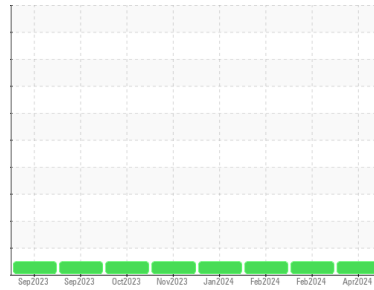




# OIL ANALYSIS REPORT

Area  
**BD SHOP**  
 Machine Id  
**200295**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (40 LTR)**

## Sample Rating Trend



**NORMAL**



### 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>WC0926306</b>	WC0888884	WC0888885
Sample Date	Client Info		<b>09 Apr 2024</b>	22 Feb 2024	22 Feb 2024
Machine Age	kms	Client Info	<b>201150</b>	182122	182123
Oil Age	kms	Client Info	<b>19028</b>	59819	1
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Changed
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>13</b>	35	1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	1	0
Nickel	ppm	ASTM D5185(m)	>15	<b>2</b>	10	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	6	1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	3	0
Copper	ppm	ASTM D5185(m)	>330	<b>12</b>	60	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	1	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)	2	<b>3</b>	1	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>59</b>	61	56
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	950	<b>967</b>	934	926
Calcium	ppm	ASTM D5185(m)	1050	<b>1040</b>	1104	988
Phosphorus	ppm	ASTM D5185(m)	995	<b>977</b>	866	987
Zinc	ppm	ASTM D5185(m)	1180	<b>1194</b>	1152	1113
Sulfur	ppm	ASTM D5185(m)	2600	<b>2542</b>	2414	2727
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

### CONTAMINANTS

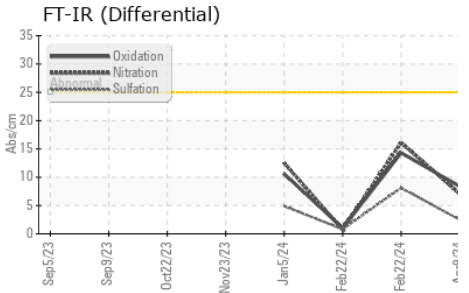
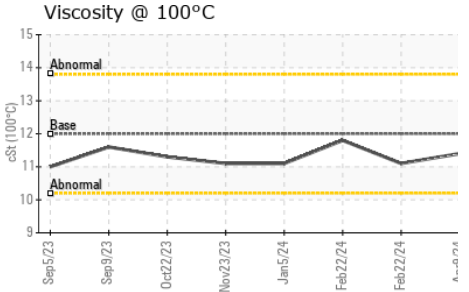
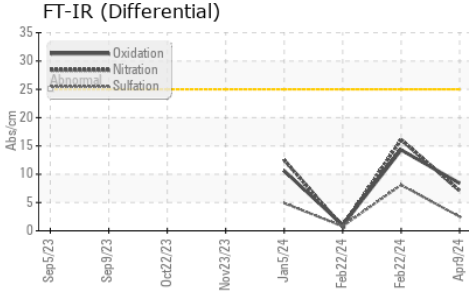
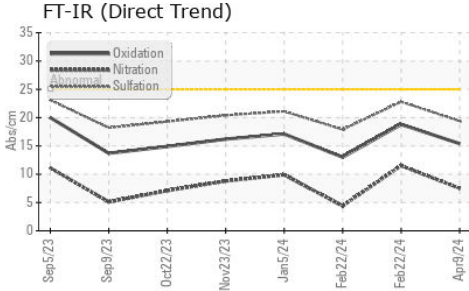
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	7	4
Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	12	<1

### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0.1</b>	0.5	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.5</b>	11.5	4.4
Nitration(Diff)	Abs/cm	ASTM E2412*	< 25	<b>7.1</b>	16.1	0.7
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>19.4</b>	22.8	17.9
Sulfation(Diff)	Abs/cm	ASTM E2412*		<b>2.5</b>	8.1	0.8



