

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA/CHINA OFFSHORE OIL
(SINGAPORE) PTE LTD
VESSEL: DPST NS PIONEER
VOYAGE: NS-V24-07
PRODUCT: BUZIOS CRUDE OIL

PETROINSPEC REF: PIS009/24
FPSO: FPSO P-76 / SANTOS BASIN
CARGO REF: P-76 OC 013
DATE: June 02nd to 03rd, 2024

1.0. DPST: DPST NS PIONEER FIGURES

1.1. Total Quantity loaded by DPST NS PIONEER (without VEF) as per ASTM 60A Table, with Density/API and S&W from FPSO In- Line Blend sample analysis, obtained at FPSO P-76 / SANTOS BASIN Laboratory.

SUMMARY OF QUANTITIES BY TABLE ASTM 60 A

Measurements	Gross	Net
Liters (20°C)	79.855.655	79.656.016
Kilograms (Vac)	69.905.640	69.730.876
Metric Tons (Vac)	69.905,640	69.730,876
Kilograms (Air)	69.834.513	69.659.927
Metric Tons (Air)	69.834,513	69.659,927
Long Tons (Air)	68.731,584	68.559,755
US BBLs (60°F)	500.481,80	499.230,59
US GALLONS (60°F)	21.020.235,42	20.967.684,87
Cubic Meters (60°F)	79.570,199	79.371,274
Cubic Meters (20°C)	79.855,655	79.656,016
Liters (15°C)	79.535.236	79.336.398

1.2. Total Quantity loaded by DPST NS PIONEER(Without VEF) as per ASTM 6A Table with Density/API and S&W from FPSO In- Line Blend sample analysis, obtained at FPSO P-76 / SANTOS BASIN Laboratory.

SUMMARY OF QUANTITIES BY TABLE ASTM 6 A

Measurements	Gross	Net
US BBLs (60°F)	500.507,39	499.256,13
Kilograms (Vac)	69.911.040	69.736.260
Metric Tons (Vac)	69.911,040	69.736,260
Kilograms (Air)	69.826.080	69.651.510
Metric Tons (Air)	69.826,080	69.651,510
Long Tons (Air)	68.723,280	68.551,470
US GALLONS (60°F)	21.021.310,40	20.968.757,50
Cubic Meters (60°F)	79.574,269	79.375,334
Cubic Meters (20°C)	79.859,754	79.660,106
Liters (15°C)	79.539.319	79.340.472

1.3. Total Quantity loaded by DPST NS PIONEER (without VEF) as per ASTM 54A Table, with Density/API and S&W from FPSO In- Line Blend sample analysis, obtained at FPSO P-76 / SANTOS BASIN Laboratory.

SUMMARY OF QUANTITIES BY TABLE ASTM 54 A

Measurements	Gross	Net
Liters (15°C)	79.538.172	79.339.325
Kilograms (Vac)	69.922.007	69.747.201
Metric Tons (Vac)	69.922,007	69.747,201
Kilograms (Air)	69.837.091	69.662.497
Metric Tons (Air)	69.837,091	69.662,497
Long Tons (Air)	68.734,121	68.562,285
US BBLs (60°F)	500.500,27	499.249,01
US GALLONS (60°F)	21.021.011,30	20.968.458,40

2.0. FPSO FPSO P-76 / SANTOS BASIN FIGURES

2.1. Total Quantity delivered by FPSO P-76 / SANTOS BASIN as per ASTM 60A Table, obtained by FPSO's flowmeter measurements with Density/API and S&W from FPSO In-Line Blend sample analysis, obtained at FPSO P-76 / SANTOS BASIN Laboratory.

SUMMARY OF QUANTITIES BY TABLE ASTM 60 A		
Measurements	Gross	Net
Liters (20°C)	79.633.551	79.434.467
Kilograms (Vac)	69.711.211	69.536.932
Metric Tons (Vac)	69.711,211	69.536,932
Kilograms (Air)	69.616.484	69.442.442
Metric Tons (Air)	69.616,484	69.442,442
Long Tons (Air)	68.516,997	68.345,705
US BBLs (60°F)	499.089,80	497.842,07
US GALLONS (60°F)	20.961.771,46	20.909.366,99
Cubic Meters (60°F)	79.348,889	79.150,517
Cubic Meters (20°C)	79.633,551	76.441,967
Liters (15°C)	79.314.023	79.115.738

2.2. Total Quantity delivered by FPSO P-76 / SANTOS BASIN as per ASTM 6A Table, obtained by FPSO's flowmeter measurements with Density/API and S&W from FPSO In-Line Blend sample analysis, obtained at FPSO P-76 / SANTOS BASIN Laboratory.

