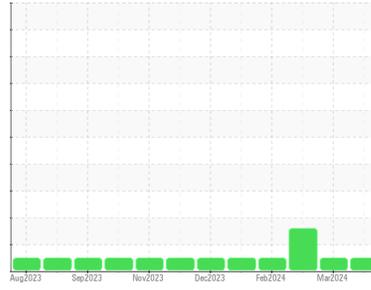




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
KDAC
 Machine Id
200288
 Component
Diesel Engine
 Fluid
TEST OIL GOLD 4 (40 LTR)

DIAGNOSIS

- Recommendation**
 Resample at the next service interval to monitor.
- Wear**
 All component wear rates are normal.
- Contamination**
 There is no indication of any contamination in the oil.
- 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0926310	WC0888906	WC0888886
Sample Date	Client Info			16 Apr 2024	07 Mar 2024	22 Feb 2024
Machine Age	kms	Client Info		342506	316959	305680
Oil Age	kms	Client Info		16330	55742	44463
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<1.0	<1.0	0.4
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	0.0

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	13	40	35
Chromium	ppm	ASTM D5185(m)	>6	<1	2	2
Nickel	ppm	ASTM D5185(m)	>3	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>50	3	13	12
Lead	ppm	ASTM D5185(m)	>10	0	<1	<1
Copper	ppm	ASTM D5185(m)	>50	10	32	25
Tin	ppm	ASTM D5185(m)	>6	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

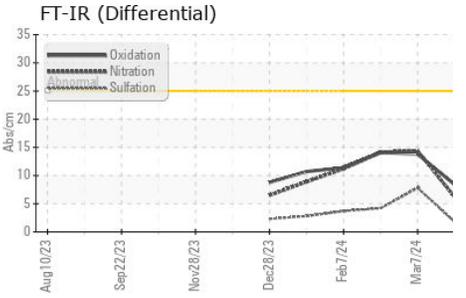
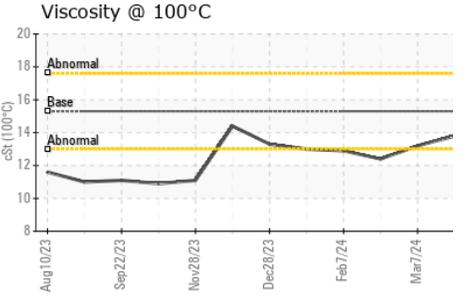
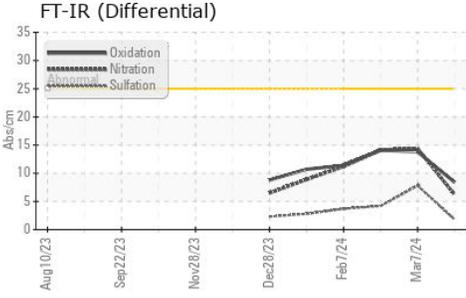
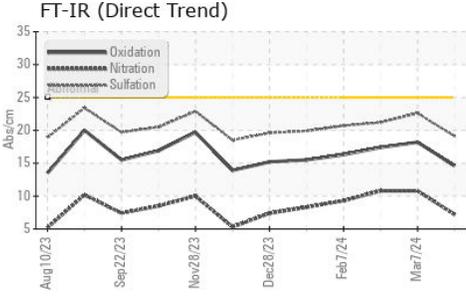
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	1	<1	<1	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	59	64	62
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	964	983	1005
Calcium	ppm	ASTM D5185(m)	980	1046	1129	1107
Phosphorus	ppm	ASTM D5185(m)	1100	965	924	999
Zinc	ppm	ASTM D5185(m)	1150	1155	1211	1205
Sulfur	ppm	ASTM D5185(m)	2600	2348	2230	2342
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	1	4	4
Sodium	ppm	ASTM D5185(m)		1	2	2
Potassium	ppm	ASTM D5185(m)	>20	5	23	22

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.4	1.1	0.9
Nitration	Abs/cm	ASTM D7624*	>20	7.2	10.8	10.8
Nitration(Diff)	Abs/cm	ASTM E2412*	< 25	6.2	14.4	14.1
Sulfation	Abs./1mm	ASTM D7415*	>30	19.1	22.6	21.2
Sulfation(Diff)	Abs/cm	ASTM E2412*		1.8	7.8	4.2



