



Your Reference: LCD 234561

**Vitol S.A.**

Place des Bergues 3  
Geneva 1201  
Switzerland

**Louis Dreyfus Armateurs (LDA)**

28 Quai Gallieni  
92158 Suresnes Cedex  
France  
Tel: +33 (0)1 7038 6000  
www.lda.fr  
Mr. Cedric Guilbert

For the attention of Mr. Allen Fraser

Report no. MX-0064-02-2019  
Date of report 28-Dec-19  
Vessel Arctic Tern  
Location Coatzacoalcos  
Product Olmeca Crude Oil, Isthmus Crude Oil  
B/Lading date 28-Dec-19

**LOADED :**

We have pleasure in enclosing herewith, our report for the above referenced inspection.

Please note the following with regard to the inspection carried out.

Letters of Protest were issued by ourselves regarding the following:

- the Letter of Protest on discrepancy between Bill of Lading and ship's figures
- the Letter of Protest on traces of water found in ship's tanks after loading.

Report distribution has been effected as follows:

To yourselves in original only together with our relevant invoice.

CC: . Attn

	<b>Gross Metric Tons in Vacuo</b>	<b>Gross Metric Tons in Air</b>
<b>Bill of Lading</b>	<b>43,076.918</b>	<b>43,022.062</b>
<b>Vessel's loaded quantity</b>	<b>43,031.931</b>	<b>42,977.132</b>
<b>Difference</b>	<b>-44.987</b>	<b>-44.930</b>
<b>Difference, %</b>	<b>-0.104%</b>	<b>-0.104%</b>
<b>Bill of Lading</b>	<b>43,076.918</b>	<b>43,022.062</b>
<b>Vessel adjusted by VEF</b>	<b>43,040.539</b>	<b>42,985.729</b>
<b>Difference</b>	<b>-36.379</b>	<b>-36.333</b>
<b>Difference, %</b>	<b>-0.084%</b>	<b>-0.084%</b>

Should you have any query, or require any additional information, please contact Robin Fromon

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Chief Officer of MV "Arctic Tern": Robin Fromon

Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

**TIME LOG**

Time	Date	Operations
23:36	24-Dec-19	Vessel arrived at "End of Sea Passage"
00:36	25-Dec-19	Notice of Readiness tendered
13:24	26-Dec-19	First line ashore
14:06	26-Dec-19	All Fast
14:45	26-Dec-19	Gangway secured
16:30	26-Dec-19	Surveyor on board
16:30	26-Dec-19	Notice of Readiness received
16:42	26-Dec-19	Commenced vessel's tank inspection
17:48	26-Dec-19	Hose 1 x 16" for Olmeca Crude Oil connected
18:48	26-Dec-19	Completed vessel's tank inspection
01:30	27-Dec-19	Commenced Loading of Olmeca Crude Oil
10:06	27-Dec-19	Completed Loading of Olmeca Crude Oil
13:12	27-Dec-19	Commenced Loading of Isthmus Crude Oil
06:48	28-Dec-19	Completed Loading of Isthmus Crude Oil
06:50	28-Dec-19	Commenced sampling vessel's tanks
06:50	28-Dec-19	Commenced measuring vessel's tanks
07:30	28-Dec-19	Completed sampling vessel's tanks
07:30	28-Dec-19	Completed measuring vessel's tanks
09:00	28-Dec-19	Completed cargo calculations
09:12	28-Dec-19	Hoses disconnected
09:30	28-Dec-19	Official cargo documents on board
09:42	28-Dec-19	Surveyor's documents on board
10:12	28-Dec-19	Surveyor left vessel
10:45	28-Dec-19	Vessel sailed (ETS)

DELAYS				REASON
From		To		
15:00	26-Dec-19	16:06	26-Dec-19	Awaiting shore readiness
18:48	26-Dec-19	01:30	27-Dec-19	Awaiting shore readiness to commence loading of Olmeca
11:48	27-Dec-19	13:12	27-Dec-19	Awaiting shore readiness to commence loading of Isthmus
13:18	27-Dec-19	15:42	27-Dec-19	Loading of Isthmus Crude Oil suspended to check quality

Remarks: ( \* ) - As per information received from the Master of the vessel  
 Average delivery rate for each grade is as follows:

2713.711 Mt in vacuo per hour for Olmeca Crude Oil, i.e. BOL Mt in vacuo divided by 8 hours 36 minutes.

1298.619 Mt in vacuo per hour for Isthmus Crude Oil, i.e. BOL Mt in vacuo divided by 15 hours 12 minutes.

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez

Report no. MX-0064-02-2019  
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 Location Coatzacoalcos  
 Product Olmecca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

**TIME LOG**  
 Additional times

Time	Date	Operations
11:48	28-Dec-19	Hose 1 x 16" for Isthmus Crude Oil connected
07:12	25-Dec-29	Pilot on board

DELAYS				REASON
From		To		

Remarks: ( \* ) - As per information received from the Master of the vessel  
 Average delivery rate for each grade are as follows:  
 2713.711 Mt in vacuo per hour for Olmecca Crude Oil, i.e. BOL Mt in vacuo divided by 8 hours 36 minutes.  
 1298.619 Mt in vacuo per hour for Isthmus Crude Oil, i.e. BOL Mt in vacuo divided by 15 hours 12 minutes.

Chief Officer of MV "Arctic Tern": Robin Fromon  
 Terminal Representative: Fernando Mendez

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 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 B/Lading date 28-Dec-19

**SUMMARY OF QUANTITIES**

Comparison of Ship's figures and Bill of Lading  
 ASTM calculation by ASTM D 1250-2004

