



CUSTOMER:	CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD
VESSEL:	DPST NS PIONEER
VOYAGE:	NS-V24-06
PRODUCT:	BÚZIOS C.O.
TERMINAL:	FPSO P-77 / SANTOS BASIN
CARGO REF:	P77 OC 013
DATE:	May 31st to June 01st, 2024
PETROINSPEC REF:	PIS009/24

Dear Customer:

Please find enclosed our Survey Report for the above referenced vessel.

Thanks and best regards,

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

VESSEL: DPST NS PIONEER
VOYAGE: NS-V24-07
PRODUCT: BÚZIOS C.O.

TERMINAL: FPSO P-77 / SANTOS BASIN
CARGO REF: P77 OC 013
DATE: May 31st to June 01st, 2024

Attention: CAPTAIN/CHIEF OFFICER
Confirmation of receipt of all related cargo documents by signing this certificate

DOCUMENTS	STATUS
MASTER RECEIPT OF DOCUMENTS	Yes
VESSEL CARGO ORDERS	Yes
SUMMARY OF QUANTITIES	Yes
SHIP'S FIGURES BY TABLE ASTM 60A	Yes
SHIP'S FIGURES BY TABLE ASTM 6A	Yes
VESSEL EXPERIENCE FACTOR	Yes
ANALYSIS REPORT	Yes
LETTER OF PROTEST / APPARENT DISCREPANCY	Yes
TIME LOG	Yes
O.B.Q. REPORT	Yes
INSPECTION CERTIFICATE OF TANKS	Yes
BUNKER REPORT - FUEL OIL	Yes
BUNKER REPORT - DIESEL OIL	Yes
SAMPLE RECEIPT	Yes
SAMPLES TO PETROINSPEC	Yes
H2S REPORT BEFORE / AFTER	Yes
SLOPS RECORD REPORT BEFORE	Yes
SLOPS RECORD REPORT AFTER	Yes

DIGITAL VERSION OF THE REPORT: The documents outlined in this report are consistent with the signed copy, which has been signed and stamped by the Terminal and/or Vessel Representatives. The original field documents are accessible upon request from our principals.

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

VESSEL: DPST NS PIONEER
VOYAGE: NS-V24-07
PRODUCT: BÚZIOS C.O.

TERMINAL: FPSO P-77 / SANTOS BASIN
CARGO REF: P77 OC 013
DATE: May 31st to June 01st, 2024

Product	Customer Order Quantity			Vessel Available Capacity			Vessel Requested Quantity		
BUZIOS C.O.	() MT	() M³	(x) BBLS	() MT	(x) M³	() BBLS	() MT	(x) M³	() BBLS
	80.000,00 +/- 5%			82.587,51			80.000,00 +/- 5%		

STOP LOADING BY: (X) Shore () Vessel

- NOTES:
- 1.0. Client Order Should Included Any Option And Party May Exercise Such Option.
 - 2.0. If vessel does not request Maximum Quantity state reason below:

Comment:

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

PETROINSPEC REF: PIS009/24

VESSEL: DPST NS PIONEER
VOYAGE: NS-V24-07
PRODUCT: BÚZIOS CRUDE OIL
DETAILS: *OFFLOADING AT FPSO P-77*

TERMINAL: FPSO P-77 / SANTOS BASIN
CARGO REF: P-77 OC 013
DATE: May 31st to June 01st, 2024

Summary of Quantities By Table ASTM 60 A - Vessel		
Without VEF Applied		
Measurements	Gross	Net
Liters (20°C)	80.033.973	79.793.870
Kilograms (Vac)	70.237.815	70.027.100
Metric Tons (Vac)	70.237,815	70.027,100
Kilograms (Air)	70.135.376	69.924.968
Metric Tons (Air)	70.135,376	69.924,968
Long Tons (Air)	69.027,694	68.820,610
US BBLS (60°F)	501.609,51	500.104,67
US GALLONS (60°F)	21.067.599,26	21.004.396,18

Summary of Quantities By Table ASTM 60 A - FPSO		
Figures Based at FPSO P-77 Flowmeter		
Measurements	Gross	Net
Liters (20°C)	80.271.669	80.030.854
Kilograms (Vac)	70.446.417	70.235.077
Metric Tons (Vac)	70.446,417	70.235,077
Kilograms (Air)	70.343.673	70.132.642
Metric Tons (Air)	70.343,673	70.132,642
Long Tons (Air)	69.232,702	69.025,004
US BBLS (60°F)	503.099,26	501.589,96
US GALLONS (60°F)	21.130.168,74	21.066.778,24

Comparative Ship - Shore			ASTM 60A	
Measurement	Ship	Shore	Difference (L)	Difference (%)
Liters (20°C)	79.793.870	80.030.854	-236.984	-0,30 %

Comparative Ship - Shore			ASTM 60A	
Measurement	Ship	Shore	Difference (L)	Difference (%)
Net US BBLS (60°F)	500.104,67	501.589,96	-1.485,29	-0,30 %

Remark:

