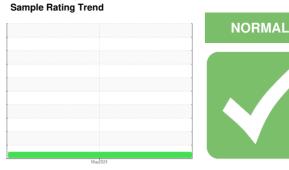


OIL ANALYSIS REPORT

CRANES [450335854] **MA-04002**

Diesel Engine

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



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm. 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

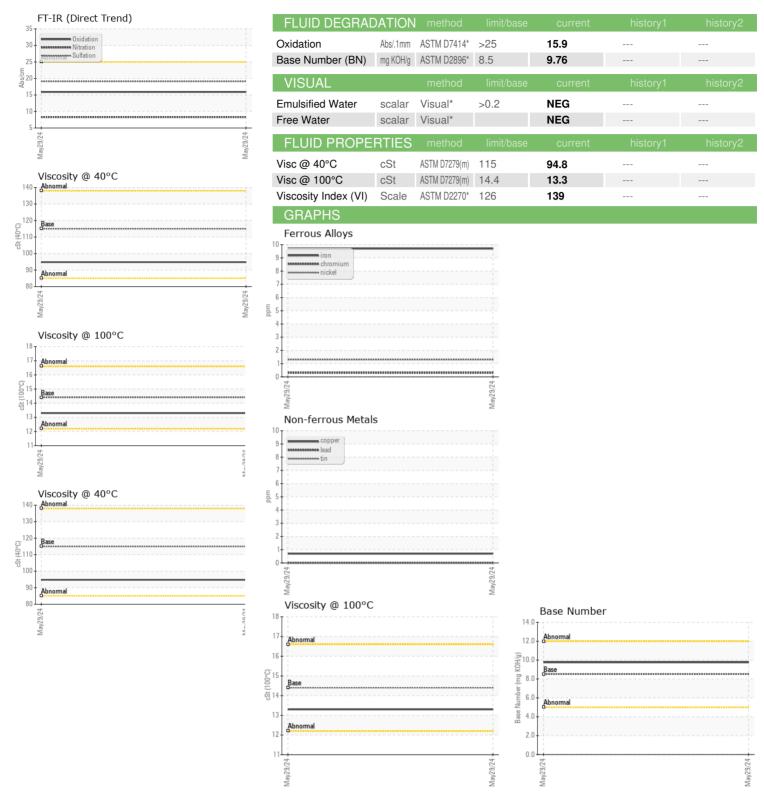
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

				May2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0080704		
Sample Date		Client Info		29 May 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	10		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>4	1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	1		
Lead	ppm	ASTM D5185(m)	>40	0		
Copper	ppm	ASTM D5185(m)	>330	<1		
Tin	ppm	ASTM D5185(m)	>15	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<1		
Barium	ppm	ASTM D5185(m)	10	0		
Molybdenum	ppm	ASTM D5185(m)	100	67		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)	450	988		
Calcium	ppm	ASTM D5185(m)	3000	1045		
Phosphorus	ppm	ASTM D5185(m)	1150	1017		
Zinc	ppm	ASTM D5185(m)		1174		
Sulfur	ppm	ASTM D5185(m)	4250	2556		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	2		
Sodium	ppm	ASTM D5185(m)	>158	1		
Potassium	ppm	ASTM D5185(m)	>20	<1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	8.3		
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.1		



OIL ANALYSIS REPORT







Laboratory Sample No.

Unique Number : 5787931

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0080704 Lab Number : 02638769

Received **Tested** Diagnosed

Test Package : MAR 2 (Additional Tests: KV40, VI) To discuss this sample report, contact Customer Service at 1-800-268-2131.

: 30 May 2024

: 30 May 2024

: 30 May 2024 - Kevin Marson

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

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