Gross Quantities						Net Quantities					
Totals of the Bills Of Lading	Olmeca Crude Oil	Isthmus Crude Oil			Total	Olmeca Crude Oil	Isthmus Crude Oil			Total	
<b>CUBIC METRES AT 15°C (GROSS STANDARD VOLUME)</b>						<b>CUBIC METRES AT 15°C (NET STANDARD VOLUME)</b>					
Bill of Lading	27,969.697	23,299.107			51,268.804	27,906.681	23,255.677			51,162.358	
Vessel's loaded quantity	27,937.165	23,278.047			51,215.212	27,874.223	23,234.657			51,108.880	
Difference	-32.532	-21.060			-53.592	-32.458	-21.020			-53.478	
% Difference	-0.116%	-0.090%			-0.105%	-0.116%	-0.090%			-0.105%	
Bill of Lading	27,969.697	23,299.107			51,268.804	27,906.681	23,255.677			51,162.358	
Vessel adjusted by VEF	27,942.754	23,282.704			51,225.458	27,879.799	23,239.305			51,119.104	
Difference	-26.943	-16.403			-43.346	-26.882	-16.372			-43.254	
% Difference	-0.096%	-0.070%			-0.085%	-0.096%	-0.070%			-0.085%	
<b>US BARRELS AT 60°C (GROSS STANDARD VOLUME)</b>						<b>US BARRELS AT 60°C (NET STANDARD VOLUME)</b>					
Bill of Lading	176,010.35	146,617.35			322,627.70	175,613.81	146,344.05			321,957.86	
Vessel's loaded quantity	175,808.58	146,488.75			322,297.33	175,412.48	146,215.69			321,628.17	
Difference	-201.77	-128.60			-330.37	-201.33	-128.36			-329.69	
% Difference	-0.115%	-0.088%			-0.102%	-0.115%	-0.088%			-0.102%	
Bill of Lading	176,010.35	146,617.35			322,627.70	175,613.81	146,344.05			321,957.86	
Vessel adjusted by VEF	175,843.75	146,518.05			322,361.80	175,447.57	146,244.94			321,692.51	
Difference	-166.60	-99.30			-265.90	-166.24	-99.11			-265.35	
% Difference	-0.095%	-0.068%			-0.082%	-0.095%	-0.068%			-0.082%	
<b>METRIC TONS IN AIR (GROSS WEIGHT)</b>						<b>METRIC TONS IN AIR (NET WEIGHT)</b>					
Bill of Lading	23,307.988	19,714.074			43,022.062	23,235.734	19,668.731			42,904.465	
Vessel's loaded quantity	23,280.878	19,696.254			42,977.132	23,208.707	19,650.953			42,859.660	
Difference	-27.110	-17.820			-44.930	-27.027	-17.778			-44.805	
% Difference	-0.116%	-0.090%			-0.104%	-0.116%	-0.090%			-0.104%	
Bill of Lading	23,307.988	19,714.074			43,022.062	23,235.734	19,668.731			42,904.465	
Vessel adjusted by VEF	23,285.535	19,700.194			42,985.729	23,213.350	19,654.884			42,868.234	
Difference	-22.453	-13.880			-36.333	-22.384	-13.847			-36.231	
% Difference	-0.096%	-0.070%			-0.084%	-0.096%	-0.070%			-0.084%	
<b>METRIC TONS IN VACUO (GROSS WEIGHT)</b>						<b>METRIC TONS IN VACUO (NET WEIGHT)</b>					
Bill of Lading	23,337.915	19,739.003			43,076.918	23,265.568	19,693.603			42,959.171	
Vessel's loaded quantity	23,310.770	19,721.161			43,031.931	23,238.507	19,675.802			42,914.309	
Difference	-27.145	-17.842			-44.987	-27.061	-17.801			-44.862	
% Difference	-0.116%	-0.090%			-0.104%	-0.116%	-0.090%			-0.104%	
Bill of Lading	23,337.915	19,739.003			43,076.918	23,265.568	19,693.603			42,959.171	
Vessel adjusted by VEF	23,315.433	19,725.106			43,040.539	23,243.156	19,679.738			42,922.894	
Difference	-22.482	-13.897			-36.379	-22.412	-13.865			-36.277	
% Difference	-0.096%	-0.070%			-0.084%	-0.096%	-0.070%			-0.084%	

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## SUMMARY OF QUANTITIES

Calculation of Net figures  
 ASTM calculation by ASTM D 1250-2004

Olmeca Crude Oil	Isthmus Crude Oil			
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### CUBIC METRES AT 15°C

							Total
<u>Bill of Lading</u>	Gross	27,969.697	23,299.107				51,268.804
	Sediments & Water	63.016	43.430				106.446
	Net	27,906.681	23,255.677				51,162.358
<u>Shore quantities</u>	Gross	27,969.697	23,299.107				51,268.804
	Sediments & Water	63.016	43.430				106.446
	Net	27,906.681	23,255.677				51,162.358
<u>Vessel's loaded quantity</u>	Gross	27,937.165	23,278.047				51,215.212
	Sediments & Water	62.942	43.390				106.332
	Net	27,874.223	23,234.657				51,108.880

### US BARRELS AT 60°C

							Total
<u>Bill of Lading</u>	Gross	176,010.35	146,617.35				322,627.70
	Sediments & Water	396.54	273.30				669.84
	Net	175,613.81	146,344.05				321,957.86
<u>Shore quantities</u>	Gross	176,010.35	146,617.35				322,627.70
	Sediments & Water	396.54	273.30				669.84
	Net	175,613.81	146,344.05				321,957.86
<u>Vessel's loaded quantity</u>	Gross	175,808.58	146,488.75				322,297.33
	Sediments & Water	396.10	273.06				669.16
	Net	175,412.48	146,215.69				321,628.17

### METRIC TONS IN AIR

							Total
<u>Bill of Lading</u>	Gross	23,307.988	19,714.074				43,022.062
	Sediments & Water	72.254	45.343				117.597
	Net	23,235.734	19,668.731				42,904.465
<u>Shore quantities</u>	Gross	23,235.734	19,668.731				42,904.465
	Sediments & Water						
	Net	23,235.734	19,668.731				42,904.465
<u>Vessel's loaded quantity</u>	Gross	23,280.878	19,696.254				42,977.132
	Sediments & Water	72.171	45.301				117.472
	Net	23,208.707	19,650.953				42,859.660

### METRIC TONS IN VACUO

							Total
<u>Bill of Lading</u>	Gross	23,337.915	19,739.003				43,076.918
	Sediments & Water	72.347	45.400				117.747
	Net	23,265.568	19,693.603				42,959.171
<u>Shore quantities</u>	Gross	23,337.915	19,731.002				43,068.917
	Sediments & Water	72.347	37.399				109.746
	Net	23,265.568	19,693.603				42,959.171
<u>Vessel's loaded quantity</u>	Gross	23,310.770	19,721.161				43,031.931
	Sediments & Water	72.263	45.359				117.622
	Net	23,238.507	19,675.802				42,914.309

### Criteria used for calculations:

Density at 15°C: (BOL)	0.8344	0.8472				
Average Sediments & Water, % mass:	0.31000	0.23000				
Average Sediments & Water, % vol.:	0.22530	0.18640				
US bbls at 60°F by Ch. 11.5 ex Cu M	6.292894290	6.292831331				
Density at 15°C: (Shore)	0.8344	0.8472				
Average Sediments & Water, % mass:	0.31000	0.18950				
Average Sediments & Water, % vol.:	0.22530	0.18640				
US Bbls@60°F/CuM@15°C by Ch. 11.5	6.292894290	6.292831331				
Density at 15°C: (Ship)	0.8344	0.8472				
Average Sediments & Water, % mass:	0.31000	0.23000				
Average Sediments & Water, % vol.:	0.22530	0.18640				
US Bbls@60°F/CuM@15°C by Ch. 11.5	6.292894290	6.292831331				

