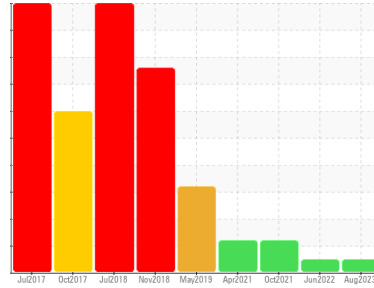




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**8006**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The water content is negligible. There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0084303</b>	GFL0054166	GFL0032539
Sample Date	Client Info	<b>02 Aug 2023</b>	25 Jun 2022	19 Oct 2021
Machine Age	hrs	Client Info	<b>15074</b>	0
Oil Age	hrs	Client Info	<b>9</b>	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>25</b>	82	57
Chromium	ppm ASTM D5185(m) >20	<b>1</b>	2	2
Nickel	ppm ASTM D5185(m) >2	<b>0</b>	<1	1
Titanium	ppm ASTM D5185(m) >2	<b>0</b>	<1	0
Silver	ppm ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >25	<b>2</b>	2	5
Lead	ppm ASTM D5185(m) >40	<b>0</b>	<1	<1
Copper	ppm ASTM D5185(m) >330	<b>2</b>	2	4
Tin	ppm ASTM D5185(m) >15	<b>0</b>	0	<1
Antimony	ppm ASTM D5185(m)	<b>0</b>	0	0
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>5</b>	5	2
Barium	ppm ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm ASTM D5185(m) 60	<b>55</b>	58	54
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>915</b>	896	916
Calcium	ppm ASTM D5185(m) 1070	<b>972</b>	1079	950
Phosphorus	ppm ASTM D5185(m) 1150	<b>1014</b>	991	981
Zinc	ppm ASTM D5185(m) 1270	<b>1121</b>	1150	1114
Sulfur	ppm ASTM D5185(m) 2060	<b>2495</b>	2724	2130
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

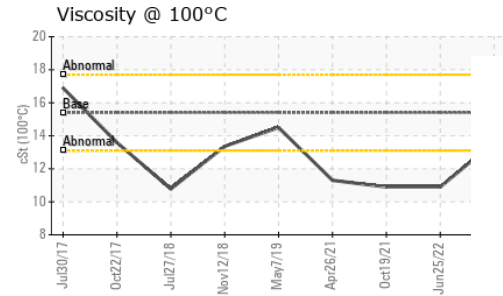
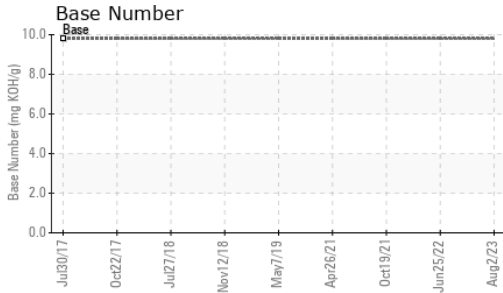
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>8</b>	9	18
Sodium	ppm ASTM D5185(m)	<b>2</b>	2	5
Potassium	ppm ASTM D5185(m) >20	<b>0</b>	0	<1

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.1</b>	0	0.5
Nitration	Abs/cm ASTM D7624* >20	<b>6.9</b>	7.1	15.1
Sulfation	Abs/.1mm ASTM D7415* >30	<b>20.2</b>	19.4	26.6



# OIL ANALYSIS REPORT

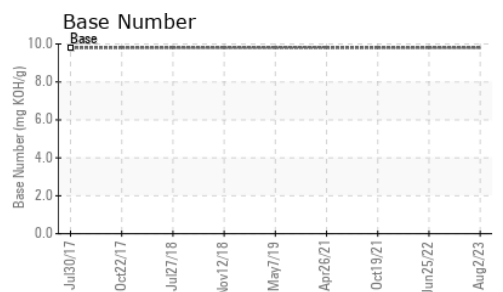
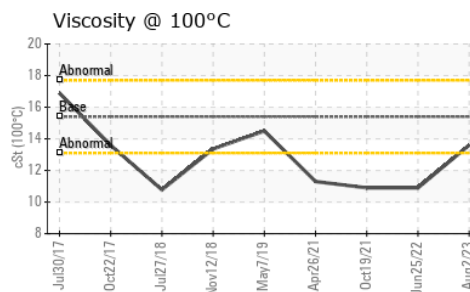
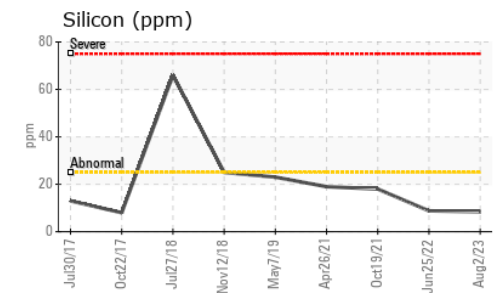
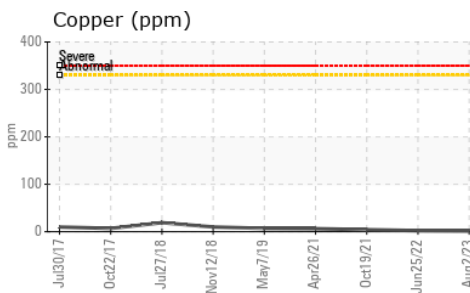
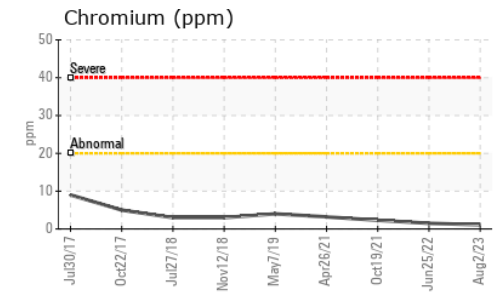
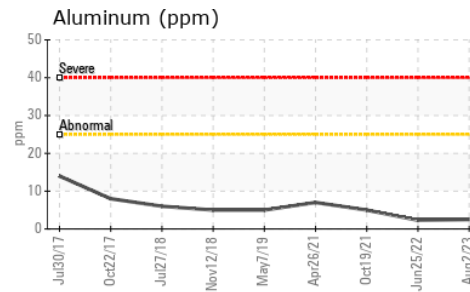
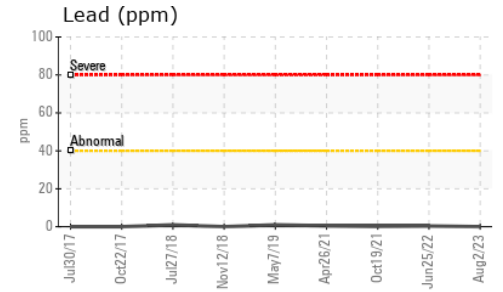
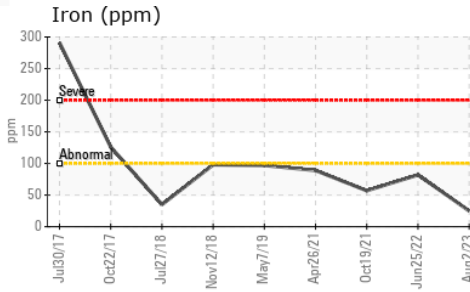


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.1	15.0	▲ 31.4
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	8.68	---	---

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	13.6	10.9	10.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0084303 **Received** : 08 Aug 2023 220 Carmek Blvd  
**Lab Number** : 02574452 **Diagnosed** : 09 Aug 2023 Rocky View County, AB  
**Unique Number** : 5619503 **Diagnostician** : Kevin Marson CA T1X 1X1  
**Test Package** : MOB 2 Contact: GFL Calgary calgarymaintenance@gflenv.com

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.

F: (403)369-6163