



Couvillion Group, LLC
MC 20 Hydrocarbon Pump-Off #16 Results Report

Document #: Couv-MC20-O&M-RPT-DOC-00043
6/2/2020

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Revision	Date	By	Check	Approve	Remarks
0	6/2/2020	REDACTED			Initial Document

Summary:

Couvillion Group's Rapid Response Collection System initiated its sixteenth collection cycle on 4/25/2020 and completed the cycle on 5/15/2020 resulting in a collection duration of 20.1 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 Venice, Louisiana. Vessel to Dockside Transfer commenced on 5/19/2020, with 583.3 bbl of hydrocarbon fluids transferred to onshore frac tanks 1-3 according to NRC frac tank strapping. Over the next 8-day period water separated from the oil and was collected in the bottom of the frac tank.

On the morning of 5/27/2020 Couvillion Group confirmed the initial measurement of 583.3 bbl of hydrocarbon that remained in tanks 1-3 via strap measurements. After a confirmation measurement was recorded, the decanting process began. From frac tanks 1-3, a total of 25.3 bbl of water was decanted and sent to the residual tank for further separation. A gross total of 530.2 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 513.0 bbl of oil was transferred from tanks 1-3 in the Venice Yard to the Acadiana Oil Company in Berwick, Louisiana. After frac tank 1-3 processing was completed a total of 27.8 bbl of residuals were transferred from frac tanks 1-3 to the residual tank. Total fluid reconciliation for frac tanks 1-3 was 0.0%.

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 have been approved by USCG, that are followed throughout the process. The USCG approved MC20 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 MC20 on 5/15/2020 at 1400 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. Pumping commenced at 1845 hrs on 5/16/2020 and ended at 1935 on 5/17/2020. 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 598.8 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 Venice, Louisiana on 5/18/2020. On the morning of 5/19/2020 hoses were run from the tanks on the vessel through a diaphragm pump which was on a Couvillion provided barge and then run to 500 bbl frac tanks onshore. 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 and then an NRC representative strapped the dockside frac tanks to determine **the total quantity transferred which was 583.3 bbl.** With dockside transfer complete, the fluid was allowed to settle out water from the oil over a period of 8 days before transfer of the oil

from the frac tanks to tank trucks. On 5/27/2020, 25.3 bbl of water that had separated from the oil in the frac tanks was sent to a vac truck for disposal at Evergreen ERR in Belle Chasse, La. Additionally, 67.2 bbl of water was loaded into the same vac truck from the fourth frac tank, also known as the residual tank. The vac truck quantity totaled 92.5 bbl of water which was sent for disposal.

Dockside Frac Tanks to Truck Transfers

On the morning of 5/28/2020 at 06:00 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 142.1 bbl of hydrocarbon fluids. The second day of frac tank to tank truck transfers began on 5/29/2020 at 06:00. The first truck was loaded with 138.0 bbl, the second truck was loaded with 135.1 bbl, and the third and final truck was loaded with 115.0 bbl. At this time an NRC Representative and a Couvillion Representative with oversight from USCG, double checked all strap measurements in the trucks, and residual left in the frac tanks. All values were recorded in the appropriate forms in the MC-20 Response Disposal Plan (see report Appendix I). Trucks were then released and began transport to the Acadiana Oil Company site in Berwick, Louisiana.

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. In other words when the tank truck volume is full, half-full and nearly empty. These readings are referred to as top, middle and bottom readings, respectively. These (3) samples are mixed together and then shaken vigorously 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 in order 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 583.3 bbl of hydrocarbon fluid was transferred from the Brandon Bordelon into an onshore frac tank. Tank trucks transported a gross total of 530.2 bbl to the Acadiana Oil Company, which netted out to a total of 513.0 bbl. From a total fluid reconciliation standpoint, measurements at different site locations were 0.0% for frac tanks 1-3. The calculated flow rate during the 20.1-day collection cycle offshore was 25.5 bbl/day or 1071.0 gallon/day. Since installation of the RRS in April 2019, Couvillion Group has collected on average of 25.6 bbl/day or 1075.2 gal/day. **As of the end of this pump off campaign 429,542.4 gallons of salvaged crude oil has been safely captured from the MC-20 site.**

Oil Tally

Oil Tally	Date	Total Fluid Transfer by Cypress (bbl)	Total Fluid Frac Tank Strap by NRC (bbl)	%	%	Truck 1				Truck 2				Truck 3				Truck 4				Total Net	Running Total Net
						Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	%	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	%	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	%	Net Oil (bbl)	Total Fluids to Acadiana NRC Frac Strap (bbl)	Total Fluid at Acadiana by strap (bbl)	%	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										
	6/21/2019					48.5	47.1	2.8	44.6					140.6	141.4	-0.6	134.2	144.1	141.4	1.9	138.4	850.0	1514.8
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	2498.5
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	3255.7
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	4005.0
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	4804.4
Pump off #9	11/11/2019	772.3	757.8	-1.9		142.3	156.5	-10.0	153.6	143.8	131.0	8.9	128.8	145.3	142.0	2.3	139.9						
	11/19/2019					145.6	145.6	0.0	143.6	92.1	94.6	-2.8	93.3									659.1	5463.5
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	6282.1
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	6989.3
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	11	61.1										
Residual Tank	2/17/2020					108.2	105.6	2.4	101.3													630.1	7619.4
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									456.4	8075.8
	3/13/2020					93.6	94.3	-0.7	91.9	120.0	120.4	-0.3	117.5										
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	9006.5
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	9714.2
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	10227.2

Total Fluid Reconciliation

	Date	Total Fluid Frac Tank Strap at Venice by NRC (bbl)	Water Decanted From Frac Tank Using Strap Measurement (bbl)	Truck 1	Truck 2	Truck 3	Truck 4	Residual left in Frac Tanks (bbl)	Total of Fluid From Trucks, Residual & Decant (bbl)	% Diff
				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)			
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				563.8	
	8/2/2019			99.8	101.0	146.0	138.0	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	
	PO7: 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		

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	0:00	4/23/2019	1:05	11.0	187.4	17.0	715.7 gallons/day
Collection Duration for 2nd Trip	4/23/2019	1:05	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	1,026.5 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	1:40	37.4	983.7	26.3	1104.7 gallons/day
Collection Duration for 6th Trip	7/21/2019	1:40	8/18/2019	3:15	28.6	757.2	26.5	1112.0 gallons/day
Collection Duration for 7th Trip	8/18/2019	3:15	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	1:05	31.6	659.1	20.8*	875.5 gallons/day
Collection Duration for 10th Trip	11/10/2019	1:05	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	2:00	31.3	456.4	14.6	612.4 gallons/day
Collection Duration for 14th Trip	3/2/2020	2:00	4/2/2020	1:15	31	798.4	25.8	1081.7 gallons/day
Collection Duration for 15th Trip	4/2/2020	1:15	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

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	4/12/2019	0:00	5/15/2020	18:40	399.8	10227.2	25.6	1075.2 gallons/day

Totals from Pumpoff 1-16

	Bbl	Gal
Net Oil collected	10227.2	429542.4
Total Oily fluids collected in:	11599.5	487179.0

Appendix 1

MC20 Product Removal and Transportation with Completed Documentation

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

Date: 5-19-2020

Time Transfer Ended: 0930

	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	311.7 stbd	304.6	304.6	
Tank 2	-				
Tank 3	0	287.1 Port	278.7	278.7	
Total	0	598.8	583.3	583.3	-2.7%

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

Sign-off by:

USCG Rep

Signed Name: _____

Couvillion Rep Signed Name: _____

Cypress Rep

Signed Name: _____

NRC Rep

Signed Name: _____

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

Date: 5-27-20

Time: 0700

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	304.6	304.6	296.5	8.1
Tank 2				
Tank 3	278.7	278.7	261.5	17.2
Total	583.3	583.3	558.0	25.3