Remarks:

based on BOL



Report no. MX-0064-02-2019  
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**CERTIFICATE OF QUANTITY**

Olmecca Crude Oil

Bill of Lading No.	OCO/1
Bill of Lading date	28-Dec-19
Gross Metric Tons in vacuo	12,561.727
Net Metric Tons in vacuo	12,522.786
Gross Metric Tons in air	12,545.618
Net Metric Tons in air	12,506.727
Gross Long Tons	12,347.47
Net Long Tons	12,309.19
Gross US barrels at 60°F	94,738.28
Net US barrels at 60°F	94,524.84
Gross US gallons at 60°F	3,979,007.76
Net US gallons at 60°F	3,970,043.28
Gross Cubic Metres at at 15°C	15,054.802
Net Cubic Metres at at 15°C	15,020.884
B/L Density at 15°C in vacuo	0.8344
API gravity from Density at 15°C as per Chapter 11.5.	38.00

Above quantities determined by Louis Dreyfus Armateurs.

**Criteria used for calculations:**

Conv. factor from cu m at 15°C to US Bbls as per Chapter 11.5	6.29289429
Conv. factor from US Bbls to US Gallons by Table 1	42
Metric Tons in Air = GSV at 15°C * by Density at 15°C in air	0.83333
Long Tons = Metric Tons in Air * by	0.984206

B/L Gross Metric tons (vac) were determined by loadport Oil Terminal.  
 Bill of Lading GSV at 15°C= B/L Metric Tons vacuo / B/L density at 15°C.

Net Volume (Cu M or Bbls or Gall) = Gross Volume (Cu M or Bbls or Gall) \* ((100 - (S + W)vol%)/100)  
 Net Metric Tons (in vacuo or in air) = Gross Metric Tons (in vacuo or in air) \* ((100 - (S + W)mass%)/100)

Test results by loadport Oil Installation Laboratory:

Sediments, % mass	ASTM D4807	0.0800
Water, % mass	ASTM D4006	0.2300
Sediments, % volume	calculated	0.0334
Water, % volume	calculated	0.1919

Chief Officer of MV "Arctic Tern": Robin Fromon

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**CERTIFICATE OF QUANTITY**

Olmecca Crude Oil

Bill of Lading No.	OCO/2
Bill of Lading date	28-Dec-19
Gross Metric Tons in vacuo	10,776.188
Net Metric Tons in vacuo	10,742.782
Gross Metric Tons in air	10,762.370
Net Metric Tons in air	10,729.007
Gross Long Tons	10,592.39
Net Long Tons	10,559.560
Gross US barrels at 60°F	81,272.07
Net US barrels at 60°F	81,088.97
Gross US gallons at 60°F	3,413,426.94
Net US gallons at 60°F	3,405,736.74
Gross Cubic Metres at at 15°C	12,914.895
Net Cubic Metres at at 15°C	12,885.797
B/L Density at 15°C in vacuo	0.8344
API gravity from Density at 15°C as per Chapter 11.5.	38.00

Above quantities determined by Louis Dreyfus Armateurs.

**Criteria used for calculations:**

Conv. factor from cu m at 15°C to US Bbls as per Chapter 11.5  
 Conv. factor from US Bbls to US Gallons by Table 1  
 Metric Tons in Air = GSV at 15°C \* by Density at 15°C in air  
 Long Tons = Metric Tons in Air \* by

6.2929
42
0.83333
0.984206

B/L Gross Metric tons (vac) were determined by loadport Oil Terminal.  
 Bill of Lading GSV at 15°C= B/L Metric Tons vacuo / B/L density at 15°C.

Net Volume (Cu M or Bbls or Gall) = Gross Volume (Cu M or Bbls or Gall) \* ((100 - (S + W)vol%)/100)  
 Net Metric Tons (in vacuo or in air) = Gross Metric Tons (in vacuo or in air) \* ((100 - (S + W)mass%)/100)

Test results by loadport Oil Installation Laboratory:

Sediments, % mass	ASTM D4807	0.0800
Water, % mass	ASTM D4006	0.2300
Sediments, % volume	calculated	0.0334
Water, % volume	calculated	0.1919

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## CERTIFICATE OF QUANTITY

Isthmus Crude Oil

Bill of Lading No.	ICO/3
Bill of Lading date	28-Dec-19
Gross Metric Tons in vacuo	10,621.324
Net Metric Tons in vacuo	10,596.895
Gross Metric Tons in air	10,607.910
Net Metric Tons in air	10,583.511
Gross Long Tons	10,440.37
Net Long Tons	10,416.360
Gross US barrels at 60°F	78,893.06
Net US barrels at 60°F	78,746.00
Gross US gallons at 60°F	3,313,508.52
Net US gallons at 60°F	3,307,332.00
Gross Cubic Metres at at 15°C	12,536.974
Net Cubic Metres at at 15°C	12,513.605
B/L Density at 15°C in vacuo	0.8472
API gravity from Density at 15°C as per Chapter 11.5.	35.44

Above quantities determined by Louis Dreyfus Armateurs.

### Criteria used for calculations:

Conv. factor from cu m at 15°C to US Bbls as per Chapter 11.5  
 Conv. factor from US Bbls to US Gallons by Table 1  
 Metric Tons in Air = GSV at 15°C \* by Density at 15°C in air  
 Long Tons = Metric Tons in Air \* by

6.2928
42
0.84613
0.984206

B/L Gross Metric tons (vac) were determined by loadport Oil Terminal.  
 Bill of Lading GSV at 15°C = B/L Metric Tons vacuo / B/L density at 15°C.

