.3													132.3	9,006.5
Pump off #15	5/7/2020	798.4	783.1	-1.9	150.3	145.8	3.0	143.4	148.0	153.1	-3.4	149.4	145.2	142.1	2.1	138.7						
	5/8/2020				147.2	149.4	-1.5	147.6	131.7	131.2	0.4	128.6									707.7	9,714.2
Pump off #16	5/28/2020	598.8	583.3	-2.7	142.1	140.3	1.3	137.5														
	5/29/2020				138.0	138.5	-0.4	134.1	135.1	134.8	0.2	131.7	115.0	116.6	-1.4	109.7					513.0	10,227.2
Pumpoff #17	7/8/2020	970.1	956.3	1.4																		
	7/9/2020				149.1	149.9	-0.5	146.8	148.8	145.5	2.2	142.5	149.2	149.9	-0.5	146.8						
	7/10/2020				150.7	149.6	0.7	146.6	137.1	138.0	-0.7	135.2	119.9	119.0	0.8	116.5					834.4	11,061.4
Pumpoff #18	7/22/2020	658.4	642.6	-2.5																		
	7/27/2020				129.9	129.9	0.0	127.8	140.6	140.6	0.0	137.7	138.2	138.2	0.0	135.7	139.8	139.8	0.0	137.5		
	7/28/2020				66.0	66.0	0.0	62.8													601.5	11,663.1
Residual Tank	7/28/2020								113	113	0.0	110.7									110.7	11,773.8
Pumpoff #19	9/1/2020	901.6	886.4	-1.7	128.2	128.2	0.0	125.6	135.5	135.5	0.0	132.6										
	9/2/2020				131.2	131.2	0.0	128.3	136.8	136.8	0.0	134.0	134.8	134.8	0.0	132.0	135.9	135.9	0.0	133.0	785.5	12,559.3
Pumpoff #20	9/29/2020	464.2	450.9	-2.9	144.0	140.0	2.8	137.9	143.5	140.0	2.4	137.9										
	9/30/2020				85.7	83.0	3.2	81.6													357.4	12,916.7
Residual Tank	10/1/2020				136.5	131.0	4.0	128.6													128.6	13,045.3
Pumpoff #21	10/15/2020	620.9	610.1	-1.8	139.0	139.0	0.0	130.8	145.3	145.0	0.2	142.1										
	10/16/2020				147.2	144.0	2.2	142.5	136.0	135.0	0.7	132.9									548.3	13,593.6
Pumpoff #22	11/16/2020	685.6	673.2	-1.8	146.5	143.0	2.4	139.7	143.4	142.0	1.0	140.1	146.4	140.0	4.4	128.3						
	11/17/2020				133.2	130.0	2.4	124.3													532.4	14,126.0
Pumpoff #23	12/30/2020	781.7	784.3	0.3	146.1	140.0	4.2	137.3	146.8	140.0	4.6	138.6	145.2	137.0	5.6	133.9						
	12/31/2020				145.3	141.0	3.0	138.4	113.9	111.0	2.5	107.2									655.4	14,781.4
Pumpoff # 24	1/27/2021	676.5	663.9	-1.9	123.9	*	*	*														
	1/28/2021				141.0	*	*	*	140.2	140.0	0.1	137.7	146.8	*	*	*						
	2/19/2021				146.0	135.0	7.5	133.7	150.7	141.0	6.4	139.0	115.3	112.0	2.9	107.05					517.5	15,298.9
Residual Tank	2/20/2021				100.9	101.5	-0.6	96.0													96.0	15,394.9
Pumpoff #25	3/8/2021	759.7	738.1	-2.9	144.6	143.0	1.1	140.9	146.5	143.0	2.4	141.7	146.0	140.0	4.1	137.4					624.7	16,019.5
	3/9/2021				144.1	140	2.8	133.9	77.3	75.0	3.0	70.8										
Pumpoff #26-27	4/21/2021	498.2	472.6	-5.4	143.7	136.2	5.2	134.8	142.6	138.6	2.8	137.2										
	4/22/2021	553.0	544.3	-1.6	123.5	129.7	-5.0	128.0	146.4	146.7	-0.2	146.6	144.1	142.0	1.5	139.9						
	4/23/2021								111.4	109.1	2.1	106.3									792.8	16,812.3
Residual Tank	4/23/2021				132.5	131	1.1	127.0													127.0	16,939.3
Pumpoff #28	5/26/2021	716.0	706.1	-1.4																		
	5/27/2021				144.5	140.6	2.7	136.3	141.1	139.0	1.5	136.6	143.3	140.4	2	137.9					565.2	17,504.5
	5/28/2021				81.1	78.0	3.8	76.1	88.7	82.0	7.6	78.3										
	7/14/2021																					
Pumpoff #29	7/15/2021	648.0	631.7	-2.6	114.7	115.3	-0.5	113.8	150.8	149.0	1.2	145.9	119.8	120.2	-0.3	118.5	155.3	151.7	2.3	149.2	527.4	18,031.9
	7/16/2021																					
Pumpoff #30	8/5/2021	763.0	750.2	-1.7	115.3	115.0	0.3	112.9	112.6	111.0	1.4	109.0	106.8	105.0	1.7	103.2					673.4	18705.3
	8/6/2021				118.5	118.0	0.4	115.5	118.4	117.0	1.2	114.2	124.3	123.0	1.0	118.6						

Oil Tally Contd.

					Truck 1				Truck 2				Truck 3				Truck 4					Running
Oil Tally	Date	Total Fluid Transfer by Legends (bbl)	Total Fluid Frac Tank Strap by NRC (bbl)	% Diff	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	% Diff	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	% Diff	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	% Diff	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	% Diff	Net Oil (bbl)	Total Net Oil (bbl)	Total Net Oil (bbl)
Pumpoff #31	9/23/2021	616.2	598.4	-3.0	145.6	141.6	2.7	140.0	142.9	142.9	0.0	141.8									530.8	19236.1
	9/24/2021				126.3	123.1	2.5	119.8	138.7	134.3	3.2	129.2										
Pumpoff #32	11/3/2021	952.4	937.1	-1.6	147.8	147.0	0.5	145.5	148.7	148.0	0.5	146.0										
	11/4/2021				152.5	149.0	2.3	147.0	154.6	145.0	6.2	142.2										
	11/5/2021				150.2	147.0	2.1	144.8														
	11/9/2021				118.8	117.0	1.5	115.4													840.9	20077.0
Pumpoff #33	11/30/2021	787.9	786.2	-0.2	142.9	140.5	1.7	139.5	144.0	140.9	2.2	139.9	149.6	145.3	2.9	143.6						
	12/1/2021				141.5	138.5	2.1	137.8	130.9	128.0	2.2	127.2									688.0	20765.0
Pumpoff #34	1/6/2022	686.6	673.8	-1.9	149.6	140.5	6.1	138.9	144.0	148.3	-3.0	146.1	152.3	148.5		147.2						
	1/7/2022				86.4	87.0	-0.7	86.3													518.5	21283.5
Pumpoff #35	2/16/2022	564.2	551.9	-2.2	144.1	144.0	0.1	142.7	140.2	136.2	2.9	140.2										
					125.5	120.0	4.4	118.3	121.8	114.6	5.9	112.3									513.5	
Residual Tank					94.0	88.0	6.4	70.1													70.1	21867.1
Pumpoff #36	3/23/2022	690.7	678.5	-1.8	152.5	148.3	2.8	147.4	152.7	147.9	3.1	145.8										
	3/24/2022				148.0	142.1	4.0	141.1	157.6	150.0	4.8	144.6									578.9	22446.0
Pumpoff #37	5/4/2022	882.7	868.2	-1.7	146.0	144.0	1.4	141.4	151.5	146.6	3.2	143.9	156.2	153.0	2.0	150.8						
	5/6/2022				145.7	142.4	2.3	141.3	127.3	125.0	1.8	123.7	70.4	68.3	3.0	67.4					768.5	23214.5
Pumpoff #38	6/1/2022	685.4	674.0	-1.7	145.2	142.0	2.2	139.9	150.3	146.7	2.4	144.6										
	6/2/2022				140.2	135.0	3.7	128.1	136.6	132.6	2.9	130.4									543.0	23757.5
Pumpoff #39	6/29/2022	545.5	539.3	-1.3	145.7	136.9	6.0	134.1	143.6	140.7	2.0	137.7										
	6/30/2022				142.0	139.5	1.8	136.7	49.8	49.0	1.6	46.6									455.1	24212.6
Pumpoff #40	7/28/2022	707.2	702.1	-0.7	139.1	137.0	1.5	134.4	144.9	140.7	2.9	137.6	135.9	133.2	2.0	130.2						
	7/29/2022				141.8	138.1	2.6	135.2	86.8	83.3	4.0	81.8									619.2	24831.8
Pumpoff #41	8/26/2022	461.4	459.8	-0.3	149.6	146.2	2.3	143.8														
	8/29/2022				149.9	146.6	2.2	144.0	106.3	102.1	4.0	99.8									387.6	25219.4
Pumpoff #42	9/20/2022	565.9	563.9	-0.4	151.5	147.6	2.6	144.6														
	9/21/2022				151.9	149.9	1.3	146.9	153.7	153.0	0.5	150.0	75.0	75.0	0.0	73.4					514.9	25734.3
Residual Tank	9/21/2022				74.2	70.5	5.0	69.0	86.5	86.0	0.6	68.0									137.0	25871.3
Pumpoff #43	10/26/2022	577.3	581.8	0.8	143.8	139.5	3.0	137.5	145.6	143.4	1.5	141.5										
	10/27/2022				146.6	141.4	3.5	139.4	83.9	81.3	3.1	80.2									498.6	26369.9
Pumpoff #44	11/22/2022	583.2	580.2	-0.5	138.3	127.6	7.7	126.5	132.4	137.7	-4.0	136.5										
	11/23/2022				148.0	140.4	5.1	138.7	133.2	129.6	2.7	128.5									530.2	26900.1
Pumpoff #45	12/20/2022	625.5	621.7	-0.6	144.9	140.0	3.4	137.0	150.3	140.0	6.9	137.0	149.5	141.0	5.7	138.0						
	12/21/2022				145.7	140.0	3.9	137.0													549.0	27449.1
Residual Tank	12/21/2022				62.5	62.7	-0.3	61.4													61.4	27510.5
Pumpoff #46	1/26/2023	719.7	709.7	-1.4	137.9	137.9	0.0	137.0	132.9	128.8	3.1	127.8	124.3	120.1	3.4	119.2						
	1/27/2023				135.2	131.9	2.4	131.1	102.5	109.0	-6.3	103.3									618.4	28128.9
Pumpoff #47	2/23/2023	576.8	578.6	0.3	110.7	106.0	4.2	103.6	145.7	145.0	0.5	141.7										
	2/24/2023				139.8	139.0	0.6	135.7	122.3	117.0	4.3	114.2									495.2	28624.1
Pumpoff #48	3/28/2023	612.4	607.8	-0.8	141.8	140.0	1.3	138.4	136.7	132.0	3.4	129.8										
	3/29/2023				149.1	145.0	2.7	143.9	136.4	135.0	1.0	133.9									546.0	29170.1
Pumpoff #49	5/10/2023	651.9	647.4	-0.7	147.2	146.1	0.7	144.8	157.3	151.0	4.0	149.2										
	5/11/2023				150.8	150.0	0.5	148.2	155.7	152.0	2.4	150.0									592.2	29762.3

Total Fluid Reconciliation

				Truck 1	Truck 2	Truck 3	Truck 4			
	Date	Total Fluid Frac Tank Strap at Port Fourchon by NRC (bbl)	Water Decanted From Frac Tank Using Strap Measurement (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Residual left in Frac Tanks (bbl)	Total of Fluid From Trucks, Residual & Decant (bbl)	% Diff
Pump Off #1	4/26/2019	215.7	0.0							
	5/6/2019			113.7	97.0	0.0	0.0	5.2	215.9	0.1
Pump Off #2	5/3/2019	223.5	15.6							
	5/8/2019			101.3	82.8	0.0	0.0	17.6	217.3	-2.8
Pump Off #3	5/13/2019	331.2	0.0							
	5/16/2019			103.2	126.4	108.5	0.0	16.2	354.3	-1.6
Pump Off #4	6/19/2019	905.5	32.5	139.4	138.7	0.0	0.0		310.6	
	6/20/2019			137.7	140.7	140.6	144.1		563.1	
	6/21/2019			48.5	0.0	0.0	0.0	0.6	49.1	
	PO4: Total								922.8	-1.8
Pump Off #5	7/31/2019	1196.6	96.3	139.2	142.7				281.9	
	8/1/2019			139.1	140.7	146.0	138.0		563.8	
	8/2/2019			99.8	101.0			45.2	246.0	-0.7
	PO5: Total								1188.0	
Pump Off #6	8/26/2019	874.6	56.8	141.7	140.3	141.5			480.3	
	8/27/2019		*	140.5	137.2	61.3		57.9	396.9	
	PO6: Total							*	877.2	0.3
Pump Off #7	9/23/2019	880.4	41.3	138.0	144.3	142.6			466.2	
	9/24/2019		*	144.4	143.7	55.3		55.3	398.7	
	P07: Total							*	864.9	-1.8
Pump Off #8	10/21/2019	787.4	27.2						27.2	
	10/22/2019			143.9	154.3	144.0			442.2	
	10/23/2019			137.7	130.0				267.7	
Residual Tank	10/23/2019	205.1	53.5			125.4		66.4	245.3	
	PO8: Total								982.4	-1.0
Pump Off #9	11/19/2019		32.0	142.3	143.8	145.3			463.4	
	11/20/2019	757.8		145.6	92.1			55.6	293.3	
	PO9: Total								756.7	-0.1
Pump Off #10	12/17/2019	942.8	33.4	142.0	71.4	146.4			393.2	
	12/18/2019			146.4	144.3	144.0	47.4	73.9	556.0	
	PO10: Total								949.2	0.7
Pump Off #11	1/9/2020	691.0	39.2	128.7	128.0	129.8		72.7	498.4	
	1/10/2020			79.4	92.6				172.0	
Residual Tank	1/8/2020	307.0	81.5	141.9				121.7	345.1	
	PO11: Total								1015.5	1.8
Pumpoff #12	2/11/2020	722.5	49.1						49.1	
	2/12/2020		2.7	120.8	102.1	99.0			324.6	
	2/13/2020		3.9	149.5	114.2			87.5	355.1	
	PO12: Total							*	728.8	0.9
Residual tank	2/17/2020	265.8	93.6	108.2					201.8	
	2/18/2020		23.5					121.7	145.2	
	Resid Total								347	-1.8
Pumpoff #13	3/11/2020	570.2	39.6						39.6	
	3/12/2020		2.8	114.5	138.3				255.6	
	3/13/2020			93.6	120.0			63.7	277.3	
	PO13: Total								572.5	0.4
Pumpoff #14	4/15/2020	928.8	55.1						55.1	
	4/16/2020			147.2	145.2	148			440.4	
	4/17/2020			144.9	144.1	87.4		65.4	441.8	
	PO14:Total								937.3	0.9
Residual tank	4/13/2020	244.1	67.6						67.6	
	4/14/2020			149.9				26.6	176.5	
									244.1	0.0
Pumpoff #15	5/6/2020	783.1	18.3						18.3	
	5/7/2020		1.2	150.3	148.0	145.2			444.7	
	5/8/2020			147.2	131.7			40.0	318.9	
	PO15: Total								781.9	-0.2
Pumpoff #16	5/27/2020	583.3	25.3						25.3	
	5/28/2020			142.1					142.1	
	5/29/2020			138.0	135.1	115.0		27.8	415.9	
	PO16: Total								583.3	0.0
Residual tank	5/27/2020		67.2					153.6		
Pumpoff #17	7/8/2020	956.3	23.6						23.6	
	7/9/2020		2.4	149.1	148.8	149.2			449.5	
	7/10/2020			150.7	137.1	119.9		63.3	471	
	PO17: Total								944.1	-1.3
Pumpoff #18	7/22/2020	642.6	14.3							
	7/27/2020			129.9	140.6	138.2	139.8	0.0		
	7/28/2020		13.6	66.0					642.4	0.0
Residual Tank	7/22/2020	299.6	67.2							
	7/28/2020		31.3	113.0				84.5	296.0	-1.2
Pumpoff #19	9/1/2020	886.4	7.8	128.2	135.5					
	9/2/2020			131.2	135.9	135.9	134.8	76.2	885.5	-0.1
Residual Tank	8/31/2020	292.6	102.9					189.7	189.7	

Total Fluid Reconciliation Contd.