Sign-off by: USCG Rep (optional) Signed Name: _____

Couvillion Rep Signed Name: _____

NRC Rep Signed Name: _____

Attachment C: WASTE MANAGEMENT TRACKING FORM

Oily Water Transportation and Net Crude Oil

Start Shipments Date: _____

Manifest Number	Transporter	Truck Number	Date	Receiving Facility	Manifested Volume loaded from Venice Frac Tank into Truck (bbl from Strap)	Volume received by Buyer (bbl by Strap)	Net Crude Oil bbls (Acadiana Oil Ticket)
10513	Legacy	6797	5-27	ERR Evergreen	92.5		
Total Volumes Shipped by Gallons/bbls					92.5		

End of Shipments date: _____

Sign-off by:USCG Rep (Optional) Signed Name: _____

Couvillion Rep

Signed Name: _____

NRC Rep

Signed Name: _____

Attachment D: Decanted Water from Frac Tanks to Disposal Facility

Date: 5-27-20

	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	304.6	296.5	8.1
Tank 2	—	—	—
Tank 3	278.7	261.5	17.2

Residual Volume left in Tanks

	Strap Measurement bbl
Tank 1	296.5
Tank 2	—
Tank 3	261.5
Tank 4	153.6

Sign-off by: USCG Rep(Optional) Signed Name: 

Couvillion Rep

Signed Name: 

NRC Rep

Signed Name: 

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

Date: 5-27-20 Time: 0700

Time Measurements begin after Vessel Offloading in hours: _____

	Column A Tank Strap from Offloading (Initially use Column C from Attach A and on subsequent decants use Column D from this form) bbl	Column B Today's Interim Tank Strap Measurement bbl	Column C Tank Strap Measurement after Decanting bbl	Column D Oily Water Mixture Volume Column (B-C) bbl
Tank 1				
Tank 2				
<i>Tank 4</i> Tank 3		220.8	153.6	67.2
Total		220.8	153.6	67.2

Sign-off by: USCG Rep (optional) Signed Name: _____

Couvillion Rep Signed Name: _____

NRC Rep Signed Name: _____

Attachment C: WASTE MANAGEMENT TRACKING FORM

Oily Water Transportation and Net Crude Oil

Start Shipments Date: 5-28-2020

Manifest Number	Transporter	Truck Number	Date	Receiving Facility	Manifested Volume loaded from Venice Frac Tank into Truck (bbl from Strap)	Volume received by Buyer (bbl by Strap)	Net Crude Oil bbls (Acadiana Oil Ticket)
1	L+B	75702	5-28	AOC	142.1 bbl		
Total Volumes Shipped by Gallons/bbls					142.1		

End of Shipments date: 5-28-20

Sign-off by:USCG Rep (Optional) Signed Name:

REDACTED

Couvillion Rep

Signed Name:

REDACTED

NRC Rep

Signed Name:

REDACTED

Attachment C: WASTE MANAGEMENT TRACKING FORM Residual Frac Tank Bottoms

Date: 5-28-2020

Residual Volume left in Tanks

	Strap Measurement after Trucks Loaded in each tank bbls
Tank 1	154.4
Tank 2	
Tank 3	261.5

Sign-off by: USCG Rep (Optional) Signed Name:

Couvillion Rep

Signed Name:

NRC Rep

Signed Name:

Attachment C: WASTE MANAGEMENT TRACKING FORM

Oily Water Transportation and Net Crude Oil

Start Shipments Date: 5-29-2020

Manifest Number	Transporter	Truck Number	Date	Receiving Facility	Manifested Volume loaded from Venice Frac Tank into Truck (bbl from Strap)	Volume received by Buyer (bbl by Strap)	Net Crude Oil bbls (Acadiana Oil Ticket)
1	L+B	7617L	5-29	AOC	138.0		
2	L+B	7570	5-29	AOC	135.1		
3	L+B		5-29	AOC	115.0		
Total Volumes Shipped by Gallons/bbls					388.1		

End of Shipments date: 5-29-2020

Sign-off by: USCG Rep (Optional) Signed Name: REDACTED

Couvillion Rep

Signed Name: REDACTED

NRC Rep

Signed Name: REDACTED

Attachment C: WASTE MANAGEMENT TRACKING FORM
Residual Frac Tank Bottoms

Date: 5-29-2020

Residual Volume left in Tanks

	Strap Measurement after Trucks Loaded in each tank bbls
Tank 1	16.4
Tank 2	<u> </u>
Tank 3	11.4

Sign-off by:USCG Rep (Optional) Signed Name:

Couvillion Rep

Signed Name:

NRC Rep

Signed Name:

REDACTED

REDACTED

REDACTED

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:

Couvillion Rep

Signed Name:

NRC Rep

Signed Name:

REDACTED

REDACTED

REDACTED

Appendix II

NRC Waste Handling Documentation

DECLARATION OF INSPECTION PRIOR TO BULK CARGO TRANSFER

Date: 5-19-20	Location: Couvillion Veneze, LA		
Facility/Vehicle Number:	Start Time	End Time	
Vessel Name: Breton Borderlon	0640	0930	
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

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

Pre-Transfer Conference and Agreement (Continued)

<input checked="" type="checkbox"/>	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).	TS	TM
	Verify adequate amount of equipment and/or absorbent material for initial response	TS	TM
	Inspect condition of response equipment stored on facility (if applicable).	TS	TM
	Verify availability of at least 200 feet of containment boom onsite within 1 hour.	TS	TM
	Verify means of deployment.	TS	TM
§ Means of Communication - 33 CFR 154.560			
	Verify continuous two-way voice communication between vessel and facility PICs.	TS	TM
Communications must meet the following requirements...			
Portable Radio:			
	IF Flammable or Combustible Liquids	TS	TM
	1. Marked or documented as intrinsically safe.	TS	TM
	2. Certified as intrinsically safe by national testing labor certification organization.	TS	TM
Voice			
	1. Be audible.	TS	TM
	Test communications. SAT <input type="checkbox"/> UNSAT <input type="checkbox"/>	TS	TM
§ Inspect lighting systems - 33 CFR 154.570			
	Verify portable lighting for operations between sunrise and sunset (if applicable).	TS	TM
	At transfer operations work areas for facility and vessel	TS	TM
	At transfer connection points for facility and vessel	TS	TM
	Verify sufficient number or fire extinguishers.	TS	TM
	Verify protective equipment is ready to operate.	TS	TM
	Verify warning signs are adequate.	TS	TM
§ 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.			
REDACTED	TKM	S-R-20	
	TITLE	DATE	TIME
REDACTED	TKM	5-19-20	
	TITLE	DATE	TIME
TRANSFER COMPLETED:		583.3 Bbls	5-19-20 0930
		AMOUNT (GALLONS)	DATE TIME

(FORM UPDATED April 15 2019)

Couville, Venice, La

DECLARATION OF INSPECTION

LOCATION & NAME OF FACILITY

Blindon Borden

5-19-20

NAME OF VESSEL

DATE TRANSFER OPERATIONS STARTS

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

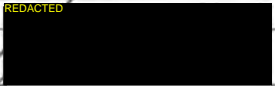

FACILITY

- | | | |
|-------------------------------------|--|-------------------------------------|
| <input checked="" type="checkbox"/> | A. The mooring lings are adequate for all anticipated conditions. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | B. Cargo hoses and/or loading arms are long enough for intended use. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | C. Cargo hoses are adequately supported to prevent undue strain on the couplings. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | D. The transfer system is properly lined up for discharging or receiving oil. (Additional checks shall be performed each time a valve is repositioned.) | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | E. Each flange connection on the cargo system not being used during the transfer operation is blanked or shut off. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | 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. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | G. The overboard or sea suction valves are sealed or lashed in the closed position. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | H. Adequate spill containment have been provided for couplings. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | I. All scuppers or other overboard drains are closed or plugged. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | J. A communications system is provided between the facility and the vessel. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | K. Emergency shutdown system is available and operable. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | L. Communication procedures are established and understood between persons in charge. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | M. Qualified and designated personnel are in charge and on duty at the terminal and vessel control stations. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | N. One person at the vessel control station is present who fluently speaks the language of the terminal control station. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | 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. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | P. Adequate lighting of the vessel and terminal work areas and manifold areas is provided. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Q. Persons in charge have held a conference to assure the mutual understanding of the following transfer operations: | |
| <input checked="" type="checkbox"/> | ...1. Product identity to be transferred. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | ...2. Sequence of transfer operation. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | ...3. Transfer rate of flow. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | ...4. Name or title and location of each person participating in the transfer operation. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | ...5. Particulars of the transferring and receiving systems. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | ...6. Starting, stripping, topping and shutdown have been discussed and understood. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | ...7. Emergency procedures including notification, containment and cleanup of spills. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | ...8. Watch and shift arrangements. | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | ...9. Notification before leaving stations. | <input checked="" type="checkbox"/> |



