MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
9973
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

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.

WEAR

All component wear rates are normal.

CONTAMINATION

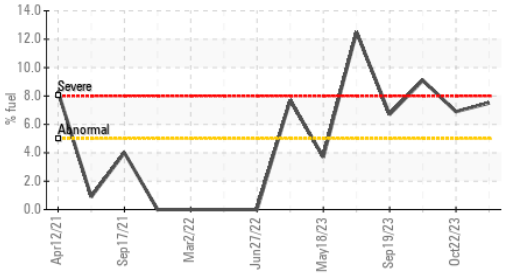
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

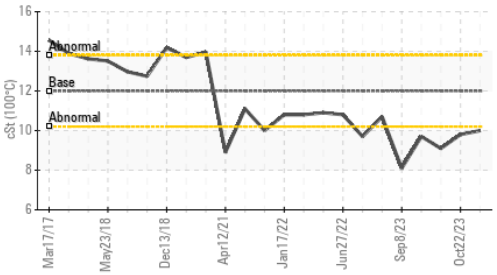
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102644	GFL0093885	GFL0093890
Sample Date		Client Info		07 Jan 2024	22 Oct 2023	04 Oct 2023
Machine Age	hrs	Client Info		28678	0	28141
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185(m)	>110	26	4	6
Chromium	ppm	ASTM D5185(m)	>4	1	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	5	1	2
Lead	ppm	ASTM D5185(m)	>45	<1	0	<1
Copper	ppm	ASTM D5185(m)	>85	1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>30	7	3	4
Potassium	ppm	ASTM D5185(m)	>20	6	<1	<1
Fuel	%	ASTM D7593*	>5	▲ 7.5	▲ 6.9	⬢ 9.1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.6	0.1	0.2
Nitration	Abs/cm	ASTM D7624*	>20	10.5	5.8	7.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	18.4	21.6
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		36	8	11
Boron	ppm	ASTM D5185(m)	2	5	7	2
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	50	56	56	52
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	853	881	821
Calcium	ppm	ASTM D5185(m)	1050	965	979	897
Phosphorus	ppm	ASTM D5185(m)	995	910	937	883
Zinc	ppm	ASTM D5185(m)	1180	1061	1088	1020
Sulfur	ppm	ASTM D5185(m)	2600	2437	2422	2229
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.1	14.2	20.3
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 10.0	▲ 9.8	▲ 9.1