				Truck 1	Truck 2	Truck 3	Truck 4			
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Pumpoff #20	9/29/2020	450 9	52.9	144.0	143.5			24.8	450 9	0.0
	9/30/2020			85.7						
Residual Tank	9/30/2020	273 2	116.1							
	10/1/2020		2.7	136.5				17.9	273 2	0.0
Pumpoff #21	10/15/2020	610.1	14.0	139.0	145.3					
	10/16/2020			147.2	136.0			28.6	610.1	0.0
Residual Tank	10/14/2020	293.4	111.8					49.5	293.4	0.0
	10/15/2020		132.1							
Pumpoff #22	11/16/2020	673 2	68.7	146.5	143.4	146.4				
	11/17/2020		2.7	133.2				32.3	673 2	0.0
Pumpoff #23	12/30/2020	784 3	30.3	146.1	146.8	145 2				
	12/31/2020			145.3	113.9			56.7	784 3	0.0
	1/27/2021	663 9	23.3							
Pumpoff #24	1/28/2021			140.2						
	2/19/2021		11.8	146.0	150.7	115 3		68.5	655 8	-1 2
Residual Tank	2/20/2021	164 8	31.1	100.9				32.8	164 8	0.0
Pumpoff # 25	3/3/2021	738.1	26.1							
	3/8/2021		5.7	144.6	146.5	146 0				
	3/9/2021			144.1	77 3			47.8	738.1	0.0
Pumpoff # 26-27	4/1/2021	1016.9	73.8							
	4/20/2021		60.2							
	4/21/2021			143.7	142.6					
	4/22/2021		6.4	123.5	146.4	144.1		62.2	1014.3	
	4/23/2021			111.4						-0 3
Residual Tank	4/21/2021	216 9	9.4	132.5				23.8		
	4/22/2021		18.2							
	4/23/2021		32.6						216 5	-0 2
Pumpoff #28	5/26/2021	706.1	72.5							
	5/27/2021			144.5	141.4	143 3				
	5/28/2021			81.1	88.7			34.6	706.1	0.0
Pumpoff #29	7/14/2021									
	7/15/2021	631.7	81.4	114.7	150.8	119 8	155.3	9.7	631.7	0.0
Residual Tank	7/16/2021	371 2	219.1						371 2	0.0
	7/21/2021		152.1							
Pumpoff #30	8/4/2021	750 2	20.4							
	8/5/2021			115.3	112.6	106 8				
	8/6/2021			118.5	118.4	124 3		33.9	750 2	0.0
Pumpoff #31	9/22/2021	598.4	16.7							
	9/23/2021			145.6	142.9					
	9/24/2021		28.2	126.3	138.7				598.4	0.0
Pumpoff #32	11/3/2021	937.1	31.7	147.8	148.7					
	11/4/2021			152.5	154.6					
	11/5/2021			150.2						
	11/9/2021			118.8				32.0	936 3	-0.1
Pumpoff #33	11/29/2021	786 2	56.0							
	11/30/2021			142.9	144.0	149.6				
	12/1/2021			141.5	130.9			21.3	786 2	0.0
Pumpoff #34	1/5/2022	673 8	107.1							
	1/6/2022			149.6	144.0	152 3				
	1/7/2022			86.4				34.2	673.6	-0.6
Pumpoff #35	2/8/2022	551 9	6.2					8 3	555.4	
	2/15/2022		9.3							
	2/16/2022			144.1	140.2					
	2/17/2022			125.5	121.8					0.6
Residual Tank	2/8/2022	207.1	104.8							
	2/17/2022		1.5	94.0				6 8	207.1	0.0
Pumpoff #36	2/21/2022	678 5								
	3/18/2022		54.9							
	3/23/2022		3.1	152.5	152.7			31.6	700.4	
	3/24/2022			148	157.6					3.1
Residual Tank	3/18/2022	27.7	27.7					0	27.7	0.0
Pumpoff #37	4/6/2022	868 2								
	4/22/2022		22.9							
	5/4/2022		2.8	146	151.5	156 2				
	5/6/2022			145.7	127.3	70.4		46.2	869 0	0.1
Pumpoff #38	5/15/2022	674								
	5/31/2022		69.2							
	6/1/2022		3.9	145.2	150.3					
	6/2/2022			140.2	136.6			28.6	674 0	0.0
Pumpoff #39	6/28/2022	538 3	39.3							
	6/29/2022			145.7	143.6					
	6/30/2022			142	49 8			22.0	542.4	0.2

Total Fluid Reconciliation Contd.

				Truck 1	Truck 2	Truck 3	Truck 4			
	Date	Total Fluid Frac Tank Strap at Port Fourchon by NRC (bbl)	Water Decanted From Frac Tank Using Strap Measurement (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Residual left in Frac Tanks (bbl)	Total of Fluid From Trucks, Residual & Decant (bbl)	% Diff
Pumpoff #40	7/27/2022	702.1	15.4							
	7/28/2022			139.1	144.9	135.9				
	7/29/2022			141.8	86.8			38.2	702.1	0.0
Pumpoff #41	8/25/2022	459.8	36.5							
	8/26/2022			149.6						
	8/29/2022			149.9	106.3			17.5	459.8	0.0
Pumpoff #42	9/5/2022	563.9	16.6							
	9/20/2022			151.5						
	9/21/2022			151.9	153.7	75.0		15.5	564.2	0.1
Residual Tank	9/21/2022	203.3	16.0	74.2	86.5			26.6	203.3	0.0
Pumpoff #43	10/4/2022	581.8	19.5							
	10/26/2022			143.8	145.6					
	10/27/2022			146.6	83.9			42.6	582.0	0.0
Pumpoff #44	11/5/2022	580.2	15.2							
	11/22/2022			138.3	132.4					
	11/23/2022			148.0	133.2			18.2	585.3	0.9
Pumpoff #45	12/3/2022	621.7	18.5							
	12/20/2022			144.9	150.3	149.5				
	12/21/2022			145.7				12.8	621.7	0.0
Residual Tank	12/21/2022	209.5	135.2	62.5				11.8	209.5	0.0
Pumpoff #46	1/7/2023	709.7	37.6							
	1/26/2023			137.9	132.9	124.3				
	1/27/2023			135.2	102.5			39.3	709.7	0.0
Pumpoff #47	2/2/2023	578.6	43.4							
	2/23/2023			110.7	145.7					
	2/24/2023		2.7	139.8	122.3			14.0	578.6	0.0
Pumpoff #48	3/8/2023	607.8	22.5							
	3/28/2023		2.0	141.8	136.7					
	3/29/2023			149.1	136.4			19.3	607.8	0.0
Pumpoff #49	4/10/2023	647.4	15.5							
	5/10/2023			147.2	157.3					
	5/11/2023			150.8	155.7			20.9	647.4	0.0

Barrels of Oil Collected Daily

	Start Date	Start Time (hrs)	End Date	End Time (hrs)	Total Collection Duration (Days)	Net Oil Collected (bbl)	RRS Collection Rate Of Oil (bbl/day)	Collection Rate of Oil (gallon/day)
Collection Duration for 1st Trip	4/12/2019	00:00	4/23/2019	01:05	11.0	187.4	17.0	715.7 gallons/day
Collection Duration for 2nd Trip	4/23/2019	01:05	4/30/2019	21:09	7.9	181.6	23.0	965.6 gallons/day
Collection Duration for 3rd Trip	4/30/2019	21:09	5/12/2019	23:20	12.1	295.7	24.4	1026.5 gallons/day
Collection Duration for 4th Trip	5/12/2019	23:20	6/13/2019	17:17	31.5	850.0	27.0	1132.3 gallons/day
Collection Duration for 5th Trip	6/13/2019	17:17	7/21/2019	01:40	37.4	983.7	26.3	1104.7 gallons/day
Collection Duration for 6th Trip	7/21/2019	01:40	8/18/2019	03:15	28.6	757.2	26.5	1112.0 gallons/day
Collection Duration for 7th Trip	8/18/2019	03:15	9/12/2019	22:30	25.8	749.2	29.0	1219.6 gallons/day
Collection Duration for 8th Trip	9/12/2019	22:30	10/9/2019	10:15	26.5	675.8	25.5	1071.1 gallons/day
Collection Duration for 9th Trip	10/9/2019	10:15	11/10/2019	01:05	31.6	659.1	20.8*	875.5 gallons/day
Collection Duration for 10th Trip	11/10/2019	01:05	12/6/2019	10:25	25.9	818.6	31.6*	1327.5 gallons/day
Collection Duration for 11th Trip	12/6/2019	10:25	12/31/2019	22:25	25.5	567.2	22.2	934.2 gallons/day
Collection Duration for 12th Trip	12/31/2019	22:25	1/30/2020	17:50	29.8	528.8	17.7	745.3 gallons/day
Collection Duration for 13th Trip	1/30/2020	17:50	3/2/2020	02:00	31.3	456.4	14.6	612.4 gallons/day
Collection Duration for 14th Trip	3/2/2020	02:00	4/2/2020	01:15	31.0	798.4	25.8	1081.7 gallons/day
Collection Duration for 15th Trip	4/2/2020	01:15	4/25/2020	15:45	23.1	707.7	30.6	1286.7 gallons/day
Collection Duration for 16th Trip	4/25/2020	15:45	5/15/2020	18:40	20.1	513.0	25.5	1071.0 gallons/day
Collection Duration for 17th Trip	5/15/2020	18:40	6/18/2020	22:55	34.2	834.4	24.4	1024.8 gallons/day
Collection Duration for 18th Trip	6/18/2020	22:55	7/12/2020	15:10	23.7	601.5	25.4	1066.8 gallons/day
Collection Duration for 19th Trip	7/12/2020	15:10	8/13/2020	06:00	33.6	785.5	23.4	982.8 gallons/day
Collection Duration for 20th Trip	8/15/2020	06:00	9/2/2020	13:25	18.3	357.4	19.5	819.0 gallons/day
Collection Duration for 21st Trip	9/2/2020	13:25	10/4/2020	15:20	32.1	548.3	17.1	718.2 gallons/day
Collection Duration for 22nd Trip	10/4/2020	15:20	11/3/2020	16:10	30.0	532.4	17.7	743.4 gallons/day
Collection Duration for 23rd Trip	11/3/2020	16:10	12/10/2020	13:00	36.9	655.4	17.8	747.6 gallons/day
Collection Duration for 24th Trip	12/10/2020	13:00	1/9/2021	09:15	29.8	517.5	17.4	730.8 gallons/day
Collection Duration for 25th Trip	1/9/2021	09:15	2/21/2021	11:30	43.1	624.7	14.5	609.0 gallons/day
Collection Duration for 26th Trip	2/21/2021	11:30	3/15/2021	22:25	22.4	-	-	-
Collection Duration for 27th Trip	3/15/2021	22:25	4/8/2021	12:35	23.6	-	-	-
Collection Duration for 26-27th Trip	2/21/2021	11:30	4/8/2021	12:35	46.0	792.8	17.2	722.4 gallons/day
Collection Duration for 28th Trip	4/8/2021	12:35	5/14/2021	12:14	36.0	565.2	15.7	659.4 gallons/day
Collection Duraiton for 29th Trip	5/14/2021	12:14	6/11/2021	12:08	28.0	527.4	18.8	789.6 gallons/day
Collection Duration for 30th Trip	6/11/2021	12:08	7/22/2021	13:38	41.1	673.4	16.4	688.8 gallons/day
Collection Duration for 31st Trip	7/22/2021	13:38	9/4/2021	05:40	43.7	-	-	- gallons/day
Collection Duration for 32nd Trip	9/4/2021	05:40	10/5/2021	15:30	31.4	-	-	- gallons/day
Collection Duration for 31-32nd Trip	7/22/2021	13:38	10/5/2021	15:30	75.1	1371.7	18.3	768.6 gallons/day
Collection Duration for 33rd Trip	10/5/2021	15:30	11/13/2021	22:29	39.3	688.0	17.5	735.0 gallons/day
Collection Duration for 34th Trip	11/13/2021	22:29	12/14/2022	13:20	30.6	518.5	16.9	709.8 gallons/day
Collection Duration for 35th Trip	12/14/2022	13:20	1/13/2022	23:30	30.4	513.5	16.9	709.8 gallons/day
Collection Duration for 36th Trip	1/13/2022	23:30	2/18/2022	17:25	35.8	578.9	16.2	680.4 gallons/day
Collection Duration for 37th Trip	2/18/2022	17:25	4/4/2022	17:56	45.0	768.5	17.1	718.2 gallons/day
Collection Duration for 38th Trip	4/4/2022	17:56	5/11/2022	16:43	36.9	547.6	14.8	621.6 gallons/day
Collection Duration for 39th Trip	5/11/2022	16:43	6/7/2022	15:50	26.9	455.1	16.9	709.8 gallons/day
Collection Duration for 40th Trip	6/7/2022	15:50	7/14/2022	05:15	36.6	619.2	16.9	709.8 gallons/day
Collection Duration for 41st Trip	7/14/2022	05:15	8/5/2022	01:45	21.9	387.6	17.7	743.4 gallons/day
Collection Duration for 42nd Trip	8/5/2022	01:45	9/2/2022	14:35	28.5	514.9	18.1	760.2 gallons/day
Collection Duration for 43rd Trip	9/2/2022	14:35	10/1/2022	18:16	29.2	498.6	17.1	718.2 gallons/day
Collection Duration for 44th Trip	10/1/2022	18:16	11/2/2022	10:40	31.7	530.2	16.7	701.4 gallons/day
Collection Duration for 45th Trip	11/2/2022	10:40	12/2/2022	02:09	29.6	549.0	18.5	777.0 gallons/day
Collection Duration for 46th Trip	12/2/2022	02:09	1/5/2023	03:27	34.1	618.4	18.1	760.2 gallons/day
Collection Duration for 47th Trip	1/5/2023	03:27	1/31/2023	15:01	26.5	495.2	18.7	785.4 gallons/day
Collection Duration for 48th Trip	1/31/2023	15:01	3/5/2023	14:26	32.9	546.0	16.6	697.2 gallons/day
Collection Duration for 49th Trip	3/5/2023	14:26	4/7/2023	17:47	33.1	592.2	17.9	751.8 gallons/day