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

PETROINSPEC REF: PIS009/24

VESSEL: DPST NS PIONEER
VOYAGE: NS-V24-07
PRODUCT: BÚZIOS CRUDE OIL
DETAILS: **OFFLOADING AT FPSO P-77**

TERMINAL: FPSO P-77 / SANTOS BASIN
CARGO REF: P-77 OC 013
DATE: May 31st to June 01st, 2024

Summary of Quantities By Table ASTM 54 A - Vessel

Without VEF Applied

Measurements	Gross	Net
Liters (15°C)	79.716.525	79.477.376
Kilograms (Vac)	70.222.287	70.011.621
Metric Tons (Vac)	70.222,287	70.011,621
Kilograms (Air)	70.137.202	69.926.791
Metric Tons (Air)	70.137,202	69.926,791
Long Tons (Air)	69.029,492	68.822,404
US BBLS (60°F)	501.622,57	500.117,71
US GALLONS (60°F)	21.068.147,90	21.004.943,80

Summary of Quantities By Table ASTM 54 A - FPSO

Figures Based at FPSO P-77 Flowmeter

Measurements	Gross	Net
Liters (20°C)	79.953.055	79.713.196
Kilograms (Vac)	70.430.646	70.219.354
Metric Tons (Vac)	70.430,646	70.219,354
Kilograms (Air)	70.345.309	70.134.273
Metric Tons (Air)	70.345,309	70.134,273
Long Tons (Air)	69.234,312	69.026,609
US BBLS (60°F)	503.110,96	501.601,62
US GALLONS (60°F)	21.130.660,13	21.067.268,19

Comparative Ship - Shore

Measurement	Ship	Shore	Difference (L)	Difference (%)
Liters (20°C)	79.477.376	79.713.196	-235.820	-0,30 %

ASTM 60A

Comparative Ship - Shore

Measurement	Ship	Shore	Difference (L)	Difference (%)
Net US BBLS (60°F)	500.117,71	501.601,62	-1.483,91	-0,30 %

ASTM 60A

Remark:

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

PETROINSPEC REF: PIS009/24

VESSEL: DPST NS PIONEER
VOYAGE: NS-V24-07
PRODUCT: BÚZIOS CRUDE OIL
DETAILS: OFFLOADING AT FPSO P-77

TERMINAL: FPSO P-77 / SANTOS BASIN
CARGO REF: P-77 OC 013
DATE: May 31st to June 01st, 2024

Summary of Quantities By Table ASTM 6 A - Vessel

Without VEF Applied

Measurements	Gross	Net
US BBLs (60°F)	501.623,89	500.119,04
Kilograms (Vac)	70.241.610	70.030.890
Metric Tons (Vac)	70.241,610	70.030,890
Kilograms (Air)	70.156.490	69.946.020
Metric Tons (Air)	70.156,490	69.946,020
Long Tons (Air)	69.048,470	68.841,330
US GALLONS (60°F)	21.068.203,40	21.004.999,70
Liters (15°C)	79.716.750	79.477.603

Summary of Quantities By Table ASTM 6 A - DPST

Figures Based at FPSO P-77 Flowmeter

Measurements	Gross	Net
US BBLs (60°F)	503.102,80	501.593,50
Kilograms (Vac)	70.416.260	70.205.010
Metric Tons (Vac)	70.416,260	70.205,010
Kilograms (Air)	70.330.880	70.119.890
Metric Tons (Air)	70.330,880	70.119,890
Long Tons (Air)	69.220,120	69.012,450
US GALLONS (60°F)	21.130.317,77	21.066.927,00
Liters (15°C)	79.951.775	79.711.920

Comparative Ship - Shore

Measurement	Ship	Shore	Difference (L)	Difference (%)
Liters (20°C)	500.119,04	501.593,50	-1.474,46	-0,29 %

Remark:

Note:	Volume Correction Factor used correspond to API Tables 2004 and Unit Conversion Factors Basis on API Chapter 11.5.3
REMARK :	4 METERS SWELL DURING TANKS MEASUREMENTS
MEASUREMENTS DEVICE UTI : MODEL: GTXE SERIAL NUMBER: G-25792 CALIBRATION EXPIRE, AUGUST 28th, 2024	
0	
Summary of quantities basis on Liters @ 15 °C from Liters @ 20°C ussing Table 54, other units basis on MPMS 11.5.3	

Summary				
Measurements	Gross	Net	Conversion Factors Based on MPMS 11.5.3	
Liters (15°C)	79,716.525	79,477.376	V.E.F.	1,0000
Kilograms (Vac)	70,222.287	70,011.621	Average of Density (VAC @ 15°C)	0,8809
Metric Tons (Vac)	70,222,287	70,011,621	Average of Density (VAC @ 20°C)	0,8776
Kilograms (Air)	70,137.202	69,926.791	BSW (% Vol)	0,300
Metric Tons (Air)	70,137,202	69,926,791	Factor / Metric Ton (Air)	1,136579765
Long Tons (Air)	69,029,492	68,822,404	Factor / Long Ton (Air)	1,154818357
US BBLs (60°F)	501,622.57	500,117.71	Factor / US BBLs (60°F)	6,292579507
US Gallons (60°F)	21,068,147,90	21,004,943,80	Factor / US Gallons (60°F)	42
			Average °API	29.0
Free Water (m³)	0,000	0,000		

Summary of quantities basis on Liters @ 15 °C from Liters @ 20°C using Table 54, other units basis on MPMS 11.5.3

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

PETROINSPEC REF: PIS009/24

VESSEL: DPST NS PIONEER

VOYAGE: NS-V24-07

PRODUCT: BÚZIOS C.O.

