

## **OIL ANALYSIS REPORT**

# Area [450273761] AFT FIRE PUMP B (S/N SAMPLE TAG #81020584)

Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

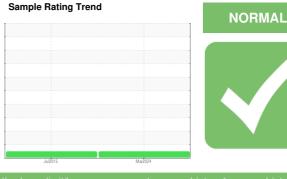
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

The condition of the oil is acceptable for the time in service.

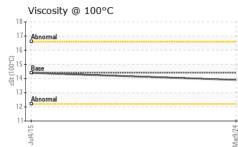




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SAMPLE INFORM	<b>1ATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC	PC	
Sample Date		Client Info		09 Mar 2024	04 Jul 2015	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	4	25	
Chromium	ppm		>20	0	1	
Nickel	ppm	ASTM D5185(m)	>4	0	<1	
Titanium	ppm	ASTM D5185(m)		0	1	
Silver	ppm	ASTM D5185(m)	>3	0	<1	
Aluminum	ppm	. /	>20	<1	2	
Lead	ppm	ASTM D5185(m)	>40	1	14	
Copper	ppm	17	>330	12	261	
Tin	ppm	ASTM D5185(m)	>15	0	3	
Antimony	ppm	ASTM D5185(m)		0	2	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<1	2	
Barium	ppm	ASTM D5185(m)	10	0	<1	
Molybdenum	ppm	ASTM D5185(m)	100	54	2	
Manganese	ppm	ASTM D5185(m)	100	0	2	
Magnesium	ppm	ASTM D5185(m)	450	908	55	
Calcium	ppm	ASTM D5185(m)	3000	972	2245	
Phosphorus	ppm	ASTM D5185(m)	1150	936	934	
Zinc	ppm	( )	1350	1079	1145	
Sulfur	ppm	ASTM D5185(m)	4250	2386	3270	
Lithium	ppm	ASTM D5185(m)	4200	<1	<1	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	2	8	
Sodium	ppm	ASTM D5185(m)	>158	2	6	
Potassium	ppm	ASTM D5185(m)	>20	<1	2	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	
Nitration	Abs/cm	ASTM D7624*	>20	5.0	8.5	
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.0	21.3	



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FLUID DEGRADATION >25 Oxidation ASTM D7414\* 13.9 19.1 Abs/.1mm VISUAL **Emulsified Water** Visual\* >0.2 NEG NEG scalar Free Water NEG Visual\* NEG scalar FLUID PROPERTIES Mar9/24 -Visc @ 100°C cSt 14.4 13.9 14.4 ASTM D7279(m) GRAPHS Iron (ppm) Lead (ppm) 250 100 200 81 100 50 20 Aar9/74 Chromium (ppm) Aluminum (ppm) 50 50 41 л 30 30 10 10 0 ٥. Aar9/74 Copper (ppm) Silicon (ppm) 400 8 Se 350 70 300 60 50 250 la 200 E 40 150 30 Ab 100 20 50 10 0 Viscosity @ 100°C Soot % 18 6.0 5.0 16 4.0 cSt (100°C) ≈ ₫3.0 Abnormal 1.0 12 0.0 Mar9/24 lul4/ Suncor - Terra Nova Projects Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. : WC Received :01 Apr 2024 Scotia Centre, 235 Water Strret Lab Number : 02625643 : 01 Apr 2024 St. John`s, NL Tested Unique Number : 5750762 : 01 Apr 2024 - Kevin Marson CA A1C 1B6 Diagnosed Test Package : MOB 1 Contact: Josh Hynes To discuss this sample report, contact Customer Service at 1-800-268-2131. joshynes@suncor.com T: (709)778-3575

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.

Contact/Location: Josh Hynes - TERHAM

F: (709)724-2835

CALA

ISO 17025:2017 Accredited Laboratory