Barrels of Oil Collected Per Day Since RRS Install

	Start Date	Start Time (hrs)	End Date	End Time (hrs)	Total Collection Duration (Days)	Net Oil Collected (bbl)	RRS Collection Rate Of Oil (bbl/day)	Collection Rate of Oil (gallon/day)	
Average collection to date less residual tank	4/12/2019	00:00	4/7/2023	17:47	1456.7	28,538.9	19.6	823.2	gallons/day
Total Collection to date	4/12/2019	00:00	4/7/2023	17:47	1456.7	29,762.3	20.4	856.8	gallons/day

Totals from Pumpoff 1-49

	Bbl	Gal
Net Oil collected	29,762.3	1,250,016.6
Total Oily fluids collected:	33,470.6	1,405,765.2

Appendix 1

MC20 Product Removal and Transportation with Completed Documentation

United States Coast Guard
U.S. Department of Homeland Security

COUVILLION
Couvillion Group, LLC

Attachment A: Dockside Transfer – Transfer of Liquid and Crude Oil in Accordance with Maintenance

Date: 4-10-2023

Time Transfer Ended: 09:04

	Column A	Column B	Column C	Column D	Column E
	Residual Tank Volume From Prior Operation (bbl)	**On Board the Vessel Tank Strap Measurement Prior to Start of Offloading (bbl)**	**Onshore Frac Tank Strap Measurement after Offloading (bbl)**	**Volume of Fluid (Column C-A) (bbl)**	**% Difference Column (D-B)/D * 100**
Tank 1	0	Port 316.5	324.5		
Tank 2	0	Starboard 335.4	322.9		
Tank 3					
Total	0	651.9	647.4	647.4	-.69

Note: If the % Difference is greater than 3% please attempt to explain the difference: _____

Sign-off by:

USCG Rep	Signed Name: [redacted]	Printed Name [redacted]	Date:	4-10-2023
Couvillion Rep	Signed Name: [redacted]	Printed Name	Date:	4-10-2023
Legends Rep	Signed Name: [redacted]	Printed Name	Date:	4-10-23
NRC Rep	Signed Name: [redacted]	Printed Name	Date:	4-10-23

United States Coast Guard
U.S. Department of Homeland Security

COUVILLION
Couvillion Group, LLC

Attachment B: Port Fourchon Shore Base On-Site Interim Tank Storage Measurements Before Offloading to Tank Trucks (Decanting of Water)

Date: 5-8-23 **Time:** _____

Time Measurements begin after Vessel Offloading in hours: _____

	Column A	Column B	Column C	Column D
	Tank Strap from Offloading (Initially use Column C from Attach A and on subsequent decants use Column D from this form) bbl	**Today's Interim Tank Strap Measurement bbl**	**Tank Strap Measurement after Decanting bbl**	**Oily Water Mixture Volume Column (B-C) bbl**
Tank 1	324.5	324.5	313.2	11.3
Tank 2	322.9	322.9	318.7	4.2
Tank 3	—	—	—	—
Total	647.4	647.4	631.9	15.5

Sign-off by: USCG Rep (optional) Signed Name: [redacted] Printed Name [redacted] Date: 5.8.23

Couvillion Rep Signed Name: [redacted] Printed Name [redacted] Date: 5.8.23

NRC Rep Signed Name: [redacted] Printed Name [redacted] Date: 5-8-23

United States Coast Guard
U.S. Department of Homeland Security

COUVILLION
Couvillion Group, LLC

Attachment D: Decanted Water from Frac Tanks to Disposal Facility

Date: 5-8-23

	Column A	Column B	Column C
	Beginning Tank Strap Measurement bbl	Decant and then Tank Strap Measurement bbl	Volume of oily water transferred to Disposal Facility Column B – Colum using Strap Measurement bbl
Tank 1	324.5	313.2	11.3
Tank 2	322.9	318.7	4.2
Tank 3	—	—	—

Residual Volume left in Tanks

	Strap Measurement bbl
Tank 1	313.2
Tank 2	318.7
Tank 3	—

Sign-off by: USCG Rep(Optional) Signed Name: [redacted] Printed Name [redacted] Date: 5-8-23

Couvillion Rep Signed Name: [redacted] Printed Name [redacted] Date: 5-8-23

NRC Rep Signed Name: [redacted] Printed Name [redacted] Date 5-8-23

United States Coast Guard
U.S. Department of Homeland Security

COUVILLION
Couvillion Group, LLC

Attachment C: WASTE MANAGEMENT TRACKING FORM

Oily Water Transportation and Net Crude Oil

Start Shipments Date: 5-10-23

Manifest Number	Transporter	Truck Number	Date	Receiving Facility	Manifested Volume loaded from Port Fourchon Frac Tank into Truck (bbl from Strap)	Volume received by Buyer (bbl by Strap)	Net Crude Oil bbls (Acadiana Oil Ticket)
1	AOC	2001-02	5/10	AOC	147.2		
2	AOC	2001-01	5/10	AOC	157.3		
Total Volumes Shipped by Gallons/bbls							

End of Shipments date: _____

Sign-off by: USCG Rep (Optional) Signed Name: [redacted] Printed Name [redacted] Date: 5-10-23

Couvillion Rep Signed Name: [redacted] Printed Name [redacted] Date: 5-10-23

NRC Rep Signed Name: [redacted] Printed Name [redacted] Date 5-10-23

Attachment C: WASTE MANAGEMENT TRACKING FORM
Residual Frac Tank Bottoms

Date: 5-10-23

Residual Volume left in Tanks

	Strap Measurement after Trucks Loaded in each tank bbls
Tank 1	8.7
Tank 2	318.7
Tank 3	—

Sign-off by: USCG Rep (Optional) Signed Name: [redacted] Printed Name [redacted] Date: 5-10-23

Couvillion Rep Signed Name: [redacted] Printed Name [redacted] Date: 5-10-23

NRC Rep Signed Name: [redacted] Printed Name [redacted] Date 5-10-23

United States Coast Guard
U.S. Department of Homeland Security

COUVILLION
Couvillion Group, LLC

Attachment C: WASTE MANAGEMENT TRACKING FORM

Oily Water Transportation and Net Crude Oil

Start Shipments Date: 5-11-23

Manifest Number	Transporter	Truck Number	Date	Receiving Facility	Manifested Volume loaded from Port Fourchon Frac Tank into Truck (bbl from Strap)	Volume received by Buyer (bbl by Strap)	Net Crude Oil bbls (Acadiana Oil Ticket)
3	AOC	2001-01	5/11	AOC	150.8		
4	AOC	2001-02	5/11	AOC	155.7		
Total Volumes Shipped by Gallons/bbls							

End of Shipments date: _____

Sign-off by: USCG Rep (Optional) Signed Name: [redacted] . Printed Name [redacted] Date: 5-11-23

Couvillion Rep Signed Name: [redacted] . Printed Name [redacted] Date: 5-11-23

NRC Rep Signed Name: [redacted] . Printed Name [redacted] Date 5-11-23

United States Coast Guard
U.S. Department of Homeland Security

COUVILLION
Couvillion Group, LLC

Attachment C: WASTE MANAGEMENT TRACKING FORM
Transportation Tracking of Petroleum Contaminated Solids

Manifest Number	Transporter	Shipment Date	Receiving Facility	Manifested Volume (Yard)	Scaled Weight (Lb)	Comments (Box Numbers, etc.)

NO solids

Sign-off by: USCG Rep(Optional) Signed Name: [redacted] Printed Name [redacted] Date: 5.11.23

Couvillion Rep Signed Name: [redacted] Printed Name [redacted] Date: 5.11.23

NRC Rep Signed Name: [redacted] Printed Name [redacted] Date 5-11-23

Attachment C: WASTE MANAGEMENT TRACKING FORM
Residual Frac Tank Bottoms

Date: 5-11-23

Residual Volume left in Tanks

	Strap Measurement after Trucks Loaded in each tank bbls
Tank 1	8.7
Tank 2	12.2
Tank 3	—

Sign-off by: USCG Rep (Optional) Signed Name: [redacted] Printed Name [redacted] Date: 5-11-23

Couvillion Rep Signed Name: [redacted] Printed Name [redacted] Date: 5-11-23

NRC Rep Signed Name: [redacted] Printed Name [redacted] Date 5-11-23

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number.

Original—Not Negotiable

Date 5-10-23

Bill of Lading No.

Shipper No. 1

Carrier No. 1

Acadiana Oil Company
(Name of Carrier)

TO:		FROM:	
Consignee	Acadiana Oil Company	Shipper	Couvillion Dock
Street	1825 River Rd.	Street	554 Dolley Bernard R[illegible]
Destination	Berwick Zip Code 70342	Origin	Zip Code 7[illegible]
Route:	Hwy 90 Vehicle No. 2001-02	SCAC	Emergency Response Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions — Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360	Weight (Subject to Correction)*	Rate or
147.2 661	X	UN1267 Petroleum Crude Oil, 3, Pg.II	74,500	
		147.2 661		
•				

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS

C.O.D. Amt. $

C.O.D. FEE PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ ______ per ______

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.
The carrier shall not make delivery of this shipment without payment of freight and all other charges

(Signature of Consignor)

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good or[illegible] and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this co[illegible] or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interest erty, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Frei[illegible] the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifi[illegible] the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (iii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply unless a specific exception from the requir[illegible]

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203. Proper shipping name, [illegible]

Note: or d[illegible] may

SHIPPER [redacted]

PER

1 Th[illegible] ma[illegible] applicable regulations of the U.S. Department of Transportation.

tion was made available and/or carrier has the U.S. Department of Transportation or equivalent documentation in the vehicle. Property described above is received in go[illegible]

CORPORATION

1206 Lemaire St. • New Iberia, LA 70560
337-560-5573

TRANSPORT MANIFEST
Lease Run Ticket
25234

EMERGENCY RESPONSE CONTACT:
E S & H
985-851-5055

Date 5-10 20 23

Operator Covilion Lease No. C G

Lease Name

Field Port Fourchon

GAUGE	OIL LEVEL FEET	OIL LEVEL INCHES	BS&W LEVEL FT.	BS&W LEVEL INCHES	TANK TEMP
1st					
2nd					

TANK NO.	SIZE	EST. GROSS GALLONS @ °F

SERIAL NUMBERS

OLD	IP	24	67	3			
NEW	M	24	74	8			

OBSERVED GRAVITY 28 @ 76 °F

PERCENT BS & W 5/10 %

TEMPERATURE OF OIL IN TANK °F

LOG NUMBER

TIME ARRIVED 10:40 AM PM

TIME DEPARTED 12:14 AM PM

1971427
1971573

DELIVERY STATION Central Crude Beaver

OFFICE USE ONLY

GRAVITY CORR. TO 60 °F	
1st	
2nd	
GROSS BARRELS	146.1
X FACTOR	.9908
NET BBLS. PER RUN TIC.	144.76

TEMP. FACTOR	X	BS & W FACTOR	=	X FACTOR
.9958	X	.9950	=	.9908

GROSS Truck Time
TARE 4 am
NET 2 pm

OPEN
CLOSE

[redacted]

DRIVER

OPERATOR'S WITNESS

I.D. NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PG	TOTAL BBLS
UN 1267	PETROLEUM CRUDE OIL	3	III	144.76
	Temp			0.61
	BS+W			0.73

"THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION, ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION".

Shipper: Mike LeBlanc Jr. Date:

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Date 5-10-23 Bill of Lading No. _

Original—Not Negotiable

Shipper No. _

Acadiana Oil Company (Name of Carrier) Carrier No. 2

TO: Consignee	Acadiana Oil Company	FROM: Shipper	Comeaux Dock
Street	1825 River Rd.	Street	554 Dudley Bernard
Destination	Berwick	Zip Code 70842	Origin Zip Code 7
Route:	Hwy 90	Vehicle No. 2001-01	SCAC Emergency Resp Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions (Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360.)	Weight (Subject to Correction)*	Rate or
157.3 bbl	X	UN1267 Petroleum Crude Oil, 3, PG.II	77600	
		157.3 bbl		

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight."

REMIT C.O.D. TO: ADDRESS

C.O.D. Amt. $

C.O.D. FEE PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interest erty, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freig the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifi the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (ii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of [redacted] unless a specific

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203

Note: or de may

SHIPPER

PER

1 The [redacted] applicable regulations of the U.S. Department of Transportation.

tion was made available and/or carrier has the U.S. Department of Transportation er or equivalent documentation in the vehicle. Property described above is received in gc

ACADIANA OIL & ENVIRONMENTAL CORPORATION

1206 Lemaire St. • New Iberia, LA 70560
337-560-5573

TRANSPORT MANIFEST
Lease Run Ticket
24772

EMERGENCY RESPONSE CONTACT:
ES & H
985-851-5055

Date 5-10 20 23

Operator Conv. 11,3 R Lease No. C G

Lease Name

Field Fourchon

GAUGE	OIL LEVEL FEET		OIL LEVEL INCHES		
1st					
2nd					

BS&W LEVEL FT.	BS&W LEVEL INCHES	TANK TEMP

TANK NO. | SIZE | EST. GROSS GALLONS @ °F

SERIAL NUMBERS

OLD	1924596
NEW	1924673

OBSERVED GRAVITY 26 @ 70 °F

PERCENT BS & W 8/10 | TEMPERATURE OF OIL IN TANK °F

LOG NUMBER	
TIME ARRIVED	1050 AM PM
TIME DEPARTED	11 10 AM PM
DELIVERY STATION	Central Crude (Shell) Gibson, La

Meh
1971273
1971120

OFFICE USE ONLY	
GRAVITY CORR. TO 60 °F	
1st	3
2nd	
GROSS BARRELS	151
X FACTOR	.9879
NET BBLS. PER RUN TIC.	149.18

TEMP. FACTOR	x	BS & W FACTOR	=	X FACTOR
.9959		.9920		.9879

GROSS	Truckline
TARE	1300 g
NET	0400

OPEN: DRIVER
OPERATOR'S WITNESS
CLOSE: [redacted]

I.D. NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PG	TOTAL BBLS
UN 1267	PETROLEUM CRUDE OIL	3	111	149.18 w/
	Temp			0.61
	BS+W			1.21

"THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION".