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

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | ...1. Warning signs and read warning signals (35.35-30). |
| <input checked="" type="checkbox"/> | ...2. Repair work authorization (35.35-30). |
| <input checked="" type="checkbox"/> | ...3. Boiler and galley fires safety (35.35-30). |
| <input checked="" type="checkbox"/> | ...4. Fires or open flames (35.35-30). |
| <input checked="" type="checkbox"/> | ...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	Signature		PERSON IN CHARGE OF FACILITY	Signature	
	Title	THM		Title	Tankman
	Time	0640		Date	5-19-20

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

	SAFETY MANAGEMENT SYSTEM	
Form 8.1.7	Site Specific Safety Plan Project Name: <u>MC20 Recovered Crude Oil Transfer</u>	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
NRC HSEQ Manager	Peter Brause, CSP (310) 387-2639
NRC HSEQ Director	Ken Koppler, CIH, CSP (971) 285-0450
Hospital / Medical Intervention	Plaquemines Medical Center – Port Sulfur, La (504) 564-3344

Date: <u>5-19-2020</u>	Start Time: <u>0600</u>	Job Number: <u>19-0192</u>
-------------------------------	--------------------------------	-----------------------------------

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

SITE DESCRIPTION / WORK SUMMARY

The site is the Couvillion Dockside Facility located at 433 McDermott Rd., Venice, La.

NRC will facilitate removing recovered crude oil from the well located at MC20 project. The M/V 33 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 Couvillion 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 _____ 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 Couvillion 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

	<p align="center">SAFETY MANAGEMENT SYSTEM</p>	
	<p align="center">Job Hazard Analysis</p>	<p align="right">Revision: 08/2015</p>

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
		<p>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</p>
<p>6. Working in potentially hazardous atmospheres</p>	<ul style="list-style-type: none"> • Personnel exposed to hazards related to hazardous atmospheres. • Ignition sources create potential for explosive conditions • Personnel not equipped to suppress incipient fire 	<ul style="list-style-type: none"> • 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.
<p>7. Energizing pneumatic equipment</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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.
<p>8. Transfer of recovered crude oil</p>	<ul style="list-style-type: none"> • Personnel contacted by crude oil spray or environmental release. • Overfilling tank resulting in spills • Personnel overcome by potentially hazardous vapors • Hydrogen Sulfide (H2S) Detected during transfer. 	<ul style="list-style-type: none"> • 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. • 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 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. The NRC crew will use a windsock, or other wind direction monitor, located on the dockside location to determine the upwind safe area and will keep personal monitors active to monitor H2S in the area.

	<p align="center">SAFETY MANAGEMENT SYSTEM</p>	
	<p align="center">Job Hazard Analysis</p>	<p align="right">Revision: 08/2015</p>

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
<p>9. Transfer of oil into transporter</p>	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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.
<p>10. Prolonged exposure to elements (Heat Stress)</p>	<ul style="list-style-type: none"> Inadequate hydration Extended work periods without rest resulting in heat stress 	<ul style="list-style-type: none"> 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).
<p>11. Break time</p>	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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.
<p>12. Decontaminate Personnel</p>	<ul style="list-style-type: none"> Potential for secondary contamination by absorption, injection, or ingestion 	<ul style="list-style-type: none"> 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.
<p>13. COVID 19 Protocol</p>	<ul style="list-style-type: none"> Personnel infected with COVID-19 could spread it to others in the work area. 	<ul style="list-style-type: none"> 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 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

	SAFETY MANAGEMENT SYSTEM	
	Job Hazard Analysis	Revision: 08/2015

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
		<p>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.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> First Aid OSHA recordable Illness/Injury Near Miss Equipment/Vehicle Damage 	<ul style="list-style-type: none"> 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
Peter Brause, CSP	HSEQ Manager	REDACTED		8/14/2019

ACKNOWLEDGEMENT

Employee Name	Signature	Date
REDACTED		

	SAFETY MANAGEMENT SYSTEM	
Form 8.1.7	Site Specific Safety Plan Project Name: <u>MC20 Recovered Crude Oil Transfer</u>	Revision: 08/2019

- Air Compressor (One aboard the M/V BB – One on Couvillion 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 Couvillion 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 Dailly Safety Meeting form - Maritime		
C	SMS 13.2 Respiratory Protection		
D	Incident / Near Miss / RCA		
E	DOI		

	SAFETY MANAGEMENT SYSTEM	
Form 8.1.7	Site Specific Safety Plan Project Name: MC20 Recovered Crude Oil Transfer	Revision: 08/2019

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 <input type="checkbox"/> Ingestion <input type="checkbox"/> Absorption <input type="checkbox"/> 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

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AIR MONITORING / ACTION LEVELS

Chemical Hazard	Instrument	Action Level	Action
Oxygen (O ₂)	4-gas	<19.5% or >23.5%	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Stop work, determine source of hazard and apply engineering controls. Upgrade PPE as necessary.
Lower Explosion Limit (LEL)	4-gas	>10%	<ul style="list-style-type: none"> Stop work, determine source of hazard and apply engineering control (ventilation) until reading can be brought below 10%.
Hydrogen Sulfide (H ₂ S)	4-gas	10 ppm >10 ppm	<ul style="list-style-type: none"> OSHA PEL SCBA / Supplied Air Respiratory Protection
PID/VOC	PID	10 - 750 ppm >750	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> No Respiratory requirement Full Face APR with OV Cartridges SCBA / Supplied Air Respiratory Protection


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ACTIVITY HAZARD ANALYSIS / SUMMARY

ITEM	HAZARD	PREVENTION
Behavioral Based Safety	Hazard Identification Stop Work Authority Near Miss	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 (H ₂ S) Detected during transfer.	<ul style="list-style-type: none"> • All hose connections shall be secured with safety clips, then wrapped in sorbent pads and duct tape as well as polly 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 be stopped 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

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ITEM	HAZARD	PREVENTION
		<p>personnel from the area during the transfer. There will be support personnel upwind with SAR capabilities on site for rescue purposes during this operation.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> All hose connections shall be secured with safety clips, then wrapped in sorbent pads and duct tape as well as polly 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 be stopped 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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

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		<p>they will be removed from work and follow the US Ecology / NRC return to work guidance issued by corporate.</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • First Aid • OSHA recordable • Illness/Injury • Near Miss • Equipment/Vehicle Damage 	<ul style="list-style-type: none"> • 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

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DECONTAMINATION AND DISPOSAL