OIL ANALYSIS REPORT

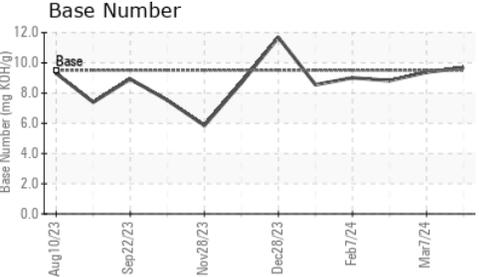
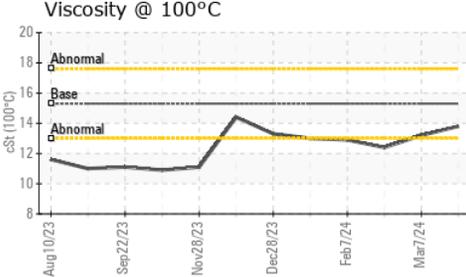
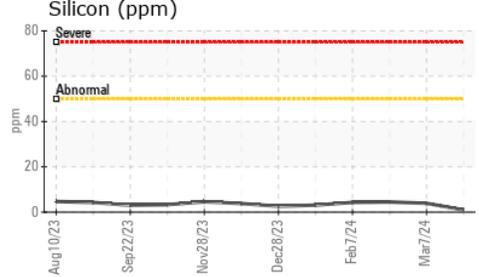
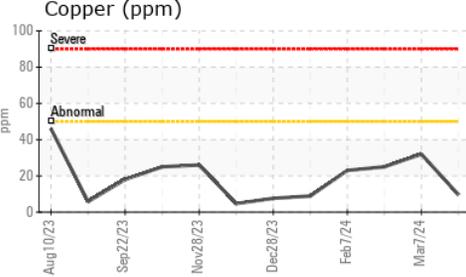
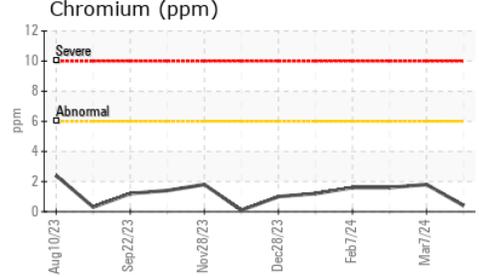
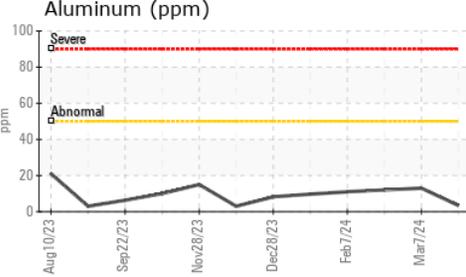
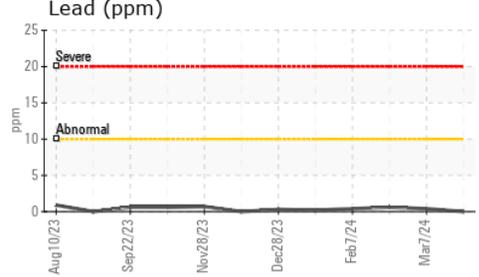
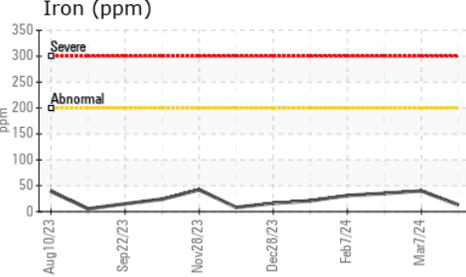


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	14.6	18.2	17.4
Oxidation(Diff)	Abs/cm	ASTM E2412*	< 25	8.4	13.8	14.1
Base Number (BN)	mg KOH/g	ASTM D2896*	9.5	9.68	9.38	8.82

VISUAL	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	▲ .2%
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	15.3	13.8	13.2	12.4

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0926310 **Received** : 22 Apr 2024
Lab Number : **02630444** **Tested** : 23 Apr 2024
Unique Number : 5763576 **Diagnosed** : 23 Apr 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: FT-IR(Diff))

WFR Technical Services
 5389 Riverside Drive
 Burlington, ON
 CA L7L 3Y1
 Contact: William Ridley
 wfr.technical.services@gmail.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.