SUMMARY OF QUANTITIES BY TABLE ASTM 6 A		
Measurements	Gross	Net
US BBLs (60°F)	499.106,45	497.858,68
Kilograms (Vac)	69.715.350	69.541.060
Metric Tons (Vac)	69.715,350	69.541,060
Kilograms (Air)	69.630.630	69.456.550
Metric Tons (Air)	69.630,630	69.456,550
Long Tons (Air)	68.530,930	68.359,600
US GALLONS (60°F)	20.962.470,98	20.910.064,56
Cubic Meters (60°F)	79.351,537	79.153,158
Cubic Meters (20°C)	79.636,224	79.437,133
Liters (15°C)	79.316.685	79.118.393

2.3. Total Quantity delivered by FPSO P-76 / SANTOS BASIN as per ASTM 54A Table, obtained by FPSO's flowmeter measurements with Density/API and S&W from FPSO In-Line Blend sample analysis, obtained at FPSO P-76 / SANTOS BASIN Laboratory.

SUMMARY OF QUANTITIES BY TABLE ASTM 54 A		
Measurements	Gross	Net
Liters (15°C)	79.316.228	79.117.937
Kilograms (Vac)	69.703.101	69.528.843
Metric Tons (Vac)	69.703,101	69.528,843
Kilograms (Air)	69.618.419	69.444.373
Metric Tons (Air)	69.618,419	69.444,373
Long Tons (Air)	68.518,902	68.347,604
US BBLs (60°F)	499.103,67	497.855,91
US GALLONS (60°F)	20.962.354,17	20.909.948,18

3.0. FPSO P-76 / SANTOS BASIN FIGURES

3.1. Analysis results of FPSO In-Line Blend sample obtained at FPSO P-76 / SANTOS BASIN Laboratory on

TEST	METHODS	RESULT
Density at 20°C (g/cm³)	ASTM D1298	0,8754
Density at 15°C (g/cm³)	ASTM D1298	0,8791
°API (60°F)	ASTM D1298	29,4
BSW (% vol)	ASTM D4007	0,25
Salt (mg/kg)	ASTM D3230	84,0

4.0. COMPARISON REPORT

4.1. Difference in Liters at 20°C NSV, as per ASTM 60A Table.

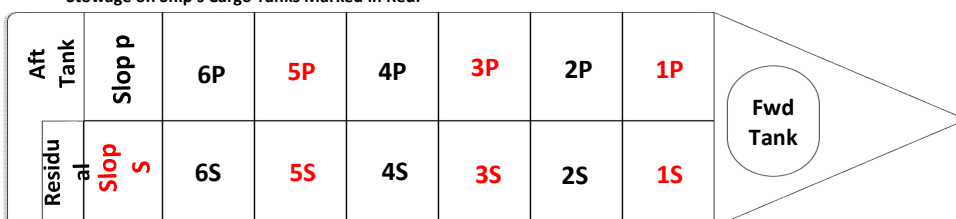
ITEM	RESULT
Total Delivered by the FPSO	79.434.467
Total Received by the Vessel	79.656.016
Difference - FPSO & Vessel	221.549

4.2. Difference in Bbls at 60°F NSV, as per ASTM 6A Table.

ITEM	RESULT
Total Delivered by the FPSO	497.858,68
Total Received by the Vessel	499.256,13
Difference - FPSO & Vessel	1.397,45

5.0. Comments

Stowage on Ship's Cargo Tanks Marked in Red:



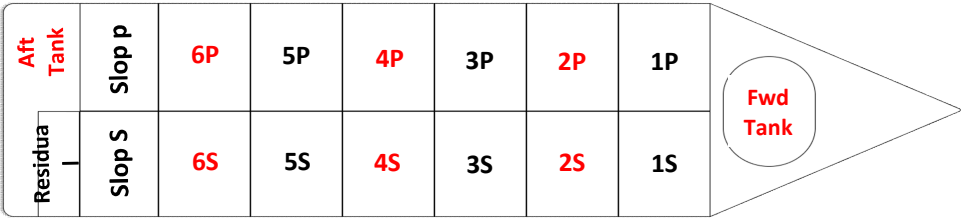
ITEM	RESULT
V.E.F	Not applied.
O.B.Q. (Before Loading - m³)	Nil.
Free Water delivered by FPSO	-
Total Free Water in Ship's Tanks (m³)	Only traces.
Total Free Water in Ship's Tanks (Bbls)	Only traces.
Slop/Residual tank(s) for receiving Flushing	-
Slop/Residual Measure After Initial Flushing	-
Slop/Residual Measure After backflushing	-
Flushing Measurement by FPSO	-
H2S - Ship's Tanks Before operation (ppm)	-
H2S - Ship's Tanks After operation (ppm)	-

6.0. Drafts

DRAFT (m)	FWD	AFT	Trim	List
Arrival	6,50	9,50	3,00	
Arrival Condition	<input type="checkbox"/> Trim by the Bow <input checked="" type="checkbox"/> Trim by the Stern <input type="checkbox"/> Even Keel <input type="checkbox"/> List by Port <input type="checkbox"/> List by Starboard <input type="checkbox"/> No List			
Departure	16,60	16,60	0,00	
Departure Condition	<input type="checkbox"/> Trim by the Bow <input type="checkbox"/> Trim by the Stern <input checked="" type="checkbox"/> Even Keel <input type="checkbox"/> List by Port <input type="checkbox"/> List by Starboard <input type="checkbox"/> No List			

7.0. Comments

Stowage on Ship's Ballast Tanks Marked in Red:



8.0. Bunkers

Bunkers (m)	Fuel Oil	Diesel
Departure from Port (Mt Vac)		
Arrival at FPSO (Mt Vac)	1.374,25	276,80
Departure from FPSO (Mt Vac)	1.336,53	262,28
Arrival at Port (Mt Vac)		

9.0. Timesheet

Date	Time	Event
JUNE 2nd, 2024	6:45	500m FPSO P-76 ZONE / PERMISSION FOR APPROACHING GRANTED
	7:15	VESSEL IN SHOOTING POSITION, AWAITING FPSO READINESS
	7:20	COMMENCED MOORING AT FPDO P-76
	8:45	COMPLETED MOORING AT FPDO P-76
	8:45	COMMENCED HOSE CONECTION
	10:18	COMPLEETD HOSE CONNECTION
	10:54	COMMENCED PRESURE TEST 5bar
	11:04	COMPLETED PRESSURE TEST 5bar
	14:29	COMMENCE LINE FLUSHING
	15:10	COMPLETED LINE FLUSHING
	15:26	COMMENCED LINE DISPLACEMANT
	15:45	COMPLETED LINE DISPLACEMENT
	16:03	COMMENCED OFFLOADING
	17:20	OFFLOAD SUSPENDE BY FPSO REQUEST (DUE BLACKOUT)
	20:42	RESUMED OFFLOAD
JUNE 3rd, 2024	6:30	COMMENCE TANK INSPECTION
	7:10	COMPLETED TANK INSPECTION
	14:45	COMPLETED OFFLOAD FPSO P-76
	14:45	COMMENCED BACK FLUSHING / COMMENCED SAMPLING
	15:30	FPSO SAMPLING TRANSFER COMMENCED
	15:35	SAMPLING COMPLETED
	16:00	FPSO SAMPLING TRANSFER COMPLETED
	16:30	COMMENCD FINAL TANK INSPECTION
	17:30	COMPLETED FINAL TANK INSPECTION
	17:30	COMMENCED CARGO CALCULATION
	18:05	COMPLETED CARGO CALCULATION
	18:20	COMMENCED HOSE DISCONNECTION
	19:00	COMPLETED HOSE DISCONNECTION
	19:05	COMMENCE UNMOORING
	19:40	COMPLETED UNMOORING
	19:50	500m OUT ZONE
	21:20	VESSEL OUT OFF 3Nm ZONE
	22:10	C.O.S.P. / VESSEL DEPARTURE TO AÇU PORT