DETAILS: OFFLOADING AT FPSO P-77

SHIP: FPSO P-77 / SANTOS BASIN

CARGO REF: P77 OC 013

DATE: May 31st to June 01st, 2024

Final Draft (m)	FWD	AFT	Trim	List
	12,40	13,40	1,00	0

Vessel Tanks	Measurements (m)	Ship's Line (bbbls)	TOV (bbbls)	Free Water (bbbls)	GOV (bbbls)	TEMP (°F)	VCF	GSV (bbbls)	S&W	NSV (bbbls)
2P	2,280 m	TRACES	84.927,22	0,00	84.927,22	100,0	0,98231	83.424,86	250	83.174,59
2S	2,300 m	TRACES	83.580,82	0,00	83.580,82	99,5	0,98253	82.120,66	246	81.874,30
4P	1,400 m	0,00	86.214,24	0,00	86.214,24	101,1	0,98182	84.646,87	254	84.392,93
4S	1,400 m	0,00	87.205,57	0,00	87.205,57	100,8	0,98195	85.631,51	257	85.374,62
6P	1,610 m	TRACES	83.764,10	0,00	83.764,10	99,3	0,98262	82.308,28	247	82.061,36
6S	1,540 m	TRACES	84.109,10	0,00	84.109,10	99,3	0,98262	82.647,28	248	82.399,34
LINES		0,00	859,64	0,00	859,64	100,0	0,98231	844,43	3	841,90
TOTAL			510.660,69	0,00	510.660,69			501.623,89	1.505	500.119,04

Summary

Measurements	GROSS		NET		Conversion Factors Based on MPMS 11.5.1	
US BBLs (60°F)	501.623,89		500.119,04		V.E.F.	1,0000
Kilograms (Vac)	70.241.610		70.030.890		Density (@20°C)	0,8776
Metric Tons (Vac)	70.241,610		70.030,890		Density (VAC @ 60/60°F)	0,88162
Kilograms (Air)	70.156.490		69.946.020		BSW (%vol)	0,300
Metric Tons (Air)	70.156,490		69.946,020		Factor / Metric Tons (VAC)	0,140028445
Long Tons (Air)	69.048,470		68.841,330		Factor / Metric Tons (AIR)	0,139858749
US GALLONS (60°F)	21.068.203,40		21.004.999,70		Factor / Long Tons (AIR)	0,137649893
Liters (15°C)	79.716.750		79.477.603		Factor / Liters (15°C)	158,9173713
Free Water (BBLs)	0,00				Factor / US Gallons (60°F)	42
					Gravity A.P.I	29,0

Note: Volume Correction Factor used correspond to API Tables 2004 and Unit Conversion Factors Basis on API Chapter 11.5.3

REMARK : 4 METERS SWELL DURING TANKS MEASUREMENTS

MEASUREMENTS DEVICE UTI : MODEL: GTEX SERIAL NUMBER: G-25792 CALIBRATION EXPIRE, AUGUST 28th, 2024

Summary of quantities basis on Liters @ 15 °C from Liters @ 20°C ussing Table 54, other units basis on MPMS 11.5.3

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

PETROINSPEC REF: PIS009/24

TERMINAL: FPSO P-77 / SANTOS BASIN

CARGO REF: P77 OC 013

VESSEL: DPST NS PIONEER

VOYAGE: NS-V24-07

PRODUCT: BÚZIOS C.O.

DATE: May 31st to June 01st, 2024

Voyage	Port	Product	Date	TCV (Departure)	OBQ (Vessel)	TCV (Load - Vessel)	TCV (Shore)	VCF (Table Used)	TCV (Vessel - Shore)	Qualified Voyage?
Last Cargo	FPSO GUANABARA	MERO C.O.	5/3/2024	138.881,300	-	138.881,300	138.881,598		1,00000	Yes
2nd	FPSO P-76 / 75	BUZIOS C.O.	8-10/04/2024	140.286,200	-	140.286,200	140.293,825		0,99995	Yes
3rd	FPSO P-77	BUZIOS C.O.	5-7/03/2024	138.267,800	-	138.267,800	137.890,390		1,00274	N
4th	FPSO GUANABARA	MERO C.O.	2/23/2024	138.730,200	-	138.730,200	139.491,552		0,99454	N
5th	FPSO P-71	ITAPU C.O.	2/13/2024	130.720,700	-	130.720,700	130.667,000		1,00041	Yes
6th	FPSO P-74 / FPSO ALM. BARROSO	BUZIOS C.O.	10-11/01/2024	137.717,750	-	137.717,750	137.716,423		1,00001	Yes
7th	FPSO GUANABARA	MERO C.O.	12/14/2023	132.185,316	-	132.185,316	132.586,346		0,99698	Yes
8th	FPSO P-75 / 76	BUZIOS C.O.	29/11-05/12/2024	134.001,700	-	134.001,700	133.760,314		1,00180	Yes
9th	JUBAIL	GASOIL 10PPM	5/7/2023	133.670,471	-	133.670,471	133.757,879		0,99935	Yes
10th										
11th										
12th										
13th										
14th										
15th										
16th										
17th										
18th										
19th										
20th										
					TOTAL	1.224.461,44	1.225.045,327	Volume correction factor table*		
						TCV average ratio	0,99952	**Does Voyage Qualified? (Yes/No)		
					qualifying VEF	0,99652	1,00252			
					current VEF		0,9998			

NOTES

* List last voyage first.

