

EXXONMOBIL CHEMICAL CO
22777 Springwoods Village Parkway
77389 Spring
United States
Ms. B. Kukiela
USEBARGCHE-2011-045 / 5067731



Job No 13074/00001807.0000/01/I/20
Report date 07 Jan 2021
Installation Houston, United States of America, Vopak Terminal Deer Park

Barge KIRBY 10562
Product Heptene

Bill of Lading date: 07-Jan-2021

Contents page

Saybolt LP has performed a survey of the above mentioned object, the findings of the survey are reflected in the following reports:

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This report consists of 15 pages.

A copy of this report and all field documents and related correspondence will be retained for a period of 10 years, unless local law requires otherwise

Handled by: Timothy Wedman

This report reflects only the findings at the time and place of the inspection and testing. This report is not a guarantee or policy of insurance with respect to the goods or the contractual performance of any party. Any person relying upon this report should be aware that issuer's activities are carried out under their general terms and conditions.

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Cover Page Loading

Loading data

Quantity data			
Bill of Lading is based on:		Shore tank measurements	
Bill of Lading date		07 Jan 2021	
Average product temperature onboard	°F	59.0	
Shore data			
Loading Installation		Vopak Terminal Deer Park	
Shore tank number(s)		737	
Type of Standpipe of shore tank(s)		Slotted	
Shore tank measurements were carried out with		Saybolt Equipment	by UTI
Shore tank measurement equipment number		G24225	
Shore tank temperatures were carried out with		Saybolt Equipment	by UTI
Shore tank temperature equipment number		G24225	
Vessel data			
Cargo stowed in cargo tanks		1C, 2C, 3C	
Type of standpipes of vessel tanks		Slotted	
Vessel tank measurement were carried out with		Saybolt equipment	by UTI
Vessel tank temperatures were carried out with		Saybolt equipment	by UTI
Sea Condition		Slight - 0.5 to 1.25 m(1 ft 8 in to 4 ft 1 in)	
Weather condition		Windy	
Operational data			
Ambient outside temperature at loading		49.00	

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Time Log

30 Dec 2020 (Wednesday)

07:30	Inspector arrived at Kirby cleaning facility for barge pre inspection
07:35	Commenced barge pre inspection at Kirby cleaning facility
07:45	Completed barge pre inspection at Kirby cleaning facility
07:50	Inspector departed Kirby cleaning facility

06 Jan 2021 (Wednesday)

23:20	Object arrived at Installation
23:20	Saybolt notified by Installation
23:30	Gangway in Place
23:30	Inspector arrived at Installation
23:30	Moored Alongside Berth (All Fast)
23:35	Commenced Initial Inspection
23:35	Saybolt onboard before Operation
23:45	Completed Initial Inspection, Tank(s) Inspected and Accepted

07 Jan 2021 (Thursday)

00:45	Cargo hose connected
01:30	COMMENCED LOADING
02:50	Suspended Loading for First Foot Sampling
07:35	COMPLETED LOADING
07:50	Saybolt onboard after Operation
07:50	Commenced Final Inspection
08:30	Completed Final Inspection and Calculations, Tank(s) Measured and Sampled
09:25	Cargo hose disconnected
09:35	Documents on Board

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Sample Report

Grade	Description	Sealed	Distribution	Amount	Volume
Heptene	Shore tank 737:Running from shore tank before loading	Open	Retain	2	1 quarts
Heptene	End of shoreline near jetty at jetty before loading	Open	Retain	2	1 quarts
Heptene	Tb KIRBY 10562:Manifold at loading arm before loading	Open	Retain	1	1 quarts
Heptene	Tb KIRBY 10562:Foot from barge tanks during loading	Open	Retain	3	1 quarts
Heptene	Tb KIRBY 10562:Running from barge tanks after loading	Open	Retain	6	1 quarts
Heptene	Tb KIRBY 10562:Multiple tank composite from barge tanks after loading	Open	Retain	2	1 quarts
Total Samples				16	

Vessel's samples were taken using vessel's closed sampling system.

Information

Samples drawn by	Saybolt Inspector
Shoretank sampling location	Top of tank
Type / condition of sampling containers	Clean glass bottles/tins
Loadport samples delivered by	Saybolt Inspector
received by	Vessel

Remarks:

Samples retained by Saybolt will be held for 90 days (unless otherwise specified) at the end of which they shall be disposed of.

