OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
BOTSFORD [71362]
Machine Id
24Z05250
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- LTR)

RECOMMENDATION

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. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

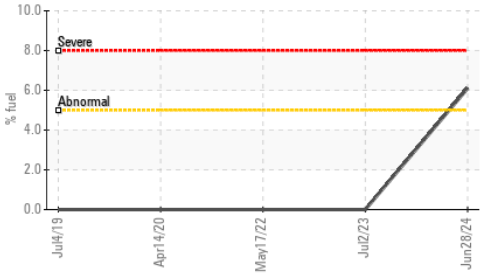
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

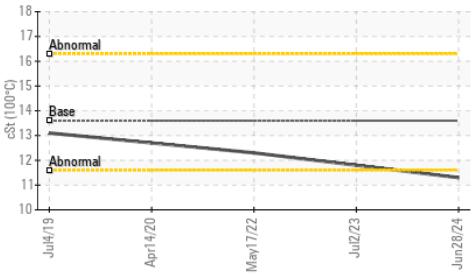
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0022707	CU0019907	CU0018786
Sample Date		Client Info		28 Jun 2024	02 Jul 2023	17 May 2022
Machine Age	hrs	Client Info		1004	1004	995
Oil Age	hrs	Client Info		0	0	11
Filter Age	hrs	Client Info		0	0	11
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	2	2	2
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		<1	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	4	4	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel	%	ASTM D7593*	>5	▲ 6.1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.7	6.4	6.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.1	17.5	19.6
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		4	4	4
Boron	ppm	ASTM D5185(m)	39	56	59	59
Barium	ppm	ASTM D5185(m)	1	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	49	33	34	34
Manganese	ppm	ASTM D5185(m)	1	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	616	429	450	467
Calcium	ppm	ASTM D5185(m)	1554	1489	1547	1538
Phosphorus	ppm	ASTM D5185(m)	899	805	870	868
Zinc	ppm	ASTM D5185(m)	1069	904	941	945
Sulfur	ppm	ASTM D5185(m)	2624	2411	2505	2536
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.5	13.2	13.1
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	▲ 11.3	11.8	12.3

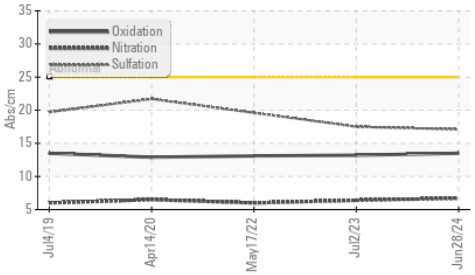
Fuel Dilution



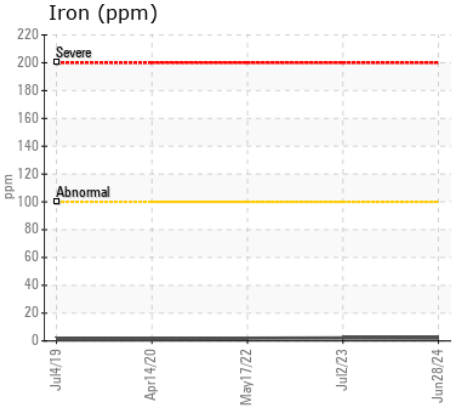
Viscosity @ 100°C



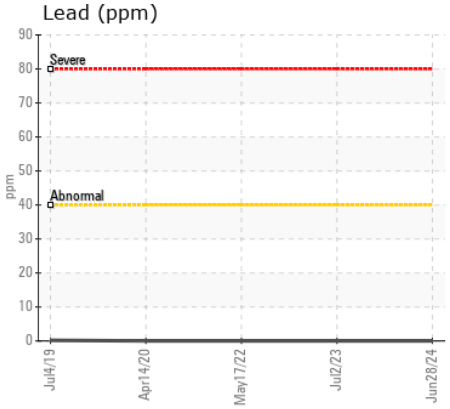
FT-IR (Direct Trend)