* Use either barrels or cubic meters: do not mix.

* The average TCV ratio is equal to total vessel TCV divided by total shore TCV.

*This form should be prepared taking information from the report of analysis of voyage on board

REMARK :

V.E.F NOT APPLIED.

All voyages do not fall under the rules for application of the ship's VEF.

Certificate of Analysis

CLIENT:

YOUR REF.:

VESSEL:

VOYAGE:

PRODUCT:

CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

P77 OC 013

DPST NS PIONEER

NS-V24-07

BÚZIOS C.O.

JOB NUMBER: PIS009/24

TERMINAL / PORT: FPSO P-77 / SANTOS BASIN

DATE: May 31st to June 01st, 2024

THE ANALYSIS BELOW WERE PERFORMED AT FPSO P-77 / SANTOS BASIN LABORATORY.
RESULTS OF FPSO IN-LINE BLEND SAMPLE FROM FPSO P-77 / SANTOS BASIN.

TESTS	UNIT	SPECIFICATION	METHODS	RESULT
DENSITY @15°C	g/cm³	Not Informed	ASTM D 5002	0,8776
DENSITY @20°C	g/cm³	Not Informed	ASTM D 5002	0,8809
API @60°F	-	Not Informed	ASTM D 5002	29,0
BSW	% vol	Not Informed	ASTM D 4007	0,30
SALINITY	mg/l	Not Informed	ASTM D3230	24,0

Due to the difficulties and limitations inherent within closed system sampling, as described in API MPMS Chapter 17.11, AmSpec cannot attest to the representative nature of samples drawn with such systems or the test data derived therefrom as contained within this Test Report

NOTICE OF APPEARANCE DISCREPANCY

VESSEL:	DPST NS PIONEER	DATE:	May 31st to June 01st, 2024
TERMINAL / PORT:	FPSO P-77 / SANTOS BASIN	VOYAGE:	NS-V24-07
PRODUCT:	BÚZIOS C.O.	YOUR REF.:	P77 OC 013
JOB NUMBER:	PIS009/24	QUANTITY :	80.000,00 +/- 5% BBLS
<input checked="" type="radio"/> LOADING <input type="radio"/> DISCHARGING <input type="radio"/> BUNKERING	CLIENT: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD		

To : Master / Chief Officer

Issuance Date : **May 31st to June 01st, 2024**

To :

Dear Sir,

We have been appointed as surveyors on the above mentioned vessel by our principals CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD . Acting for and on their behalf, we do hereby note protest with you concerning the following situation:

COMPARISON BETWEEN TOTAL QUANTITY RECEIVED ON VESSEL AND DELIVERED BY FPSO AS PER ASTM 6A TABLE:

FPSO'S DELIVERED FIGURES: 80.030,854 m³ @20°C° NSV

VESSEL'S LOADED FIGURES: 79.793,870 m³ @20°C° NSV

> DIFFERENCE: -236,984 m³ @20°C or -0,30 % RECEIVED ON VESSEL.

We hereby reserve the right of our principals to refer to this matter at a later date and to take such action as may be deemed necessary.

