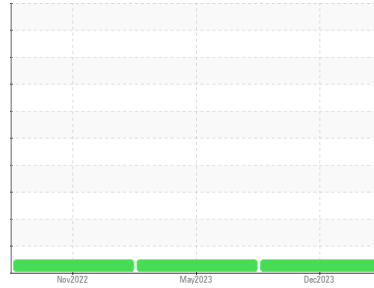


Area
TANK SYSTEM
Machine Id
TERSAN SHIPYARD FUEL SETTLING TANK #30 (CAL021) (S/N CALVERT21)
Component
Diesel Fuel
Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (22100 LTR)



DIAGNOSIS

Recommendation
Please contact your representative for information regarding the proper sampling kits for your service.

Corrosion
{not applicable}

Contaminants
There is no indication of any contamination in the component(unconfirmed).

Fuel Condition
Not enough sample submitted to determine fuel condition and/or classification.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0011823	PC0011649	PC0011797
Sample Date	Client Info			17 Dec 2023	01 May 2023	30 Nov 2022
Machine Age	hrs	Client Info		0	0	0
Sample Status				NORMAL	NORMAL	NORMAL

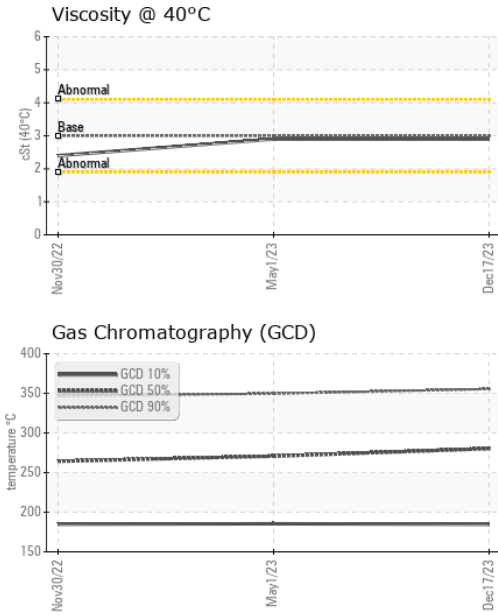
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>2	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>2	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	0	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>2	0	0	0
Lead	ppm	ASTM D5185(m)	>2	0	0	0
Copper	ppm	ASTM D5185(m)	>2	0	0	0
Tin	ppm	ASTM D5185(m)	>2	0	0	0
Antimony	ppm	ASTM D5185(m)	>2	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)	>2	0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	0	0	<1
Barium	ppm	ASTM D5185(m)	2	0	0	0
Molybdenum	ppm	ASTM D5185(m)	2	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	2	0	<1	<1
Calcium	ppm	ASTM D5185(m)	2	2	1	1
Phosphorus	ppm	ASTM D5185(m)	2	0	0	0
Zinc	ppm	ASTM D5185(m)	2	0	<1	<1
Sulfur	ppm	ASTM D5185(m)	10	10	9	8
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>10	0	0	0
Sodium	ppm	ASTM D5185(m)	>5	0	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

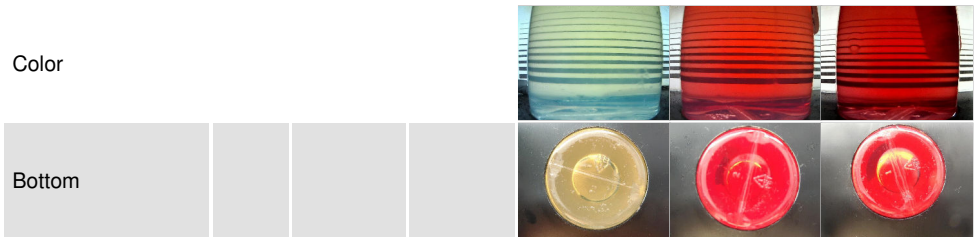
OIL ANALYSIS REPORT



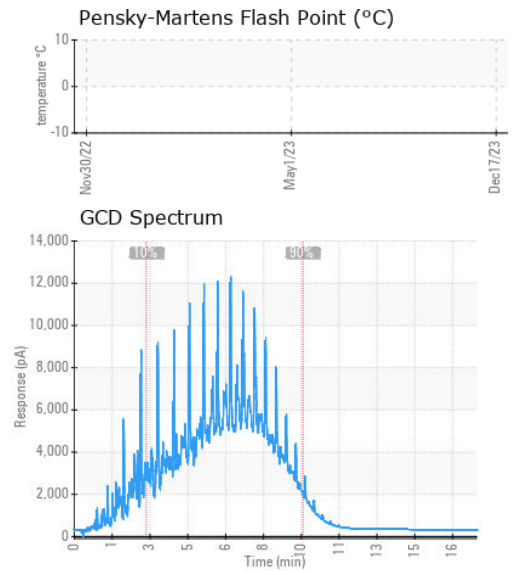
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.9	2.9	2.4

SIMULATED DISTILLATION (GCD)		method	limit/base	current	history1	history2
(GCD) % < 335°C	°C	ASTM D2887*		81.44	84.48	85.33
(GCD) Initial Boiling Point	°C	ASTM D2887*		118.1	118.2	127.5
(GCD) 5% Distillation Point	°C	ASTM D2887*		164.7	165.4	169.3
(GCD) 10% Distillation Point	°C	ASTM D2887*		184.7	185.4	184.8
(GCD) 20% Distillation Point	°C	ASTM D2887*		216.6	216.1	208.9
(GCD) 30% Distillation Point	°C	ASTM D2887*		240.8	236.7	228.8
(GCD) 40% Distillation Point	°C	ASTM D2887*		262.1	254.3	246.6
(GCD) 50% Distillation Point	°C	ASTM D2887*		280.2	270.7	264.2
(GCD) 60% Distillation Point	°C	ASTM D2887*		296.9	287.4	282.1
(GCD) 70% Distillation Point	°C	ASTM D2887*		313.6	304.3	301.7
(GCD) 80% Distillation Point	°C	ASTM D2887*		330.9	323.9	321.3
(GCD) 90% Distillation Point	°C	ASTM D2887*		355.4	349.6	346.8
(GCD) FBP% Distillation Point	°C	ASTM D2887*		483.0	459.0	416.8

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Ocean Choice International - MV Calvert**
Sample No. : PC0011823 **Received** : 18 Dec 2023 1315 Topsail Rd, P.O. Box 8190
Lab Number : **02603951** **Diagnosed** : 20 Dec 2023 St. John's, NL
Unique Number : 5697036 **Diagnostician** : Kevin Marson CA A1B 3N4
Test Package : MOB 1 (Additional Tests: GC-PercFuel, GCD)
 Contact: Calvert Engine Control Room
 calvertengine@oceanchoice.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.