

ERDÖLBEVORRATUNGSVERBAND

Jungfernstieg 38/IV
20354 Hamburg
Germany

Att. Mr. E. Becker

Cover page



Analysis report

Issuer warrants that it has exercised due diligence and care with respect to the information and professional judgements embodied in this report. This report reflects only the findings at the time and place of the inspection and testing.

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Report Nr.: 12002/00032922/24

Date : July 8, 2024

Test with a Q are part of the scope of the ISO 17025 accreditation under number L292 of the RVA

Uncertainties, available on request, apply in the evaluation of the test results. Where available and for convenience purposes, the tested sample has been checked for compliance with supplied specifications, without accepting any liability. In case of dispute or concern, we refer to the interpretation of test results as defined in ASTM D3244, IP 367, ISO 4259 or GOST 33701

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Crude Oil Quality

Tank 112

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Report Nr.: 12002/00032922/24
Date : July 8, 2024
Handled By: T.J. Windhorst

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Att. Mr. E. Becker

Vlaardingen, July 8, 2024

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REPORT ON CRUDE OIL QUALITY

Sample: Tank 112

Description on label: Sht 112
Installation: Nord West Oelleitung

Below oil surface	vol%
11400	20
8800	20
6200	20
3600	20
1300	20

Date of sampling: July 3, 2024 16:00

Received in lab: July 4, 2024

Sample volume: 5 x 1 liter

Sample package: Flask

Date of testing: July 4, 2024 and following

Instructions: As per your instruction , July 2, 2024

For and on behalf of Saybolt,
Division of Core Laboratories Sales N.V.

T.J. Windhorst - Account Manager



TEST	METHOD	UNIT	CRUDE
Density at 15°C ^Q	ASTM D 5002	kg/l	0.8355
Composition (up to C5)	GC		
methane/ethane		mass %	0.02
propane		mass %	0.43
iso-butane		mass %	0.35
normal butane		mass %	1.38
iso-pentane		mass %	1.21
normal pentane		mass %	1.73
Kinematic Visc. at 20°C ^Q	ASTM D 445	mm ² /sec	5.123
Kinematic Visc. at 40°C ^Q	ASTM D 445	mm ² /sec	3.268
Sulphur ^Q	ASTM D 2622	mass %	0.612
Mercaptan Sulphur ^Q	UOP 163	mg/kg	51
Hydrogen Sulphide	UOP 163	mg/kg	<1
Total Nitrogen ^Q	ASTM D 5762	mg/kg	760
Total Acid Number ^Q	ASTM D 664	mg KOH/g	0.110
Pour Point ^Q	ASTM D 5853	°C	-24
Flash Point	ASTM D 93	°C	<40.0
Vapour Pressure (DVPE)	ASTM D 5191	kPa	41.6
Organic Chlorine	ASTM D 4929	mg/kg	<1
Water KF	ASTM D 4928	mass %	0.027
Salt as NaCl	ASTM D 3230	mg/kg	9
Sediment by Extraction	ASTM D 473	mass %	0.08
Micro Carbon Residue	ASTM D 4530	mass %	1.96
Asphaltenes	IP 143	mass %	0.35
Vanadium	IP 501	mg/kg	11
Nickel	IP 501	mg/kg	3
Iron	IP 501	mg/kg	<1
Sodium	IP 501	mg/kg	3
Potassium	IP 501	mg/kg	<1
Lead	IP 501	mg/kg	<1
Calcium	IP 501	mg/kg	1
Copper	IP 501 mod	mg/kg	<1
Wax	UOP 46 obs	mass %	5.4
Mercury	UOP 938	µg/kg	<2
Arsenic	GFAAS	µg/kg	<50
Simulated Distillation	ASTM D 7169		Page 5



TEST	METHOD	UNIT	C4-	C5- 160	C5- 180	180- 250
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Yield on crude	Calculated	mass %	2.2	22.8	26.4	12.0
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TEST	METHOD	UNIT	160- 360	180- 360	360- 380
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Yield on crude	Calculated	mass %	38.3	34.7	3.6
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TEST	METHOD	UNIT	360- 550	360+	550+
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Yield on crude	Calculated	mass %	26.2	36.7	10.5
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* Calculated based on Light end composition and simulated distillation

Simulated Distillation ASTM D 7169 (°C)	CRUDE
Initial Boiling point	-11.5
2% recovered	-0.5
4% recovered	36.0
6% recovered	60.5
8% recovered	68.5
10% recovered	80.5
12% recovered	92.0
14% recovered	101.0
16% recovered	112.0
18% recovered	122.5
20% recovered	133.0
22% recovered	143.5
24% recovered	155.5
26% recovered	165.5
28% recovered	177.0
30% recovered	188.5
32% recovered	201.5
34% recovered	215.5
36% recovered	226.0
38% recovered	235.5
40% recovered	247.5
42% recovered	255.0
44% recovered	265.5
46% recovered	274.0
48% recovered	285.5
50% recovered	294.5
52% recovered	303.0
54% recovered	312.5
56% recovered	321.0
58% recovered	331.0
60% recovered	343.0
62% recovered	353.5
64% recovered	364.0
66% recovered	375.5
68% recovered	387.5
70% recovered	399.5
72% recovered	411.0
74% recovered	423.0
76% recovered	435.0
78% recovered	447.5
80% recovered	461.5
82% recovered	477.0
84% recovered	493.5
86% recovered	511.5
88% recovered	532.5
90% recovered	556.0
92% recovered	582.5
94% recovered	613.5
96% recovered	653.5
98% recovered	710.0
Final boiling point	> 750



Simulated Distillation ASTM D 7169 Graph