Yours Faithfully

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

PETROINSPEC REF: PIS009/24

VESSEL: DPST NS PIONEER

VOYAGE: NS-V24-07

PRODUCT: BÚZIOS CRUDE OIL

DETAILS: OFFLOADING AT FPSO P-77

SHIP: FPSO P-77 / SANTOS BASIN

CARGO REF: P77 OC 013

DATE: May 31st to June 01st, 2024

Date	Time	Event
MAY 29th, 2024	15:30	SURVEYOR LAIRTON SILVA DE ALMEIDA ON BOARD IN "DPST NS PIONEER" AT RIO DE JANEIRO
MAY 29th, 2024	17:00	C.O.S.P. / VESSEL DEPARTURE TO FPSO P-76
MAY 30th, 2024	5:30	E.O.S.P. / VESSEL ARRIVED AT FPSO P-76 ZONE 10NM
MAY 30th, 2024	6:00	N.O.R. TENDERED / N.O.R. ACCEPTED
MAY 30th, 2024	10:30	COMMENCE INITIAL TANKS INSPECTIONS
MAY 30th, 2024	11:30	COMPLETED INITIAL TANKS INSPECTIONS / NO OBQ ON BOARD
MAY 30th, 2024	11:30	KEY MEETING COMMENCED
MAY 30th, 2024	11:50	PERMISSION TO ENTER 3NM GRANTED, APPROACHING COMMENCED
MAY 30th, 2024	12:00	KEY MEETING COMPLETED
MAY 30th, 2024	13:30	WEATHER EVALUATION COMMENCED
MAY 30th, 2024	14:00	WEATHER EVALUATION COMPLETED, APPROACHING SUSPENDED DUE TO WEATHER CONDITIONS
MAY 30th, 2024	15:00	VESSEL OUT OFF 3NM ZONE
MAY 30th, 2024	16:40	VESSEL IN 3NM ZONE
MAY 30th, 2024	18:50	CONNECTION OF PULL TUG "AH LIGURIA" COMMENCED
MAY 30th, 2024	19:40	CONNECTION OF PULL TUG "AH LIGURIA" COMPLETED
MAY 30th, 2024	20:20	500m FPSO ZONE
MAY 30th, 2024	20:20	PERMISSION FOR APPROACHING GRANTED
MAY 30th, 2024	20:25	VESSEL AT SHOOTING POSITION, AWAITING FPSO READINESS
MAY 30th, 2024	20:45	COMMENCED MOORING
MAY 30th, 2024	21:45	COMPLETED MOORING
MAY 30th, 2024	23:00	COMMENCE HOSE CONNECTION
MAY 30th, 2024	23:36	COMPLETED HOSE CONNECTION
MAY 30th, 2024	23:36	COMMENCE PRESSURE TEST 5bar
MAY 30th, 2024	23:46	COMPLETED PRESSURE TEST 5bar
MAY 30th, 2024	23:59	COMMENCE LINE FLUSHING
MAY 31st, 2024	0:27	COMPLETED LINE FLUSHING
MAY 31st, 2024	0:30	COMMENCE LINE DISPLACEMENT
MAY 31st, 2024	0:55	COMPLETED LINE DISPLACEMENT
MAY 31st, 2024	1:05	COMMENCE OFFLOAD BÚZIOS CRUDE OIL
MAY 31st, 2024	15:22	OFFLOAD STOPPED BY FPSO REQUEST
JUNE 1st, 2024	3:48	RESUMED OFFLOAD
JUNE 1st, 2024	17:45	COMPLETED OFFLOAD BÚZIOS CRUDE OIL
JUNE 1st, 2024	17:55	COMMENCED SAMPLING
JUNE 1st, 2024	17:55	COMMENCE BACK FLUSHING
JUNE 1st, 2024	18:35	COMPLETED SAMPLING
JUNE 1st, 2024	19:10	COMPLETED BACK FLUSHING
JUNE 1st, 2024	19:10	COMMENCE FINAL TANK INSPECTION
JUNE 1st, 2024	19:45	COMPLETED FINAL TANK INSPECTION
JUNE 1st, 2024	19:45	COMMENCE CARGO CALCULATIONS
JUNE 1st, 2024	20:05	COMPLETED CARGO CALCULATIONS
JUNE 1st, 2024	20:12	COMMENCE HOSE DISCONNECTION
JUNE 1st, 2024	20:45	COMPLETED HOSE DISCONNECTION
JUNE 1st, 2024	21:12	COMMENCE UNMOORING
JUNE 1st, 2024	21:45	COMPLETED UNMOORING
JUNE 1st, 2024	22:00	500m OFF FPSO ZONE
JUNE 1st, 2024	22:25	AFT TUG "AH LIGURIA" CAST OFF
JUNE 1st, 2024	23:15	VESSEL OUT OFF 3NM ZONE
JUNE 1st, 2024	23:30	DOCUMENTS SIGNED

PETROINSPEC REF: PIS009/24

TERMINAL FPSO P-77 / SANTOS BASIN
CARGO REF: P77 OC 013
DATE: May 31st to June 01st, 2024

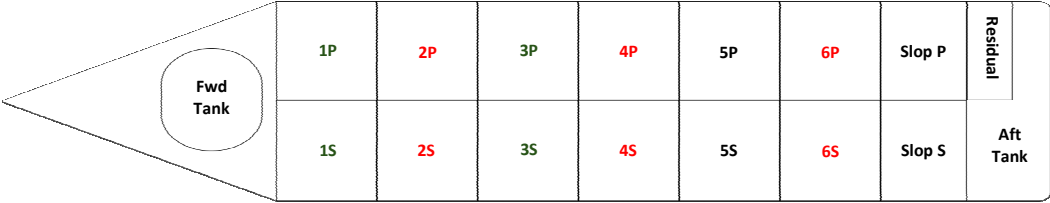
Draft (m)		FWD	AFT
Arrival		6,50	9,50
Arrival Condition	() Trim by the Bow		
	(X) Trim by the Stern		
	() Even Keel		
	() List by Port		
	() List by Starboard		
	() No List		
Departure		12,40	13,40
Departure Condition	() Trim by the Bow		
	(X) Trim by the Stern		
	() Even Keel		
	() List by Port		
	() List by Starboard		
	() No List		

Sea Valves Seal Numbers

Sea Valves Port	405433
Sea Valves Starboard	-
Oil/Water Separator	420745
Cargo Tanks Used as Ballast	() Yes (X) No
Segregated Ballast Tanks	(X) Yes () No

Innages Taken at Assigned Gauge Points	(X) Yes () No
Location	() Fore () Center (x) Aft

Additional Oil Found in Red	() Yes (X) No
-----------------------------	------------------------------



Top Lines Stripped	(X) Yes () No
Bottom Lines Stripped	(X) Yes () No
Hose/Arm Stripped	(X) Yes () No

Bunkers (m)	Fuel Oil	Diesel
Departure from Port (Mt Vac)	-	-
Arrival at FPSO (Mt Vac)	1.437,92	276,80
Departure from FPSO (Mt Vac)	1384,40	262,28
Arrival at Port (Mt Vac)	-	-

Comments:

ALL TANKS EMPTY - TK'S (2W/4W/6W).