DECONTAMINATION EQUIPMENT	
<input type="checkbox"/> Visqueen on Ground <input type="checkbox"/> Carpet on Ground <input type="checkbox"/> Wooden Pallets <input checked="" type="checkbox"/> Decon Pool / wash boots <input type="checkbox"/> Boot brushes <input type="checkbox"/> Decon Pool Rinse Boots <input checked="" type="checkbox"/> Respirator wash bucket <input checked="" type="checkbox"/> Respirator rinse bucket <input checked="" type="checkbox"/> Drying stands or platforms for respirators after washing <input checked="" type="checkbox"/> Wipe rags to clean respirators	<input checked="" type="checkbox"/> Rags for cleaning - wiping <input type="checkbox"/> Labeled Drums for disposal items <input checked="" type="checkbox"/> Chairs to sit on for PPE removal <input type="checkbox"/> Plastic zip-lock bags for personal sample pumps <input checked="" type="checkbox"/> Water to wash face / hands <input type="checkbox"/> Decontamination Assistant <input type="checkbox"/> Barrier stands <input checked="" type="checkbox"/> Caution tape to designate decon area <input type="checkbox"/> Shower
PERSONNEL DECONTAMINATION PLAN	
<input type="checkbox"/> Establish two stage contamination reduction zone with small decon area just inside of containment area <input type="checkbox"/> Provide wet rags (not saturated) to personnel to wipe exterior of PPE prior to dry decon (stage 1 decon) <input type="checkbox"/> Place empty lined drums for contaminated PPE with liners removed to waste bin at end of each shift <input type="checkbox"/> Untape gloves and boots – discard tape <input type="checkbox"/> Sit on chair prior to removing boots or outer PPE <input type="checkbox"/> Remove boots and outer gloves (boots will be reused and leather outer gloves may be reuse if still in good condition) <input type="checkbox"/> Unzip suit / pull off hood <input type="checkbox"/> Roll down suit / inside out and place into labeled container <input type="checkbox"/> Remove respirator <input type="checkbox"/> Use wipes to clean <input type="checkbox"/> Store respirators in plastic bags after drying <input type="checkbox"/> Remove inner gloves <input type="checkbox"/> PPE and debris will be bagged, accounted for, and bulked into the applicable waste bin or container <input type="checkbox"/> Store respirators in individual plastic bags with employee names <input type="checkbox"/>	
WASTE MANAGEMENT PLAN	
<input type="checkbox"/> Contaminated disposable PPE & debris from operation shall be placed in an approved container <input type="checkbox"/> <input type="checkbox"/>	

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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

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EMERGENCY MEDICAL TREATMENT AND FIRST AID



TYPE CONTACT	FIRST AID
Eyes	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Remove contaminated clothing immediately • Wash skin continuously for 15 minutes • Refer to physician if redness, swelling, or pain persists after washing
Not Breathing	<ul style="list-style-type: none"> • Call 911 • Remove to fresh air immediately if respiratory distress develops • Begin CPR until EMT arrives
Ingestion	<ul style="list-style-type: none"> • Aspiration hazard • Do not induce vomiting • Do not give anything by mouth

ACCIDENT REPORTING

FIRST AID INJURIES REQUIRING MEDICAL TREATMENT VEHICLE ACCIDENT NEAR MISS	<ul style="list-style-type: none"> <input type="checkbox"/> Employees immediately report all accidents or incidents to the Site Project Manager / Safety Officer <input type="checkbox"/> 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 <input type="checkbox"/> NRC Safety Manager will provide employee disposition guidelines and coordinate an accident investigation either by himself or Project Supervisor <input type="checkbox"/> NRC Project Manager will relay information to Project Site Superintendent <input type="checkbox"/> Accident reporting forms are included in Attachment D <input type="checkbox"/> Determination will be made regarding need for post accident drug testing
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EMERGENCY RESPONSE PLAN

ELEMENT	LOCATION, SPECIFICATION OR REASON FOR USE
NEAREST HOSPITAL	Plaquemines Medical Center 27136 Highway 23 Port Sulfur, La (504)564-3344
NEAREST PHONE	Couvillion Facility Phone
FIRST AID KIT	Deck of M/V Chloe Candies / Dock side as well
FIRE EXTINGUISHER	Deck of the vessel Couvillion Dock
EYEWASH STATION	Stage Portable Eyewash Station in Support Zone
EVACUATION ROUTE / MEETING POINT	See site map and follow established emergency procedure

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Hospital Route



-  Start out going **northwest** on McDermott Rd toward Tidewater Rd.
Then 0.50 miles
-  Turn **right** onto Tidewater Rd.
Then 0.67 miles
-  Turn **slight left** onto Jump Basin Rd.
Jump Basin Rd is just past Chevron Rd
Then 0.16 miles
-  Take the 2nd **left** onto Highway 23/LA-23.
Highway 23 is just past Spanish Pass Rd
If you reach Offshore Shipyard Rd you've gone a little too far
Then 30.67 miles
-  Plaquemines Medical Center, 27136 Highway 23, Port Sulphur, LA, 27136 HIGHWAY 23.



SAFETY MANAGEMENT SYSTEM



Job Hazard Analysis

Revision: 08/2015

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

5-27-2020

SUMMARY OF POTENTIAL HAZARDS (Check applicable)

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

APPLICABLE REGULATION / SOPS / ALERTS

<input type="checkbox"/> SMS 19.2 Vacuum Trucks	<input type="checkbox"/>	<input type="checkbox"/>
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MINIMUM PERSONAL PROTECTIVE EQUIPMENT (Check applicable)

<input type="checkbox"/> Level A	<input checked="" type="checkbox"/> Hard Hat	<input type="checkbox"/> High Visibility Vest	<input checked="" type="checkbox"/> Leather Steel Toe Boots	<input checked="" type="checkbox"/> PFD / Work vest
<input type="checkbox"/> Level B	<input checked="" type="checkbox"/> Safety Glasses	<input checked="" type="checkbox"/> Long Sleeves / Coveralls	<input type="checkbox"/> Disposable boot covers	<input type="checkbox"/>
<input type="checkbox"/> Level C	<input type="checkbox"/> Face Shield	<input type="checkbox"/> Chemical protective clothing	<input type="checkbox"/> Neoprene Steel Toe Boots	<input type="checkbox"/>
<input checked="" type="checkbox"/> Level D	<input checked="" type="checkbox"/> Hearing Protection	<input type="checkbox"/> Respirator: _____	<input checked="" type="checkbox"/> Gloves: _____	

JOB HAZARD ANALYSIS

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
1. Pre-job Meetings Behavior Based Safety	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Uneven working surfaces and trip hazards. Equipment not certified, not tested or damaged Improper set-up due to untrained or unqualified personnel 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

	SAFETY MANAGEMENT SYSTEM	
	Job Hazard Analysis	Revision: 08/2015

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
6. Working in potentially hazardous atmospheres	<ul style="list-style-type: none"> Personnel exposed to hazards related to hazardous atmospheres. Ignition sources create potential for explosive conditions Personnel not equipped to suppress incipient fire 	<p>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</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Personnel contacted by crude oil spray or environmental release. Overfilling tank resulting in spills Personnel overcome by potentially hazardous vapors Hydrogen Sulfide (H₂S) Detected during transfer. 	<ul style="list-style-type: none"> 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. 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 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. The NRC crew will use a windsock, or other wind direction monitor, located on the dockside location to determine the upwind safe area and will keep personal monitors active to monitor H₂S in the area.

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	Job Hazard Analysis	Revision: 08/2015

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
9. Transfer of oil into transporter	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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)	<ul style="list-style-type: none"> Inadequate hydration Extended work periods without rest resulting in heat stress 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Potential for secondary contamination by absorption, injection, or ingestion 	<ul style="list-style-type: none"> 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.
13. COVID 19 Protocol	<ul style="list-style-type: none"> Personnel infected with COVID-19 could spread it to others in the work area. 	<ul style="list-style-type: none"> 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 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

	SAFETY MANAGEMENT SYSTEM	
	Job Hazard Analysis	Revision: 08/2015

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
		<p>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.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> First Aid OSHA recordable Illness/Injury Near Miss Equipment/Vehicle Damage 	<ul style="list-style-type: none"> 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
Peter Brause, CSP	HSEQ Manager	REDACTED	Ms. Way	8/14/2019 5/27/2020

ACKNOWLEDGEMENT

Employee Name	Signature	Date
REDACTED		5-27-2020
		5-27-20
		5-27-2020
		5-27-2020



SAFETY MANAGEMENT SYSTEM



Job Hazard Analysis

Revision: 08/2015

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

5/28/2020

SUMMARY OF POTENTIAL HAZARDS (Check applicable)

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

APPLICABLE REGULATION / SOPS / ALERTS

<input type="checkbox"/> SMS 19.2 Vacuum Trucks	<input type="checkbox"/>	<input type="checkbox"/>
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MINIMUM PERSONAL PROTECTIVE EQUIPMENT (Check applicable)

<input type="checkbox"/> Level A	<input checked="" type="checkbox"/> Hard Hat	<input type="checkbox"/> High Visibility Vest	<input checked="" type="checkbox"/> Leather Steel Toe Boots	<input checked="" type="checkbox"/> PFD / Work vest
<input type="checkbox"/> Level B	<input checked="" type="checkbox"/> Safety Glasses	<input checked="" type="checkbox"/> Long Sleeves / Coveralls	<input type="checkbox"/> Disposable boot covers	<input type="checkbox"/>
<input type="checkbox"/> Level C	<input type="checkbox"/> Face Shield	<input type="checkbox"/> Chemical protective clothing	<input type="checkbox"/> Neoprene Steel Toe Boots	<input type="checkbox"/>
<input checked="" type="checkbox"/> Level D	<input checked="" type="checkbox"/> Hearing Protection	<input type="checkbox"/> Respirator: _____	<input checked="" type="checkbox"/> Gloves: _____	

JOB HAZARD ANALYSIS

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
1. Pre-job Meetings Behavior Based Safety	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Uneven working surfaces and trip hazards. Equipment not certified, not tested or damaged Improper set-up due to untrained or unqualified personnel 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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



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Job Hazard Analysis

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● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
6. Working in potentially hazardous atmospheres	<ul style="list-style-type: none"> Personnel exposed to hazards related to hazardous atmospheres. Ignition sources create potential for explosive conditions Personnel not equipped to suppress incipient fire 	<p>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</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Personnel contacted by crude oil spray or environmental release. Overfilling tank resulting in spills Personnel overcome by potentially hazardous vapors Hydrogen Sulfide (H₂S) Detected during transfer. 	<ul style="list-style-type: none"> 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. 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 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. The NRC crew will use a windsock, or other wind direction monitor, located on the dockside location to determine the upwind safe area and will keep personal monitors active to monitor H₂S in the area.



SAFETY MANAGEMENT SYSTEM



Job Hazard Analysis

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● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
9. Transfer of oil into transporter	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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)	<ul style="list-style-type: none"> Inadequate hydration Extended work periods without rest resulting in heat stress 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Potential for secondary contamination by absorption, injection, or ingestion 	<ul style="list-style-type: none"> 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.
13. COVID 19 Protocol	<ul style="list-style-type: none"> Personnel infected with COVID-19 could spread it to others in the work area. 	<ul style="list-style-type: none"> 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 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

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● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
		<p>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.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> First Aid OSHA recordable Illness/Injury Near Miss Equipment/Vehicle Damage 	<ul style="list-style-type: none"> 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
Peter Brause, CSP	HSEQ Manager	REDACTED	Manning	8/14/2019
				5/28/2020

ACKNOWLEDGEMENT

Employee Name	Signature	Date
REDACTED		05/28/20
		5-28-20
		5-28-20
		5-28-20
		5-28-20



SAFETY MANAGEMENT SYSTEM



Job Hazard Analysis

Revision: 08/2015

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

5/29/2020

SUMMARY OF POTENTIAL HAZARDS (Check applicable)

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

APPLICABLE REGULATION / SOPS / ALERTS

<input type="checkbox"/> SMS 19.2 Vacuum Trucks	<input type="checkbox"/>	<input type="checkbox"/>
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MINIMUM PERSONAL PROTECTIVE EQUIPMENT (Check applicable)

<input type="checkbox"/> Level A	<input checked="" type="checkbox"/> Hard Hat	<input type="checkbox"/> High Visibility Vest	<input checked="" type="checkbox"/> Leather Steel Toe Boots	<input checked="" type="checkbox"/> PFD / Work vest
<input type="checkbox"/> Level B	<input checked="" type="checkbox"/> Safety Glasses	<input checked="" type="checkbox"/> Long Sleeves / Coveralls	<input type="checkbox"/> Disposable boot covers	<input type="checkbox"/>
<input type="checkbox"/> Level C	<input type="checkbox"/> Face Shield	<input type="checkbox"/> Chemical protective clothing	<input type="checkbox"/> Neoprene Steel Toe Boots	<input type="checkbox"/>
<input checked="" type="checkbox"/> Level D	<input checked="" type="checkbox"/> Hearing Protection	<input type="checkbox"/> Respirator: _____	<input checked="" type="checkbox"/> Gloves: _____	

JOB HAZARD ANALYSIS

● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
1. Pre-job Meetings Behavior Based Safety	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Uneven working surfaces and trip hazards. Equipment not certified, not tested or damaged Improper set-up due to untrained or unqualified personnel 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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



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● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
6. Working in potentially hazardous atmospheres	<ul style="list-style-type: none"> Personnel exposed to hazards related to hazardous atmospheres. Ignition sources create potential for explosive conditions Personnel not equipped to suppress incipient fire 	<p>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</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Personnel contacted by crude oil spray or environmental release. Overfilling tank resulting in spills Personnel overcome by potentially hazardous vapors Hydrogen Sulfide (H₂S) Detected during transfer. 	<ul style="list-style-type: none"> 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. 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 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. The NRC crew will use a windsock, or other wind direction monitor, located on the dockside location to determine the upwind safe area and will keep personal monitors active to monitor H₂S in the area.



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● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
9. Transfer of oil into transporter	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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)	<ul style="list-style-type: none"> Inadequate hydration Extended work periods without rest resulting in heat stress 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Potential for secondary contamination by absorption, injection, or ingestion 	<ul style="list-style-type: none"> 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.
13. COVID 19 Protocol	<ul style="list-style-type: none"> Personnel infected with COVID-19 could spread it to others in the work area. 	<ul style="list-style-type: none"> 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 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



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● Job Steps	● Potential Hazards	● Preventive Measures / Special PPE
		<p>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.</p> <ul style="list-style-type: none">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	<ul style="list-style-type: none">First AidOSHA recordableIllness/InjuryNear MissEquipment/Vehicle Damage	<ul style="list-style-type: none">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
Peter Brause, CSP	HSEQ Manager			8/14/2019
			DN	5/29/2020

ACKNOWLEDGEMENT

Employee Name	Signature	Date
REDACTED		5-29-2020
REDACTED		5-29-2020
REDACTED		5-29-2020
REDACTED		5-29-2020
REDACTED		5-29-2020
REDACTED		5-29-2020
REDACTED		5-29-2020

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 5-28-2020

Bill of Lading No. 303245

Memorandum

LTB Transport LLC

Shipper No. 1

Carrier No.

TO: Consignee		FROM: Shipper	
1925 River Rd		Covington Dock	
Street		Street	
Destination		Origin	
Bozwick LA		Venice, LA	
Zip Code		Zip Code	
70842		70071	
Route: Hwy 90		Vehicle No. 20003	
SCAC		Emergency Response Phone Number	
		1 828 255 3921	

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions	Weight (Subject to Correction)*	Rate or Class	CHARGES
BBL	X	UN1267 Petroleum Crude Oil, 3, 8g	78,000 lbs		
142.1					
BBL		142.1 BBL Crude Oil			

*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 <input type="checkbox"/> COLLECT <input type="checkbox"/> \$	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)

FREIGHT CHARGES
Check Appropriate Box:

- ☐ Freight prepaid
☐ Collect

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, except as noted (contents 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 as meaning any person 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 carrier on the route to said 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 interested in all or any of said property, 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 Freight Classifications in effect on the date hereof, if this is a rail or a railwater shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all 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 are hereby agreed to by the shipper and accepted for himself and his assigns.

Mark with "RG" 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 special instruction is noted.

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 class(es).

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c) (1)(A) and (B).

SHIPPER	CARRIER
PER	PER
3	
Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.	

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

Memorandum

Bill of Lading No. 303247

Shopper No. _____

Carrier No. _____

L+B Transport

(Name of Carrier)

[illegible]

*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. \$
1. 1000000	1000000
2. 1000000	1000000
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97. 1000000	1000000
98. 1000000	1000000
99. 1000000	1000000
100. 1000000	1000000

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.

