



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
GM DIESEL
 Component
Diesel Engine
 Fluid
SHELL CAPRINUS XR 40 (1764 LTR)

RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. 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

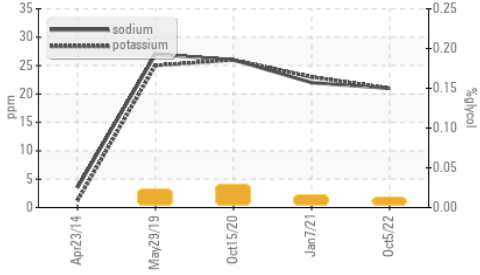
Test for glycol is positive. There is a light concentration of glycol present in the oil.

FLUID CONDITION

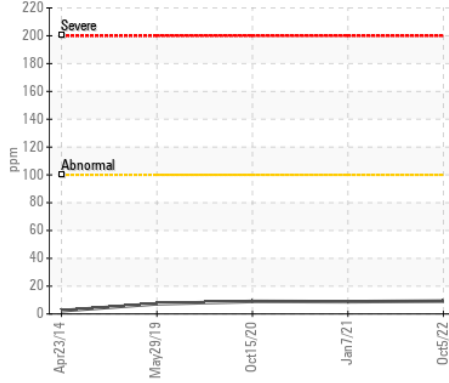
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0328027	WC0299309	WC0299308
Sample Date		Client Info		05 Oct 2022	07 Jan 2021	15 Oct 2020
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Filter Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>100	9	9	9
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	4	4	4
Copper	ppm	ASTM D5185(m)	>330	8	6	7
Tin	ppm	ASTM D5185(m)	>15	2	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	4	4	6
Potassium	ppm	ASTM D5185(m)	>20	▲ 21	▲ 23	▲ 26
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.012	▲ 0.015	▲ 0.029
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.4	11.9	11.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	13.9	14.0	13.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		▲ 21	▲ 22	▲ 26
Boron	ppm	ASTM D5185(m)		0	<1	1
Barium	ppm	ASTM D5185(m)		0	<1	<1
Molybdenum	ppm	ASTM D5185(m)		1	1	1
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		25	23	23
Calcium	ppm	ASTM D5185(m)		4616	4255	4371
Phosphorus	ppm	ASTM D5185(m)		2	3	3
Zinc	ppm	ASTM D5185(m)		4	4	5
Sulfur	ppm	ASTM D5185(m)		3073	3531	4186
Oxidation	Abs/.1mm	ASTM D7414*	>25	9.8	9.4	8.8
Base Number (BN)	mg KOH/g	ASTM D2896*	13	12.40	---	12.74
Visc @ 100°C	cSt	ASTM D7279(m)	14.6	13.1	13.2	13.4

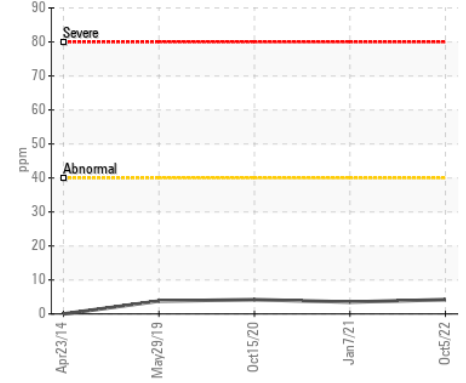
▲ Glycol Contamination



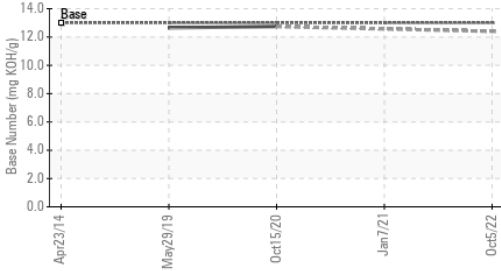
Iron (ppm)