Net Volume (Cu M or Bbls or Gall) = Gross Volume (Cu M or Bbls or Gall) \* ((100 - (S + W)vol%)/100)  
 Net Metric Tons (in vacuo or in air) = Gross Metric Tons (in vacuo or in air) \* ((100 - (S + W)mass%)/100)

Test results by loadport Oil Installation Laboratory:

Sediments, % mass	ASTM D4807	0.0200
Water, % mass	ASTM D4006	0.2100
Sediments, % volume	calculated	0.0085
Water, % volume	calculated	0.1779

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## CERTIFICATE OF QUANTITY

Isthmus Crude Oil

Bill of Lading No.	ICO/4
Bill of Lading date	28-Dec-19
Gross Metric Tons in vacuo	9,117.679
Net Metric Tons in vacuo	9,096.708
Gross Metric Tons in air	9,106.164
Net Metric Tons in air	9,085.220
Gross Long Tons	8,962.34
Net Long Tons	8,941.730
Gross US barrels at 60°F	67,724.29
Net US barrels at 60°F	67,598.05
Gross US gallons at 60°F	2,844,420.18
Net US gallons at 60°F	2,839,118.10
Gross Cubic Metres at at 15°C	10,762.133
Net Cubic Metres at at 15°C	10,742.072
B/L Density at 15°C in vacuo	0.8472
API gravity from Density at 15°C as per Chapter 11.5.	35.44

Above quantities determined by Louis Dreyfus Armateurs.

### Criteria used for calculations:

Conv. factor from cu m at 15°C to US Bbls as per Chapter 11.5  
 Conv. factor from US Bbls to US Gallons by Table 1  
 Metric Tons in Air = GSV at 15°C \* by Density at 15°C in air  
 Long Tons = Metric Tons in Air \* by

6.2928
42
0.84613
0.984206

B/L Gross Metric tons (vac) were determined by loadport Oil Terminal.  
 Bill of Lading GSV at 15°C = B/L Metric Tons vacuo / B/L density at 15°C.

Net Volume (Cu M or Bbls or Gall) = Gross Volume (Cu M or Bbls or Gall) \* ((100 - (S + W)vol%)/100)  
 Net Metric Tons (in vacuo or in air) = Gross Metric Tons (in vacuo or in air) \* ((100 - (S + W)mass%)/100)

Test results by loadport Oil Installation Laboratory:

Sediments, % mass	ASTM D4807	0.0200
Water, % mass	ASTM D4006	0.2100
Sediments, % volume	calculated	0.0085
Water, % volume	calculated	0.1779



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**VESSEL TANKS INSPECTION REPORT**

Product Olmeca Crude Oil, Isthmus Crude Oil Date of tank inspection: 28-Dec-19  
 B/Lading date 28-Dec-19 Time of tank inspection: 10:42

We hereby report that we, Louis Dreyfus Armateurs, attended on board the Vessel for the purpose of visually inspecting the nominated cargo tanks.

We report that the nominated cargo was to be loaded into the following Vessel tanks:

NOMINATED CARGO:	Olmeca Crude Oil	Isthmus Crude Oil			
PORTTANKS	1, 5	2, 3			
CENTRAL TANKS	Not available	Not available			
STARBOARD TANKS	5	1, 2, 3			

Each of the listed tanks is equipped with vapour lock for manual measurements.

Each of the listed tanks were inspected by us. In our opinion the listed cargo tanks have been found to be well drained.  
 Inspection carried out from deck level.

PUMP(S) AND LINES

The line connections to the aforementioned cargo tanks were closed and/or blanked off at the time of inspection.

HEATING COILS WITHIN THE CARGO TANKS: None

TANK CONSTRUCTION MATERIAL reported by the Vessel to be:

Mild Steel

TANK COATING as reported by the Vessel ;

We have been informed that the interior of the cargo tanks is:

The type of coating was reported by the Vessel to be epoxy.

PREVIOUS 3 CARGOES CARRIED BY THE VESSEL reported to be

CARGO TANK	All cargo tanks
First Last Cargo	Olmeca Crude Oil
Second Last Cargo	Olmeca Crude Oil
Third Last Cargo	Olmeca Crude Oil

TANK CLEANING:

We have been informed by the vessel that tank cleaning was carried out as follows:  
 Well drained only.

TYPE OF OBO:

This report does not cover the state of cleanliness and dryness of Vessel tanks, pump(s) and line systems at inaccessible spots and/or possible release of components of previous cargoes during loading, discharge or transport of the cargo, for which the Vessel is fully responsible.

This report represents our findings at the time and on the date of our inspection

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez

Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

## ON BOARD QUANTITY (OBQ) REPORT

Draft : FWD: 4.10 m, AFT: 5.60 m, Trim 1.50 m, List: 0.7° Port

Tank No	Total Actual	Total Observed Volume	Free Water		Gross Observed Volume	Non-Liquid	Liquid, Cu Mtrs	
	Dip, Mtrs	Cu Mtrs	Dip, Mtrs	Cu Mtrs	Cu Mtrs		by Trim correction	by Wedge formula
1P	0.030	1.542	0.015	0.329	1.213	1.213		
1S		3.444	0.020	0.295	3.149	2.395		0.754
2P		4.732			4.732	3.270		1.462
2S		3.681			3.681	3.681		
3P	0.030	1.455	0.030	1.455				
3S	0.020	1.533	0.025	1.533				
4P	0.095	10.839		0.809	10.030	3.037	6.993	
4S	0.095	2.922		0.388	2.534	2.534		
5P								
5S								
6P	0.010	2.072	0.010	2.072				
6S	0.025	2.769	0.025	2.769				
7P								
7S								
8P								
8S								
9P	0.115	7.156	0.035	2.625	4.531		4.531	
9S	0.110	9.835	0.040	4.180	5.655		5.655	
SP								
SS								
Tanks for reference onl		51.980		16.455	35.525	16.130	17.179	2.216

### SUMMARY OF QUANTITY

Total Observed Cu Mtrs	Free Water Cu Mtrs	Gross Observed Cu Mtrs	Liquid Volume Cu Mtrs	Non-Liquid Volume Cu Mtrs
51.980	16.455	35.525	19.395	16.130

Previous product in tanks reported by the Vessel to be Olmeca Crude Oil

Measurements by representative of the vessel and witnessed by Fernando Mendez, Terminal Representative.

Calculations by Robin Fromon. Chief Officer of MV "Arctic Tern".

