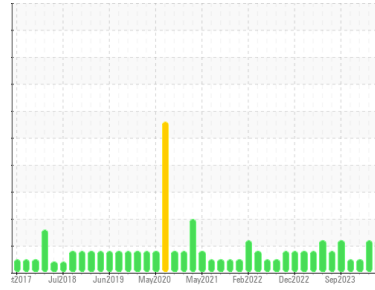




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
CUMMINS 168

Component
Rear Diesel Engine

Fluid
ESSO XD-3 EXTRA 15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0889073	WC0889127	WC0866612
Sample Date	Client Info		26 Mar 2024	15 Feb 2024	18 Dec 2023
Machine Age	kms	Client Info	0	0	0
Oil Age	kms	Client Info	9292	9255	9374
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >75	12	15	11
Chromium	ppm	ASTM D5185(m) >5	0	<1	<1
Nickel	ppm	ASTM D5185(m) >4	<1	0	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	0	0	0
Aluminum	ppm	ASTM D5185(m) >15	1	2	1
Lead	ppm	ASTM D5185(m) >25	0	0	0
Copper	ppm	ASTM D5185(m) >100	<1	1	1
Tin	ppm	ASTM D5185(m) >4	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)	67	58	65
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	1	<1
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m)	16	21	15
Calcium	ppm	ASTM D5185(m) 3780	2197	2134	2192
Phosphorus	ppm	ASTM D5185(m) 1370	936	907	926
Zinc	ppm	ASTM D5185(m) 1500	1135	1088	1109
Sulfur	ppm	ASTM D5185(m) 3800	2752	2868	2944
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

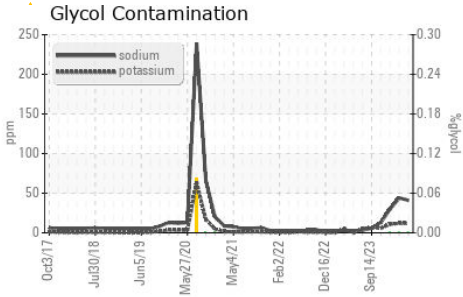
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	6	9	4
Sodium	ppm	ASTM D5185(m) >192	41	44	30
Potassium	ppm	ASTM D5185(m) >20	12	12	11
Fuel	%	ASTM D7593* >3.0	▲ 3.6	▲ 4	<1.0
Glycol	%	ASTM D7922*	0.0	0.0	0.0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >6	0.4	0.5	0.5
Nitration	Abs/cm	ASTM D7624* >20	9.4	9.6	9.7
Sulfation	Abs/.1mm	ASTM D7415* >30	23.8	24.4	24.3



OIL ANALYSIS REPORT



FLUID DEGRADATION

method	limit/base	current	history1	history2	
Abs./1mm	ASTM D7414*	>25	19.8	20.4	20.7

