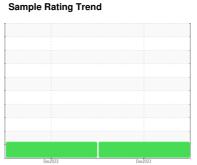


OIL ANALYSIS REPORT

F Sam



WEAR



CRANE #7 MAIN

Component

Main Gearbox

MOBIL MOBILUBE HD 85W140 (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

Contamination

There is no indication of any contamination in the oil.

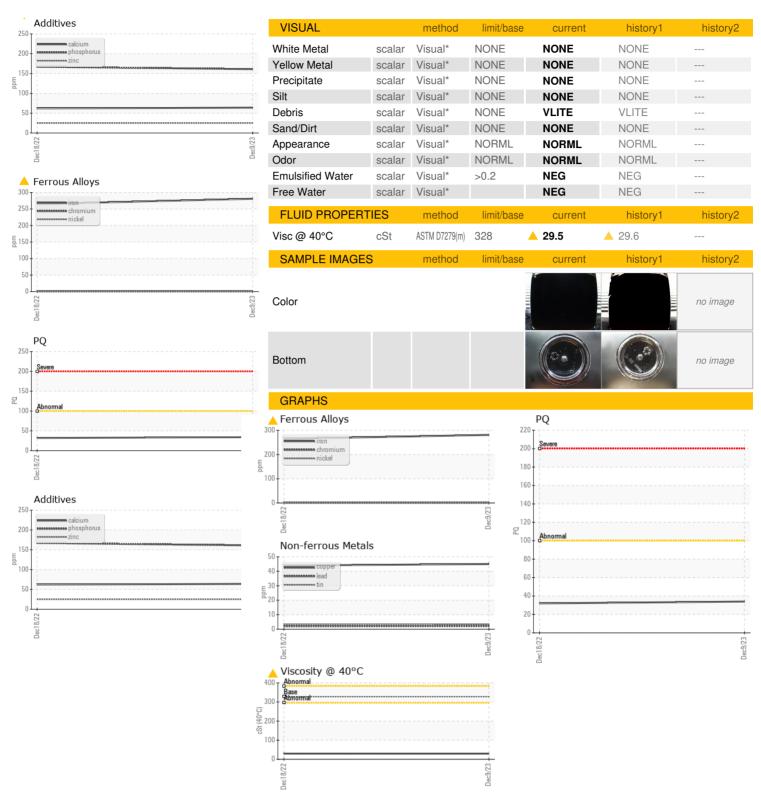
▲ Fluid Condition

Viscosity of sample indicates oil is within ATF range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION method limit/base current history1 history2			<u>, </u>	Dec2022	Dec2023		
Sample Date Client Info 09 Dec 2023 18 Dec 2022 Machine Age hrs Client Info 0 0 Oil Age hrs Client Info 0 0 Oil Changed Client Info N/A N/A Sample Status RBNORMAL ABNORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG WEAR METALS method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Water WC Method >0.2 NEG NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D5185(m) >15 1 1	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0	Sample Number		Client Info		WC0887215	WC0765208	
Oil Age hrs Client Info N/A N/A	Sample Date		Client Info		09 Dec 2023	18 Dec 2022	
Oil Changed Sample Status Client Info N/A N/A N/A CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D5185(m) >200 281 265 Chromium ppm ASTM D5185(m) >15 1 1 Chromium ppm ASTM D5185(m) 0 0 0 Aluminum ppm ASTM D5185(m) >20 4 4 <td>Machine Age</td> <td>hrs</td> <td>Client Info</td> <td></td> <td>0</td> <td>0</td> <td></td>	Machine Age	hrs	Client Info		0	0	
Sample Status	Oil Age	hrs	Client Info		0	0	
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG	Oil Changed		Client Info		N/A	N/A	
Water WC Method >0.2 NEG NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184* 34 32 Iron ppm ASTM D5185(m) >200 4281 265 Chromium ppm ASTM D5185(m) >15 1 1 Nickel ppm ASTM D5185(m) >15 <1 1 Titanium ppm ASTM D5185(m) 0 0 Aluminum ppm ASTM D5185(m) 25 6 6 Aluminum ppm ASTM D5185(m) >20 45 44 Lead ppm ASTM D5185(m) >20 45 44 Copper ppm ASTM D5185(m) >5 0 <1 Vanadium ppm ASTM D5185(m) 0 0	Sample Status				ABNORMAL	ABNORMAL	
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Boron ppm ASTM D5185(m) 52 55 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) <1	Cadmium	ppm	ASTM D5185(m)		0	0	
Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) <1 1 Manganese ppm ASTM D5185(m) 4 4 Magnesium ppm ASTM D5185(m) 2 2 Calcium ppm ASTM D5185(m) 64 62 Phosphorus ppm ASTM D5185(m) 25 25 Sulfur ppm ASTM D5185(m) 983 734 Lithium ppm ASTM D5185(m) 1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 3 3 Sodium ppm ASTM D5185(m) 3 3	ADDITIVES		method	limit/base	current	history1	history2
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Manganese ppm ASTM D5185(m) 4 4 Magnesium ppm ASTM D5185(m) 2 2 Calcium ppm ASTM D5185(m) 64 62 Phosphorus ppm ASTM D5185(m) 161 167 Zinc ppm ASTM D5185(m) 25 25 Sulfur ppm ASTM D5185(m) 983 734 Lithium ppm ASTM D5185(m) 1 <1	Barium	ppm	ASTM D5185(m)		0	0	
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Calcium ppm ASTM D5185(m) 64 62 Phosphorus ppm ASTM D5185(m) 161 167 Zinc ppm ASTM D5185(m) 25 25 Sulfur ppm ASTM D5185(m) 983 734 Lithium ppm ASTM D5185(m) 1 <1	Manganese	ppm	ASTM D5185(m)		4	4	
Phosphorus ppm ASTM D5185(m) 161 167 Zinc ppm ASTM D5185(m) 25 25 Sulfur ppm ASTM D5185(m) 983 734 Lithium ppm ASTM D5185(m) 1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 3 3 Sodium ppm ASTM D5185(m) 3 3	Magnesium	ppm	ASTM D5185(m)		2	2	
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Sulfur ppm ASTM D5185(m) 983 734 Lithium ppm ASTM D5185(m) 1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 3 3 Sodium ppm ASTM D5185(m) 3 3	Phosphorus	ppm	ASTM D5185(m)		161	167	
Lithium ppm ASTM D5185(m) 1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 3 3 Sodium ppm ASTM D5185(m) 3 3	Zinc	ppm	ASTM D5185(m)		25	25	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 3 3 Sodium ppm ASTM D5185(m) 3 3	Sulfur	ppm	ASTM D5185(m)		983	734	
Silicon ppm ASTM D5185(m) >50 3 3 Sodium ppm ASTM D5185(m) 3 3	Lithium	ppm	ASTM D5185(m)		1	<1	
Sodium ppm ASTM D5185(m) 3	CONTAMINANTS	;	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185(m) 3	Silicon	ppm	ASTM D5185(m)	>50	3	3	
Potassium ppm ASTM D5185(m) >20 4 3	Sodium		ASTM D5185(m)		3		
	Potassium	ppm	ASTM D5185(m)	>20	4	3	



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0887215

Test Package : IND 1 (Additional Tests: PQ)

: 02605125 : 5698210

Recieved : 22 Dec 2023 : 27 Dec 2023 Diagnosed Diagnostician : Kevin Marson **Continuous Colour Coat Limited** 1430 Martin Grove Rd Rexdale, ON **CA M9W 4Y1**

Contact: Parminder Singh parminder.singh@materialsciencescorp.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.

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