Shipper: Mike LeBlanc Jr. Date:

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Original—Not Negotiable

Date 5-11-23 Bill of Lading No. 3

Shipper No. 3

Carrier No. 3

Acadiana Oil Company (Name of Carrier)

TO: Consignee	Acadiana Oil Company	FROM: Shipper	Courtlion Dock
Street	1825 River Rd	Street	554 Dudley Bernard Rd.
Destination	Berwick	Zip Code 70842	Origin Zip Code 703.
Route:	Hwy 90	Vehicle No. 2001-01	SCAC Emergency Respor Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions	Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360	Weight (Subject to Correction)*	Rate or Cl
150.8 bbl	X	UN1267 Petroleum Crude Oil, 3, PG.II		25,600	
		150.8 661			

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight."

REMIT C.O.D. TO: ADDRESS

C.O.D. Amt. $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good ord and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this con or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interest erty, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freig the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifi the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (ii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply, unless a specific [redacted]

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203: Proper shipping name, hazardous class, UN identification number, packing group, and subsidiary classes.

Note: or d may Unite 1470

SHIPPER

PER

This is to certify that the above-named materials are properly classified, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation.

[redacted] tion was made available and/or carrier has the U.S. Department of Transportation e or equivalent documentation in the vehicle. Property described above is received in

ACADIANA OIL & ENVIRONMENTAL CORPORATION

1206 Lemaire St. • New Iberia, LA 70560
337-560-5573

TRANSPORT MANIFEST
Lease Run Ticket
24773

EMERGENCY RESPONSE CONTACT:
E S & H
985-851-5055

Date 5-11 2023

Operator Couvillion Lease No. C G

Lease Name

Field Fourchon

GAUGE	OIL LEVEL FEET		OIL LEVEL INCHES			BS&W LEVEL FT.	INCHES	TANK TEMP		
1st										
2nd										

TANK NO.	SIZE	EST. GROSS GALLONS @ °F

SERIAL NUMBERS

OLD	1924748
NEW	1924823

OBSERVED GRAVITY 26 @ 78°F

PERCENT BS & W 5/10 TEMPERATURE OF OIL IN TANK °F

meter
1972798.4
1972648.6

LOG NUMBER

TIME ARRIVED 1030 AM PM

TIME DEPARTED 1130 AM PM

DELIVERY STATION Central Auto (Steel) Gibson, LA

OFFICE USE ONLY

GRAVITY CORR. TO 60 °F

1st

2nd

GROSS BARRELS	150
X FACTOR	.9876
NET BBLS. PER RUN TIC.	148.15

TEMP. FACTOR	x	BS & W FACTOR	=	X FACTOR
.9926		.9950		.9876

Truck time
GROSS 1400
TARE 10
NET 0400

OPEN / CLOSE

DRIVER

OPERATOR'S WITNESS

[redacted]

I.D. NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PG	TOTAL BBLS
UN 1267	PETROLEUM CRUDE OIL	3	111	148.15
	Temp.			1.10
	BS+W			0.75

"THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION".

Shipper: Mike LeBlanc Jr. Date:

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Original—Not Negotiable

Date 5-11-23

Bill of Lading No.

Shipper No.

Carrier No. 4

Acadiana Oil Company (Name of Carrier)

TO: Consignee	Acadiana Oil Company	FROM: Shipper	Comeaux Dock
Street	1825 River Rd.	Street	554 Dudley Berwick
Destination	Berwick	Zip Code 70842	Origin / Zip Code
Route:	Hwy 90	Vehicle No. 2001-02	SCAC / Emergency Response Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles, Special Marks and Exceptions (Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360)	Weight (Subject to Correction)*	Rate
155.7 bbl	X	UN 1267 Petroleum Crude Oil, 3, PG. II	77,000	
		155.7 bbl		

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS

C.O.D. Amt. $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES:

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good or and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this co or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interes erby, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Fre the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certi the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (iii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply unless a specific exception from the requirement is provided in Part 173 of the Federal Regulations.

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203

Note or c

SHIPPER

PER

[redacted]

applicable regulations of the U.S. Department of Transportation.

tion was made available and/or carrier has the U.S. Department of Transportation e or equivalent documentation in the vehicle. Property described above is received in g

ACADIANA OIL & ENVIRONMENTAL CORPORATION

1206 Lemaire St. • New Iberia, LA 70560
337-560-5573

TRANSPORT MANIFEST
Lease Run Ticket
25235

EMERGENCY RESPONSE CONTACT:
E S & H
985-851-5055

Date 5-11 20 23

Operator Covilion Lease No. C G

Lease Name

Field Port Fourchon

GAUGE	OIL LEVEL FEET	OIL LEVEL INCHES	BS&W LEVEL FT.	BS&W LEVEL INCHES	TANK TEMP
1st					
2nd					

TANK NO.	SIZE	EST. GROSS GALLONS @ °F

SERIAL NUMBERS

OLD	18 24852 3	
NEW	19 24900	

OBSERVED GRAVITY 26 @ 80 °F

PERCENT BS & W 5/10 %

TEMPERATURE OF OIL IN TANK °F

LOG NUMBER

TIME ARRIVED 11:35 AM PM

TIME DEPARTED 12:08 AM PM

DELIVERY STATION Central Crude Boards

1972798.4
1972950.4

OFFICE USE ONLY

GRAVITY CORR. TO 60 °F	
1st	
2nd	
GROSS BARRELS	152
X FACTOR	.9868
NET BBLS. PER RUN TIC.	150

TEMP. FACTOR	X	BS & W FACTOR	=	X FACTOR
.9918		.9950		.98168

GROSS Truck Tank

TARE 4 pm

NET 1:30 pm

OPEN [redacted]

CLOSE DRIVER

OPERATOR'S WITNESS

I.D. NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PG	TOTAL BBLS
UN 1267	PETROLEUM CRUDE OIL	3	III	150
	Temp			1.24
	BS+W			0.76

"THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION, ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION".

Shipper: Mike LeBlanc Jr. Date:

Appendix II

NRC Waste Handling Documentation

MC20 Pump Obj #49

DECLARATION OF INSPECTION

LOCATION & NAME OF FACILITY
Couvillion Dock Port Fourchon. 0600

NAME OF VESSEL
Brandon Boudelon

DATE TRANSFER OPERATIONS STARTS
04-10-23

An oil transfer operation may not commence to or from a vessel unless the following requirements are met and agreed upon by the respective transferring and receiving persons in charge.
Persons in charge indicate by a check (√), in the appropriate spaces, that the specific requirement has been met.

VESSEL		FACILITY
√	A. The mooring lings are adequate for all anticipated conditions.	√
√	B. Cargo hoses and/or loading arms are long enough for intended use.	√
√	C. Cargo hoses are adequately supported to prevent undue strain on the couplings.	√
√	D. The transfer system is properly lined up for discharging or receiving oil. (Additional checks shall be performed each time a valve is repositioned.)	√
√	E. Each flange connection on the cargo system not being used during the transfer operation is blanked or shut off.	√
√	F. The cargo hoses and/or loading arms are connected to the manifolds using gaskets and a bolt in every other hole, (minimum of 4 bolts). Exception: Tanks without fixed loading systems per waiver from the Captain of the Port.	√
√	G. The overboard or sea suction valves are sealed or lashed in the closed position.	√
√	H. Adequate spill containments have been provided for couplings.	√
√	I. All scuppers or other overboard drains are closed or plugged.	√
√	J. A communications system is provided between the facility and the vessel.	√
√	K. Emergency shutdown system is available and operable.	√
√	L. Communication procedures are established and understood between persons in charge.	√
√	M. Qualified and designated personnel are in charge and on duty at the terminal and vessel control stations.	√
√	N. One person at the vessel control station is present who fluently speaks the language of the terminal control station.	√
√	O. The owner of the cargo hoses will insure test requirements have been met and that the hose has no loose covers, kinks, bulges, soft spots or gouges, cuts and slashes which penetrate the hose reinforcement and that hoses are marked for identification and test data is maintained in a test log.	√
	P. Adequate lighting of the vessel and terminal work areas and manifold areas is provided.	√
	Q. Persons in charge have held a conference to assure the mutual understanding of the following transfer operations:	
√	...1. Product identity to be transferred.	√
√	...2. Sequence of transfer operation.	√
√	...3. Transfer rate of flow	√
√	...4. Name or title and location of each person participating in the transfer operation	√
√	...5. Particulars of the transferring and receiving systems	√
√	...6. Starting, stripping, topping and shutdown have been discussed and understood	√
√	...7. Emergency procedures including notification, containment and cleanup of spills	√
√	...8. Watch and shift arrangements	√
√	...9. Notification before leaving stations	√

The following items are to be filled out by Vessel personnel only.

√	...1. Warning signs and read warning signals (35.35-30).
√	...2. Repair work authorization (35.35-30).
√	...3. Boiler and galley fires safety (35.35-30).
√	...4. Fires or open flames (35.35-30).
√	...5. Safe smoking space (35.35-30).

I certify that I have read, understand and agree with the foregoing as marked and agree to begin/continue the transfer operation.

PERSON IN CHARGE OF VESSEL	[redacted]	PERSON IN CHARGE OF FACILITY	[redacted]
	Time 0600 Date 4-10-23		Time 0600 Date 4-10-23

The operator of each facility and the operator of each vessel shall retain a signed copy for at least a month.

DECLARATION OF INSPECTION PRIOR TO BULK CARGO TRANSFER

Date: 4-10-23	**Location:** GIS Dock		
Facility/Vehicle Number:		**Start Time**	**End Time**
Vessel Name: Brandon Bordelon		0900	
Vessel Official Number:	**Vessel Capacity (Total) (bbls):**		
Product Transferred: Crude Oil	***Est.* Transfer Volume (bbls):**		

Note For Emergency Notification Discharge amounts (Gallons):

Average most probable:

Maximum most probable:

Worst case discharge:

The following list refers to requirements set forth in detail in 33 CFR 156.150 and 46 CFR 35.35-30.

- The spaces on the left are to be reviewed by ALL PIC's involved in the transfer and checked in agreement.
- The right hand columns are to be initialed by the appropriate PIC and/or noted as not applicable with (N/A).
- Items on the list are provided to indicate that the detailed requirements have been met

☑	***TOPIC***	PIC Delivering	PIC Receiving
	Verify PIC designation/qualification 33 CFR 154.710, 154.730, 154.740(b)		
	Person In Charge (PIC): In Immediate Vicinity and Available		
	Personnel: Capable/Unimpaired		
	Name, title and location of each person participating in the transfer operation		
	MC 20 Subsea Storage Offloading Operations & Maintenance Manual present with procedures and particulars of the transfer and receiving systems to be followed and verified with key personnel involved in these operations		
	Watch and shift arrangements discussed		
	Cargo is Authorized for transfer ***to*** **or** ***from*** tanks		
	Discuss if transfer will need to stopped to change tanks – *supply or receiving facility*		
	Discuss transfer rates and max allowable to receiving facility		
	(Facility/Vessel) properly vented (monitoring vacuum and positive tanks pressure)		
	Communications & No Language Barrier		
§ Hoses and Connection - 33CFR 154.500			
	Nonmetallic hoses usable for oil or hazardous material service		
	Proper connections (must be one of the following):		
	Fusion 100 hammer union connections		
	Quick-disconnect coupling present on suction side of pump		
	Examine transfer hose markings or records.		
	Name of product handled; example "OIL SERVICE," or "HAZMAT SERVICE"		
§ Examine Transfer Hose condition - 33CFR 156.170			
	No unrepaired kinks, bulges, soft spots, loose covers, other defects		
	No cuts, slashes, or gouges that penetrate the first layer of hose reinforcement		
	No external/internal deterioration		
§ Emergency shutdown - 33CFR 156.170			
	Test emergency shutdown - 33CFR 154.550 - who controls the emergency shutdown		
	Communication system continuously operated.		
	Verify operating properly (Electric, pneumatic, or mechanical link to facility; electronic voice)		
	Record test info in physical information.		
§ Examine closure device - 33CFR 154.520			
	Verify enough to blank off ends of each hose /loading arm not connected for transfer		
§ Inspect Small Discharge Containment - 33CFR 154.530			
	Inspect handling area and verify capacity (not less than 5 gallons).		

Pre-Transfer Conference and Agreement (Continued)			
☑	***TOPIC***	**PIC Delivering**	**PIC Receiving**
§ Inspect discharge containment equipment for oil & hazardous liquids - 33CFR 154.545			
	Verify booming for oil or hazmat transfer (if required by COTP).		
	Verify adequate amount of equipment and/or absorbent material for initial response		
	Inspect condition of response equipment stored on facility (if applicable).		
	Verify availability of at least 200 feet of containment boom onsite within 1 hour.		
	Verify means of deployment.		
§ Means of Communication - 33 CFR 154.560			
	Verify continuous two-way voice communication between vessel and facility PICs.		
	Communications must meet the following requirements…		
	Portable Radio:		
	IF Flammable or Combustible Liquids		
	1. Marked or documented as intrinsically safe.		
	2. Certified as intrinsically safe by national testing labor certification organization.		
	Voice		
	1. Be audible.		
	Test communications SAT ☐ UNSAT ☑		
§ Inspect lighting systems - 33 CFR 154.570			
	Verify portable lighting for operations between sunrise and sunset *(if applicable).*		
	At transfer operations work areas for facility and vessel		
	At transfer connection points for facility and vessel		
	Verify sufficient number or fire extinguishers.		
	Verify protective equipment is ready to operate.		
	Verify warning signs are adequate.		
§ VESSEL ONLY - 155.730 Compliance with VESSEL TRANSFER PROCEDURES §			
	PIC for vessel/operator is required by §155.720 to have current transfer procedures		
	Require vessel personnel to use the transfer procedures for each transfer operation		
	Available for inspection by the COTP or OCMI whenever the vessel is in operation		
	Legibly printed language(s) understood by personnel engaged in transfer operation		
	Permanently posted or available and used by members of crew engaged in transfer operation		
	Appropriate tank level monitoring (visual, gauging, indicators, etc.)		
	Arrangements to monitor draft marks during transfer		
	Transfer Piping Line diagram, location of each valve, pump, control device, vent, and overflow		
	Shutoff valve location or isolation device separating bilge or ballast from the transfer system		
	Adequate containment on the vessel at loading or discharge connection		
	Drains, Scuppers and overboard discharges closed		
	The number of persons required to be on duty during transfer operations;		
	Procedures for emptying discharge containment system required by §§155.310 and 155.320		
	Procedures for tending the vessel's moorings during the transfer of oil or hazardous material		
	Procedures for emergency shutdown/communications required by §§155.780 and 155.785		
	Procedures for topping off tanks		
	Procedures ensuring all valves used during transfer are closed upon completion of transfer		

I do certify that I have personally inspected this facility or vessel with reference to the requirements aforementioned and that I have indicated that the regulations have been complied with if applicable.