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez



Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos

**LIQUID OBQ CALCULATION  
 BY WEDGE FORMULA**

Product Olmeca Crude Oil, Isthmus Crude Oil

B/Lading date 28-Dec-19

Draft (m) : FWD: 4.10 AFT: 5.60 Trim : 1.50 List: 0.7° Port

Formulae :  $((U - (D \times F)) \times F) + S_1 = A$   $(A \times A \times W \times 0.5) / F = \text{Cubic Metres}$

Tank	L Metres	U Metres	D Metres	D x F	S_1 Metres	A	A x A	W Metres	Volume Cu Mtrs
1P									
1S	18.612	1.940	17.631	0.152	0.038	0.053	0.003	4.556	0.754
2P	10.016	1.940	17.634	0.152	0.039	0.054	0.003	8.517	1.462
2S									
3P									
3S									
4P	10.008	2.405	17.634	0.152	0.070	0.089	0.008	10.508	4.872
4S	10.006	1.570	17.623	0.152	0.066	0.078	0.006	10.510	3.729
5P									
5S									
6P									
6S									
7P									
7S									
8P									
8S									
9P	9.391	7.170	17.627	0.152	0.064	0.125	0.016	5.707	5.131
9S	9.397	7.155	17.634	0.152	0.086	0.146	0.021	5.708	7.092
SP									
SS									

FIELD INFORMATION			L.B.P.	Length between perpendiculars
+Draft of ship Aft of	5.60	metres	L	Length of tank
-Draft of ship Forward of	4.10	metres	U	Distance from ullage point to aft bulkhead
=Trim of ship of	1.50	metres	D	Total gauge height
divided by L.B.P. of	173.90	metres	F	Trim factor
=Trim Factor of	0.00863	(F)	S_1	Sounding (Innage) of liquid oil corrected for list
			A	Adjusted innage at aft bulkhead
			W	Width of tank

Measurements by representative of the vessel and witnessed by Fernando Mendez, Terminal Representative.  
 Calculations by Robin Fromon. Chief Officer of MV "Arctic Tern".

Remarks

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez

Report No. MX-0064-02-2019  
 Date 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

## VESSEL EXPERIENCE REPORT

The following "Vessel Experience Factor" (VEF), has been calculated according to IP Petroleum Measurement Manual Part 16 (Annex C, Method 1), in which the following is noted (see also remarks, below):

- (a) There must be a minimum of five qualifying voyages, but more are preferred.
- (b) Voyages prior to any structural modification which may affect cargo capacities do not qualify.
- (c) Voyages where shore quantities are not available do not qualify.
- (d) No minimum percentage capacity is specified for qualification.
- (e) It is not advised whether quantities should be stated as weight or volume.

Voyage	Date	Port	Cargo	Vessel's figure (A) Metric tons	Shore Figure (B) Metric tons	Vessel Load/Disch Ratio	Qualify
Last	11-Dec-19	Coatzacoalcos	Olmeca Crude Oil	45,991.197	45,989.534	1.00002	Yes
2nd last	3-Dec-19	Coatzacoalcos	Olmeca Crude Oil	46,927.118	46,970.699	0.99906	Yes
3rd last	31-Oct-19	Coatzacoalcos	Olmeca Crude Oil	46,240.587	46,269.615	0.99937	Yes
4th last	13-Oct-19	Coatzacoalcos	Olmeca Crude Oil	47,883.001	47,948.643	0.99862	Yes
5th last	6-Oct-19	Coatzacoalcos	Isthmus Crude Oil	49,630.103	49,651.340	0.99958	Yes
6th last	26-Sep-19	Coatzacoalcos	Isthmus Crude Oil	48,816.467	48,794.713	1.00043	Yes
7th last	7-Sep-19	Coatzacoalcos	Isthmus Crude Oil	49,610.103	49,651.340	0.99917	Yes
8th last	28-Aug-19	Coatzacoalcos	Olmeca Crude Oil	42,571.009	42,558.696	1.00028	Yes
9th last	10-Jul-19	Coatzacoalcos	Olmeca Crude Oil	41,803.914	41,792.686	1.00026	Yes
10th last	28-Jun-19	Coatzacoalcos	Isthmus Crude Oil	47,923.053	47,948.012	0.99948	Yes
11th last	28-Jun-19	Coatzacoalcos	Olmeca Crude Oil	41,426.013	41,476.915	0.99877	Yes
12th last	28-Jun-19	Coatzacoalcos	Isthmus Crude Oil	43,220.125	43,251.177	0.99928	Yes
13th last	31-May-19	Coatzacoalcos	Olmeca Crude Oil	44,682.610	44,651.478	1.00072	Yes
14th last	30-May-19	Coatzacoalcos	Olmeca Crude Oil	44,124.453	44,098.781	1.00057	Yes
15th last	30-May-19	Coatzacoalcos	Isthmus Crude Oil	42,424.587	42,412.706	1.00028	Yes
16th last	14-May-19	Coatzacoalcos	Olmeca Crude Oil	41,457.025	41,458.576	0.99995	Yes
17th last	7-Apr-19	Coatzacoalcos	Isthmus Crude Oil	44,978.644	45,020.476	0.99909	Yes
18th last	5-Apr-19	Coatzacoalcos	Isthmus Crude Oil	42,442.310	42,477.979	0.99915	Yes
19th last	4-Apr-19	Coatzacoalcos	Olmeca Crude Oil	41,921.394	41,919.587	1.00002	Yes
20th last	23-Feb-19	Coatzacoalcos	Isthmus Crude Oil	49,798.510	49,686.752	1.00225	Yes

Step (b) - Totals, excluding present cargo	903,872.223	904,029.705
Step (c) - Average Vessel Load Ratio (VLR), (A)/(B)	0.99983	
Permissible VLR range (plus / minus 0.3%)	1.00283	0.99683
Step (g) - Totals of qualifying voyages only	903,872.223	904,029.705
Step (h) - Average VLR as step (c), qualifying voyages only	0.99983	
VLR (VEF) range (plus / minus 0.3%)	1.00283	0.99683

Vessel's figures this voyage (Excluding OBQ)	43,031.931
Bill of Lading this voyage	43,076.918
Vessel loaded ratio this voyage	0.9990

Number of qualifying voyages: 20

<b>Vessel Experience Factor</b> <b>0.9998</b>
--

The above mentioned quantities are for the last 0 voyages as obtained from ship's record supplied by Robin Fromon, Chief Officer of MV "Arctic Tern".

Cargo information can be verified in accordance with IP Petroleum manual Manual Part 16 (Annex C, Method 1). Shore quantities derived from ship cargo measurements do not qualify, whether adjusted for VEF or not.