FREIGHT CHARGES

Check Appropriate Box:

☐ Freight prepaid☐ Collect

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, except as noted (contents and condition of contents of packages (owner's own), marked, consigned and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation, partnership, firm, company or individual, whether or not a carrier, who contracts to carry to its usual place of delivery at said destination or to deliver to the consignee at said 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 interested in all or any of said property, 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 Freight Classifications in effect on 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 certifies that he is familiar with all 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 are hereby agreed to by the 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 separate statement is required.

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 class(es).

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c)(1)(A) and (B).

SHIPPER

PER

3

CARRIER

PER

kaged,
to the

Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.

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

Shipper No. _____

Carrier No. _____

Memorandum

(Name of Carrier)

TO: Consignee <i>Acadian Oil Company</i>		FROM: Shipper <i>Carroll's Dock</i>	
Street <i>1325 Rte Road</i>		Street <i>433 Medford H Rd</i>	
Destination <i>Berwick, LI</i>	Zip Code <i>70812</i>	Origin <i>Warren, LI</i>	Zip Code <i>76091</i>
Route: <i>High 90</i>	Vehicle No. <i>7617 L</i>	SCAC	Emergency Response Phone Number <i>1-800-255-3824</i>

[illegible]

*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: C.O.D.	C.O.D.	C.O.D. FEE:	TOTAL
		Amt. \$	PREPAID <input type="checkbox"/> COLLECT <input type="checkbox"/> \$	CHARGES: \$

\$ _____ per _____


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

☐ Collect

(Signature of Consignor)

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 172.204(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 spot REDACTED.

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c) (1)(A) and (B).

SHIPPER		CARRIER	
PER		PER	
	<p>ckaged, to the</p>	<p>Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.</p>	

L & B TRANSPORT, L.L.C.

NIGHTS AWAY:

ORDER NO.

303245

702 Hwy 190 West, Port Allen, LA 70767
Phone (225) 387-0894 1-800-545-9401

DISPATCHER

WILLIAMS

CUSTOMER
P.O.ORDERED
BY

WILLIAMS

RELEASE
NO.LOAD
DATE

05/28/20

TIME

06:00

LOADING
DRIVER

AVEE

TRUCK
NO.

7570

TRAILER
NO.

800003

DELIVERY
DATE

05/28/20

TIME

11:34

DELIVERY
DRIVERTRUCK
NO.TRAILER
NO.

BILL TO:

LEGACY INDUSTRIES, LLC
309 St George Ave
Jefferson, LA 70121

CONSIGNEE:

ACADIANA OIL
1825 River road
Berwick, LA 70342

SHIPPER:

COUVILLON DOCK
433 McDermott Road
Verde, LA 70091

TRAILER APPROVED & AUTHORIZED LOAD:

Shipper
Signature

REDACTED

BASIC DESCRIPTION								QUANTITY GAL/WT
X RQ UN1287 PETROLEUM CRUDE OIL EQUIV POINT EQUAL Q 3 PG 1								
142.1 BBL C-4								

DRIVER SPECIAL
INSTRUCTIONS

TIME DEPARTED FROM TERMINAL:

TIME RETURNED TO TERMINAL:

ACCESSORIAL CHARGES

CHECK ALL
THAT APPLY

LOADING

DELIVERY

PUMP

BLOWER

EXTRA HOSE (FT)

EXTRA STOPS

WASH OUT

IN-TRANSIT HEAT

SCALES/TOLLS

LAYOVER

TRAILER RENTAL

DELIVERY
DATE:
PICK UP
DATE:

TIME:

TIME:

GROSS

TARE

WEIGHT DATA

NET

LOADING DATA

ARRIVE:

START:

FINISH:

DEPART:

HOURS

DELAYED:

REASON DELAYED:

AUTHORIZATION TO UNLOAD

This is to certify that I have checked the documents pertaining to this shipment, verified the product and the quantity tendered for delivery. The connections are correct and the receiving tank will hold the product. The driver is authorized to unload.

RECEIVER'S
SIGNATURE X

DELIVERY DATA

ARRIVE:

START:

FINISH:

DEPART:

HOURS

DELAYED:

REASON DELAYED:

DRIVER REMARKS

IN CASE OF LEAK, SPILL, FIRE OR OTHER EMERGENCY CALL CHEMTREC 1-800-424-9300

L & B TRANSPORT, L.L.C.

ORDER NO.
303247

702 Hwy 190 West, Port Allen, LA 70767
Phone (225) 387-0894 1-800-545-9401

NIGHTS AWAY:

DISPATCHER

WILLIAMS

CUSTOMER P.O.		ORDERED BY WILLIAMS		RELEASE NO.	
LOAD DATE	05/29/20	TIME	06:00	LOADING DRIVER	AVEE
TRUCK NO.	7670	TRAILER NO.	800003		
DELIVERY DATE	05/29/20	TIME	11:34	DELIVERY DRIVER	
TRUCK NO.		TRAILER NO.			

BILL TO:
LEGACY INDUSTRIES, LLC
308 St George Ave
Jefferson, LA 70121

CONSIGNEE:
ACADIANA OIL
1625 River road
Barwick, LA 70342

SHIPPER:
COUVILLON DOCK
433 McDermott Road
Venice, LA 70081

TRAILER # REDACTED
Shipper Signature

BASIC DESCRIPTION	QUANTITY GAL/WT
X RQ UN1267 PETROLEUM CRUDE OIL 1500 LBS PER TON EQUAL 0.3	PG 1 0

DRIVER SPECIAL INSTRUCTIONS

TIME DEPARTED FROM TERMINAL: TIME RETURNED TO TERMINAL:

ACCESSORIAL CHARGES	PUMP	BLOWER	EXTRA HOSE (FT)	EXTRA STOPS	WASH OUT	IN-TRANSIT HEAT	SCALES/TOLLS	LAYOVER
CHECK ALL THAT APPLY →	LOADING							
	DELIVERY							

TRAILER RENTAL	DELIVERY DATE: TIME: PICK UP DATE: TIME:	WEIGHT DATA	
		GROSS	TARE NET

LOADING DATA
ARRIVE: START: FINISH: DEPART: HOURS DELAYED:
REASON DELAYED:

AUTHORIZATION TO UNLOAD This is to certify that I have checked the documents pertaining to this shipment, verified the product and the quantity tendered for delivery. The connections are correct and the receiving tank will hold the product. The driver is authorized to unload.

RECEIVER'S SIGNATURE X

DELIVERY DATA
ARRIVE: START: FINISH: DEPART: HOURS DELAYED:
REASON DELAYED:

DRIVER REMARKS

L & B TRANSPORT, L.L.C.

NIGHTS AWAY:

ORDER NO.

303246

702 Hwy 190 West, Port Allen, LA 70767

Phone (225) 387-0894 1-800-545-9401

DISPATCHER

WILLIAMS

CUSTOMER
P.O.ORDERED
BY

WILLIAMS

RELEASE
NO.LOAD
DATE

05/28/20

TIME

08:30

LOADING
DRIVER

UNKNOWN

TRUCK
NO.

7617L

TRAILER
NO.

800670V

DELIVERY
DATE

05/29/20

TIME

12:34

DELIVERY
DRIVERTRUCK
NO.TRAILER
NO.

BILL TO:

LEGACY INDUSTRIES, LLC
308 St George Ave
Jefferson, LA 70121

CONSIGNEE:

ACADIANA OIL
1825 River road
Berwick, LA 70342

SHIPPER:

BOUVILLION DOCK
433 McDermott Road
Venice, LA 70091TRAILER A
Shipper
Signature

REDACTED

BASIC DESCRIPTION

X RD UN1267 PETROLEUM CRUDE OIL BOILING POINT EQUAL TO 3 PG1 0

QUANTITY
GAL/WTDRIVER SPECIAL
INSTRUCTIONS

TIME DEPARTED FROM TERMINAL:

TIME RETURNED TO TERMINAL:

ACCESSORIAL CHARGES

CHECK ALL
THAT APPLY

LOADING

DELIVERY

PUMP

BLOWER

EXTRA HOSE (FT)

EXTRA STOPS

WASH OUT

IN-TRANSIT HEAT

SCALES/TOLLS

LAYOVER

TRAILER RENTAL

DELIVERY
DATE:
PICK UP
DATE:

TIME:

TIME:

WEIGHT DATA

GROSS

TARE

NET

LOADING DATA

ARRIVE:

START:

FINISH:

DEPART:

HOURS

DELAYED:

REASON DELAYED:

AUTHORIZATION TO UNLOAD

This is to certify that I have checked the documents pertaining to this shipment, verified the product and the quantity tendered for delivery. The connections are correct and the receiving tank will hold the product. The driver is authorized to unload.