CUSTOMER: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

VESSEL: DPST NS PIONEER
VOYAGE: NS-V24-06
PRODUCT: BÚZIOS CRUDE OIL

TERMINAL: FPSO P-77 / SANTOS BASIN
CARGO REF: P77 OC 013
DATE: May 31st to June 01st, 2024

As per the Master/Chief Officer of the aforementioned vessel, the cargo tanks on deck below are pressurized with gas, preventing physical entry. Consequently, our assessment was confined to a visual inspection. The onboard tanks were examined visually, adhering to the criteria of cleanliness, dryness, and absence of odors.

Informed method that have been used to clean the tanks:

The tanks on the ship were inspected using sounding, as visual checks were impracticable due to the presence of inert gas inside

Tank Number	Date	Time	Last Cargo	2nd Last Cargo	3rd Last Cargo	Cap. of the Tanks	Type of Coating
1P	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	11.959,04	EPOXY
1S	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	11.953,24	EPOXY
2P	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.971,69	EPOXY
2S	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.970,58	EPOXY
3P	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.956,17	EPOXY
3S	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.973,53	EPOXY
4P	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.953,99	EPOXY
4S	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.971,31	EPOXY
5P	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.957,01	EPOXY
5S	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.972,00	EPOXY
6P	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.353,54	EPOXY
6S	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	13.366,40	EPOXY
SLOP P	05/30/24	11:30	OILY WATER	OILY WATER	OILY WATER	2.414,08	EPOXY
SLOP S	05/30/24	11:30	MERO C.O.	BUZIOS C.O.	BUZIOS C.O.	1.957,41	EPOXY
					TOTAL	166.730,00	

Information regarding previous cargoes, tank coating, and cleaning methods was obtained from vessel personnel and cannot be guaranteed as accurate. PetroInspec assumes no liability for any consequences resulting from inaccurate information supplied by the vessel. This report necessarily relies on such information.

The tank cleaning inspections are based on visual assessments of accessible surfaces and system time. However, this document does not encompass the evaluation of tank surfaces' cleanliness, specific spots, or the potential release of components from previous cargoes during loading, discharging, or transport of the current cargo. The vessel holds full responsibility for these aspects. The assurance of the suitability of tank coating for the intended cargo must be guaranteed by the vessel's owner or the coating suppliers.

Due to the difficulties and limitations inherent within closed system sampling, as described in API MPMS Chapter 17.11, PetroInspec can not attest to the representative nature of samples drawn with such systems or the test data derived therefrom as contained within this Test Report.

CLIENT: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

YOUR REF.: P77 OC 013

VESSEL: DPST NS PIONEER

VOYAGE: NS-V24-07

PRODUCT: BÚZIOS C.O.

JOB NUMBER: PIS009/24

TERMINAL / PORT: FPSO P-77 / SANTOS BASIN

DATE: May 31st to June 01st, 2024

1. VESSEL HISTORY FROM CHIEF ENGINEER

BUNKER PRODUCT	HEAVY FUEL OIL	DAYS AT SEA	N/I	AT ANCH	N/I
LAST PORT	Angra dos Reis	AVERAGE BUNKER CONSUMPTION PER DAY			
BUNKERS ON DEPARTURE	N/I	METRIC TONS	AT SEA	N/I	METRIC TONS
BUNKERS AT E.O.S.P.	N/I	METRIC TONS	AT LOAD	N/I	METRIC TONS
BUNKERS RECEIVED INTRANSIT	N/I	METRIC TONS	AT DISC	N/I	METRIC TONS
BUNKERS RECEIVED IN PORT	N/I	METRIC TONS	AT ANCHOR	N/I	METRIC TONS

2. INSPECTION UPON ARRIVAL

DATE	30-mai-24	TIME	9:15:00 AM	DRAFTS	FWD	6,50 m	AFT	9,50 m
TANK NAME	INNAGES	G.O.V.	TEMP.	V.C.F.	G.S.V.	DENSITY	M. TONS	
	m	m3	°C	T54B - 2004	m3	15°C	(AIR)	
1P	1,85	1078,500	30,0	0,98858	1066,184	0,9113	970,440	
1S	15,37	104,700	32,0	0,98735	103,376	0,9276	95,777	
2S	1,42	173,300	52,0	0,97170	168,396	0,9113	153,274	
G1 Service	5,93	93,300	86,0	0,94660	88,318	0,9276	81,826	
G1 Settling	6,72	78,200	68,0	0,96027	75,093	0,9276	69,574	
G2 Service	10,33	24,400	68,0	0,96031	23,432	0,9283	21,726	
G2 Settling	12,06	0,000	47,0	0,97613	0,000	0,9283	0,000	
G3 Service	9,10	41,300	77,0	0,95349	39,379	0,9283	36,512	
G3 Settling	10,81	3,200	58,0	0,96786	3,097	0,9283	2,872	
OVFL, snd	0,68	6,500	40,0	0,98138	6,379	0,9283	5,915	
TOTALS	G.O.V. =	1603,400		G.S.V. =	1573,652	M. TONS =	1437,916	

