

OIL ANALYSIS REPORT

^{Area}[6100193068] 47290050014152

Component **Diesel Engine**

NOT GIVEN (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation

Check for low coolant level. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

All component wear rates are normal.

Contamination

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION method limit/base current history1 history2				,	Aug2023	•	
Sample Date Client Info 735226	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age	Sample Number		Client Info		WA0020153		
Oil Age kms Client Info N/A Oil Changed Client Info N/A Sample Status Image: Control of the page	Sample Date		Client Info		22 Aug 2023		
Oil Changed Sample Status Client Info N/A CONTAMINATION method limit/base current history1 history2 Fuel WC Method 3.0 <1.0 WEAR METALS method limit/base current history1 history2 Iron ppm ASTMD5185/m) >20 110 Chromium ppm ASTMD5185/m) >20 110 Nickel ppm ASTMD5185/m) >3 <1	Machine Age	kms	Client Info		735226		
Sample Status	Oil Age	kms	Client Info		0		
Fuel	Oil Changed		Client Info		N/A		
WEAR METALS	Sample Status				ATTENTION		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM DS188(m) >200 110 Chromium ppm ASTM DS188(m) >6 5 Nickel ppm ASTM DS188(m) >2 -1 Silver ppm ASTM DS188(m) >2 -1 Aluminum ppm ASTM DS188(m) >2 -1 Aluminum ppm ASTM DS188(m) >50 22 Lead ppm ASTM DS188(m) >6 -1 Acquerium ppm ASTM DS188(m) >6 -1 Antimory ppm ASTM DS188(m) 0 Vanadium ppm ASTM DS188(m) 0 Beryllium ppm ASTM DS188(m) 0 <th>CONTAMINATION</th> <th>١</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINATION	١	method	limit/base	current	history1	history2
Iron	Fuel		WC Method	>3.0	<1.0		
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185(m)	>200	110		
Titanium	Chromium	ppm	ASTM D5185(m)	>6	5		
Silver	Nickel	ppm	ASTM D5185(m)	>3	<1		
Aluminum	Titanium	ppm	ASTM D5185(m)	>2	<1		
Lead ppm ASTM D5185(m) >10 <1 Copper ppm ASTM D5185(m) >50 30 Tin ppm ASTM D5185(m) >6 <1	Silver	ppm	ASTM D5185(m)	>2	<1		
Copper	Aluminum	ppm	ASTM D5185(m)	>50	22		
Tin ppm ASTM D5185(m) >6 <1	Lead	ppm	ASTM D5185(m)	>10	<1		
Antimony ppm ASTM D5185(m) 0 Vanadium ppm ASTM D5185(m) <1 Beryllium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 30 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 116 Manganese ppm ASTM D5185(m) 10 Manganese ppm ASTM D5185(m) 1995 Calcium ppm ASTM D5185(m) 1995 Phosphorus ppm ASTM D5185(m) 1215 Sulfur ppm ASTM D5185(m) 2776 <	Copper	ppm	ASTM D5185(m)	>50	30		
Vanadium ppm ASTM D5185(m) <1	Tin	ppm	ASTM D5185(m)	>6	<1		
Beryllium	Antimony	ppm	ASTM D5185(m)		0		
Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 30 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 116 Manganese ppm ASTM D5185(m) 1 Magnesium ppm ASTM D5185(m) 204 Phosphorus ppm ASTM D5185(m) 1995 Zinc ppm ASTM D5185(m) 1215 Sulfur ppm ASTM D5185(m) 2776 Lithium ppm ASTM D5185(m) <1	Vanadium	ppm	ASTM D5185(m)		<1		
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Boron	Cadmium	ppm	ASTM D5185(m)		0		
Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 116 Manganese ppm ASTM D5185(m) 204 Magnesium ppm ASTM D5185(m) 1995 Calcium ppm ASTM D5185(m) 1058 Phosphorus ppm ASTM D5185(m) 1215 Zinc ppm ASTM D5185(m) 2776 Sulfur ppm ASTM D5185(m) <1 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 14 Sodium ppm ASTM D5185(m) >20 20 Glycol % ASTM D79							
Molybdenum ppm ASTM D5185(m) 116 Manganese ppm ASTM D5185(m) 204 Calcium ppm ASTM D5185(m) 1995 Phosphorus ppm ASTM D5185(m) 1058 Zinc ppm ASTM D5185(m) 1215 Sulfur ppm ASTM D5185(m) 27776 Lithium ppm ASTM D5185(m) <1	ADDITIVES		method	limit/base	current	history1	history2
Manganese ppm ASTM D5185(m) 1 Magnesium ppm ASTM D5185(m) 204 Calcium ppm ASTM D5185(m) 1995 Phosphorus ppm ASTM D5185(m) 1058 Zinc ppm ASTM D5185(m) 2776 Sulfur ppm ASTM D5185(m) 2776 Lithium ppm ASTM D5185(m) <1		ppm		limit/base			
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Sulfur ppm ASTM D5185(m) 2776 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 14 Sodium ppm ASTM D5185(m) >20 20 Potassium ppm ASTM D5185(m) >20 20 Glycol % ASTM D7922* 0.0 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 2 Nitration Abs/cm ASTM D7624* >20 14.3 FLUID DEGRADATION method limit/base current history1 history2	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	30 0 116 1 204		
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Sulfation Abs/.1mm ASTM D7415* >30 31.8 FLUID DEGRADATION method limit/base current history1 history2	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base >50 >20	30 0 116 1 204 1995 1058 1215 2776 <1 current 14 467 20 0.0 current	history1 history1	history2 history2
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	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7922* method ASTM D7844* ASTM D7624* ASTM D7615*	limit/base >50 >20 limit/base >3 >20 >30	30 0 116 1 204 1995 1058 1215 2776 <1 current 14 467 20 0.0 current 2 14.3 31.8	history1 history1	history2 history2



OIL ANALYSIS REPORT



Copper (ppm)

Viscosity @ 100°C

100





Laboratory Sample No. Lab Number Unique Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WA0020153

: 02577646 : 5630706

Received Diagnosed

: 23 Aug 2023 : 25 Aug 2023 Diagnostician : Kevin Marson

Test Package : MOB 1 (Additional Tests: Glycol) 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.

Wajax Power Systems 10 Diesel Drive

history2

history2

Toronto, ON **CA M8W 2T8** Contact: Komal Ramotar kramotar@wajax.com

T: (416)259-3281 F: (416)251-6191

Silicon (ppm)

Glycol Contamination

60

E 40

400

300

100

0.25

0.20

0.15 0.10

0.05 Lo oo