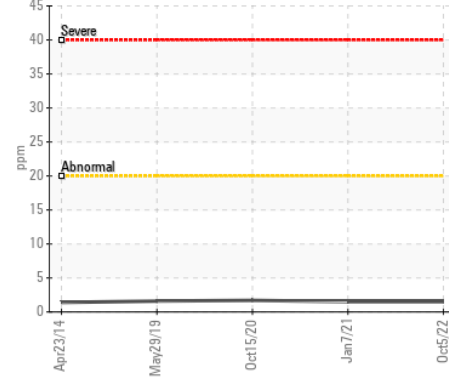
Lead (ppm)



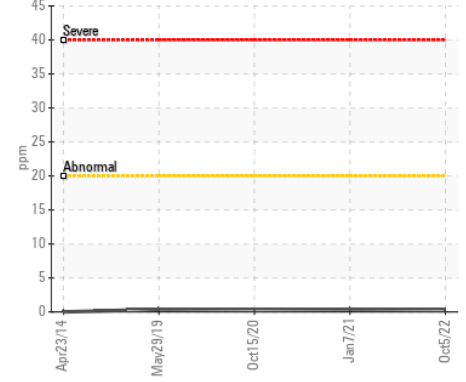
Base Number



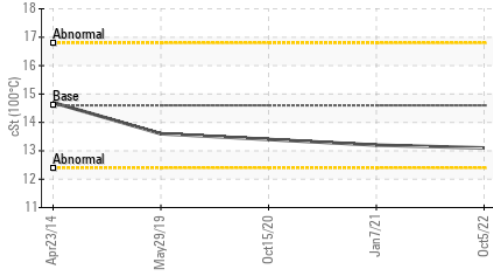
Aluminum (ppm)



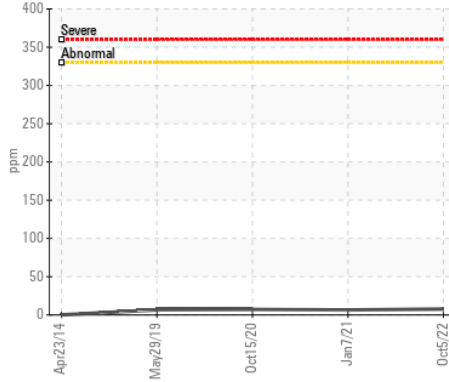
Chromium (ppm)



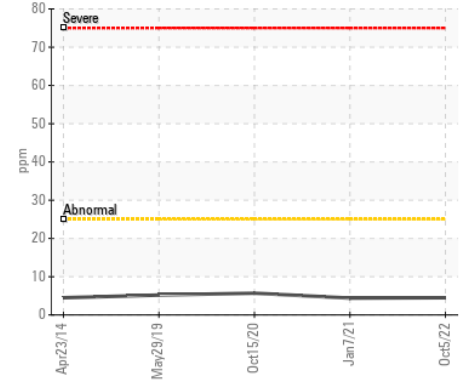
Viscosity @ 100°C



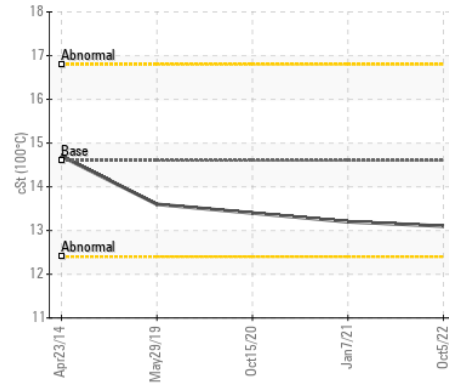
Copper (ppm)



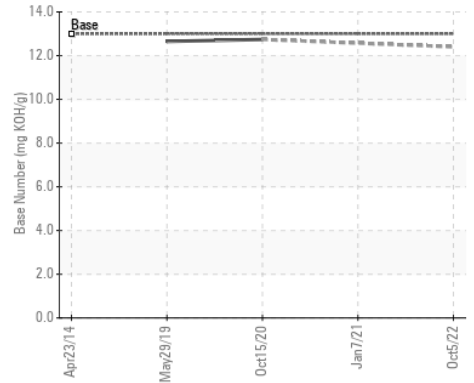
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0328027 **Received** : 20 Oct 2022
Lab Number : 02517453 **Diagnosed** : 21 Oct 2022
Unique Number : 5474433 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: Glycol)

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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