3. INSPECTION PRIOR TO SAILING

DATE	01-Jun-2024	TIME	21:12:00	DRAFTS	FWD	12,40	AFT	13,40 m
TANK NAME	INNAGES	G.O.V.	TEMP.	V.C.F.	G.S.V.	DENSITY	M. TONS	
	m	m3	°C	T54B - 2004	m3	15°C	(AIR)	
1P	1,85	1078,500	30,0	0,98858	1066,184	0,9113	970,440	
1S	16,29	46,200	32,0	0,98735	45,616	0,9276	42,263	
2S	1,42	173,300	52,0	0,97170	168,396	0,9113	153,274	
G1 Service	5,93	93,300	86,0	0,94660	88,318	0,9276	81,826	
G1 Settling	6,72	78,200	68,0	0,96027	75,093	0,9276	69,574	
G2 Service	10,33	24,400	68,0	0,96031	23,432	0,9283	21,726	
G2 Settling	12,06	0,000	47,0	0,97613	0,000	0,9283	0,000	
G3 Service	9,10	41,300	77,0	0,95349	39,379	0,9283	36,512	
G3 Settling	10,81	3,200	58,0	0,96786	3,097	0,9283	2,872	
OVFL, snd	0,68	6,500	40,0	0,98138	6,379	0,9283	5,915	
TOTALS	G.O.V. =	1544,900		G.S.V. =	1515,892	M. TONS =	1384,402	

4. ADDITIONAL INFORMATION AND COMMENTS

QUANTITY CONSUMED DURING VOYAGE		METRIC TONS	BUNKER SURVEY WAS
QUANTITY CONSUMED DURING TRANSFER	53,514	METRIC TONS	SUBMITTED BY VESSEL

Bunker Report

CLIENT:	CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD	JOB NUMBER:	PIS009/24
YOUR REF.:	P77 OC 013	TERMINAL / PORT:	FPSO P-77 / SANTOS BASIN
VESSEL:	DPST NS PIONEER	DATE:	May 31st to June 01st, 2024
VOYAGE:	NS-V24-07		
PRODUCT:	BÚZIOS C.O.		

1. VESSEL HISTORY FROM CHIEF ENGINEER

BUNKER PRODUCT	MARINE GAS OIL	DAYS AT SEA	N/I	AT ANCH	N/I
LAST PORT	Angra dos Reis	AVERAGE BUNKER CONSUMPTION PER DAY			
BUNKERS ON DEPARTURE	N/I	METRIC TONS	AT SEA	N/I	METRIC TONS
BUNKERS AT E.O.S.P.	N/I	METRIC TONS	AT LOAD	N/I	METRIC TONS
BUNKERS RECEIVED INTRANSIT	N/I	METRIC TONS	AT DISC	N/I	METRIC TONS
BUNKERS RECEIVED IN PORT	N/I	METRIC TONS	AT ANCHOR	N/I	METRIC TONS

2. INSPECTION UPON ARRIVAL

DATE	30-mai-24	TIME	9:15:00 AM	DRAFTS	FWD	6,70 m	AFT	9,70 m
TANK NAME	INNAGES	G.O.V.	TEMP.	V.C.F.	G.S.V.	DENSITY	M. TONS	
	m	m3	°C	T54B - 2004	m3	15°C	(AIR)	
MGO Storage	6,96	217,000	30,0	0,98733	214,251	0,8420	180,163	
G1 MGO Service	2,84	47,300	30,0	0,98733	46,701	0,8420	39,271	
G2 MGO Service	2,33	37,100	30,0	0,98733	36,630	0,8420	30,802	
G3 MGO Service	2,17	32,000	30,0	0,98733	31,595	0,8420	26,568	
TOTALS	G.O.V. =	333,400		G.S.V. =	329,176	M. TONS =	276,804	

3. INSPECTION PRIOR TO SAILING

DATE	01-Jun-2024	TIME	21:12:00	DRAFTS	FWD	12,40 m	AFT	13,40 m
TANK NAME	INNAGES	G.O.V.	TEMP.	V.C.F.	G.S.V.	DENSITY	M. TONS	
	m	m3	°C	T54B - 2004	m3	15°C	(AIR)	
MGO Storage	6,98	218,500	30,0	0,98733	215,732	0,8420	181,409	
G1 MGO Service	1,78	28,300	30,0	0,98733	27,941	0,8420	23,496	
G2 MGO Service	2,33	37,100	30,0	0,98733	36,630	0,8420	30,802	
G3 MGO Service	2,17	32,000	30,0	0,98733	31,595	0,8420	26,568	
TOTALS	G.O.V. =	315,900		G.S.V. =	311,898	M. TONS =	262,275	

4. ADDITIONAL INFORMATION AND COMMENTS

QUANTITY CONSUMED DURING VOYAGE	METRIC TONS	BUNKER SURVEY WAS
QUANTITY CONSUMED DURING TRANSFER	14,529 METRIC TONS	SUBMITTED BY VESSEL



TERMINAL: FPSO P-77 / SANTOS BASIN
CARGO REF: P77 OC 013
DATE: May 31st to June 01st, 2024

Owing to the challenges and constraints inherent in closed system sampling, as elucidated in API MPMS Chapter 17.11, it is important to note that PetroInspec cannot guarantee the representative nature of samples collected using such systems or vouch for the accuracy of the test data presented in this Test Report.

