



Area

Fwd Machinery Space [450339560]

Machine Id

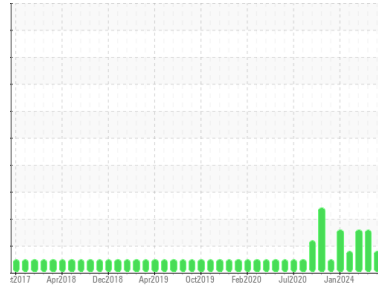
Thruster Fwd Fore - Lubrication System (S/N Sample Tag CL-06005-S1)

Component

Lube System

Fluid

PETRO CANADA ENERGOL GR-XP ISO 150 (5000 LTR)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC	PC	PC0081676
Sample Date	Client Info	21 May 2024	21 Apr 2024	31 Mar 2024
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184*	0	0	0	
Iron	ppm	ASTM D5185(m) >20	<1	<1	<1
Chromium	ppm	ASTM D5185(m) >10	0	0	0
Nickel	ppm	ASTM D5185(m) >10	0	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >10	0	0	0
Lead	ppm	ASTM D5185(m) >20	0	0	0
Copper	ppm	ASTM D5185(m) >20	<1	<1	<1
Tin	ppm	ASTM D5185(m) >10	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	8	9	9
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m)	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	4	4	4
Phosphorus	ppm	ASTM D5185(m)	180	175	182
Zinc	ppm	ASTM D5185(m)	5	5	4
Sulfur	ppm	ASTM D5185(m)	11644	11349	11537
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

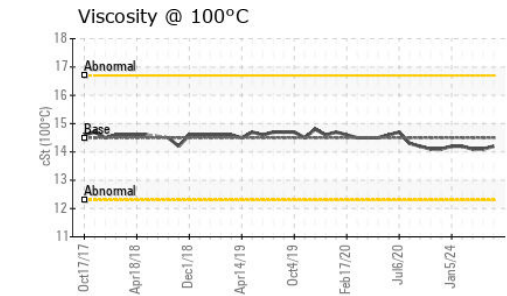
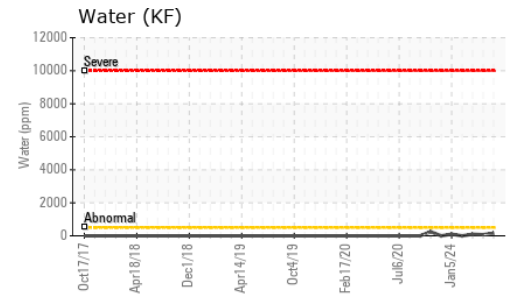
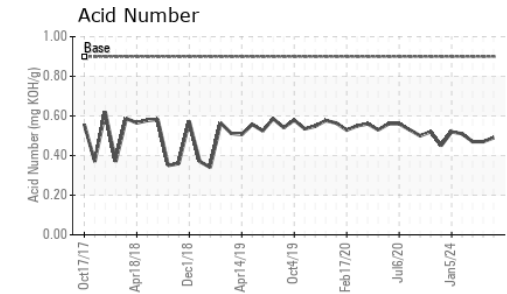
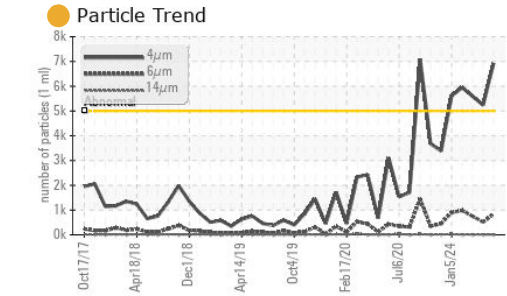
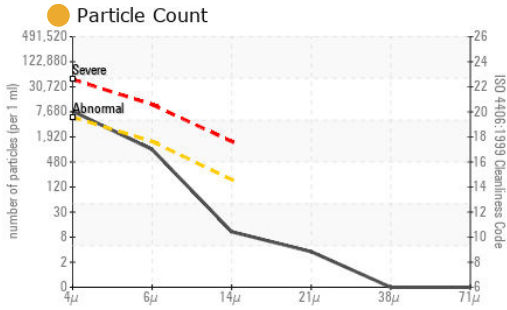
CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >15	0	0	0
Sodium	ppm	ASTM D5185(m)	0	0	0
Potassium	ppm	ASTM D5185(m) >20	<1	0	0
Water	%	ASTM D6304* >0.05	0.016	0.007	0.009
ppm Water	ppm	ASTM D6304* >500	162	70	97

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	6926	5237	5592
Particles >6µm	ASTM D7647 >1300	839	516	749
Particles >14µm	ASTM D7647 >160	9	16	14
Particles >21µm	ASTM D7647 >40	3	5	3
Particles >38µm	ASTM D7647 >10	0	2	0
Particles >71µm	ASTM D7647 >3	0	1	0

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02640341
Unique Number : 5789503
Test Package : MAR 2 (Additional Tests: KF, KV100, PQ, TAN Man, VI)

Received : 06 Jun 2024
Tested : 10 Jun 2024
Diagnosed : 10 Jun 2024 - Kevin Marson

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.

Suncor - Terra Nova Projects
 Scotia Centre, 235 Water Street
 St. John's, NL
 CA A1C 1B6
 Contact: Josh Hynes
 joshynes@suncor.com
 T: (709)778-3575
 F: (709)724-2835

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.9	0.49	0.47	0.47

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	HAZY	▲ HAZY	▲ HAZY
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	149	146	146	144
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	14.2	14.1	14.1
Viscosity Index (VI)	Scale	ASTM D2270*		94	92	94

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						