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Certificate of Quantity

The undersigned Independent Saybolt Surveyor herewith declares that the quantity of product loaded by the above mentioned Barge amounts to:

Liters 15°C	1,467,161
Cubic meters 15°C	1,467.161
Cubic meters 60°F	1,468.245
Barrels 60°F	9,234.98
Gallons 60°F	387,869.32
Metric Tons vac	1,043.311
Kilos vac	1,043,311
Metric Tons air	1,041.708
Kilos air	1,041,708
Long Tons	1,025.256
Short Tons	1,148.287
Pounds	2,296,574.22

These quantities have been determined by Shore tank measurements.

Criteria used

Gallons 60°F to Barrels 60°F	ASTM Table 1	0.02380952
Metric Tons Air to Metric Tons Vac	MPMS 11.5.3 - 4.5	0.999837985
Pounds to Metric Tons Air	MPMS 11.5 - Annex D	0.45359237
Pounds to Long Tons	MPMS 11.5 - Annex D	2,240
Pounds to Short Tons	MPMS 11.5 - Annex D	2,000

Signed by: Saybolt representative

Name:

Rank: Saybolt Inspector

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Shore Tank Report Single

Shore tank 737 at Vopak Terminal Deer Park

Shore tank measurement		Open	Close
Date / Time of measurement		06 Jan 2021 13:00	07 Jan 2021 07:40
Average Ullage	FT/IN	34-4 11/16	49'-2"
Average temp.	°F	62.5	62.5
T.O.V.	Gallons	442,584.00	53,927.00
Water	FT/IN	NIL	ND
Ambient temp.	°F		49.00
G.O.V.	Gallons	442,584.00	53,927.00
Pounds per Gallon		5.909	5.909
Pounds		2,615,228.86	318,654.64

Totals			Volume		Mass/Weight	
T.O.V.	Gallons	388,657.00	Liters 15°C	1,467,161	Metric Tons Vac	1,043.311
G.O.V.	Gallons	388,657.00	Cu m 15°C	1,467.161	Kilos Vac	1,043,311
			Cu m 60°C	1,468.245	Metric Tons Air	1,041.708
Pounds per Gallons	5.921		Barrels 60°F	9,234.98	Kilos Air	1,041,708
60°F			Gallons 60°F	387,869.32	Long Tons Air	1,025.256
					Short Tons Air	1,148.287
Delivered temp.	°F	62.5			Pounds	2,296,574.22

Tables used Table source: Pounds per gallon

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Shore Tank Measurement Details

Shore tank 737

Measurement data (Ullage)		Open	Close
Average	FT/IN	34'-4 11/16	49'-2"
Measurement Equipment Data		Open	Close
Water measurement used		UTI	UTI
Gauging equipment type		Saybolt Equipment	Saybolt Equipment
Gauging Equipment used		UTI	UTI
Gauging equipment number		G24225	G24225
Temperature equipment type		Saybolt Equipment	Saybolt Equipment
Temperature Equipment used		UTI	UTI
Temperature equipment number		G24225	G24225
Inspector Equipment used for verification?		No	No
Inspector name		TIM WEDMAN	SH

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Ullage Report Arrival

Survey Date and Time 06 Jan 2021 23:45

RD 60/60°F

Tank	ullage FT/IN	ullage corr FT/IN	TOV Gallons	FT/IN	Free water Gallons	GOV Gallons	Temp °F	Pounds per Gallon	Pounds
1C	17'-10"			ND			60.00		
2C	17'-9 3/4"			ND			60.00		
3C	17'-10"			ND			60.00		
Totals									

Summary Totals

On-board figures	Pre-loaded parcel	Draft		Correction		
TOV Gallons		FORE	FT/IN	02' 06"	TRIM	FT/IN
Free water		AFT	FT/IN	02' 06"	LIST	°
GOV Gallons		Trim/List correction applied: Yes				
On-board figures						

Calcs. based on: WCF Table: Pounds per gallon (at actual temp)

Signed by: Ship's representative
Name:
Rank:

Saybolt representative

Saybolt Inspector

Measurements in accordance with API standards.