	4-10-23 DATE	0600 TIME
	4-10-23 DATE	0600 TIME

TRANSFER COMPLETED: _____ AMOUNT (GALLONS) _____ DATE _____ TIME

Pump Off # 49

NRC	SAFETY MANAGEMENT SYSTEM	TEAM SAFETY IT'S THE WAY TO GO!
	Job Hazard Analysis	Revision: 08/2015

TASK DESCRIPTION: MC 20 Recovered Crude Oil / Vessel to Shore Transfer 1-10-23

SUMMARY OF POTENTIAL HAZARDS (Check applicable)

☒ Heavy or awkward lifting / movement	☒ Pinch Points or caught between	☒ Working and walking surfaces; slip, trip, fall
☐ New / Inexperienced employees	☒ Spill / containment	☒ Heat stress environment
☒ Struck by or crush hazard	☒ Noise levels (>85 dBA)	☐
☒ Hazardous liquids, vapors, waste	☒ Elevated surfaces / Fall / Ladders	☐

APPLICABLE REGULATION / SOPS / ALERTS

☐ SMS 19.2 Vacuum Trucks	☐	☐

MINIMUM PERSONAL PROTECTIVE EQUIPMENT (Check applicable)

☐ Level A	☒ Hard Hat	☐ High Visibility Vest	☒ Leather Steel Toe Boots	☒ PFD / Work vest
☐ Level B	☒ Safety Glasses	☒ Long Sleeves / Coveralls	☐ Disposable boot covers	☐ _____
☐ Level C	☐ Face Shield	☐ Chemical protective clothing	☐ Neoprene Steel Toe Boots	☐ _____
☒ Level D	☒ Hearing Protection	☐ Respirator:_____	☒ Gloves:_____	

JOB HAZARD ANALYSIS

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
1. Pre-job Meetings Behavior Based Safety	• Personnel do not understand the operational plan, relevant hazards or their roles/responsibilities • Personnel do not stop work when hazards are identified • Personnel do not report injuries, illnesses, near misses or incidents	• The operational plan, hazards and controls will be explained to all involved personnel in Safety/Ops meeting. Personnel will be encouraged to ask questions if they are unsure of any project details • Immediate supervisor will remind their crews of their Authority and Responsibility to Stop work and contact their supervisor if they discover a hazard • Personnel will be instructed to report any injuries, illnesses, near misses or incidents
2. Site Survey and Equipment Set-up	• Uneven working surfaces and trip hazards. • Equipment not certified, not tested or damaged • Improper set-up due to untrained or unqualified personnel	• Inspect site for correctable walking surface hazards. Flag or correct unsafe conditions. Position equipment and hoses away from travel paths. Identify "no-go" areas. • All equipment will be inspected for current certifications, testing and serviceable working condition prior to work • Personnel will be pre-selected to perform tasks based on verified competency
3. Vehicle movements	• Personnel, equipment or hoses struck or crushed by moving vehicles or equipment • Vehicles not inspected prior to movements. Unsafe for travel. • Unsecured items create dropped object or road hazards.	• Ground guides will be used for equipment movements. Non-essential personnel will clear the travel path. Travel path will be confirmed as clear prior to movements. • Vehicles will be inspected by drivers prior to travel and after travel for potential damage. • Vehicles will be inspected to ensure that there are no loose items and that loads are secured properly.
4. Mooring Vessel and working near water	• Personnel struck by thrown lines or caught in "line of fire". • Personnel pinched or crushed during vessel movements. • Personnel fall into the water. Man overboard.	• When tossing the mooring lines to the shore allow the lines to fall on the ground and pick them up. Do not attempt to catch mooring lines from the M/V. • When mooring the vessel, keep hands, fingers, arms, and all other body parts from between the mooring line and the bits on the dock • Never work alone. All personnel within 5' of the docks edge are required to wear a USCG approved PFD. Always discuss "man overboard" procedures prior to work. Have life ring and recovery plan in place.
5. Connecting hoses	• Personnel crushed or pinched while connecting transfer hoses. • Personnel suffer back strain or other ergonomic related injuries during connections or moving hoses • Slip/trip/fall hazards while working	• Identify, communicate and avoid all crush/pinch points: including cam-lock connections, vehicles and other moving parts or equipment • Transfer hoses can be heavy and when handling these hoses employees shall use proper ergonomic practices including keeping your back as straight as possible as well as lifting with your knees and not your back • Observe good housekeeping and maintain situational

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
		awareness when walking in the dock area. Try to run hoses in an area that is out of the normal walking path and go around if possible
6. Working in potentially hazardous atmospheres	• Personnel exposed to hazards related to hazardous atmospheres. • Ignition sources create potential for explosive conditions • Personnel not equipped to suppress incipient fire	• Calibrated multi-gas meters/detectors will be used to confirm that LEL's, CO and other gases are within safe range for pumping and transfer operations. Operations will transfer operations will stop immediately if LEL's or Carbon Monoxide levels become elevated • A protective distance of 100' outside shoreside transfer will be identified, and marked with caution tape and warning signs, to prohibit smoking, sparks and any potential source of ignition within the transfer area perimeter. The M/V will suspend all similar activities for the duration of transfer operations. • Fire extinguishers will be placed at the transfer manifolds, compressors, vessel and any other areas of potential ignition.
7. Energizing pneumatic equipment	• Personnel injured when struck by hoses or pressure during hose connection or fitting failure. • Air leaks or blowout causing pressure related injuries. • Hearing loss/injury due to noise levels above 85 decibels	• All pressurized hoses will have whip checks and safety clips installed prior to energizing. All pneumatic hoses will be inspected prior to use. • Pumping operations will be stopped immediately if leaks are detected during operations. Defective hoses will be replaced with new hoses/whips. • Hearing protection will be worn in all areas where high-noise machinery and equipment is being operated.
8. Transfer of recovered crude oil	• Personnel contacted by crude oil spray or environmental release. • Overfilling tank resulting in spills • Personnel overcome by potentially hazardous vapors	• All transfer hoses used will be inspected, certified and tested prior to use. They will be secured with safety clips and wrapped with absorbent pads and duct tape. Polypropylene line will be used as an added retention measure. Personnel will wear Level D PPE and increase protection as appropriate. Spill control kits/supplies will be available on site. **The DOI Declaration of Inspection will be completed prior to operations.** • Prior to transfer the amount of product that can be accepted will be calculated and the PIC will ensure that there is ample room to handle the transferred product. • Crude oil is a mixture of various hydrocarbons. Among them can be benzene, hydrogen sulfide, and other chemicals. There will be a properly calibrated and bump tested 4-gas meter on site during transfer to ensure vapors aren't present. All work will stop if hazardous gasses are detected. PPE will be upgraded according to the concentration of hazards detected. • If personnel will work at heights above 6': fall protection will be worn and a rescue plan will be in place. • Fire extinguishers will be placed at the transfer manifolds, compressors, vessel and any other areas of potential ignition.
9. Transfer of oil into transporter	• Personnel contacted by crude oil spray or environmental release • Overfilling transportation vessel resulting in spills • Personnel overcome by potentially hazardous vapors • Fall hazards present if personnel are working above 6 feet	• All transfer hoses used will be inspected, certified and tested prior to use. They will be secured with safety clips and wrapped with absorbent pads and duct tape. Polypropylene line will be used as an added retention measure. Personnel will wear Level D PPE and increase protection as appropriate. Spill control kits/supplies will be available on site. • Prior to transfer the amount of product that can be accepted will be calculated and the PIC will ensure that there is ample room to handle the transferred product. • Crude oil is a mixture of various hydrocarbons. Among them can be benzene, hydrogen sulfide, and other chemicals. There will be a properly calibrated and bump tested 4-gas meter on site during transfer to ensure vapors aren't present. All work will stop if hazardous gasses are

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
		detected. PPE will be upgraded according to the concentration of hazards detected. • If personnel will work at heights above 6': fall protection will be worn and a rescue plan will be in place. • Fire extinguishers will be placed at the transfer manifolds, compressors, vessel and any other areas of potential ignition.
10. Prolonged exposure to elements (Heat Stress)	• Inadequate hydration • Extended wo·k periods without rest resulting in heat stress	• Personnel will be encouraged to hydrate frequently. Water to sports drink ratio will be 3:1 (1 sports drink to 3 waters consumed). • Work to rest schedules will be determined based on the ambient temperature, acclimatization of personnel and work being performed. Heat stress potential and signs/symptoms will be discussed at all safety meetings, tailgate meetings and during breaks. Personnel will be encouraged to self-report any early symptoms of heat stress. All personnel will be advised that stop work authority applies to potential heat stress symptoms they may be experiencing, (or that they suspect with co-workers).
11. Break time	• Potential for ingestion of petroleum product or other contaminants. • Fire hazards f·om unrestricted smoking • Direct sun recuces recovery time for workers d·uring breaks • Inadequate water	• Personnel will wash hands before smoking, eating, drinking or any other activity where contaminants might be ingested. This hazard will be stressed in break areas. • Only smoke in designated areas. • Ensure that break areas have adequate shade and cooling potential for personnel • Personnel are more likely to hydrate when cool water is available. Ensure an adequate supply and include sports drinks with electrolytes to be consumed sparingly.
12. Decontaminate Personnel	• Potential for secondary contamination by absorption, injection, or ingestion	• Follow decontamination plan for clothing removal and disposal when protective outerwear is required and becomes contaminated. • Only use safety scissors (never knives) to cut Tyvek from personnel. • Ensure that workers wash hands and face thoroughly.
NRC INCIDENT REPORTING POLICY	• First Aid • OSHA recordable • Illness/Injury • Near Miss • Equipment/Vehicle Damage	• NRC employees and subcontractors are required to immediately report all incidents to their supervisor. • The immediate supervisor will immediately report the incident to the site safety professional, HSEQ Manager, and Project Manager. • As soon as possible the affected employee will complete the required form, if an injury then the first report of injury; if near miss, then a near miss / safety suggestion form will be completed. • The supervisor will complete a root cause analysis of all reported incidents and submit to the HSEQ manager within 8 hours of an incident. • Determination will be made regarding need for post-incident drug and alcohol testing based on NRC policy. • Contact HSEQ Manager for proper USCG reports, if needed and what report is needed.

REVIEW

Development Team	Position/Title	Reviewed By	Position/Title	Date
[redacted]				7/27/20
			PM	7-10-23

ACKNOWLEDGEMENT

Employee Name	Signature	Date
[redacted]		4-10-23
		4-10-23

[redacted]

	4-10-23
	4-10-23

Pump CST #9

NRC	SAFETY MANAGEMENT SYSTEM	TEAM SAFETY IT'S THE WAY TO GO!
Form 8.1.7	Site Specific Safety Plan Project Name: MC20 Recovered Crude Oil Transfer	Revision: 08/2019

NRC PROJECT PERSONNEL AND EMERGENCY CONTACTS	
Shore side NRC Project Manager	Jesse Bridges (985) 502-7190
Director of Marine Ops	David Kendall (281) 914-6577
Director of Operations	Ray Mc Coy (631) 236-2512
Yard Manager	Darryl Prout (985) 396-4518
H&S Program Manager	Peter Brause, CSP (310) 387-2639
VP Health & Safety	Ken Koppler, CIH, CSP (971) 285-0450
Hospital / Medical Intervention	Lady of the Sea Hospital: Galliano, LA (985) 632-6401

Date: 4-10-23	Start Time: 0600	Job Number:

☐ Land Emergency Response ☐ Marine Emergency Response ☐ Land Service ☒ Marine Service

SITE DESCRIPTION / WORK SUMMARY

The site is the Port Fourchon Facility: 554 Dudley Bernard Rd. Port Fourchon, LA. 70357 (985) 396-4518

NRC will facilitate removing recovered crude oil from the well located at MC20 project. The M/V BD has been collecting crude oil from the location and storing it on Marine Portable Tanks (MPTs) located on her deck. The vessel will be moored to the dock at the above location and transfer the recovered crude from the MPTs on her deck to double walled frac tanks on the dockside.

Once the frac tanks on the Port Fourchon docks are ready for transfer the crude will then be transferred into bulk transporter trailers to be sent to its final destination.

SCOPE OF WORK

The M/V BB will send a 100' section of 3-inch petroleum duty hose to the dock where it will be connected to the hoses leading to a properly rated and tested manifold. The manifold has one inlet and three outlets. Each outlet will be fitted with a 3-inch transfer hose and affixed to the frac tanks. Once the connections are secured and the declaration of inspection (DOI) is complete, the vessel will transfer the crude oil in her tanks using a 4-inch pneumatic diaphragm pump. As the frac tanks near capacity the dockside operator will open the next manifold valve and close the active one. This process will continue until all three frac tanks are at capacity. Once the transfer is complete a 1-inch airline with the proper fitting will be given to the M/V's crew to send compressed air up the hose to "blow down" any residual product left in the hoses to ensure no product is spilled when the hoses are disconnected.

After the crude oil sits in the frac tank at the Port Fourchon Dock for 12 to 24 hours the crude oil will be pumped using a 3-inch pneumatic diaphragm pump to transport trailers to be sent to final destination.

EQUIPMENT

- Air Compressor (One aboard the M/V BB – One on Port Fourchon Facility Properties)
- 4-inch pneumatic diaphragm pumps
- Petroleum Duty transfer hoses rated and inspected accordingly
- Safety Clips for Cam-lock connections and Chicago fittings
- Containment pans for diaphragm pumps and each hose connection (on the deck of the M/V as well as the Port Fourchon Facility Dock)
- Sorbent pads / Polly to wrap around each hose connection as spill prevention
- Whip Checks for each air line connection coming from the air compressor
- Intrinsically safe handheld VHF radios (Means of Communication between PIC of vessel and PIC of dock)
- **Supplied Air Breathing System**

ATTACHMENTS

Attachment	TITLE	Attachment	TITLE
A	Safety Data Sheets	F	Diagram of dock layout
B	SMS 8.1.5 Daily Safety Meeting form - Maritime		
C	SMS 13.2 Respiratory Protection		
D	Incident / Near Miss / RCA		
E	DOI		

CHEMICAL INFORMATION

CHEMICAL / CAS	CHEMICAL PROPERTIES	EXPOSURE LIMITS Action Levels	ROUTES OF ENTRY	SYMPTOMS
Crude Oil	VP (mmHg): 2.6-6.2lbs @ 100F VD (Air=1): >1 BP: -54 to 1100F SG: 0.8939 PV: 1-50 **FP: <24 F Estimated** LEL: 1.1 UEL: 7.3 Appearance; thick light yellow to dark black	Oil Mist, If Generated ACGIH TWA: 5mg/m3 STEL: 10mg/m3 OSHA TWA: 5mg/m3 NIOSH IDLH:2500mg/m3	X Inhalation X Ingestion X Contact	May include eye, nose and throat irritation, digestive tract, nausea, vomiting, diarrhea, headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue
Hydrogen Sulfide	Strong rotten egg odor at low levels, rapidly deadens the sense of smell at higher concentrations. Highly flammable - LEL is 4.3%	10 PPM – OSHA PEL Above 10 PPM – Level B PPE required in work area. IDLH = 100 PPM	X Inhalation ☐ Ingestion ☐ Absorption ☐ Contact	Headache, Nausea, irritation to the eyes, nose, or throat. Death if exposed to high concentrations of Hydrogen Sulfide.
Benzene / 71-43-2	S.G. = 0.88 FP = 12 F LEL: 1.2% UEL = 7.8%	ACGIH TWA: 0.5 ppm OSHA TWA: 1 ppm IDLH: 500ppm	X Inhalation X Ingestion X Absorption X Contact	Irritation to the eyes, skin, nose and respiratory system. Dizziness, headache, nausea, staggered gait; bone marrow depressive.