Remarks:

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez

Report No. MX-0064-02-2019  
 Date 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/L date 28-Dec-19

## VOID/BALLAST TANKS REPORT

### BALLAST TANKS

Compartment / Tank	Before Loading		After Loading	
	Contents	Volume, cu m	Contents	Volume, cu m
Fore peak	Sea water	23.000	River water	144.000
Ballast tank 1P	Empty		River water	436.000
Ballast tank 1S	Empty		River water	419.000
Ballast tank 2P	Empty		River water	373.000
Ballast tank 2S	Empty		River water	354.000
Ballast tank 3P	Empty		River water	359.000
Ballast tank 3S	Empty		River water	378.000
Ballast tank 4P	Empty		River water	378.000
Ballast tank 4S	Empty		River water	359.000
Ballast tank 5P	Empty		River water	220.000
Ballast tank 5S	Empty		River water	200.000
After peak	Sea water	66.000	River water	126.000
<b>Total:</b>		<b>89.000</b>		<b>3,746.000</b>

### IDLE CARGO TANKS

Compartment / Tank	Before Loading		After Loading	
	Contents	Volume, cu m	Contents	Volume, cu m
Res.	Empty		Empty	
<b>Total:</b>				

Remarks:  
 Chief Officer of MV "Arctic Tern": Robin Fromon  
 Terminal Representative: Fernando Mendez

Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

### ULLAGE REPORT AFTER LOADING

**ASTM calculation by ASTM  
 D 1250-2004**

Draft: FWD: 6.70 m, AFT: 6.84 m, Trim: 0.14 m, List: 0.6° Stbd

Tank No	Ullage Mtrs		Total Obs. Volume Cu Mtrs	Free Water		Gross Obs. Volume Cu Mtrs	Temp °C	V.C.F. by T 54A	*	Gross Standard Volume Cu Mtrs
	Actual	Corrected		Dip Mtrs	Volume Cu Mtrs					
1P	1.705	1.713	2,854.610	0.010	1.372	2,853.238	29.7	0.98698	1	2,816.089
1S	1.890	1.875	2,833.876	0.010	1.681	2,832.195	29.6	0.98707	1	2,795.575
2P	1.650	1.662	2,597.696			2,597.696	29.8	0.98729	2	2,564.679
2S	1.680	1.669	2,586.764			2,586.764	29.8	0.98729	2	2,553.886
3P	1.645	1.648	2,732.232	0.020	2.972	2,729.260	29.8	0.98729	2	2,694.571
3S	1.615	1.617	2,726.163	0.010	1.308	2,724.855	29.8	0.98729	2	2,690.222
4P	1.755	1.764	2,812.397			2,812.397	29.7	0.98698	1	2,775.780
4S	1.710	1.701	2,810.548			2,810.548	29.9	0.98680	1	2,773.449
5P	1.455	1.465	2,867.740			2,867.740	29.3	0.98734	1	2,831.434
5S	1.440	1.437	2,853.798			2,853.798	29.4	0.98725	1	2,817.412
6P	1.765	1.768	2,817.723	0.005	1.935	2,815.788	29.7	0.98737	2	2,780.225
6S	1.785	1.775	2,802.280	0.015	2.945	2,799.335	29.6	0.98746	2	2,764.231
7P	1.325	1.327	2,875.182			2,875.182	29.3	0.98734	1	2,838.782
7S	1.330	1.323	2,870.369			2,870.369	29.4	0.98725	1	2,833.772
8P	1.230	1.236	2,846.800			2,846.800	29.5	0.98755	2	2,811.357
8S	1.255	1.252	2,826.439			2,826.439	29.6	0.98746	2	2,790.995
9P	1.755	1.769	2,779.242	0.015	1.586	2,777.656	29.7	0.98698	1	2,741.491
9S	1.740	1.720	2,777.290	0.020	0.898	2,776.392	29.6	0.98707	1	2,740.493
SP	1.140	1.156	827.536			827.536	29.7	0.98737	2	817.084
SS	1.145	1.140	829.471			829.471	29.4	0.98763	2	819.210
<b>Totals</b>			<b>51,928.156</b>		<b>14.697</b>	<b>51,913.459</b>				<b>51,250.737</b>

Product Code (*)	Product Name(s)	Factor by Chapt. 11.5	TOV Cu Mtrs	Free Water Cu Mtrs	GOV Cu Mtrs
1	Olmeca Crude Oil	6.29289	28,335.052	5.537	28,329.515
2	Isthmus Crude Oil	6.29283	23,593.104	9.160	23,583.944
Long Tons = Metric tons (air) x 0.984206		<b>Totals:</b>	<b>51,928.156</b>	<b>14.697</b>	<b>51,913.459</b>

Product Code (*)	Density @ 15°C	W.C.F. by Chapt. 11.5	G.S.V. @15°C Cu Mtrs	OBQ (GOV) Cu Mtrs	G.S.V. @15°C Loaded, Cu Mtrs	G.S.V. @60°F Loaded, US bbls	Metric Tons (in air)
1	0.8344	0.83333	27,964.277	27.112	27,937.165	175,805.63	23,280.878
2	0.8472	0.84613	23,286.460	8.413	23,278.047	146,484.82	19,696.254
<b>Totals:</b>			<b>51,250.737</b>	<b>35.525</b>	<b>51,215.212</b>	<b>322,290.45</b>	<b>42,977.132</b>

Origin for Densities: Density at 15°C in vac is based on Bill of Lading density 15°C by T 53A.

Origin of Measurements: measured by ship's UTI tape and water finding paste.

Remarks: Measurements were taken from ship's hatches.

Sea valve Nos.: Starboard: Port:

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez

Long Tons	*	Metric Tons (in vacuo)
22,913.18	1	23,310.770
19,385.17	2	19,721.161
<b>42,298.35</b>		<b>43,031.931</b>

Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

**BUNKER REPORT**  
**(Marine Diesel Oil)**

**ASTM calculation by ASTM D 1250-2004**

Average Bunker consumption per day, according to Vessel's Officer (Quantities in MT VAC)			
While at Sea:	6 Mt	While at Port: Nil	While at Anchor: 2 Mt
Last Port of Call:	Tuxpan	Time / Date of Sailing:	09:24 22-Dec-19
Bunker on Sailing from last port, Mt (vac)	(as advised by Vessel)		35 Mt

**UPON BERTHING** Date & Time of inspection 26-Dec-19 16:06 Trim Correction applied Yes

Draft FWD 4.10 m, AFT 5.60 m, Trim 1.50 m, List 0.7° Port

Tank No	Innage Mtrs	G.O.V. Cu Mtrs	Temp °C	Density 15°C	VCF Table 54B	G.S.V. Cu Mtrs	Metric Tons (Air)	Metric Tons (Vacuo)
Diesel Oil tank Port	1.110	11.300	30.0	0.8378	0.9872	11.155	9.334	9.346
Service tank	Auto	5.900	45.0	0.8378	0.9744	5.749	4.810	4.817
Settling tank	Auto	2.400	45.0	0.8378	0.9744	2.339	1.957	1.960
Diesel Oil tank Stbd	1.070	16.100	30.0	0.8378	0.9872	15.894	13.299	13.316
<b>Totals:</b>		35.700				35.137	29.400	29.439

**UPON SAILING** Date & Time of inspection 28-Dec-19 07:42 Trim Correction applied Yes

Draft FWD 6.70 m, AFT 6.84 m, Trim 0.14 m, List 0.6° Stbd

Tank No	Innage Mtrs	G.O.V. Cu Mtrs	Temp °C	Density 15°C	VCF Table 54B	G.S.V. Cu Mtrs	Metric Tons (Air)	Metric Tons (Vacuo)
Diesel Oil tank Port	1.110	11.300	30.0	0.8378	0.9872	11.155	9.334	9.346
Service tank	Auto	5.900	45.0	0.8378	0.9744	5.749	4.810	4.817
Settling tank	Auto	2.400	45.0	0.8378	0.9744	2.339	1.957	1.960
Diesel Oil tank Stbd	1.070	16.100	30.0	0.8378	0.9872	15.894	13.299	13.316
<b>Totals:</b>		35.700				35.137	29.400	29.439

Bunker loaded at this port: None Aforementioned densities are as advised by the Vessel.  
 Remarks: Densities are as advised by ship's Chief Engineer

Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

**BUNKER REPORT**  
**(Heavy Fuel Oil)**

**ASTM calculation by ASTM D 1250-2004**

Average Bunker consumption per day, according to Vessel's Officer (Quantities in MT VAC)			
While at Sea:	6 Mt	While at Port:	Nil
		While at Anchor:	1.2 Mt
Last Port of Call:	Tuxpan	Time / Date of Sailing:	09:24 22-Dec-19
Bunker on Sailing from last port, Mt (vac)	(as advised by Vessel)		122 Mt

**UPON BERTHING** Date & Time of inspection 26-Dec-19 16:06 Trim Correction applied Yes

Draft FWD 4.10 m, AFT 5.60 m, Trim 1.50 m, List 0.7° Port

Tank No	Innage Mtrs	G.O.V. Cu Mtrs	Temp °C	Density 15°C	VCF Table 54B	G.S.V. Cu Mtrs	Metric Tons (Air)	Metric Tons (Vacuo)
Fuel Oil tank 1P	1.033	30.190	40.0	0.9326	0.9815	29.631	27.602	27.634
Fuel Oil tank 1S	8.030	78.180	50.0	0.9484	0.9746	76.194	72.182	72.262
Fuel Oil tank 2P	Nil							
Fuel Oil tank 2S	Nil							
Service tank	Auto	10.500	85.0	0.9327	0.9478	9.952	9.272	9.282
Settling tank	Auto	8.200	82.0	0.9327	0.9500	7.790	7.257	7.266
<b>Totals:</b>		127.070				123.567	116.313	116.444

**UPON SAILING** Date & Time of inspection 28-Dec-19 07:42 Trim Correction applied Yes

Draft FWD 6.70 m, AFT 6.84 m, Trim 0.14 m, List 0.6° Stbd

Tank No	Innage Mtrs	G.O.V. Cu Mtrs	Temp °C	Density 15°C	VCF Table 54B	G.S.V. Cu Mtrs	Metric Tons (Air)	Metric Tons (Vacuo)
Fuel Oil tank 1P	1.035	28.120	40.0	0.9326	0.9815	27.600	25.711	25.740
Fuel Oil tank 1S	8.030	78.180	50.0	0.9484	0.9746	76.194	72.182	72.262
Fuel Oil tank 2P	Nil							
Fuel Oil tank 2S	Nil							
Service tank	Auto	7.100	85.0	0.9327	0.9478	6.729	6.269	6.276
Settling tank	Auto	6.200	82.0	0.9327	0.9500	5.890	5.487	5.494
<b>Totals:</b>		119.600				116.413	109.649	109.772

Bunker loaded at this port: None Aforementioned densities are as advised by the Vessel.  
 Remarks: Densities are as advised by ship's Chief Engineer

Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

**RECEIPT FOR DOCUMENTS**

To: Master of MV Arctic Tern (Gildas Maire)

Please sign for receipt of the documents listed below:

OBQ report	One
Time Log	One
Void/Ballast Tank Report	One
Vessel Experience Report	One
Ullage Report	One
Document & Sample Receipt	One
Bunker Inspection Reports	Two
Letter of Protest	One
Tank Inspection Report	One
Statement of Facts	One

Instructions regarding documents: 1 set for Vessel's own use

Master of MV "Arctic Tern": Gildas Maire  
 Louis Dreyfus Armateurs Chief Officer: Robin Fromon

**RECEIPT FOR SAMPLES**

To: Master of mv Arctic Tern (Gildas Maire)

Please sign for receipt of the samples listed below:

Sample Size, Ltr	Number of Samples	Seal Numbers	Sample Description
1.000	2	LDA 10620, LDA 10621 - for vessel	Multiple Ship's Tank Composite Samples (UML after loading) of Olmeca Crude Oil ex: 1P, 1S, 4P, 4S, 5P, 5S, 7P, 7S, 9P, 9S,
1.000	2	LDA 10622, Ida 10623 - for vessel	Multiple Ship's Tank Composite Samples (UML after loading) of Isthmus Crude Oil ex: 2P, 2S, 3P, 3S, 6P, 6S, 8P, 8S, SP, SS,
1.000	1	LDA 234567	Multiple Shore tank composite sample (before loading)
TOTAL	5		

Instruction regarding samples: to be held within a period of 90 days.

Chief Officer of MV "Arctic Tern": Robin Fromon  
 Terminal Representative: Fernando Mendez

## CERTIFICATE OF SHORE BASED QUANTITY

Olmeca Crude Oil

Report no.                   MX-0064-02-2019  
Date of report               28-Dec-19  
Vessel                        Arctic Tern  
Location                     Coatzacoalcos

Gross Metric Tons in vacuo	23,337.915
Net Metric Tons in vacuo	23,265.568
Gross Metric Tons in air	23,235.734
Net Metric Tons in air	23,235.734
Gross Long Tons	22,939.86
Net Long Tons	22,868.75
Gross US barrels at 60°F	176,010.35
Net US barrels at 60°F	175,613.81
Gross US gallons at 60°F	7,392,434.70
Net US gallons at 60°F	7,375,780.02
Gross Cubic Metres at at 15°C	27,969.697
Net Cubic Metres at at 15°C	27,906.681
B/L Density at 15°C in vacuo	0.8344
API gravity from Density at 15°C as per Chapter 11.5.	38.00

Above quantities determined by Louis Dreyfus Armateurs.

**Criteria used for calculations:**

Conv. factor from cu m at 15°C to US Bbls as per Chapter 11.5	6.29289429
Conv. factor from US Bbls to US Gallons by Table 1	42
Metric Tons in Air = GSV at 15°C * by Density at 15°C in air	0.83075
Long Tons = Metric Tons in Air * by	0.984206

B/L Gross Metric tons (vac) were determined by loadport Oil Terminal.  
Bill of Lading GSV at 15°C= B/L Metric Tons vacuo / B/L density at 15°C.

Net Volume (Cu M or Bbls or Gall) = Gross Volume (Cu M or Bbls or Gall) \* ((100 - (S + W)vol%)/100)  
Net Metric Tons (in vacuo or in air) = Gross Metric Tons (in vacuo or in air) \* ((100 - (S + W)mass%)/100)

Average pro rata calculated results based on Shore side calculations:

(Sediments + Water), % mass	0.3100
(Sediments + Water), % volume	0.2253

Terminal Representative: Fernando Mendez





Report no. MX-0064-02-2019  
Date of report 28-Dec-19  
Vessel Arctic Tern  
Location Coatzacoalcos  
Product Olmeca Crude Oil, Isthmus Crude Oil  
B/Lading date 28-Dec-19

**STATEMENT OF FACTS**

To: Whom it may concern

We have been appointed as Inspectors on the aforementioned shipment. On behalf of our Principals we wish to draw attention of all parties to the following:

The following cargo manifold valves were sealed by Louis Dreyfus Armateurs Representative after loading:

Port FWD:	LDA 12345
Port AFT :	LDA 56732
Starboard FWD:	LDA 35267
Starboard AFT :	LDA 78654

We hereby reserve the right of our Principals to make reference to the above at a later date.

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez

**STATEMENT OF FACTS**

Report no.	MX-0064-02-2019
Date of report	28-Dec-19
Vessel	Arctic Tern
Location	Coatzacoalcos
Product	Olmecca Crude Oil, Isthmus Crude Oil
B/Lading date	28-Dec-19

To: Whom it may concern

We have been appointed as Inspectors on the aforementioned shipment. On behalf of our Principals we wish to draw attention of all parties to the following:

Line displacement was not performed because of lack of permission from Oil Terminal.

We hereby reserve the right of our Principals to make reference to the above at a later date.

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez

Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil  
 B/Lading date 28-Dec-19

**LETTER OF PROTEST**

To:	Whom it may concern
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We have been appointed as Inspectors on the aforementioned shipment. On behalf of our Principals we do hereby lodge protest in respect of:

The apparent ship/shore difference noted between the Bill of Lading Quantity and the Quantity measured on board the above named Vessel.

**ASTM calculation by ASTM D 1250-2004**

	<b><u>GROSS WEIGHT</u></b>	
	<b>Metric Tons in Vacuo</b>	<b>Metric Tons in Air</b>
<b>Bill of Lading</b>	<b>23,337.915</b>	<b>23,307.988</b>
<b>Vessel's loaded quantity</b>	<b>23,310.770</b>	<b>23,280.878</b>
<b>Difference</b>	<b>-27.145</b>	<b>-27.110</b>
<b>Difference, %</b>	<b>-0.116%</b>	<b>-0.116%</b>

	<b><u>GROSS WEIGHT</u></b>	
	<b>Metric Tons in Vacuo</b>	<b>Metric Tons in Air</b>
<b>Bill of Lading</b>	<b>23,337.915</b>	<b>23,307.988</b>
<b>Vessel loaded quantity adjusted hv VEF</b>	<b>23,315.433</b>	<b>23,285.535</b>
<b>Difference</b>	<b>-22.482</b>	<b>-22.453</b>
<b>Difference, %</b>	<b>-0.096%</b>	<b>-0.096%</b>

We hereby reserve the right of our Principals to make reference to the above at a later date.

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez

Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Isthmus Crude Oil  
 B/Lading date 28-Dec-19

**LETTER OF PROTEST**

To:	Whom it may concern
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We have been appointed as Inspectors on the aforementioned shipment. On behalf of our Principals we do hereby lodge protest in respect of:

The apparent ship/shore difference noted between the Bill of Lading Quantity and the Quantity measured on board the above named Vessel.

**ASTM calculation by ASTM D 1250-2004**

	<b><u>GROSS WEIGHT</u></b>	
	<b>Metric Tons in Vacuo</b>	<b>Metric Tons in Air</b>
<b>Bill of Lading</b>	<b>19,739.003</b>	<b>19,714.074</b>
<b>Vessel's loaded quantity</b>	<b>19,721.161</b>	<b>19,696.254</b>
<b>Difference</b>	<b>-17.842</b>	<b>-17.820</b>
<b>Difference, %</b>	<b>-0.090%</b>	<b>-0.090%</b>

	<b><u>GROSS WEIGHT</u></b>	
	<b>Metric Tons in Vacuo</b>	<b>Metric Tons in Air</b>
<b>Bill of Lading</b>	<b>19,739.003</b>	<b>19,714.074</b>
<b>Vessel loaded quantity adjusted hv VEF</b>	<b>19,725.106</b>	<b>19,700.194</b>
<b>Difference</b>	<b>-13.897</b>	<b>-13.880</b>
<b>Difference, %</b>	<b>-0.070%</b>	<b>-0.070%</b>

We hereby reserve the right of our Principals to make reference to the above at a later date.

Chief Officer of MV "Arctic Tern": Robin Fromon

Terminal Representative: Fernando Mendez



Report no. MX-0064-02-2019  
 Date of report 28-Dec-19  
 Vessel Arctic Tern  
 Location Coatzacoalcos  
 Product Olmeca Crude Oil, Isthmus Crude Oil  
 B/Lading date 28-Dec-19

**SAMPLE LIST**

Size, Ltr	Number of samples	Seal Number	Sample Description
2.500	1	Open	Multiple Ship's Tank Composite Sample (UML after loading) of Olmeca Crude Oil ex: 1P, 1S, 4P, 4S, 5P, 5S, 7P, 7S, 9P, 9S,
2.500	1	Open	Multiple Ship's Tank Composite Sample (UML after loading) of Isthmus Crude Oil ex: 2P, 2S, 3P, 3S, 6P, 6S, 8P, 8S, SP, SS,
0.450	10	Open	Single Ship's Tank Composite Samples (UML after loading) of Olmeca Crude Oil ex: 1P, 1S, 4P, 4S, 5P, 5S, 7P, 7S, 9P, 9S,
0.450	10	Open	Single Ship's Tank Composite Samples (UML after loading) of Isthmus Crude Oil ex: 2P, 2S, 3P, 3S, 6P, 6S, 8P, 8S, SP, SS,

**Total: 22 samples**

Retained samples are intended to be held within a period of 90 days.  
 Chief Officer of MV "Arctic Tern": Robin Fromon