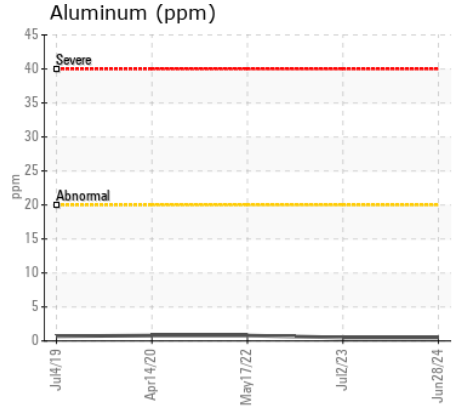
Iron (ppm)



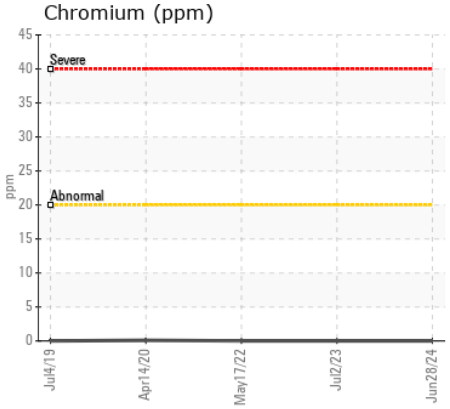
Lead (ppm)



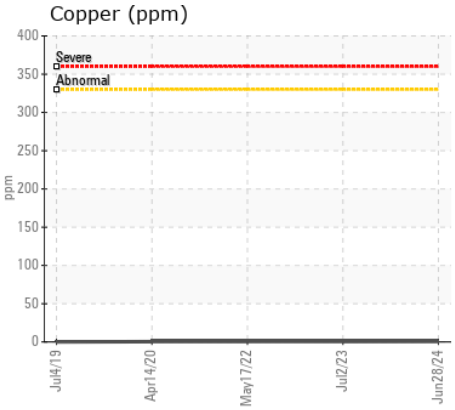
Aluminum (ppm)



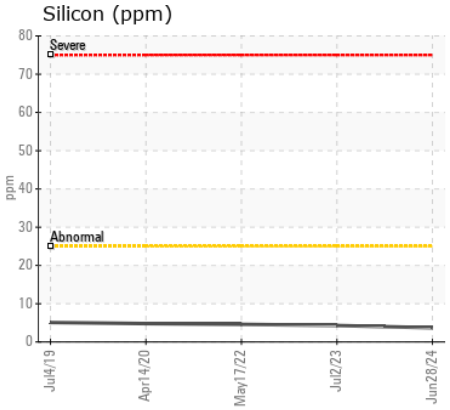
Chromium (ppm)



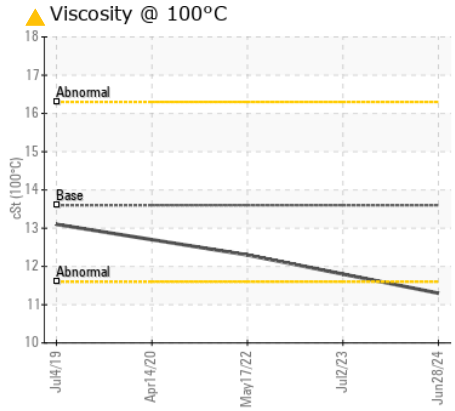
Copper (ppm)



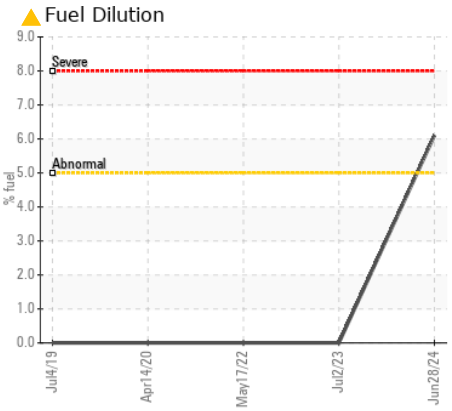
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0022707 **Received** : 05 Jul 2024
Lab Number : 02645815 **Tested** : 08 Jul 2024
Unique Number : 5803354 **Diagnosed** : 08 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, 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.

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