# OIL ANALYSIS REPORT

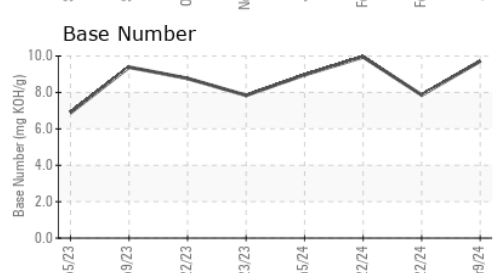
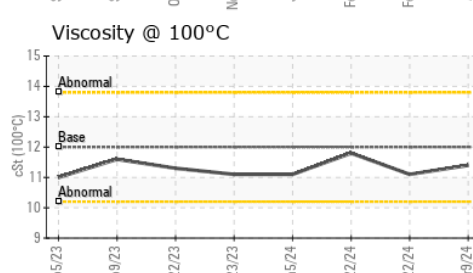
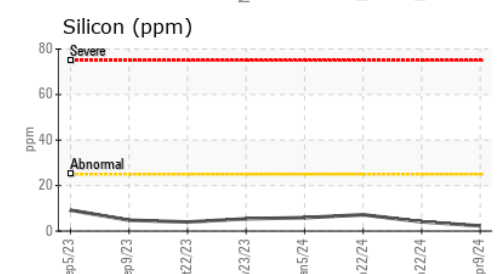
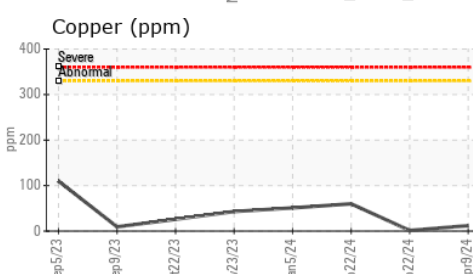
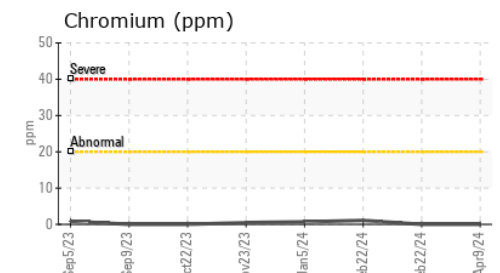
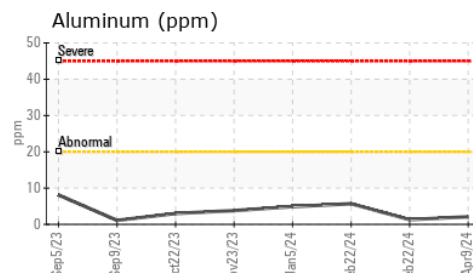
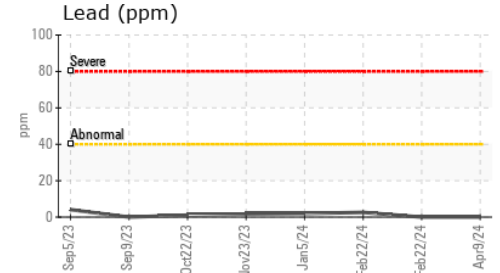
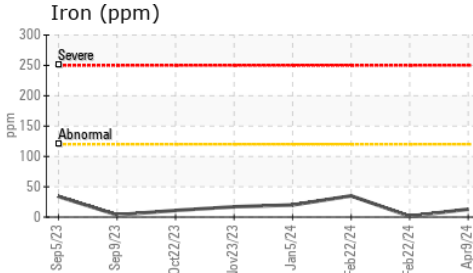


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	15.4	18.8	13.0
Oxidation(Diff)	Abs/cm	ASTM E2412*	< 25	8.4	14.3	1
Base Number (BN)	mg KOH/g	ASTM D2896*	9.72	7.86	9.95	

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)	12.00	11.4	11.1	11.8

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0926306 **Received** : 10 Apr 2024  
**Lab Number** : **02627782** **Tested** : 10 Apr 2024  
**Unique Number** : 5760914 **Diagnosed** : 11 Apr 2024 - 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

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.