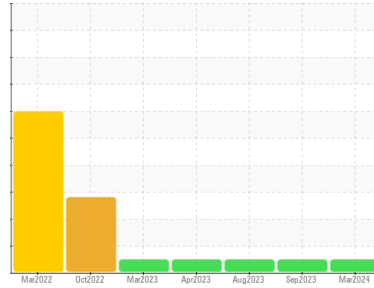




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**227118**

Component  
**Gasoline Engine**

Fluid  
**PETRO CANADA DURON UHP 5W30 (--- GAL)**

## 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 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>GFL0112454</b>	GFL0091638	GFL0084318
Sample Date	Client Info	<b>19 Mar 2024</b>	26 Sep 2023	16 Aug 2023
Machine Age	hrs	<b>2768</b>	346951	1927
Oil Age	hrs	<b>120</b>	0	595
Oil Changed	Client Info	<b>Changed</b>	Changed	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >4.0	<b>&lt;1.0</b>	<1.0	<1.0
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) >150	<b>24</b>	25	49
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	1
Nickel	ppm ASTM D5185(m) >5	<b>&lt;1</b>	<1	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m) >2	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185(m) >40	<b>3</b>	2	4
Lead	ppm ASTM D5185(m) >50	<b>0</b>	<1	<1
Copper	ppm ASTM D5185(m) >155	<b>5</b>	15	17
Tin	ppm ASTM D5185(m) >10	<b>0</b>	0	0
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>31</b>	18	21
Barium	ppm ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm ASTM D5185(m) 64	<b>59</b>	63	64
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	0	<1
Magnesium	ppm ASTM D5185(m) 1160	<b>1054</b>	1111	1081
Calcium	ppm ASTM D5185(m) 820	<b>842</b>	846	854
Phosphorus	ppm ASTM D5185(m) 1160	<b>999</b>	965	965
Zinc	ppm ASTM D5185(m) 1260	<b>1193</b>	1223	1158
Sulfur	ppm ASTM D5185(m) 3000	<b>2627</b>	2579	2482
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

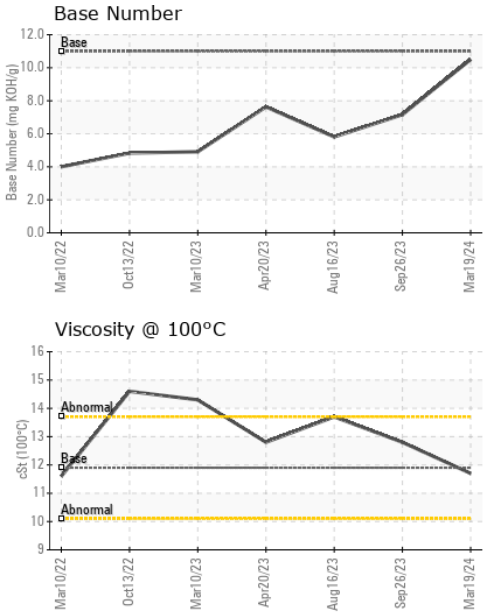
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >30	<b>4</b>	9	12
Sodium	ppm ASTM D5185(m) >400	<b>4</b>	6	7
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	1

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844*	<b>0</b>	0	0
Nitration	Abs/cm ASTM D7624*	<b>9.5</b>	13.4	15.5
Sulfation	Abs./1mm ASTM D7415*	<b>20.7</b>	27.1	32.5



# OIL ANALYSIS REPORT

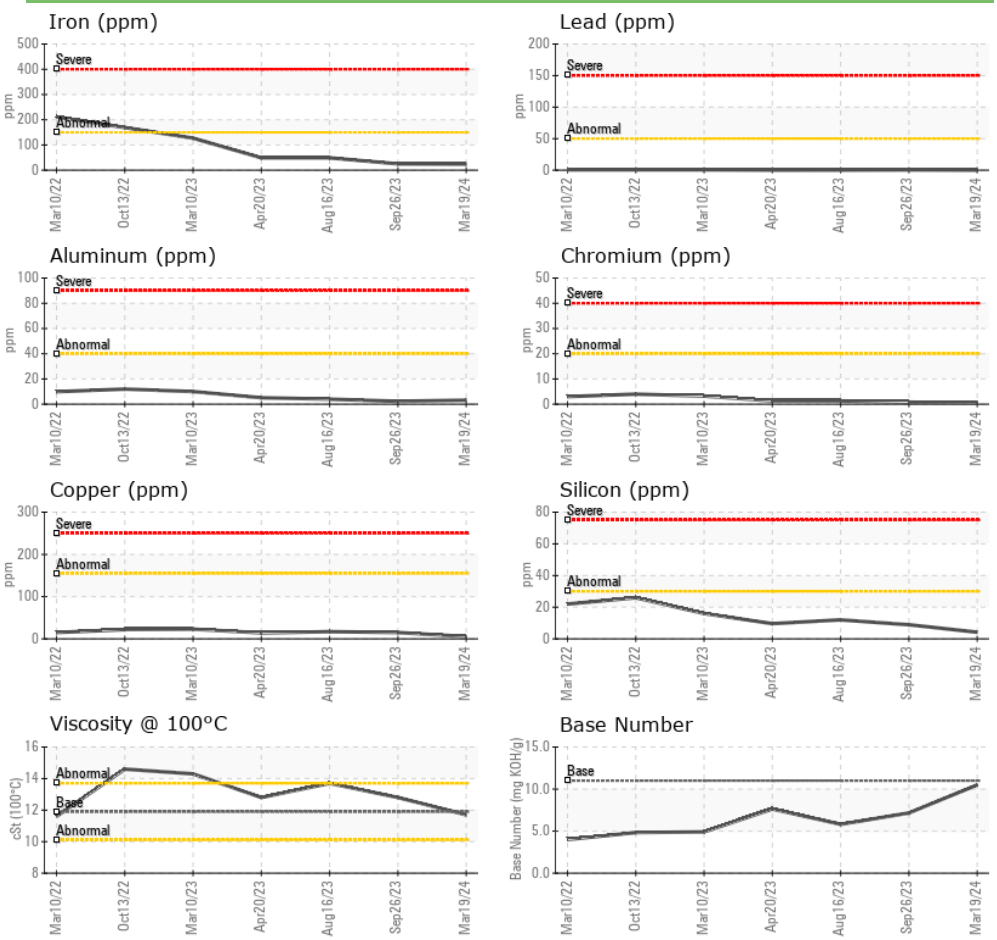


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.5</b>	28.5	34.8
Base Number (BN)	mg KOH/g	ASTM D2896*	11.0	<b>10.50</b>	7.16	5.81

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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)	11.9	<b>11.7</b>	12.8	13.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 550 - Rocky View County**  
**Sample No.** : GFL0112454 **Received** : 26 Mar 2024 **220 Carmek Blvd**  
**Lab Number** : **02624675** **Tested** : 27 Mar 2024 **Rocky View County, AB**  
**Unique Number** : 5749794 **Diagnosed** : 27 Mar 2024 - Wes Davis **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**