PERSONAL PROTECTIVE EQUIPMENT

TASK	Level	MASK / CARTRIDGE / AIR	ADDITIONAL PPE
Mooring Vessel	**D**	N/A	Level D PPE with the addition of an approved PFD when working within 5' of the docks edge
Connecting hoses	**D**	N/A	Level D PPE with the addition of an approved PFD when working within 5' of the docks edge
Completing inspection	**D**	N/A	Level D PPE with the addition of an approved PFD when working within 5' of the docks edge
Transfer operations	**D**	Level C or Level B may be needed based on air monitoring results.	Level D PPE (unless readings indicate a need to upgrade PPE to level C respiratory protection) with the addition of an approved PFD when working within 5' of docks edge. If H2S is detected above 5 ppm Level B PPE (supplied air respirators) will be used. Operations will be suspended if H2S levels reach 100ppm.

RESPIRATORY PROTECTION PLAN

The NRC SMS Procedure 13.2 for Respiratory Protection is provided in **Attachment_C_**.

AIR MONITORING / ACTION LEVELS

Chemical Hazard	Instrument	Action Level	Action
Oxygen (O_2)	4-gas	<19.5% or >23.5%	• Stop work, determine source of hazard and apply engineering control (ventilation) until reading can be brought to 21% +/- 1%.
Carbon Monoxide (CO)	4-gas	25 ppm	• Stop work, determine source of hazard and apply engineering controls. Upgrade PPE as necessary.
Lower Explosion Limit (LEL)	4-gas	>10%	• Stop work, determine source of hazard and apply engineering control (ventilation) until reading can be brought below 10%.
Hydrogen Sulfide (H2S)	4-gas	10 ppm >10 ppm	• OSHA PEL • SCBA / Supplied Air Respiratory Protection
PID/VOC	PID	10 - 750 ppm >750	• Don level C PPE APR w/OV cartridge (Check Benzene Levels, if Benzene levels are below 0.5 Respiratory protection may be reduced • SCBA / Supplied Air Respiratory Protection
Benzene	Colorimetric Tube	<0.5 PPM 0.5 – 25 PPM >25 PPM	• No Respiratory requirement • Full Face APR with OV Cartridges • SCBA / Supplied Air Respiratory Protection

ACTIVITY HAZARD ANALYSIS / SUMMARY

ITEM	HAZARD	PREVENTION
Behavioral Based Safety	Hazard Identification Stop Work Authority Near Miss	• Immediate supervisor will remind their crews of their Authority and Responsibility to Stop work and contact their supervisor if they discover a hazard • Safety officer to coordinate with work crew safety leads • Daily HASP / Tailgate meetings will be conducted with the crew. • Report all near misses, at risk conditions on the job site, or at-risk actions by crew member. Discuss all reported near misses during the post job briefing and during Daily HASP / Tailgate meetings.
Mooring M/V	Struck by Pinched by Fall into water	• When tossing the mooring lines to the shore allow the lines to fall on the ground and pick them up. Do not attempt to catch mooring lines from the M/V. • When mooring the vessel, keep hands, fingers, arms, and all other body parts from between the mooring line and the bits on the dock. • Never perform this task alone and all personnel within 5' of the docks edge are required to wear a USCG approved PFD.
Connecting Hoses	Caught / pinched by Back / muscle strain Slip / Trip / Fall	• Identify, communicate, and avoid all pinch / crush points including, but not limited to - cam lock connections, trucks backing / parking, other mobile equipment on the dock. • Transfer hoses can be heavy and when handling these hoses employees shall use proper ergonomic practices including keeping your back as straight as possible as well as lifting with your knees and not your back. • Observe good housekeeping and maintain situational awareness when walking in the dock area. Try to run hoses in an area that is out of the normal walking path and go around if possible.
Energizing pneumatic equipment	Hose whipping Air Leak Noise levels above 85 decibels	• Ensure all connections have whip checks and safety clips in place prior to energizing air lines. • If hissing is hear there is a leak in the line and the compressor should be de-energized and the leaking hoses / connections should be replaced prior to continuing operation. • Hearing protection required for pneumatic equipment.
Transfer of recovered crude oil	Spill / spray crude oil on employee. Overfilling of frac tank Overcome by vapors Hydrogen Sulfide (H2S) Detected during transfer.	• All hose connections shall be secured with safety clips, then wrapped in sorbent pads and duct tape and rope to prevent spills or contamination of individuals. There will be no hose connections over water and all connections will also be in secondary containment. • Prior to transfer the amount of product that can be accepted will be calculated and the PIC of the dock facility will ensure that there is ample room to handle the transferred product. • Crude oil is a mixture of all sorts of hydrocarbons. Among them can be benzene, hydrogen sulfide, and other chemicals. There will be a properly calibrated and bump tested 4-gas meter with PID on site during transfer to ensure vapors aren't present. If vapors become an issue, all work will stop and PPE will be upgraded according to the chart found on page 5 of this document. • All personnel involved in the transfer process will be wearing a personal H2S Detector worn in their breathing zone. • If H2S is detected above 5 PPM, the operations will stop, and all essential personnel will don their Supplied Air Respiratory Protection (SAR) and evacuate all non-essential

ITEM	HAZARD	PREVENTION
		personnel from the area during the transfer. There will be support personnel upwind with SAR capabilities on site for rescue purposes during this operation. • If H2S is detected above the IDLH (100 PPM) then stop work authority will be used, all personnel will evacuate the work area and move to an upwind, safe location until the levels are below 100 PPM.
Transfer of oil into transporter	Spill / spray crude oil on employee. Overfilling of frac tank Overcome by vapors	• All hose connections shall be secured with safety clips, then wrapped in sorbent pads and duct tape and rope to prevent spills or contamination of individuals. There will be no hose connections over water and all connections will also be in secondary containment. • Prior to transfer the amount of product that can be accepted will be calculated and the PIC of the dock facility will ensure that there is ample room to handle the transferred product. • Crude oil is a mixture of all sorts of hydrocarbons. Among them can be benzene, hydrogen sulfide, and other chemicals. There will be a properly calibrated and bump tested 4-gas meter with PID on site during transfer to ensure vapors aren't present. If vapors become an issue, all work will stop and PPE will be upgraded according to the chart found on page 5 of this document.
Incident Reporting	First Aid OSHA Recordable Medical Only Near Miss	• Employees immediately report all incidents to their immediate supervisor. • The immediate supervisor will immediately report the incident to the site safety professional, HSEQ Manager, and Project Manager. • As soon as possible the affected employee will complete the required form, if an injury then the first report of injury; if near miss, then a near miss / safety suggestion form will be completed. • The supervisor will complete a root cause analysis of all reported incidents and submit to the HSEQ manager within 8 hours of an incident. • Determination will be made regarding need for post-incident drug and alcohol testing based on NRC policy. • Contact HSEQ Manager for proper USCG reports, if needed and what report is needed.
Prolonged exposure to elements	Dehydration Hypothermia Hyperthermia	• If Tyvek is not required, long sleeve shirts should be worn to cover skin. • Rain suits should be worn in lieu of chemical protective coveralls during inclement weather • Drink plenty of fluids. • Appropriate clothing should be worn based on weather conditions.
Break time	Ingestion Fire	• Thoroughly wash hands before eating, drinking, smoking, or applying sun screen • Do not smoke near petroleum products (ONLY IN DESIGNATED AREA)
Decontaminate Personnel	Absorption Contamination	• Follow decontamination plan for clothing removal / disposal. • Do not use knives to cut PPE / use safety scissors • Wash hands and face thoroughly.
COVID 19 Protocol	Personnel infected with COVID-19 could spread it to others in the work area.	• Employees will follow all CDC, Local, State, and Federal guidance regarding Social Distancing. All personnel must remain at least 6' from one another on the worksite at all times. Only personnel essential to the operation will be allowed in the work area. • If any employee is displaying symptoms related to COVID19

ITEM	HAZARD	PREVENTION
		they will be removed from work and follow the US Ecology / NRC return to work guidance issued by corporate. • The Symptoms in question are Fever (Above 100.4F, Dry Cough, and Shortness of breath) • Dockside personnel will not interact with personnel aboard the M/V during transfer operations. If an emergency were to arise where dockside personnel need to board the M/V they will be wearing proper PPE and will decontaminate anything touched while on board the vessel. • All trucks, handles, switches, controls, doors, etc. (frequently touched items) will be decontaminated frequently, at minimum prior to use and once the work task is complete. All personnel on site will have adequate supplies to decontaminate frequently touched surfaces such as disinfectant wipes, hand sanitizer, and a cleaner approved for use as a virucide. • All breaks will be taken individually, or employees will set themselves at least 6 feet away from one another to accomplish the social distancing demand due to the current pandemic.
NRC INCIDENT REPORTING POLICY	• First Aid • OSHA recordable • Illness/Injury • Near Miss • Equipment/Vehicle Damage	• NRC employees and subcontractors are required to immediately report all incidents to their supervisor. • The immediate supervisor will immediately report the incident to the site safety professional, HSEQ Manager, and Project Manager. • As soon as possible the affected employee will complete the required form, if an injury then the first report of injury; if near miss, then a near miss / safety suggestion form will be completed. • The supervisor will complete a root cause analysis of all reported incidents and submit to the HSEQ manager within 8 hours of an incident. • Determination will be made regarding need for post-incident drug and alcohol testing based on NRC policy. • Contact HSEQ Manager for proper USCG reports, if needed and what report is needed.
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		•
		•

MINIMUM SAFETY EQUIPMENT REQUIRED

✓	Eyewash	✓	Decon Pool / Supplies See itemization list under Decon		Tinted faceshield, leathers, gauntlets, hot-work cutting gear
✓	First Aid Kit	✓	Fire Extinguisher, Dry Chemical		Barricades / Traffic Cones / Delineators / Banner Tape
			Fire Extinguisher, Water	✓	Ladders
	Harnesses		Lanyards / rope		Confined space entry equipment
✓	PPE (Task specific)				

TRAINING / DOCUMENTATION REQUIREMENTS

✓	HAZWOPER 40	✓	Hazwoper Supervisor	✓	Current 8 Hour Refresher
✓	First Aid /CPR		Confined Space Supervisor	✓	Current Medical Fitness For Duty
	NRC Confined Space Entrant				NRC Confined Space Rescue
✓	API Safe Rigging Practices			✓	Documentation of compliance with Drug Free Work Place
	Competent Fire Watch Designated Personnel				Qualified Pressure Washer Operator

DECONTAMINATION AND DISPOSAL

DECONTAMINATION EQUIPMENT

- ☐ Visqueen on Ground
- ☐ Carpet on Ground
- ☐ Wooden Pallets
- ☒ Decon Pool / wash boots
- ☐ Boot brushes
- ☐ Decon Pool Rinse Boots
- ☒ Respirator wash bucket
- ☒ Respirator rinse bucket
- ☒ Drying stands or platforms for respirators after washing
- ☒ Wipe rags to clean respirators
- ☒ Rags for cleaning - wiping
- ☐ Labeled Drums for disposal items
- ☒ Chairs to sit on for PPE removal
- ☐ Plastic zip-lock bags for personal sample pumps
- ☒ Water to wash face / hands
- ☐ Decontamination Assistant
- ☐ Barrier stands
- ☒ Caution tape to designate decon area
- ☐ Shower

PERSONNEL DECONTAMINATION PLAN

- ☐ Establish two stage contamination reduction zone with small decon area just inside of containment area
- ☐ Provide wet rags (not saturated) to personnel to wipe exterior of PPE prior to dry decon (stage 1 decon)
- ☐ Place empty lined drums for contaminated PPE with liners removed to waste bin at end of each shift
- ☐ Untape gloves and boots – discard tape
- ☐ Sit on chair prior to removing boots or outer PPE
- ☐ Remove boots and outer gloves (boots will be reused and leather outer gloves may be reuse if still in good condition)
- ☐ Unzip suit / pull off hood
- ☐ Roll down suit / inside out and place into labeled container
- ☐ Remove respirator
- ☐ Use wipes to clean
- ☐ Store respirators in plastic bags after drying
- ☐ Remove inner gloves
- ☐ PPE and debris will be bagged, accounted for, and bulked into the applicable waste bin or container
- ☐ Store respirators in individual plastic bags with employee names
- ☐ _____

WASTE MANAGEMENT PLAN

- ☐ Contaminated disposable PPE & debris from operation shall be placed in an approved container
- ☐ _____
- ☐ _____

SITE LAYOUT

Sketch the work area or attach a schematic drawing. Please include the following:

Evacuation Route	Control Entry Point	Exclusion Zone (red security tape)
Decontamination Point (red tape)	Support Zone (yellow caution tape)	Fire Extinguishers
Eyewash / Showers		

See Facility Map

EMERGENCY MEDICAL TREATMENT AND FIRST AID

TYPE CONTACT	FIRST AID
Eyes	• Flush each eye continuously for 15 minutes • Tilt head to side to ensure liquid runs onto floor not other eye • Refer to EMT for evaluation
Skin	• Remove contaminated clothing immediately • Wash skin continuously for 15 minutes • Refer to physician if redness, swelling, or pain persists after washing
Not Breathing	• Call 911 • Remove to fresh air immediately if respiratory distress develops • Begin CPR until EMT arrives
Ingestion	• Aspiration hazard • Do not induce vomiting • Do not give anything by mouth