RECEIVER'S
SIGNATURE

X

DELIVERY DATA

ARRIVE:

START:

FINISH:

DEPART:

HOURS

DELAYED:

REASON DELAYED:

DRIVER REMARKS

IN CASE OF LEAK, SPILL, FIRE OR OTHER EMERGENCY CALL CHEMTREC 1-800-424-9300

L & B TRANSPORT, L.L.C.

NIGHTS AWAY:

ORDER NO.
303248702 Hwy 190 West, Port Allen, LA 70767
Phone (225) 387-0894 1-800-545-9401

DISPATCHER

WILLIAMS

CUSTOMER
P.O.ORDERED
BY

WILLIAMS

RELEASE
NO.LOAD
DATE 05/29/20

TIME 09:30

LOADING
DRIVER LEESTRUCK
NO. 7447TRAILER
NO. 8077DELIVERY
DATE 05/29/20

TIME 12:34

DELIVERY
DRIVERTRUCK
NO.TRAILER
NO.BILL TO: LEGACY INDUSTRIES, LLC
308 St George Ave
Jefferson, LA 70121CONSIGNEE:
ACADIANA OIL
1625 River road
Berwick, LA 70342SHIPPER: COUVILLON DOCK
433 McDermott Road
Venice, LA 70091TRAILER A
Shipper
Signature

REDACTED

BASIC DESCRIPTION
SELECTING POINT EQUAL O 3 PG 1 0QUANTITY
GAL/WTDRIVER SPECIAL
INSTRUCTIONS

TIME DEPARTED FROM TERMINAL:

TIME RETURNED TO TERMINAL:

ACCESSORIAL CHARGES

CHECK ALL
THAT APPLY

LOADING

DELIVERY

PUMP

BLOWER

EXTRA HOSE (FT)

EXTRA STOPS

WASH OUT

IN-TRANSIT HEAT

SCALES/TOLLS

LAYOVER

TRAILER RENTAL

DELIVERY
DATE:
PICK UP
DATE:

TIME:

TIME:

GROSS

TARE

WEIGHT DATA

NET

TRAILER NO.:

LOADING DATA

ARRIVE: START: FINISH: DEPART: HOURS
DELAYED:

REASON DELAYED:

AUTHORIZATION TO UNLOAD This is to certify that I have checked the documents
pertaining to this shipment, verified the product and the quantity tendered for delivery. The connections
are correct and the receiving tank will hold the product. The driver is authorized to unload.RECEIVER'S
SIGNATURE X

DELIVERY DATA

ARRIVE: START: FINISH: DEPART: HOURS
DELAYED:

REASON DELAYED:

DRIVER REMARKS

IN CASE OF LEAK, SPILL, FIRE OR OTHER EMERGENCY CALL CHEMTREC 1-800-424-9300

LEGACY

INDUSTRIES

Day | Date: 05-27-2020

Ticket No: _____

WORK ORDER FROM:

PO NUMBER _____

COMPANY LEGACY

CONTACT NAME _____

TITLE _____

ADDRESS 308 ST GEORGE AVE.

NEW ORLEANS, LA 70121

PHONE 504-900-1194

FAX _____

EMAIL _____

JOB SITE:

JOB NRC CRUDE OIL

JOB SITE VENICE

CONTACT NAME REDACTED

TITLE _____

ADDRESS 433 McDERMOTT RD

VENICE, LA

PHONE _____

FAX _____

EMAIL _____

TRANSPORTATION:

DRIVER REDACTED

SUPERVISOR _____

HELPER _____

TRUCK NO | TRUCK SIZE 6797 190 BBL

TOTAL
GALLONS | BARRELS _____

DISPOSAL SITE _____

WASH OUT SITE _____

TIME: (Military)

SHOP : DEPART @ 0500

JOB SITE : ARRIVE @ 0730 DEPART @ 1000

DISPOSAL/RECYCLE : ARRIVE @ _____ DEPART @ _____

CLEAN OUT : ARRIVE @ _____ DEPART @ _____

_____ : ARRIVE @ _____ DEPART @ _____

SHOP : ARRIVE @ _____

TOTAL TIME _____

DESCRIPTION OF WORK: PRE TRIP TRAVEL TO SITE. RECOVER OILY WATER.

AUTHORIZED CUSTOMER REPRESENTATIVE SIGNATURE REDACTED

DATE: 5/27/2020

E.R.R. LLC

EVERGREEN

No. 10513

NON-HAZARDOUS MANIFEST GENERATOR

Generator NRC CRUDE OIL I.D. # 11566
Address 433 MCDERMOTT RD Shipping Location 11566 11th St. Dock
VENICE, LA Address 2000 Highway 101 New Orleans LA
Phone _____ Phone 504 912-0476 433 MCDERMOTT RD
VENICE, LA

Description Waste Materials	Profile Number	Total Quantity	Units of Measure	Container Type
<u>OILY WATER</u>		<u>3774.32</u>	<u>GALLONS</u>	<u>906BL</u>
		<u>3774.32</u>		

SHIPPING SEAL NUMBERS

--	--	--	--

All entry points must have a seal. Without seal shipment will be returned.

I HEREBY CERTIFY THAT THE ABOVE DESCRIBED MATERIALS ARE NOT HAZARDOUS WASTES AS DEFINED BY 40 CFR, PART 261 OR ANY APPLICABLE STATE LAW, HAVE BEEN FULLY AND ACCURATELY DESCRIBED, CLASSIFIED AND PACKAGED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE REGULATIONS.

REDACTED
Generator Authorized Agent Name (Print)

REDACTED
Signature

27 MAY 2020
Delivery Date

TRANSPORTER

Transporter Name REDACTED
I.D. # DOT 3204290
Address 308 ST GEORGE AVE
NOLA 70121

Driver Name _____
Truck Number _____
Truck Type _____

I HEREBY ACKNOWLEDGE RECEIPT OF THE ABOVE DESCRIBED MATERIALS FOR TRANSPORT FROM THE GENERATOR SITE LISTED ABOVE.

I HEREBY ACKNOWLEDGE THAT THE ABOVE DESCRIBED MATERIALS WERE RECEIVED FROM THE GENERATOR SITE WERE TRANSPORTED WITHOUT INCIDENT TO THE DESTINATION LISTED BELOW.

REDACTED

REDACTED

5-27-20
5-27-20
Delivery Date

DESTINATION

I.D. Number LA 0125750 Time In 12:00 Time Out 12:30
Site Name Belle Chasse Outfall #001 Phone Number (504) 554-9285 (504) 512-1039
Address 9875 Hwy 23 South, Belle Chasse, LA 70037

I HEREBY ACKNOWLEDGE RECEIPT OF THE ABOVE DESCRIBED MATERIALS.

REDACTED

REDACTED

5-27-20
Receipt Date

White - Original

Canary - Disposer Retain

Pink - Transporter Retain

Gold - Generator Retain

E.R.R. LLC

EVERGREEN

No. 10511

NON-HAZARDOUS MANIFEST

GENERATOR

Generator NRC I.D. # _____
Address 3711 WALKER RD. Shipping Location _____
BELLE CHASSE, LA 70037 Address _____
Phone _____ Phone _____

Description Waste Materials	Profile Number	Total Quantity	Units of Measure	Container Type
<u>ONLY WASH WATER</u>		<u>200</u>	<u>GALLONS</u>	<u>90 BBL VAC</u>

SHIPPING SEAL NUMBERS

--	--	--	--

All entry points must have a seal. Without seal shipment will be returned.

