



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
[25110]
 Machine Id
12-125
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0941328	WC0842913	WC0794721
Sample Date		Client Info		18 Jun 2024	20 Sep 2023	21 Apr 2023
Machine Age	kms	Client Info		904416	717971	687529
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	39	28	22
Chromium	ppm	ASTM D5185(m)	>5	2	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)	>2	<1	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	9	16	14
Lead	ppm	ASTM D5185(m)	>150	2	3	2
Copper	ppm	ASTM D5185(m)	>90	4	2	3
Tin	ppm	ASTM D5185(m)	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

Water treatment chemicals present, indicating slow coolant leak. Tests indicate that there is no fuel present in the oil. Test for glycol is negative.

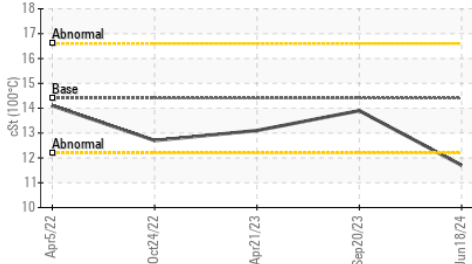
Silicon	ppm	ASTM D5185(m)	>35	33	11	11
Potassium	ppm	ASTM D5185(m)	>20	▲ 43	13	10
Fuel	%	ASTM D7593*	>3.0	0.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*	>7.5	0.2	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	10.3	11.4	9.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.2	24.3	22.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

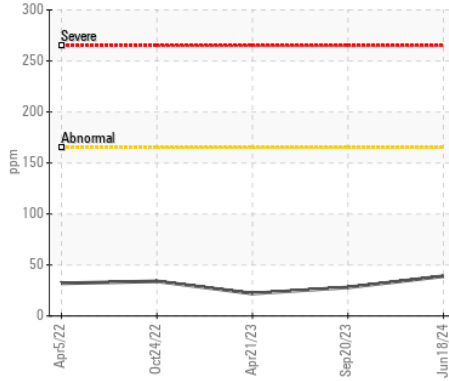
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service (see recommendation).

Sodium	ppm	ASTM D5185(m)	>158	52	28	61
Boron	ppm	ASTM D5185(m)	250	27	36	30
Barium	ppm	ASTM D5185(m)	10	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	100	83	39	46
Manganese	ppm	ASTM D5185(m)		1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	141	508	601
Calcium	ppm	ASTM D5185(m)	3000	2050	1897	1763
Phosphorus	ppm	ASTM D5185(m)	1150	945	934	872
Zinc	ppm	ASTM D5185(m)	1350	1133	1055	959
Sulfur	ppm	ASTM D5185(m)	4250	2885	2410	2339
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.4	24.2	22.0
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ 11.7	13.9	13.1

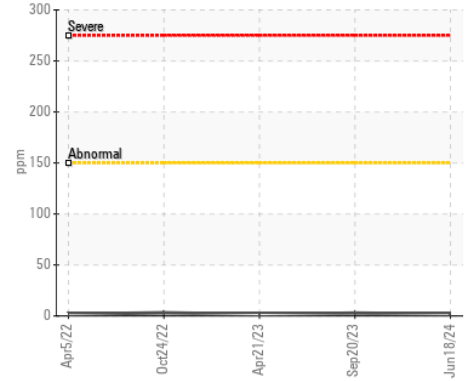
▲ Viscosity @ 100°C



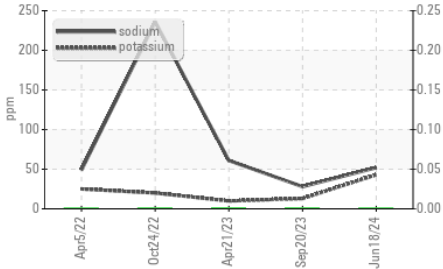
Iron (ppm)



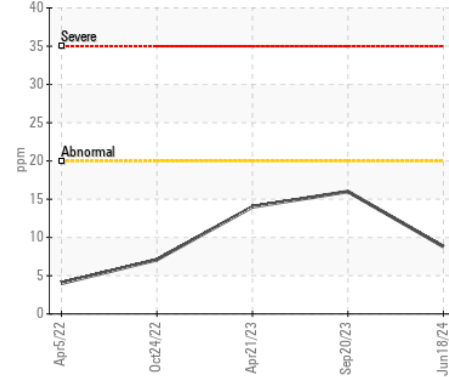
Lead (ppm)



