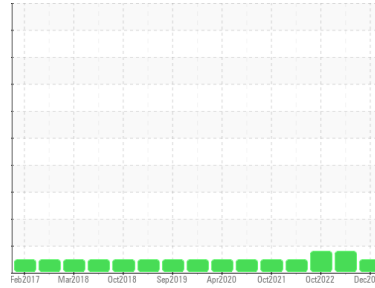




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**3000 Series**  
 Machine Id  
**Freightliner 3805T**

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

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		<b>WC0864536</b>	WC0805708	WC0750604
Sample Date	Client Info		<b>10 Dec 2023</b>	07 May 2023	22 Oct 2022
Machine Age	mls	Client Info	<b>112043</b>	111786	111598
Oil Age	mls	Client Info	<b>257</b>	198	14992
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	MARGINAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	▲ 2	▲ 4
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	<b>40</b>	28	32
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>3</b>	3	3
Lead	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>100	<b>2</b>	1	2
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	3	4
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>65</b>	65	63
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>1023</b>	1037	988
Calcium	ppm	ASTM D5185(m)	1070	<b>1131</b>	1155	1176
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1026</b>	1136	1078
Zinc	ppm	ASTM D5185(m)	1270	<b>1278</b>	1244	1224
Sulfur	ppm	ASTM D5185(m)	2060	<b>2520</b>	2544	2491
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

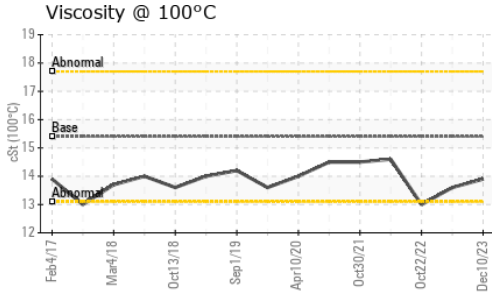
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	4	4
Sodium	ppm	ASTM D5185(m)		<b>3</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.9</b>	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.9</b>	12.3	12.7
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>28.2</b>	24.4	26.2

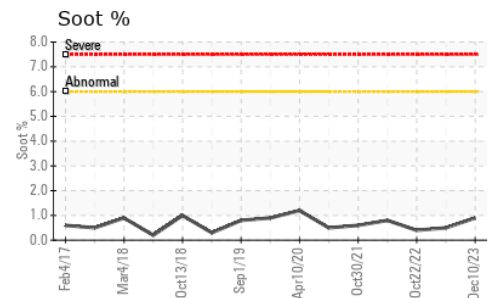
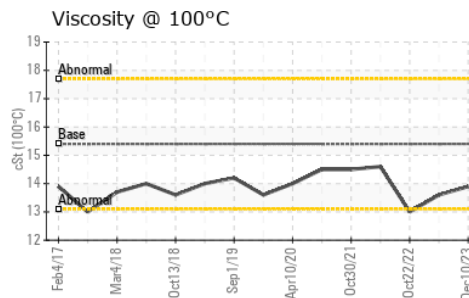
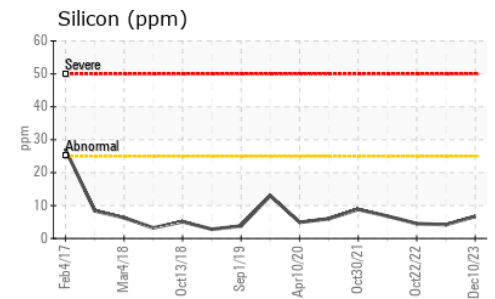
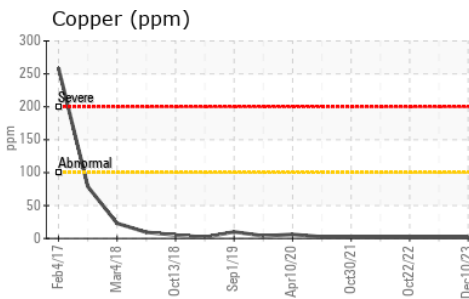
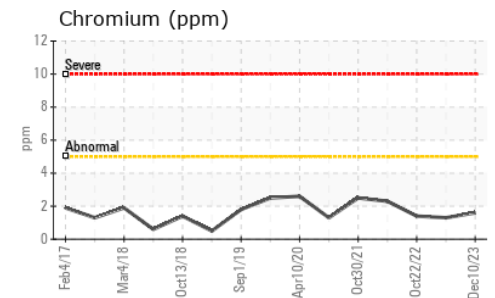
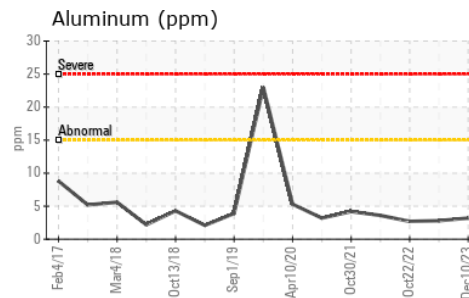
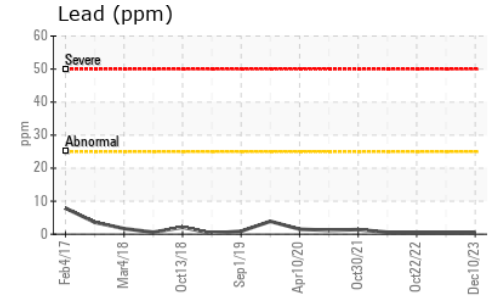
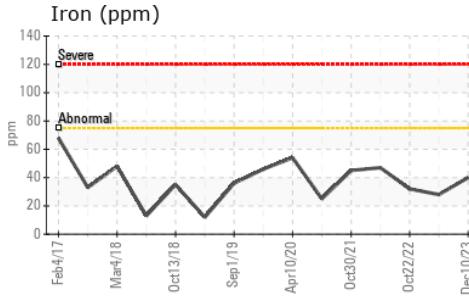


# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>25.4</b>	22.4	25.0
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.9</b>	13.6	13.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**  
**Sample No.** : WC0864536 **Received** : 12 Dec 2023 1335 SHAWSON DRIVE  
**Lab Number** : **02602483** **Diagnosed** : 12 Dec 2023 MISSISSAUGA, ON  
**Unique Number** : 5695568 **Diagnostician** : Kevin Marson CA L4W 1C4  
**Test Package** : MOB 1

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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