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Ullage Report Departure

Survey Date and Time 07 Jan 2021 08:30

RD 60/60°F

0.71131

Tank	ullage FT/IN	ullage corr FT/IN	TOV Gallons	Free water FT/IN	Free water Gallons	GOV Gallons	Temp °F	Pounds per Gallon	Pounds
1C	5'-1 3/8"	4'-1 5/8"	129,953.04	nd		129,953.04	59.10	5.925	769,971.76
2C	5'-4 1/2"	4'-4 5/8"	128,670.36	nd		128,670.36	59.00	5.925	762,371.88
3C	5'-6"	4'-6 3/8"	127,542.24	nd		127,542.24	58.80	5.925	755,687.77
Totals			386,165.64			386,165.64			2,288,031.41

Summary Totals

On-board figures		Draft		Correction	
TOV Gallons	386,165.64	FORE	FT/IN	07' 06" TRIM	FT/IN 0 6
Free water		AFT	FT/IN	08' 00" LIST	°
GOV Gallons	386,165.64	Trim/List correction applied: No			

On-board figures		Loaded figures			
Liters 15°C	1,461,704	Liters 15°C loaded	1,461,704	Average Product Temp °F	59.0
Cu m 15°C	1,461.704	Cu m 15°C loaded	1,461.704	Ambient temp	49
Cu m 60°F	1,462.783	Cu m 60°F loaded	1,462.783	Calcs. based on: WCF Table: Pounds per gallon (at actual temp)	
Barrels 60°F	9,200.63	Barrels 60°F loaded	9,200.63		
Gallons 60°F	386,426.52	Gallons 60°F loaded	386,426.52		
Metric Tons Vac	1,039.430	Metric Tons Vac loaded	1,039.430		
Metric Tons Air	1,037.833	Metric Tons Air loaded	1,037.833		
Kilos Vac	1,039,430	Kilos Vac loaded	1,039,430		
Kilos Air	1,037,833	Kilos Air loaded	1,037,833		
Long Tons Air	1,021.443	Long Tons Air loaded	1,021.443		
Short Tons Air	1,144.016	Short Tons Air loaded	1,144.016		
Pounds Air	2,288,031.41	Pounds Air loaded	2,288,031.41		

Signed by: Ship's representative
Name:
Rank:

Saybolt representative
SH
Saybolt Inspector

Measurements in accordance with API standards.

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Reference Height and Measurement data report

Manual Tank Heights

Tank	Calibrated Reference Height in FT/IN	Found Reference Height in FT/IN		Gauging Location
		Before	After	
1C	16'-10 1/4"	17'-10"	17'-10"	Center
2C	16'-9 3/4"	17'-9 3/4"	17'-9 5/8"	Center
3C	16'-10 1/8"	17'-10"	17'-9 3/4"	Center

* Tanks where full sounding depth could not be reached due to obstructions or tank contours.

Draft	Before		After	
	FT/IN		FT/IN	
FWD	FT/IN	02' 06"	FT/IN	07' 06"
AFT	FT/IN	02' 06"	FT/IN	08' 00"

Measurement data Before Operations

Survey Date and Time	06 Jan 2021 23:45	Gauge equipment type	Saybolt equipment
Inspector Equipment used for verification?	Yes	Gauge equipment used	UTI
Water Measurement Method	UTI	Temp equipment type	Saybolt equipment
Connector Type	MMC	Temp equipment used	UTI
Weather Condition	Rainy		
Sea Condition	Slight - 0.5 to 1.25 m(1 ft 8 in to 4 ft 1 in)		

Measurement data After Operations

Survey Date and Time	07 Jan 2021 08:30	Gauge equipment type	Saybolt equipment
Water Measurement Method	UTI	Gauge equipment used	UTI
Connector Type	MMC	Temp equipment type	Saybolt equipment
Weather Condition	Windy	Temp equipment used	UTI
Sea Condition	Slight - 0.5 to 1.25 m(1 ft 8 in to 4 ft 1 in)		

Signed by: Ship's representative

Name:

Rank:

Saybolt representative

SH

Saybolt Inspector

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Tank Inspection Report

Information supplied by ship's officers or ship's log cannot be guaranteed as accurate and no liability can be assumed for errors that result from improper information supplied. The responsibility for such information must rest with the ship and her officers.

Date of Inspection: 30 Dec 2020

Time of Inspection: 07:40

For Previous Cargoes, see "Ship's Tank History Report"

Ship's tanks inspected:

Tanks	Last Cargo	Cleaning	Coating
1C	Toluene	Hot water wash, stirr, blow dry	C.S
2C	Toluene	Hot water wash, stirr, blow dry	C.S.
3C	Toluene	Hot water wash, stirr, blow dry	C.S.

This is to advise that on the above date we carried out a visual inspection (tanks entered) of the following tanks: 1C, 2C, 3C.

From such visual inspection, and from information as supplied by ship's officers, we consider that said tanks are substantially dry, clean and suitable to load the nominated cargo.

Whilst every effort has been made to comply with tank inspection instructions we cannot be held responsible for those areas beyond visual inspection (such as pumps, lines) and/or the effectiveness of advised tank cleaning methods.

Note: Due to the nature of the cargo to be loaded and the previous cargo(es) carried by the vessel, commencement of loading this cargo is depending on permission obtained from the principal(s). It may be necessary that 'First Foot' samples are drawn and checked for quality.

Sea-valves sealed and numbered:

Remarks

Clean, Dry, Odor free

Signed by: Ship's representative
Name:
Rank: Barge Master

Saybolt representative
David Bieber
Saybolt Inspector

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Letter of Protest

Dear Sirs,

This is to advise that we, Saybolt, as Independent Surveyors on behalf of our clients do hereby lodge protest in respect of:

- **No second line displacement performed**

Furthermore, on behalf of our client, we reserve the right to refer to this matter at a later date.

Signature of this document is acknowledged of receipt only and not an admission of responsibility for the incident.

Signed by: Ship's representative

Name:

Rank:

Shore representative

Loading Master

Saybolt representative

SH

Saybolt Inspector

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Line Displacement Report Chemical

On your request a line displacement was carried out before loading of the above mentioned vessel, in order to check the condition of the shoreline, and we report as follows:

Capacity of shoreline from tankside to ships manifold	3801
Shore tank(s) used	737
Tanks density	
Shore line(s) used	79-1
Shore line RD 60/60°F	
Ship tank(s) used	1C
Ships RD 60/60°F	

Shore Line Displacement Comparison

	Observed Volume Gallons	Temperature	Standard Volume Gallons
Shore			
A Shore tank 737 quantity before	442,584	60	0
B Shore tank 737 quantity after	430,110	60	0
C Shore tank difference (A-B)	12,474		
D Shore tank quantity before	0	0	0
E Shore tank quantity after	0	0	0
F Shore tank difference (D-E)	0		0
G Total shore difference (C+F)	12,474		0
Vessel			
K Ship tanks quantity before	0	60	0
L Ship tanks quantity after	12,405	60	0
M Ships difference (L-K)	12,405		0
N Ship line quantity	0		0
O Difference including Ship line (M+N)	12,405		0
Totals			
Difference Ship vs Shore (O-G)	Δ Quantity	Δ %	
Observed Volume Gallons	-69	-0.55	
Standard Volume Gallons	0	0	

Signed by: Ship's representative
Name:
Rank:

Shore representative

Loading Master

Saybolt representative

Saybolt Inspector

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Notice of Apparent Discrepancy

TO: THE REPRESENTATIVE OF THE TERMINAL INDICATED ABOVE:

1. The designated shore tanks were gauged, sampled (if applicable) and temperatured (if applicable) before and after cargo transfer and found to have delivered 9,234.98 Bbl GSV at 60°F.
2. The designated vessel tanks were gauged, sampled (if applicable) and temperatured (if applicable) before and after cargo transfer and found to have received 9,200.63 Bbl GSV at 60°F, not applying the vessel's experience factor (VEF).
3. Please investigate the discrepancy between the volumes shown above in items 1 and 2 which appears to be 34.35 Bbl and report your findings promptly.
4. The terminal representative designated shore tank(s) number(s) 737 to deliver the above cargo.
The terminal representative informed us that the shore lines used to transfer the cargo were full before and full after transfer of the cargo.
5. Line fill was verified by the terminal using the following line fill verification procedure: Line displacement
6. There was no evidence of spillage at the terminal or the vessel.

Furthermore, on behalf of our client, we reserve the right to revert to this matter at a later date.

Signed by: Shore representative
Name:
Rank: Loading Master

Saybolt representative
Saybolt Inspector

Note: If the word "Refused" appears above under "Shore representative", it indicates that a copy of this document was left with the terminal on the date shown at the top, however, the terminal representative refused to acknowledge receipt of the document.

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Void Space/Ballast Reports

Compartment/ Tank	Product	Before		After	
		Quantity Liters	Product	Quantity Liters	Product
1c	DRY	NIL	DRY	NIL	DRY
2c	DRY	NIL	DRY	NIL	DRY
3c	DRY	NIL	DRY	NIL	DRY

* Tanks where full sounding depth could not be reached due to obstructions or tank contours.

Additional information

Quantity of Oil received from ballast pumped ashore Liters

Tanks used by ship for previous ballast voyage?

Signed by: Ship's representative

Name:

Rank:

Saybolt representative

Saybolt Inspector