



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**SPARTOR/ROSENBAUER 4025**  
Component  
**Front Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (24 LTR)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0806345</b>	WC0702387	WC0623553
Sample Date		Client Info		<b>05 Dec 2023</b>	15 Oct 2022	12 Mar 2022
Machine Age	kms	Client Info		<b>130896</b>	117334	110546
Oil Age	kms	Client Info		<b>13562</b>	5800	5000
Filter Age	kms	Client Info		<b>13562</b>	5800	5000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	<b>66</b>	20	17
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	<b>4</b>	2	2
Lead	ppm	ASTM D5185(m)	>25	<b>4</b>	3	6
Copper	ppm	ASTM D5185(m)	>100	<b>7</b>	11	5
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

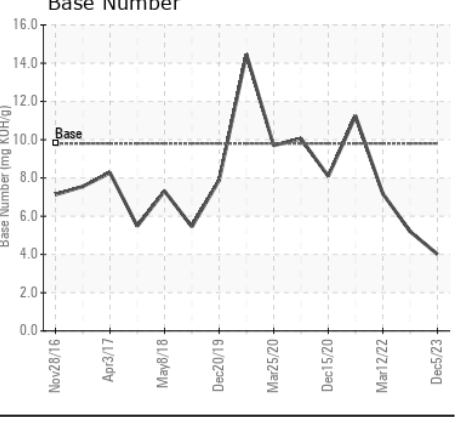
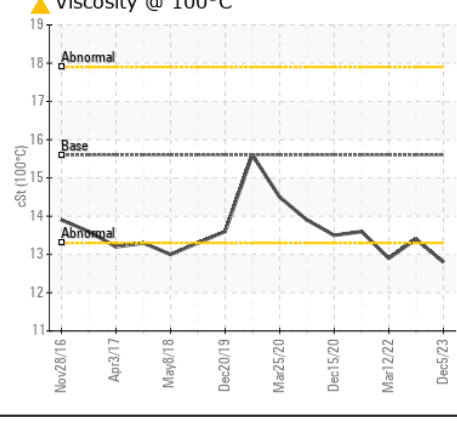
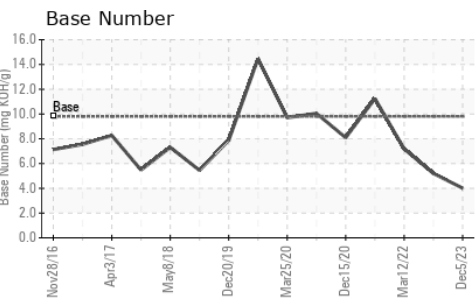
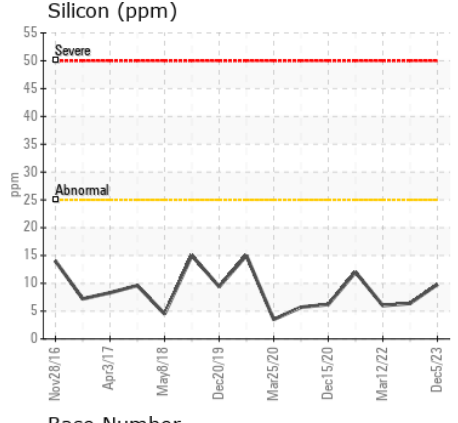
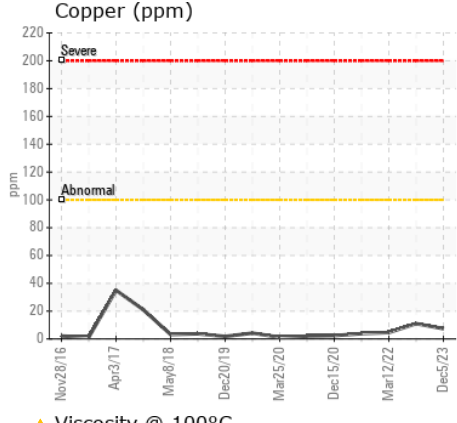
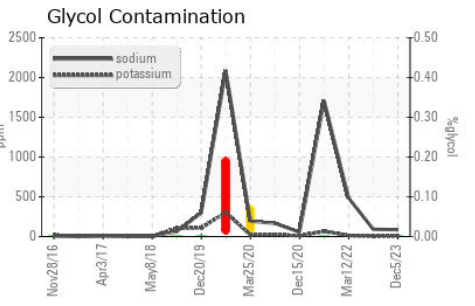
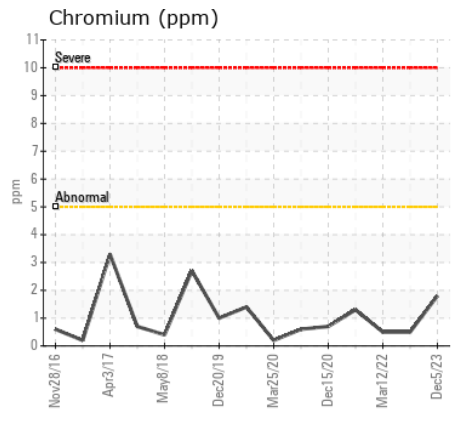
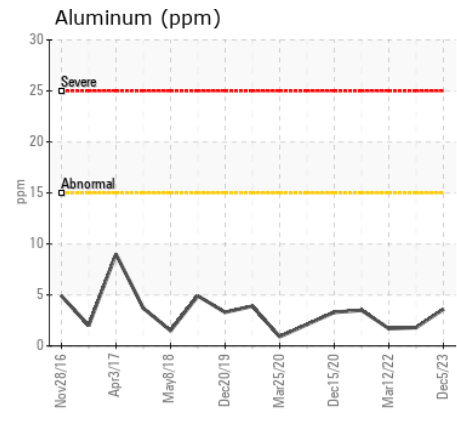
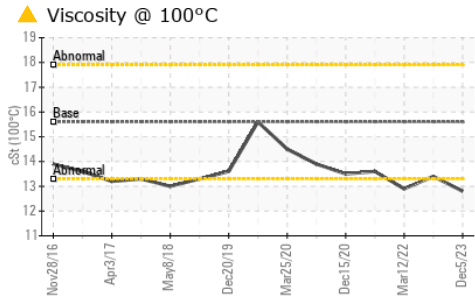
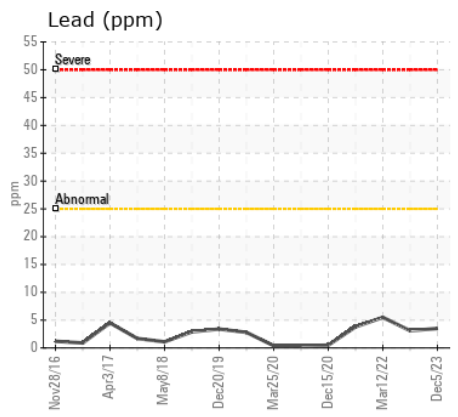
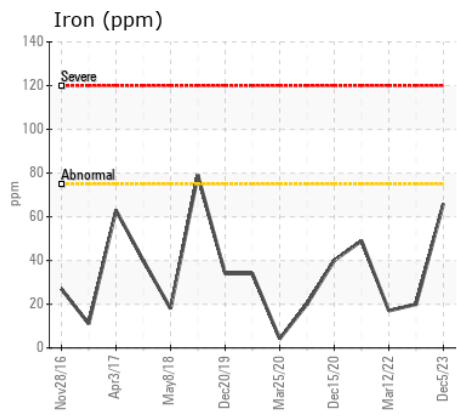
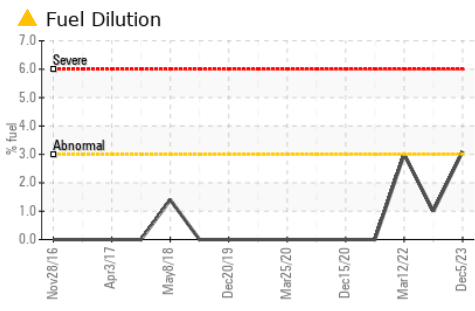
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>10</b>	6	6
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	4	13
Fuel	%	ASTM D7593*	>3.0	<b>▲ 3.1</b>	1	<b>▲ 3</b>
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0
Soot %	%	ASTM D7844*	>6	<b>0.8</b>	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.7</b>	8.4	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>28.4</b>	21.4	19.9
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<b>86</b>	92	● 484
Boron	ppm	ASTM D5185(m)	0	<b>8</b>	9	4
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>34</b>	34	41
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>375</b>	372	298
Calcium	ppm	ASTM D5185(m)	1070	<b>1728</b>	1882	1686
Phosphorus	ppm	ASTM D5185(m)	1150	<b>865</b>	946	886
Zinc	ppm	ASTM D5185(m)	1270	<b>1079</b>	1068	1007
Sulfur	ppm	ASTM D5185(m)	2060	<b>2636</b>	2892	2796
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>24.7</b>	14.5	14.6
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	<b>4.01</b>	5.20	7.18
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>▲ 12.8</b>	13.4	<b>▲ 12.9</b>



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0806345 **Received** : 08 Dec 2023  
**Lab Number** : 02601813 **Tested** : 15 Dec 2023  
**Unique Number** : 5694898 **Diagnosed** : 15 Dec 2023 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: FUELDILUTION, Glycol, PercentFuel )

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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.