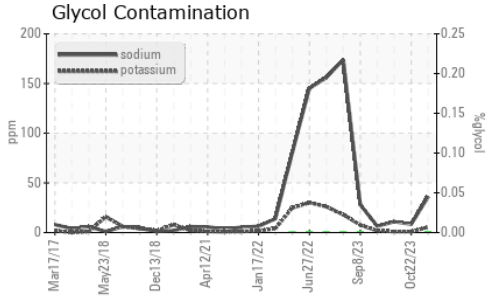
Fuel Dilution



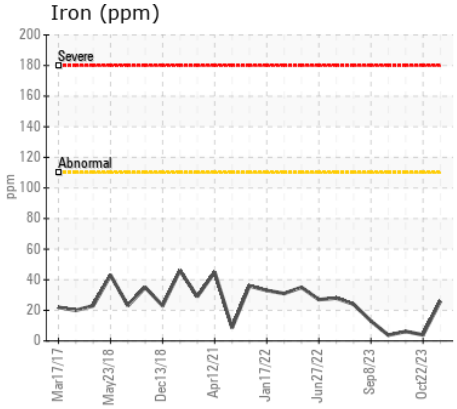
Viscosity @ 100°C



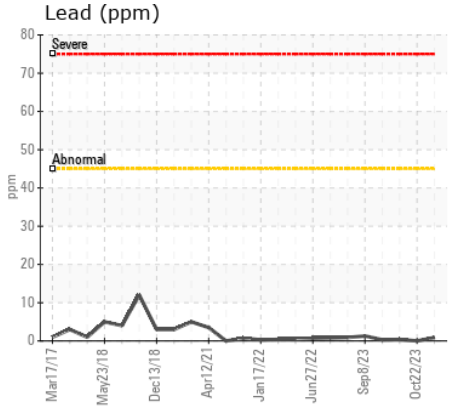
Glycol Contamination



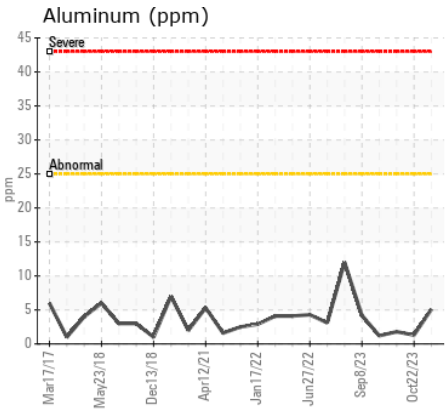
Iron (ppm)



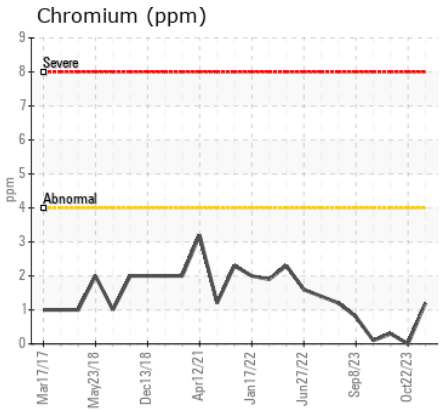
Lead (ppm)



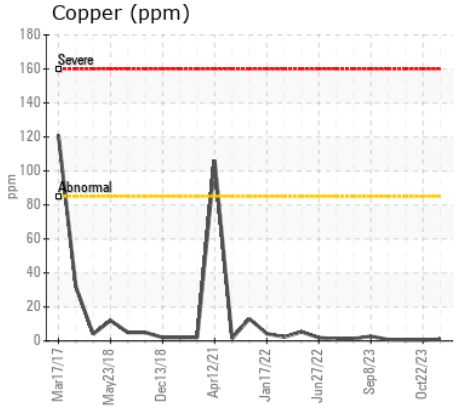
Aluminum (ppm)



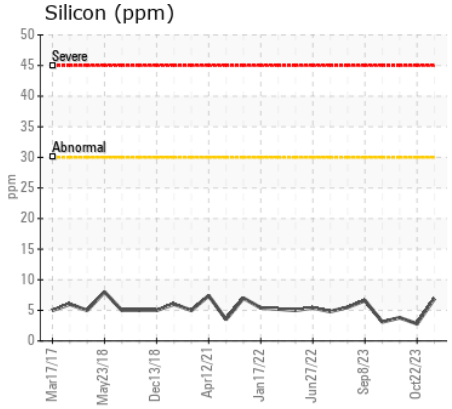
Chromium (ppm)



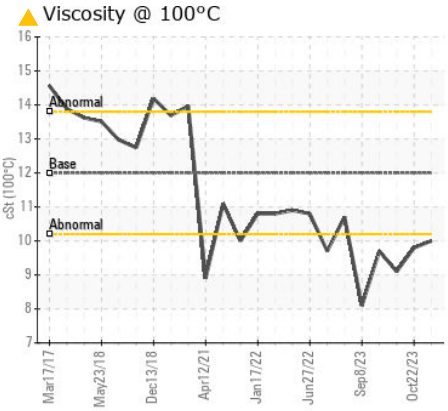
Copper (ppm)



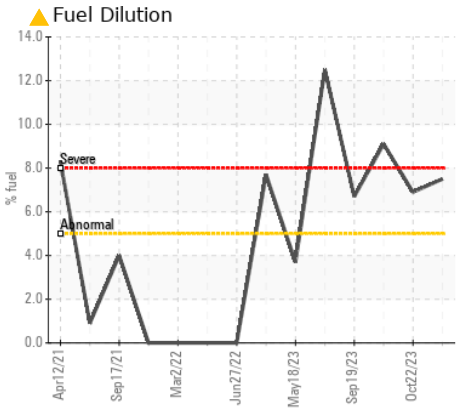
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**
Sample No. : GFL0102644 **Recieved** : 22 Jan 2024
Lab Number : 02610162 **Diagnosed** : 23 Jan 2024
Unique Number : 5711248 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: 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.

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