Slops Record Report - Before Loading

CLIENT: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

YOUR REF.: P77 OC 013

VESSEL: DPST NS PIONEER

JOB NUMBER: PIS009/24

VOYAGE: NS-V24-07

TERMINAL / PORT: FPSO P-77 / SANTOS BASIN

PRODUCT: BÚZIOS C.O.

DATE: May 31st to June 01st, 2024

[illegible]

VESSEL DRAFT				SEA VALVES SEALS NUMBER			
FORE DRAFT:		6,50		SEA VALVES PORT:		405433	
AFTER DRAFT:		9,50		SEA VALVES STB:		-	
LIST DEGREES:				OVERBOARD:		405431 - 405432	
				SEACHEST:		420748	
				OIL/WATER SEPARATOR:		420745	
CARGO TANKS USED AS BALLAST :		NOT					
SEGREGATED BALLAST TANKS:		YES		1to 6 P/S WBT fore and after peak segregated			
INNAGES TAKEN AT DESIGNATES GAUGE POINTS :		YES		LOCATED		AFT	
ADDITIONAL OIL FOUND:		INFORM TANK N°:		TAKEN SAMPLES:			
TOP LINES STRIPPED:		YES		BUNKER SURVEY:		FUEL OIL DIESEL OIL	
BOTTOM LINES STRIPPED:		YES		MT-VAC (BEFORE):		- -	
HOSE/ARM STRIPPED:		NOT		MT-VAC (AFTER):		- -	

REMARKS:

Slops Record Report - After Loading

CLIENT: CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD

YOUR REF.: P77 OC 013

VESSEL: DPST NS PIONEER

VOYAGE: NS-V24-07

PRODUCT: BÚZIOS C.O.

JOB NUMBER: PIS009/24

TERMINAL / PORT: FPSO P-77 / SANTOS BASIN

DATE: May 31st to June 01st, 2024

[illegible]

VESSEL DRAFT		SEA VALVES SEALS NUMBER	
FORE DRAFT:	12,40	SEA VALVES PORT	405433
AFTER DRAFT:	13,40	SEA VALVES STB	-
LIST DEGREES:	-	OVERBOARD:	405431 - 405432
		SEACHEST	420748
		OIL/WATER SEPARATOR:	420745

CARGO TANKS USED AS BALLAST :	NOT		
SEGREGATED BALLAST TANKS :	YES	1to 6 P/S WBT fore and after peak segregated	

INNAGES TAKEN AT DESIGNATES GAUGE POINTS :		YES		LOCATED	AFT	
ADDITIONAL OIL FOUND:	NOT	INFORM TANK N°:	N/A	TAKEN SAMPLES:		

TOP LINES STRIPPED:	YES		BUNKER SURVEY:	FUEL OIL	DIESEL OIL
BOTTOM LINES STRIPPED:	YES		MT-VAC (BEFORE):	-	-
HOSE/ARM STRIPPED:	NOT		MT-VAC (AFTER):	-	-

REMARKS:

SEE ULLAGE REPORT.

H2S Report - Before Operation

CLIENT:	CNOOC PETROLEUM BRASIL LTDA / CHINA OFFSHORE OIL (SINGAPORE) INT. PTE LTD	
YOUR REF.:	P77 OC 013	
VESSEL:	DPST NS PIONEER	JOB NUMBER: PIS009/24
VOYAGE:	NS-V24-07	TERMINAL / PORT: FPSO P-77 / SANTOS BASIN
PRODUCT:	BÚZIOS C.O.	DATE: May 31st to June 01st, 2024

TANK	UNIT	METHODS	RESULT BEFORE	RESULT AFTER
1P	ppm	Not Informed	0	0,0
1S	ppm	Not Informed	0	0,0
2P	ppm	Not Informed	0	10,0
2S	ppm	Not Informed	0	9,0
3P	ppm	Not Informed	0	0,0
3S	ppm	Not Informed	0	0,0
4P	ppm	Not Informed	0	8,0
4S	ppm	Not Informed	0	9,0
5P	ppm	Not Informed	0	0,0
5S	ppm	Not Informed	0	0,0
6P	ppm	Not Informed	0	11,0
6S	ppm	Not Informed	0	12,0
SLOP P	ppm	Not Informed	0	0,0
SLOP S	ppm	Not Informed	0	0,0

REMARK.:

The H2S measurements was done by the Vessel staff and accompanied by the PetroInspec Surveyor.