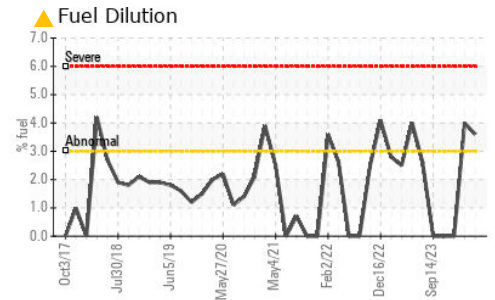
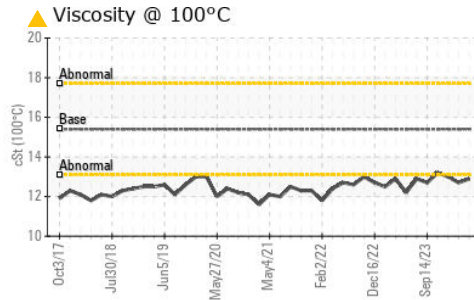
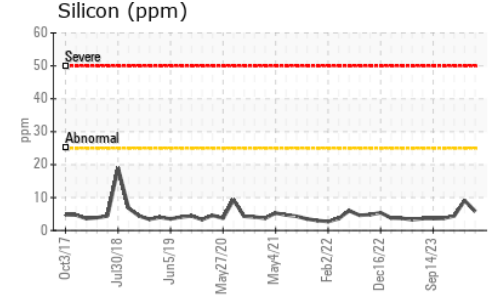
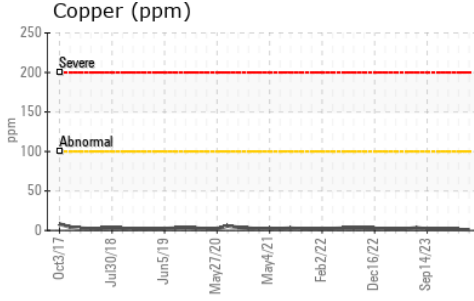
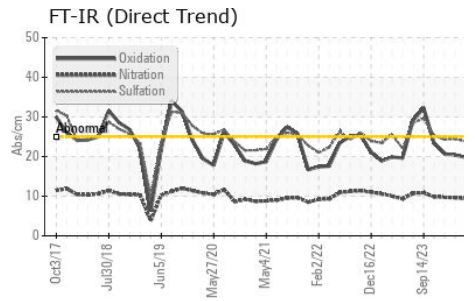
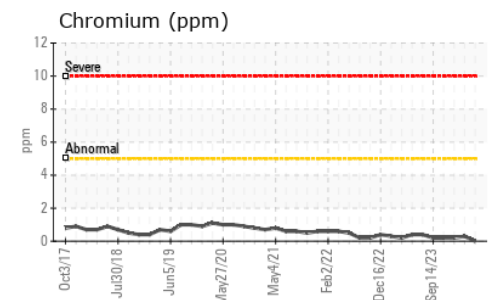
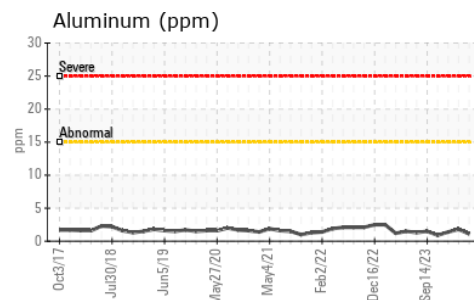
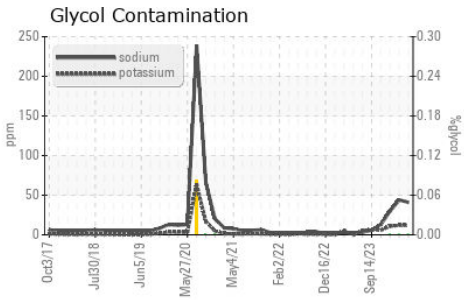
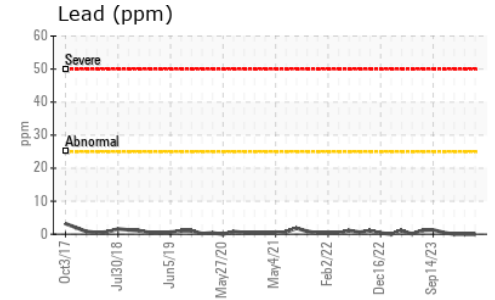
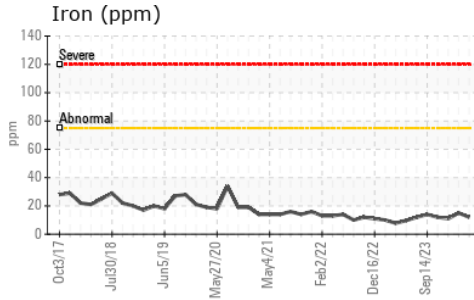
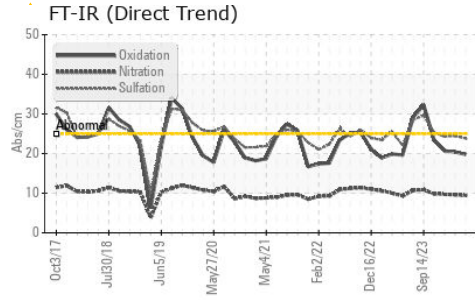
VISUAL

method	limit/base	current	history1	history2	
scalar	Visual*	>0.2	NEG	NEG	NEG
scalar	Visual*	NEG	NEG	NEG	

FLUID PROPERTIES

method	limit/base	current	history1	history2	
cSt	ASTM D7279(m)	15.4	12.9	12.7	13.0

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0889073 **Received** : 03 Apr 2024
Lab Number : 02626343 **Tested** : 04 Apr 2024
Unique Number : 5759475 **Diagnosed** : 04 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

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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.