ACCIDENT REPORTING

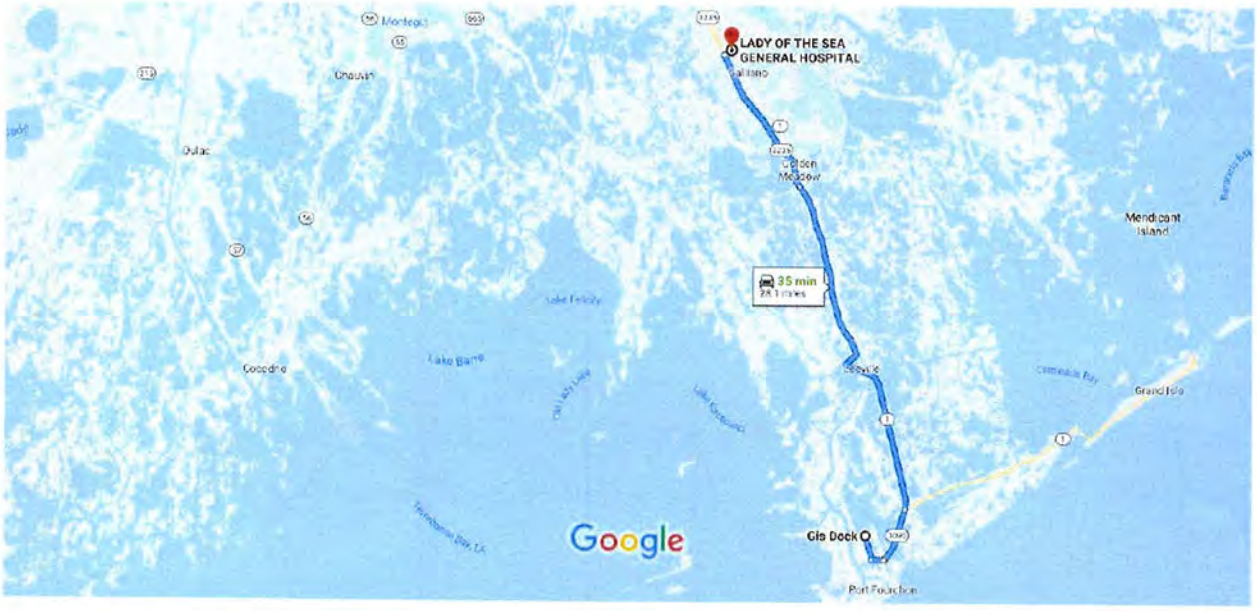
FIRST AID INJURIES REQUIRING MEDICAL TREATMENT VEHICLE ACCIDENT NEAR MISS	☐ Employees immediately report all accidents or incidents to the Site Project Manager / Safety Officer ☐ Site Project Supervisor will immediately notify the NRC Project Manager via cell phone. If unable to reach the Project Manager, call the NRC Safety Manager. If you get a voice mail; call their cell phones ☐ NRC Safety Manager will provide employee disposition guidelines and coordinate an accident investigation either by himself or Project Supervisor ☐ NRC Project Manager will relay information to Project Site Superintendent ☐ Accident reporting forms are included in **Attachment_D** ☐ Determination will be made regarding need for post accident drug testing

EMERGENCY RESPONSE PLAN

ELEMENT	LOCATION, SPECIFICATION OR REASON FOR USE
NEAREST HOSPITAL	Our Lady of the Sea General Hospital, (985) 632-6401 200 W 134th Pl, Cut Off, LA 70345
NEAREST PHONE	Port Fourchon Facility Phone
FIRST AID KIT	Deck of M/V Brandon Bordelon and the M/V Connor Bordelon/ Fourchon Dock side as well
FIRE EXTINGUISHER	Deck of the vessel discharging product Port Fourchon Facility Dock
EYEWASH STATION	Stage Portable Eyewash Station in Support Zone
EVACUATION ROUTE / MEETING POINT	See site map and follow established emergency procedure

Hospital Route

Google Maps Gis Dock to LADY OF THE SEA GENERAL HOSPITAL Drive 28.1 miles, 35 min



via LA-1 and LA-3235 35 min

Fastest route, the usual traffic 28.1 miles

⚠ This route has restricted usage or private roads.

PO # 49

NRC	SAFETY MANAGEMENT SYSTEM	TEAM SAFETY IT'S THE WAY TO GO!
Form 8.1.7	Site Specific Safety Plan Project Name: MC20 Recovered Crude Oil Transfer	Revision: 08/2019

SAFETY PLAN APPROVAL

Site Safety Officer Jesse Bridges **Date** 4-10-23

ACKNOWLEDGMENTS (signed by all NRC site personnel)

I have read and understand the topics outlined on all pages of this HASP and will follow all the required safety rules.
**I am aware that I am to sign in at the beginning of the shift and sign out at the end of my shift on the Daily Safety Meeting form.
I must notify the on site supervisor of any injury /accident/ near miss that I had or observed during my shift**
I understand that I have the right to stand down for Safety and report any potential hazards to the NRC Site Supervisor.
After an injury/accident/near miss is reported, the Site Supervisor must call the H & S Manager at

Date	Print Name	Signature
4-10-23	[redacted]	
4-10-23		
4-10-23		
4-10-23		

#49 Decont

NRC	SAFETY MANAGEMENT SYSTEM	TEAM SAFETY IT'S THE WAY TO GO!
	Job Hazard Analysis	Revision: 08/2015

TASK DESCRIPTION: MC 20 Recovered Crude Oil / Vessel to Shore Transfer 5-8-23

SUMMARY OF POTENTIAL HAZARDS (Check applicable)		
☒ Heavy or awkward lifting / movement	☒ Pinch Points or caught between	☒ Working and walking surfaces; slip, trip, fall
☐ New / Inexperienced employees	☒ Spill / containment	☒ Heat stress environment
☒ Struck by or crush hazard	☒ Noise levels (>85 dBA)	☐
☒ Hazardous liquids, vapors, waste	☒ Elevated surfaces / Fall / Ladders	☐

APPLICABLE REGULATION / SOPS / ALERTS		
☐ SMS 19.2 Vacuum Trucks	☐	☐

MINIMUM PERSONAL PROTECTIVE EQUIPMENT (Check applicable)				
☐ Level A	☒ Hard Hat	☐ High Visibility Vest	☒ Leather Steel Toe Boots	☒ PFD / Work vest
☐ Level B	☒ Safety Glasses	☒ Long Sleeves / Coveralls	☐ Disposable boot covers	☐ _____
☐ Level C	☐ Face Shield	☐ Chemical protective clothing	☐ Neoprene Steel Toe Boots	☐ _____
☒ Level D	☒ Hearing Protection	☐ Respirator:_____	☒ Gloves:_____	

JOB HAZARD ANALYSIS

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
1. Pre-job Meetings Behavior Based Safety	• Personnel do not understand the operational plan, relevant hazards or their roles/responsibilities • Personnel do not stop work when hazards are identified • Personnel do not report injuries, illnesses, near misses or incidents	• The operational plan, hazards and controls will be explained to all involved personnel in Safety/Ops meeting. Personnel will be encouraged to ask questions if they are unsure of any project details • Immediate supervisor will remind their crews of their Authority and Responsibility to Stop work and contact their supervisor if they discover a hazard • Personnel will be instructed to report any injuries, illnesses, near misses or incidents
2. Site Survey and Equipment Set-up	• Uneven working surfaces and trip hazards. • Equipment not certified, not tested or damaged • Improper set-up due to untrained or unqualified personnel	• Inspect site for correctable walking surface hazards. Flag or correct unsafe conditions. Position equipment and hoses away from travel paths. Identify "no-go" areas. • All equipment will be inspected for current certifications, testing and serviceable working condition prior to work • Personnel will be pre-selected to perform tasks based on verified competency
3. Vehicle movements	• Personnel, equipment or hoses struck or crushed by moving vehicles or equipment • Vehicles not inspected prior to movements. Unsafe for travel. • Unsecured items create dropped object or road hazards.	• Ground guides will be used for equipment movements. Non-essential personnel will clear the travel path. Travel path will be confirmed as clear prior to movements. • Vehicles will be inspected by drivers prior to travel and after travel for potential damage. • Vehicles will be inspected to ensure that there are no loose items and that loads are secured properly.
4. Mooring Vessel and working near water	• Personnel struck by thrown lines or caught in "line of fire". • Personnel pinched or crushed during vessel movements. • Personnel fall into the water. Man overboard.	• When tossing the mooring lines to the shore allow the lines to fall on the ground and pick them up. Do not attempt to catch mooring lines from the M/V. • When mooring the vessel, keep hands, fingers, arms, and all other body parts from between the mooring line and the bits on the dock • Never work alone. All personnel within 5' of the docks edge are required to wear a USCG approved PFD. Always discuss "man overboard" procedures prior to work. Have life ring and recovery plan in place.
5. Connecting hoses	• Personnel crushed or pinched while connecting transfer hoses. • Personnel suffer back strain or other ergonomic related injuries during connections or moving hoses • Slip/trip/fall hazards while working	• Identify, communicate and avoid all crush/pinch points: including cam-lock connections, vehicles and other moving parts or equipment • Transfer hoses can be heavy and when handling these hoses employees shall use proper ergonomic practices including keeping your back as straight as possible as well as lifting with your knees and not your back • Observe good housekeeping and maintain situational

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
		awareness when walking in the dock area. Try to run hoses in an area that is out of the normal walking path and go around if possible
6. Working in potentially hazardous atmospheres	• Personnel exposed to hazards related to hazardous atmospheres. • Ignition sources create potential for explosive conditions • Personnel not equipped to suppress incipient fire	• Calibrated multi-gas meters/detectors will be used to confirm that LEL's, CO and other gases are within safe range for pumping and transfer operations. Operations will transfer operations will stop immediately if LEL's or Carbon Monoxide levels become elevated • A protective distance of 100' outside shoreside transfer will be identified, and marked with caution tape and warning signs, to prohibit smoking, sparks and any potential source of ignition within the transfer area perimeter. The M/V will suspend all similar activities for the duration of transfer operations. • Fire extinguishers will be placed at the transfer manifolds, compressors, vessel and any other areas of potential ignition.
7. Energizing pneumatic equipment	• Personnel injured when struck by hoses or pressure during hose connection or fitting failure. • Air leaks or blowout causing pressure related injuries. • Hearing loss/injury due to noise levels above 85 decibels	• All pressurized hoses will have whip checks and safety clips installed prior to energizing. All pneumatic hoses will be inspected prior to use. • Pumping operations will be stopped immediately if leaks are detected during operations. Defective hoses will be replaced with new hoses/whips. • Hearing protection will be worn in all areas where high-noise machinery and equipment is being operated.
8. Transfer of recovered crude oil	• Personnel contacted by crude oil spray or environmental release. • Overfilling tank resulting in spills • Personnel overcome by potentially hazardous vapors	• All transfer hoses used will be inspected, certified and tested prior to use. They will be secured with safety clips and wrapped with absorbent pads and duct tape. Polypropylene line will be used as an added retention measure. Personnel will wear Level D PPE and increase protection as appropriate. Spill control kits/supplies will be available on site. **The DOI Declaration of Inspection will be completed prior to operations.** • Prior to transfer the amount of product that can be accepted will be calculated and the PIC will ensure that there is ample room to handle the transferred product. • Crude oil is a mixture of various hydrocarbons. Among them can be benzene, hydrogen sulfide, and other chemicals. There will be a properly calibrated and bump tested 4-gas meter on site during transfer to ensure vapors aren't present. All work will stop if hazardous gasses are detected. PPE will be upgraded according to the concentration of hazards detected. • If personnel will work at heights above 6': fall protection will be worn and a rescue plan will be in place. • Fire extinguishers will be placed at the transfer manifolds, compressors, vessel and any other areas of potential ignition.
9. Transfer of oil into transporter	• Personnel contacted by crude oil spray or environmental release • Overfilling transportation vessel resulting in spills • Personnel overcome by potentially hazardous vapors • Fall hazards present if personnel are working above 6 feet	• All transfer hoses used will be inspected, certified and tested prior to use. They will be secured with safety clips and wrapped with absorbent pads and duct tape. Polypropylene line will be used as an added retention measure. Personnel will wear Level D PPE and increase protection as appropriate. Spill control kits/supplies will be available on site. • Prior to transfer the amount of product that can be accepted will be calculated and the PIC will ensure that there is ample room to handle the transferred product. • Crude oil is a mixture of various hydrocarbons. Among them can be benzene, hydrogen sulfide, and other chemicals. There will be a properly calibrated and bump tested 4-gas meter on site during transfer to ensure vapors aren't present. All work will stop if hazardous gasses are

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
		detected. PPE will be upgraded according to the concentration of hazards detected. • If personnel will work at heights above 6': fall protection will be worn and a rescue plan will be in place. • Fire extinguishers will be placed at the transfer manifolds, compressors, vessel and any other areas of potential ignition.
10. Prolonged exposure to elements (Heat Stress)	• Inadequate hydration • Extended work periods without rest resulting in heat stress	• Personnel will be encouraged to hydrate frequently. Water to sports drink ratio will be 3:1 (1 sports drink to 3 waters consumed). • Work to rest schedules will be determined based on the ambient temperature, acclimatization of personnel and work being performed. Heat stress potential and signs/symptoms will be discussed at all safety meetings, tailgate meetings and during breaks. Personnel will be encouraged to self-report any early symptoms of heat stress. All personnel will be advised that stop work authority applies to potential heat stress symptoms they may be experiencing, (or that they suspect with co-workers).
11. Break time	• Potential for ingestion of petroleum product or other contaminants. • Fire hazards from unrestricted smoking • Direct sun reduces recovery time for workers during breaks • Inadequate water	• Personnel will wash hands before smoking, eating, drinking or any other activity where contaminants might be ingested. This hazard will be stressed in break areas. • Only smoke in designated areas. • Ensure that break areas have adequate shade and cooling potential for personnel • Personnel are more likely to hydrate when cool water is available. Ensure an adequate supply and include sports drinks with electrolytes to be consumed sparingly.
12. Decontaminate Personnel	• Potential for secondary contamination by absorption, injection, or ingestion	• Follow decontamination plan for clothing removal and disposal when protective outerwear is required and becomes contaminated. • Only use safety scissors (never knives) to cut Tyvek from personnel. • Ensure that workers wash hands and face thoroughly.
NRC INCIDENT REPORTING POLICY	• First Aid • OSHA recordable • Illness/Injury • Near Miss • Equipment/Vehicle Damage	• NRC employees and subcontractors are required to immediately report all incidents to their supervisor. • The immediate supervisor will immediately report the incident to the site safety professional, HSEQ Manager, and Project Manager. • As soon as possible the affected employee will complete the required form, if an injury then the first report of injury; if near miss, then a near miss / safety suggestion form will be completed. • The supervisor will complete a root cause analysis of all reported incidents and submit to the HSEQ manager within 8 hours of an incident. • Determination will be made regarding need for post-incident drug and alcohol testing based on NRC policy. • Contact HSEQ Manager for proper USCG reports, if needed and what report is needed.

REVIEW

Development Team	Position/Title	Reviewed By	Position/Title	Date
[redacted]				7/27/20
			PM	5-8-23

ACKNOWLEDGEMENT

Employee Name	Signature	Date
[redacted]		5-8-23
		5-8-23

[redacted]	5.8.27

#49 Truck 2 5-9-23

NRC	SAFETY MANAGEMENT SYSTEM	TEAM SAFETY IT'S THE WAY TO GO!
	Job Hazard Analysis	Revision: 08/2015

TASK DESCRIPTION: MC 20 Recovered Crude Oil / Vessel to Shore Transfer

SUMMARY OF POTENTIAL HAZARDS (Check applicable)

☒ Heavy or awkward lifting / movement	☒ Pinch Points or caught between	☒ Working and walking surfaces; slip, trip, fall
☐ New / Inexperienced employees	☒ Spill / containment	☒ Heat stress environment
☒ Struck by or crush hazard	☒ Noise levels (>85 dBA)	☐
☒ Hazardous liquids, vapors, waste	☒ Elevated surfaces / Fall / Ladders	☐

APPLICABLE REGULATION / SOPS / ALERTS

☐ SMS 19.2 Vacuum Trucks	☐	☐

MINIMUM PERSONAL PROTECTIVE EQUIPMENT (Check applicable)

☐ Level A	☒ Hard Hat	☐ High Visibility Vest	☒ Leather Steel Toe Boots	☒ PFD / Work vest
☐ Level B	☒ Safety Glasses	☒ Long Sleeves / Coveralls	☐ Disposable boot covers	☐ _____
☐ Level C	☐ Face Shield	☐ Chemical protective clothing	☐ Neoprene Steel Toe Boots	☐ _____
☒ Level D	☒ Hearing Protection	☐ Respirator:_____	☒ Gloves:_____	

JOB HAZARD ANALYSIS

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
1. Pre-job Meetings Behavior Based Safety	• Personnel do not understand the operational plan, relevant hazards or their roles/responsibilities • Personnel do not stop work when hazards are identified • Personnel do not report injuries, illnesses, near misses or incidents	• The operational plan, hazards and controls will be explained to all involved personnel in Safety/Ops meeting. Personnel will be encouraged to ask questions if they are unsure of any project details • Immediate supervisor will remind their crews of their Authority and Responsibility to Stop work and contact their supervisor if they discover a hazard • Personnel will be instructed to report any injuries, illnesses, near misses or incidents
2. Site Survey and Equipment Set-up	• Uneven working surfaces and trip hazards. • Equipment not certified, not tested or damaged • Improper set-up due to untrained or unqualified personnel	• Inspect site for correctable walking surface hazards. Flag or correct unsafe conditions. Position equipment and hoses away from travel paths. Identify "no-go" areas. • All equipment will be inspected for current certifications, testing and serviceable working condition prior to work • Personnel will be pre-selected to perform tasks based on verified competency
3. Vehicle movements	• Personnel, equipment or hoses struck or crushed by moving vehicles or equipment • Vehicles not inspected prior to movements. Unsafe for travel. • Unsecured items create dropped object or road hazards.	• Ground guides will be used for equipment movements. Non-essential personnel will clear the travel path. Travel path will be confirmed as clear prior to movements. • Vehicles will be inspected by drivers prior to travel and after travel for potential damage. • Vehicles will be inspected to ensure that there are no loose items and that loads are secured properly.
4. Mooring Vessel and working near water	• Personnel struck by thrown lines or caught in "line of fire". • Personnel pinched or crushed during vessel movements. • Personnel fall into the water. Man overboard.	• When tossing the mooring lines to the shore allow the lines to fall on the ground and pick them up. Do not attempt to catch mooring lines from the M/V. • When mooring the vessel, keep hands, fingers, arms, and all other body parts from between the mooring line and the bits on the dock • Never work alone. All personnel within 5' of the docks edge are required to wear a USCG approved PFD. Always discuss "man overboard" procedures prior to work. Have life ring and recovery plan in place.
5. Connecting hoses	• Personnel crushed or pinched while connecting transfer hoses. • Personnel suffer back strain or other ergonomic related injuries during connections or moving hoses • Slip/trip/fall hazards while working	• Identify, communicate and avoid all crush/pinch points: including cam-lock connections, vehicles and other moving parts or equipment • Transfer hoses can be heavy and when handling these hoses employees shall use proper ergonomic practices including keeping your back as straight as possible as well as lifting with your knees and not your back • Observe good housekeeping and maintain situational

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
		awareness when walking in the dock area. Try to run hoses in an area that is out of the normal walking path and go around if possible
6. Working in potentially hazardous atmospheres	• Personnel exposed to hazards related to hazardous atmospheres. • Ignition sources create potential for explosive conditions • Personnel not equipped to suppress incipient fire	• Calibrated multi-gas meters/detectors will be used to confirm that LEL's, CO and other gases are within safe range for pumping and transfer operations. Operations will transfer operations will stop immediately if LEL's or Carbon Monoxide levels become elevated • A protective distance of 100' outside shoreside transfer will be identified, and marked with caution tape and warning signs, to prohibit smoking, sparks and any potential source of ignition within the transfer area perimeter. The M/V will suspend all similar activities for the duration of transfer operations. • Fire extinguishers will be placed at the transfer manifolds, compressors, vessel and any other areas of potential ignition.
7. Energizing pneumatic equipment	• Personnel injured when struck by hoses or pressure during hose connection or fitting failure. • Air leaks or blowout causing pressure related injuries. • Hearing loss/injury due to noise levels above 85 decibels	• All pressurized hoses will have whip checks and safety clips installed prior to energizing. All pneumatic hoses will be inspected prior to use. • Pumping operations will be stopped immediately if leaks are detected during operations. Defective hoses will be replaced with new hoses/whips. • Hearing protection will be worn in all areas where high-noise machinery and equipment is being operated.
8. Transfer of recovered crude oil	• Personnel contacted by crude oil spray or environmental release. • Overfilling tank resulting in spills • Personnel overcome by potentially hazardous vapors	• All transfer hoses used will be inspected, certified and tested prior to use. They will be secured with safety clips and wrapped with absorbent pads and duct tape. Polypropylene line will be used as an added retention measure. Personnel will wear Level D PPE and increase protection as appropriate. Spill control kits/supplies will be available on site. **The DOI Declaration of Inspection will be completed prior to operations.** • Prior to transfer the amount of product that can be accepted will be calculated and the PIC will ensure that there is ample room to handle the transferred product. • Crude oil is a mixture of various hydrocarbons. Among them can be benzene, hydrogen sulfide, and other chemicals. There will be a properly calibrated and bump tested 4-gas meter on site during transfer to ensure vapors aren't present. All work will stop if hazardous gasses are detected. PPE will be upgraded according to the concentration of hazards detected. • If personnel will work at heights above 6': fall protection will be worn and a rescue plan will be in place. • Fire extinguishers will be placed at the transfer manifolds, compressors, vessel and any other areas of potential ignition.
9. Transfer of oil into transporter	• Personnel contacted by crude oil spray or environmental release • Overfilling transportation vessel resulting in spills • Personnel overcome by potentially hazardous vapors • Fall hazards present if personnel are working above 6 feet	• All transfer hoses used will be inspected, certified and tested prior to use. They will be secured with safety clips and wrapped with absorbent pads and duct tape. Polypropylene line will be used as an added retention measure. Personnel will wear Level D PPE and increase protection as appropriate. Spill control kits/supplies will be available on site. • Prior to transfer the amount of product that can be accepted will be calculated and the PIC will ensure that there is ample room to handle the transferred product. • Crude oil is a mixture of various hydrocarbons. Among them can be benzene, hydrogen sulfide, and other chemicals. There will be a properly calibrated and bump tested 4-gas meter on site during transfer to ensure vapors aren't present. All work will stop if hazardous gasses are

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10. Prolonged exposure to elements (Heat Stress)	• Inadequate hydration • Extended work periods without rest resulting in heat stress	• Personnel will be encouraged to hydrate frequently. Water to sports drink ratio will be 3:1 (1 sports drink to 3 waters consumed). • Work to rest schedules will be determined based on the ambient temperature, acclimatization of personnel and work being performed. Heat stress potential and signs/symptoms will be discussed at all safety meetings, tailgate meetings and during breaks. Personnel will be encouraged to self-report any early symptoms of heat stress. All personnel will be advised that stop work authority applies to potential heat stress symptoms they may be experiencing, (or that they suspect with co-workers).
11. Break time	• Potential for ingestion of petroleum product or other contaminants. • Fire hazards from unrestricted smoking • Direct sun reduces recovery time for workers during breaks • Inadequate water	• Personnel will wash hands before smoking, eating, drinking or any other activity where contaminants might be ingested. This hazard will be stressed in break areas. • Only smoke in designated areas. • Ensure that break areas have adequate shade and cooling potential for personnel • Personnel are more likely to hydrate when cool water is available. Ensure an adequate supply and include sports drinks with electrolytes to be consumed sparingly.
12. Decontaminate Personnel	• Potential for secondary contamination by absorption, injection, or ingestion	• Follow decontamination plan for clothing removal and disposal when protective outerwear is required and becomes contaminated. • Only use safety scissors (never knives) to cut Tyvek from personnel. • Ensure that workers wash hands and face thoroughly.
NRC INCIDENT REPORTING POLICY	• First Aid • OSHA recordable • Illness/Injury • Near Miss • Equipment/Vehicle Damage	• NRC employees and subcontractors are required to immediately report all incidents to their supervisor. • The immediate supervisor will immediately report the incident to the site safety professional, HSEQ Manager, and Project Manager. • As soon as possible the affected employee will complete the required form, if an injury then the first report of injury; if near miss, then a near miss / safety suggestion form will be completed. • The supervisor will complete a root cause analysis of all reported incidents and submit to the HSEQ manager within 8 hours of an incident. • Determination will be made regarding need for post-incident drug and alcohol testing based on NRC policy. • Contact HSEQ Manager for proper USCG reports, if needed and what report is needed.

REVIEW

Development Team	Position/Title	Reviewed By	Position/Title	Date
[redacted]				7/27/20
			PM	5-9-23

ACKNOWLEDGEMENT

Employee Name	Signature	Date
[redacted]		5.9.23
		5-9-23

[redacted]	5-9-23
	5-9-23
	5-9-23

MC20 #49 Trucks 2

NRC	SAFETY MANAGEMENT SYSTEM	TEAM SAFETY IT'S THE WAY TO GO!
	Job Hazard Analysis	Revision: 08/2015

TASK DESCRIPTION: MC 20 Recovered Crude Oil / Vessel to Shore Transfer 5-10-23

SUMMARY OF POTENTIAL HAZARDS (Check applicable)

☒ Heavy or awkward lifting / movement	☒ Pinch Points or caught between	☒ Working and walking surfaces; slip, trip, fall
☐ New / Inexperienced employees	☒ Spill / containment	☒ Heat stress environment
☒ Struck by or crush hazard	☒ Noise levels (>85 dBA)	☐
☒ Hazardous liquids, vapors, waste	☒ Elevated surfaces / Fall / Ladders	☐

APPLICABLE REGULATION / SOPS / ALERTS

☐ SMS 19.2 Vacuum Trucks	☐	☐

MINIMUM PERSONAL PROTECTIVE EQUIPMENT (Check applicable)

☐ Level A	☒ Hard Hat	☐ High Visibility Vest	☒ Leather Steel Toe Boots	☒ PFD / Work vest
☐ Level B	☒ Safety Glasses	☒ Long Sleeves / Coveralls	☐ Disposable boot covers	☐ _____
☐ Level C	☐ Face Shield	☐ Chemical protective clothing	☐ Neoprene Steel Toe Boots	☐ _____
☒ Level D	☒ Hearing Protection	☐ Respirator:_____	☒ Gloves:_____	

JOB HAZARD ANALYSIS

❶ Job Steps	❷ Potential Hazards	❸ Preventive Measures / Special PPE
1. Pre-job Meetings Behavior Based Safety	• Personnel do not understand the operational plan, relevant hazards or their roles/responsibilities • Personnel do not stop work when hazards are identified • Personnel do not report injuries, illnesses, near misses or incidents	• The operational plan, hazards and controls will be explained to all involved personnel in Safety/Ops meeting. Personnel will be encouraged to ask questions if they are unsure of any project details • Immediate supervisor will remind their crews of their Authority and Responsibility to Stop work and contact their supervisor if they discover a hazard • Personnel will be instructed to report any injuries, illnesses, near misses or incidents
2. Site Survey and Equipment Set-up	• Uneven working surfaces and trip hazards. • Equipment not certified, not tested or damaged • Improper set-up due to untrained or unqualified personnel	• Inspect site for correctable walking surface hazards. Flag or correct unsafe conditions. Position equipment and hoses away from travel paths. Identify "no-go" areas. • All equipment will be inspected for current certifications, testing and serviceable working condition prior to work • Personnel will be pre-selected to perform tasks based on verified competency
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4. Mooring Vessel and working near water	• Personnel struck by thrown lines or caught in "line of fire". • Personnel pinched or crushed during vessel movements. • Personnel fall into the water. Man overboard.	• When tossing the mooring lines to the shore allow the lines to fall on the ground and pick them up. Do not attempt to catch mooring lines from the M/V. • When mooring the vessel, keep hands, fingers, arms, and all other body parts from between the mooring line and the bits on the dock • Never work alone. All personnel within 5' of the docks edge are required to wear a USCG approved PFD. Always discuss "man overboard" procedures prior to work. Have life ring and recovery plan in place.
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[redacted]				7/27/20
			PM	5-10-23

ACKNOWLEDGEMENT

Employee Name	Signature	Date
[redacted]		5-10-23
		5/10/23

[redacted]

5-10-23
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5-10-23

PO #49 2 Trucks

NRC	SAFETY MANAGEMENT SYSTEM	TEAM SAFETY IT'S THE WAY TO GO!
	Job Hazard Analysis	Revision: 08/2015

TASK DESCRIPTION: MC 20 Recovered Crude Oil / Vessel to Shore Transfer 5-11-23

SUMMARY OF POTENTIAL HAZARDS (Check applicable)

☒ Heavy or awkward lifting / movement	☒ Pinch Points or caught between	☒ Working and walking surfaces; slip, trip, fall
☐ New / Inexperienced employees	☒ Spill / containment	☒ Heat stress environment
☒ Struck by or crush hazard	☒ Noise levels (>85 dBA)	☐
☒ Hazardous liquids, vapors, waste	☒ Elevated surfaces / Fall / Ladders	☐

APPLICABLE REGULATION / SOPS / ALERTS

☐ SMS 19.2 Vacuum Trucks	☐	☐

MINIMUM PERSONAL PROTECTIVE EQUIPMENT (Check applicable)

☐ Level A	☒ Hard Hat	☐ High Visibility Vest	☒ Leather Steel Toe Boots	☒ PFD / Work vest
☐ Level B	☒ Safety Glasses	☒ Long Sleeves / Coveralls	☐ Disposable boot covers	☐ _____
☐ Level C	☐ Face Shield	☐ Chemical protective clothing	☐ Neoprene Steel Toe Boots	☐ _____
☒ Level D	☒ Hearing Protection	☐ Respirator:_____	☒ Gloves:_____	

JOB HAZARD ANALYSIS

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