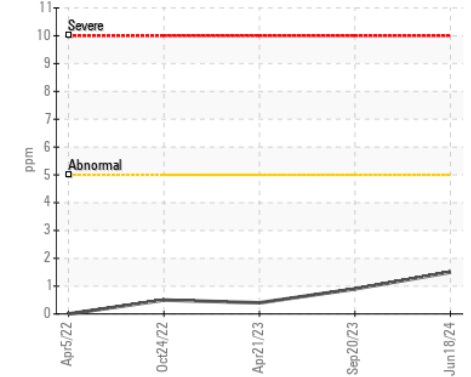
Glycol Contamination



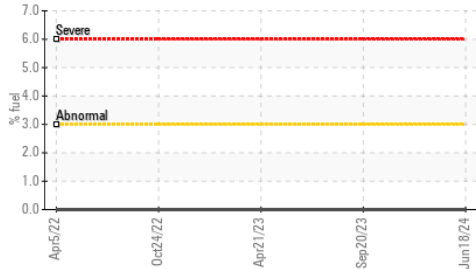
Aluminum (ppm)



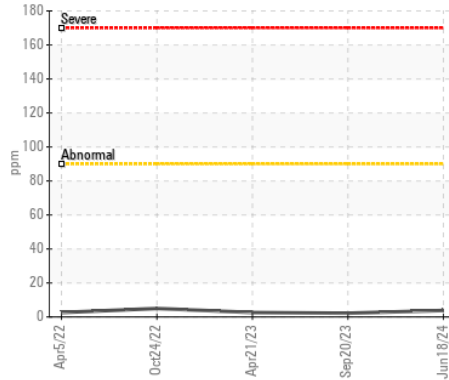
Chromium (ppm)



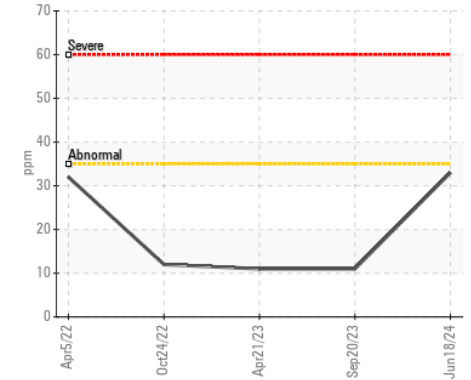
Fuel Dilution



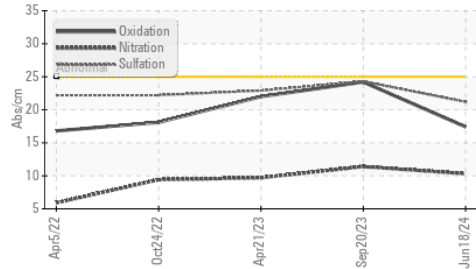
Copper (ppm)



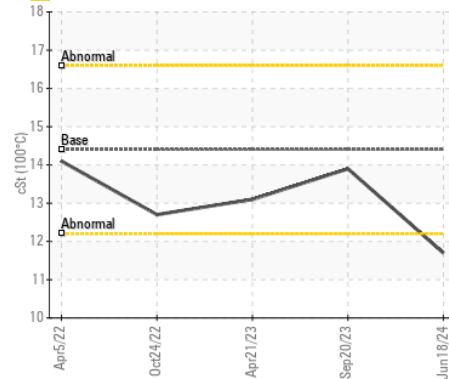
Silicon (ppm)



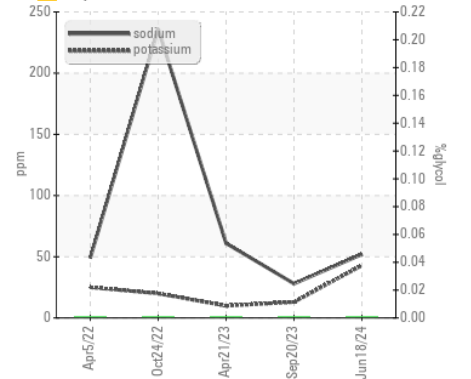
FT-IR (Direct Trend)



▲ Viscosity @ 100°C



▲ Glycol Contamination



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0941328 **Received** : 20 Jun 2024
Lab Number : 02643074 **Tested** : 21 Jun 2024
Unique Number : 5800613 **Diagnosed** : 21 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel)

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.

OX FLEET CARE
 466 HIGHWAY 52
 DUNDAS, ON
 CA L9H 5E2
 Contact: Robert Hughes
 robert.hughes@ox-equipment.com
 T: (289)683-6037
 F: