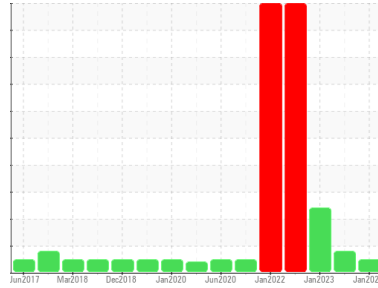




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
3000 Series
 Machine Id
Freightliner 3806T

Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (26 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0886646	WC0805726	WC0759740
Sample Date	Client Info		14 Jan 2024	30 Jul 2023	14 Jan 2023
Machine Age	mls	Client Info	291382	275168	251230
Oil Age	mls	Client Info	16216	8035	17379
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	MARGINAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	▲ 1.7	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	50	65	73
Chromium	ppm	ASTM D5185(m)	>5	3	4	4
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	21	26	▲ 23
Lead	ppm	ASTM D5185(m)	>25	0	<1	<1
Copper	ppm	ASTM D5185(m)	>100	4	6	20
Tin	ppm	ASTM D5185(m)	>4	<1	1	2
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)	0	2	2	15
Barium	ppm	ASTM D5185(m)	0	0	<1	5
Molybdenum	ppm	ASTM D5185(m)	60	59	62	52
Manganese	ppm	ASTM D5185(m)	0	<1	3	10
Magnesium	ppm	ASTM D5185(m)	1010	933	1009	879
Calcium	ppm	ASTM D5185(m)	1070	1142	1107	1352
Phosphorus	ppm	ASTM D5185(m)	1150	980	1080	845
Zinc	ppm	ASTM D5185(m)	1270	1168	1220	945
Sulfur	ppm	ASTM D5185(m)	2060	2530	2297	2064
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

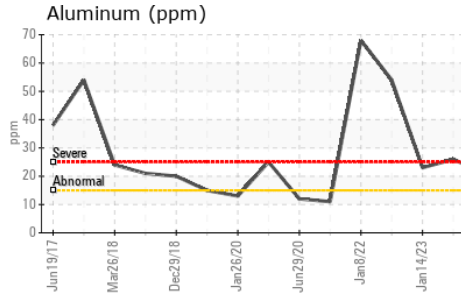
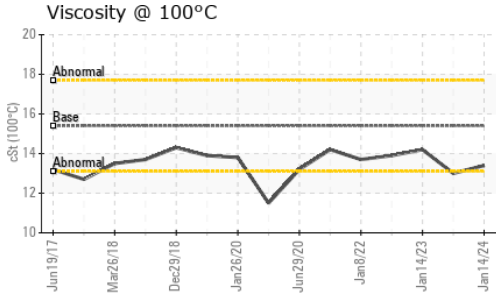
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	8	14	▲ 30
Sodium	ppm	ASTM D5185(m)		2	3	6
Potassium	ppm	ASTM D5185(m)	>20	30	42	34

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	1.1	1.1	0.6
Nitration	Abs/cm	ASTM D7624*	>20	13.9	13.8	11.7
Sulfation	Abs./1mm	ASTM D7415*	>30	27.9	28.5	24.7



OIL ANALYSIS REPORT

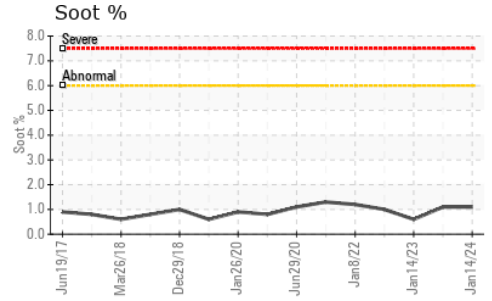
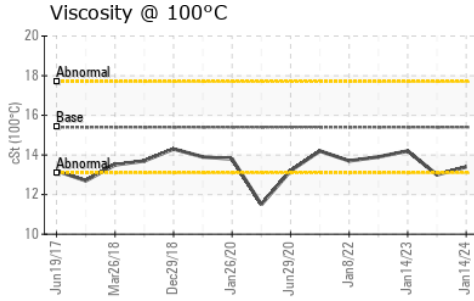
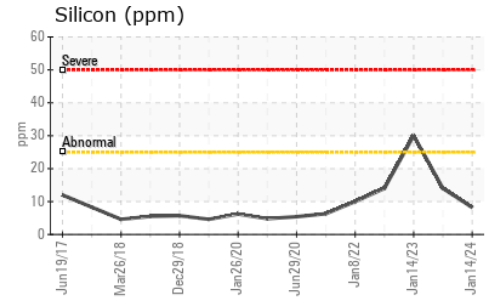
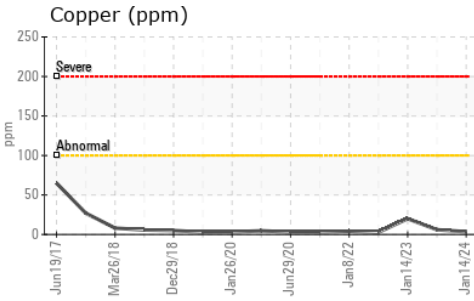
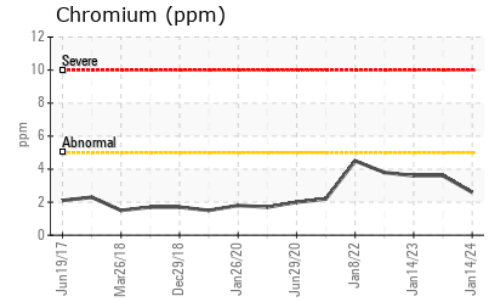
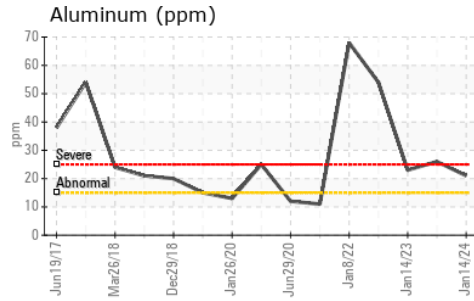
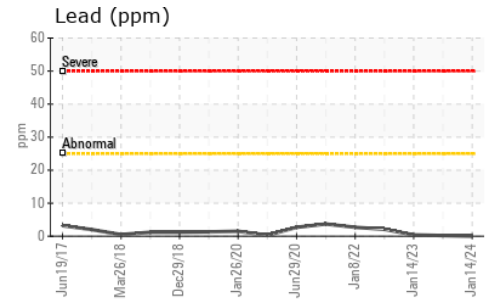
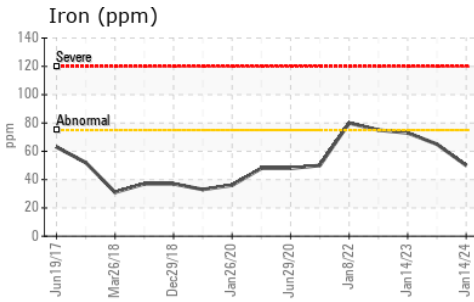


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	24.4	25.1	21.1

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.4	13.0	14.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**
Sample No. : WC0886646 **Received** : 16 Jan 2024 **1335 SHAWSON DRIVE**
Lab Number : 02608873 **Diagnosed** : 16 Jan 2024 **MISSISSAUGA, ON**
Unique Number : 5709959 **Diagnostician** : Wes Davis **CA L4W 1C4**
Test Package : MOB 1 **Contact:** Travis Spence

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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