I HEREBY CERTIFY THAT THE ABOVE DESCRIBED MATERIALS ARE NOT HAZARDOUS WASTES AS DEFINED BY 40 CFR, PART 261 OR ANY APPLICABLE STATE LAW, HAVE BEEN FULLY AND ACCURATELY DESCRIBED, CLASSIFIED AND PACKAGED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO FEDERAL REGULATIONS.

Generator Authorized Agent Name (Print)

Sig

Delivery Date 5/21/2020

TRANSPORTER

Transporter Name LEGACY
I.D. # DOT 3204290
Address 308 ST. GEORGE AVE
NEW ORLEANS LA 70121

Driver [REDACTED]
Truck Number 6197
Truck Type 9001 VAC

I HEREBY ACKNOWLEDGE RECEIPT OF THE ABOVE DESCRIBED MATERIALS FOR TRANSPORT FROM THE GENERATOR SITE LISTED ABOVE.

I HEREBY ACKNOWLEDGE THAT THE ABOVE DESCRIBED MATERIALS WERE RECEIVED FROM THE GENERATOR SITE WERE TRANSPORTED WITHOUT INCIDENT TO THE DESTINATION LISTED BELOW.

[REDACTED]

DESTINATION

I.D. Number LA 0125750 Time In _____ Time Out _____
Site Name Belle Chasse Outfall #001 Phone Number (504) 554-9285 (504) 512-1039
Address 9875 Hwy 23 South, Belle Chasse, LA 70037

I HEREBY ACKNOWLEDGE RECEIPT OF THE ABOVE DESCRIBED MATERIALS.

[REDACTED]

[REDACTED]

Receipt Date

White - Original

Canary - Disposer Retain

Pink - Transporter Retain

Gold - Generator Retain

ACADIANA OIL & ENVIRONMENTAL

CORPORATION

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

TRANSPORT MANIFEST

Lease Run Ticket

22235

EMERGENCY RESPONSE CONTACT:

E S & H

985-851-5055

Date 5-28-2020

Operator

Lease No.

C	G								
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Lease Name CouvillionField Venice La.

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

TANK NO.				SIZE
62006				4500

SERIAL NUMBERS			
OLD			
NEW			

LOG NUMBER	Ticket #303245
TIME ARRIVED <u>11:10</u> <u>AM</u>	
TIME DEPARTED <u>AM</u>	

DELIVERY STATION	<u>Berwick La.</u>
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TEMP. FACTOR	X	BS & W FACTOR	=	X FACTOR
<u>.9900</u>		<u>.9900</u>		<u>.9801</u>

OBSERVED GRAVITY		<u>28 @ 84 °F</u>
PERCENT BS & W	<u>1%</u>	TEMPERATURE OF OIL IN TANK °F

OFFICE USE ONLY	
GRAVITY CORR TO 60 °F	
1st	
2nd	
GROSS BARRELS	<u>140.3</u>
X FACTOR	<u>.9801</u>
NET BBLs. PER RUN TIC.	<u>137.51</u>

GROSS	OPEN	DRIVER
TARE		<u>REDACTED</u>
NET	CLOSE	DRIVER
OPERATOR'S WITNESS		

I.D. NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PG	TOTAL BBLs
UN 1267	PETROLEUM CRUDE OIL	3	111	137.51
		BS		1.40
		Temp		1.39

"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: REDACTED Date: _____

ACADIANA OIL & ENVIRONMENTAL
CORPORATION

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

TRANSPORT MANIFEST

Lease Run Ticket

22236

EMERGENCY RESPONSE CONTACT:

E S & H

985-851-5055

Date 5-29-2020

Operator

Lease No.

C	G						
---	---	--	--	--	--	--	--

Lease Name

Couville

Field

Venice La.

GAUGE	OIL LEVEL			
	FEET		INCHES	
1st				
2nd				

BS&W LEVEL		TANK TEMP	
FT.	INCHES		

TANK NO.	SIZE
<u>62006</u>	<u>12,500</u>

EST. GROSS GALLONS @ °F

SERIAL NUMBERS	OLD			
NEW				

OBSERVED GRAVITY 26 @ 80 °F

PERCENT BS & W 2.4% TEMPERATURE OF OIL IN TANK °F

LOG NUMBER	
TIME ARRIVED	AM PM
TIME DEPARTED	AM PM

Ticket #303246

OFFICE USE ONLY
GRAVITY CORR. TO 60 °F

1st	
2nd	

GROSS BARRELS 138.49

X FACTOR .9679

NET BBLs. PER RUN TIC. 134.06

DELIVERY STATION Berwick La.

TEMP. FACTOR	X	BS & W FACTOR	=	X FACTOR
<u>.9918</u>		<u>.9760</u>		<u>.9679</u>

GROSS	OPEN	DRIVER
TARE		
NET	CLOSE	OPERATOR'S WITNESS

I.D. NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PG	TOTAL BBLs
UN 1267	PETROLEUM CRUDE OIL	3	111	<u>134.06</u>
		<u>BS</u>		<u>3.32</u>
		<u>Temp</u>		<u>1.11</u>

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Shipper:

Date:

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

TRANSPORT MANIFEST

Lease Run Ticket

22237

EMERGENCY RESPONSE CONTACT:

ES & H

985-851-5055

Date 5-21- 2020

Operator

Lease No.	C	G
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C	G						
---	---	--	--	--	--	--	--

Lease Name

Coullion

Field

Venice La.

G A U G E	OIL LEVEL				BS&W LEVEL		TANK TEMP	
	FEET		INCHES		FT.	INCHES		
1st								
2nd								

TANK NO.				SIZE	
62006				12,500	

SERIAL NUMBERS						EST. GROSS GALLONS		@	°F
OLD						OBSERVED GRAVITY		25	@ 84
NEW						PERCENT BS & W		1.4%	TEMPERATURE OF OIL IN TANK °F

LOG NUMBER		Ticket #303247
TIME ARRIVED	AM PM	
TIME DEPARTED	AM PM	
DELIVERY STATION		
Berwick Co.		

TEMP. FACTOR		X	BS & W FACTOR		=	X FACTOR	
.9903			.9860			.9764	

OFFICE USE ONLY	
GRAVITY CORR. TO 60 °F	
1st	
2nd	
GROSS BARRELS	134.84
X FACTOR	.9764
NET BBLS PER RUN TIC.	131.66

GROSS	O P E N	DRIVER [REDACTED] DRIVER
TARE		
NET		
		OPERATOR'S WITNESS

I.D. NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PG	TOTAL BBLS
UN 1267	PETROLEUM CRUDE OIL	3	111	131.666
		BS		1.89
		Temp		1.29

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Shipper:

Date: _____

CORPORATION

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

TRANSPORT MANIFEST

Lease Run Ticket

22238

EMERGENCY RESPONSE CONTACT:

E S & H

985-851-5055

Date

5-29-20

Operator

Lease No.

C	G						
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Lease Name

Couvillion

Field

Venice La.

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

TANK NO.				SIZE
6	2	0	6	12,500

EST.
GROSS
GALLONS

@

°F

SERIAL NUMBERS					
OLD					
NEW					

OBSERVED
GRAVITY

26 @ 84 °F

PERCENT
BS & W

5%

TEMPERATURE
OF OIL
IN TANK °FLOG
NUMBERTIME
ARRIVEDAM
PMTIME
DEPARTEDAM
PMDELIVERY
STATION

Berwick La.

TEMP. FACTOR

.9902

X

BS &
W FACTOR

.9500

=

X FACTOR

.9407

OFFICE USE ONLY

GRAVITY CORR.
TO 60 °F

1st

2nd

GROSS
BARRELS

116.61

X
FACTOR

.9407

NET BBLs.
PER RUN TIC.

109.69

GROSS		OPEN	DRIVER
TARE <td>OPERATOR'S WITNESS</td>			OPERATOR'S WITNESS
NET <td>CLOSE</td> <td>OPERATOR'S WITNESS</td>		CLOSE	OPERATOR'S WITNESS

I.D. NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PG	TOTAL BBLs
UN 1267	PETROLEUM CRUDE OIL	3	111	109.69
		BS		5.83
		Temp		1.09

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Shipper:

REDACTED

Date: