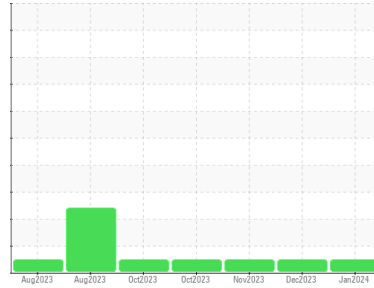




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**BD SHOP**  
 Machine Id  
**200304**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (40 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>WC0888890</b>	WC0864707	WC0864680
Sample Date	Client Info		<b>15 Jan 2024</b>	10 Dec 2023	12 Nov 2023
Machine Age	kms	Client Info	<b>102918</b>	89100	78296
Oil Age	kms	Client Info	<b>1</b>	43960	33156
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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)	>120	<b>4</b>	29	25
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	4	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	8	8
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	7	6
Copper	ppm	ASTM D5185(m)	>330	<b>12</b>	258	272
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	2	2
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)	2	<b>7</b>	7	8
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	50	<b>57</b>	67	66
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>924</b>	957	945
Calcium	ppm	ASTM D5185(m)	1050	<b>1018</b>	1121	1098
Phosphorus	ppm	ASTM D5185(m)	995	<b>971</b>	944	951
Zinc	ppm	ASTM D5185(m)	1180	<b>1116</b>	1134	1141
Sulfur	ppm	ASTM D5185(m)	2600	<b>2659</b>	2157	2240
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

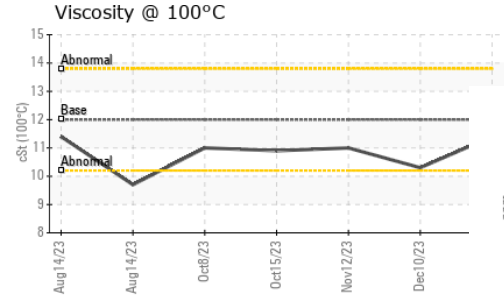
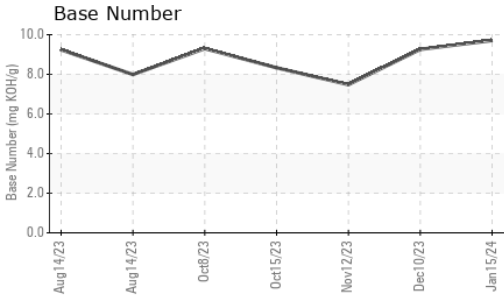
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	11	11
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	22	21

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0</b>	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>4.8</b>	10.2	8.9
Nitration(Diff)	Abs/cm	ASTM D7624*		<b>0.1</b>	---	---
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>18.0</b>	21.0	21.0
Sulfation(Diff)	Abs/cm	ASTM D7415*		<b>0</b>	---	---



# OIL ANALYSIS REPORT

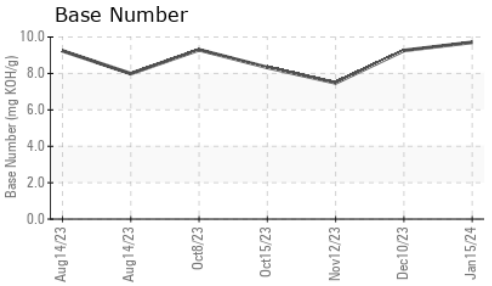
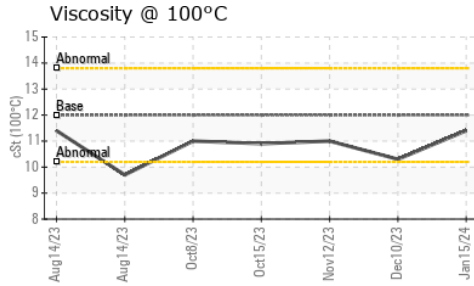
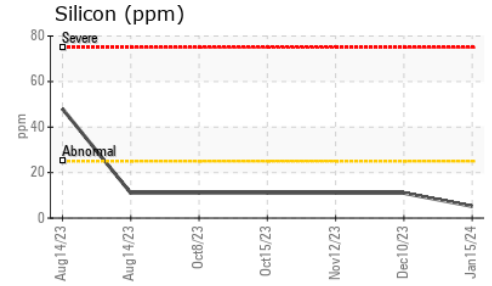
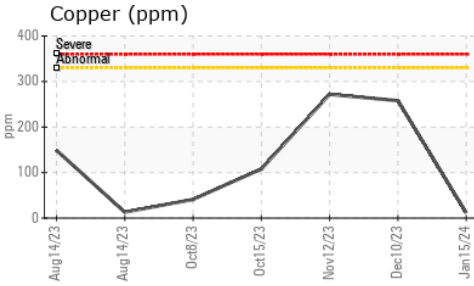
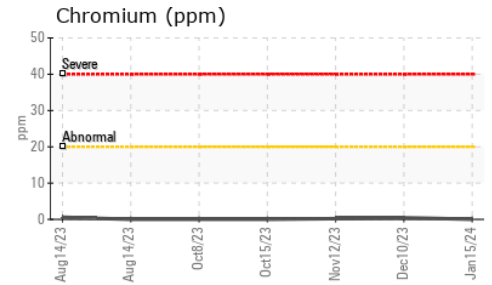
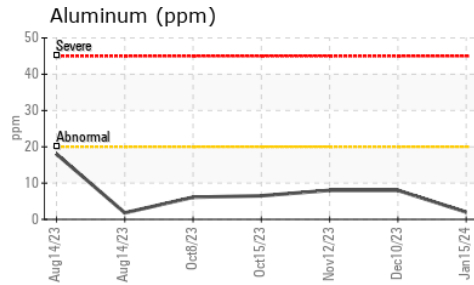
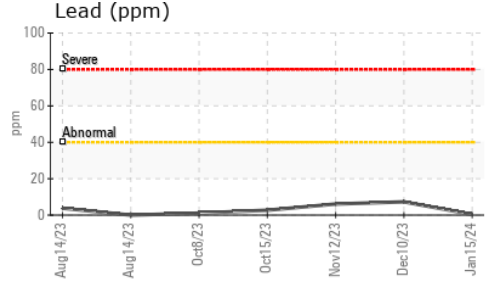
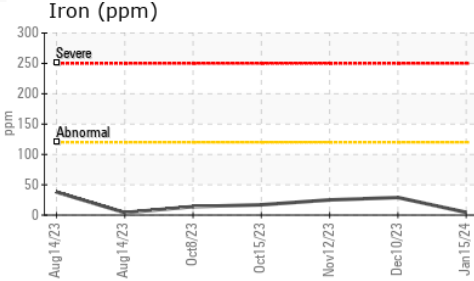


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>13.3</b>	17.7	16.9
Oxidation(Diff)	Abs/cm	ASTM D7414*		<b>1.3</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>9.71</b>	9.26	7.48

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)	12.00	<b>11.4</b>	10.3	11.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0888890 **Received** : 22 Jan 2024  
**Lab Number** : **02610195** **Diagnosed** : 23 Jan 2024  
**Unique Number** : 5711281 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: FT-IR(Diff) )

**WFR Technical Services**  
 5389 Riverside Drive  
 Burlington, ON  
 CA L7L 3Y1  
 Contact: William Ridley  
 wfr.technical.services@gmail.com  
 T:  
 F:

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.