



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

Machine Id  
**116**  
 Component  
**Rear Diesel Engine**  
 Fluid  
**PETRO CANADA DURON UHP 5W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0078279</b>	PC0078533	PC0077501
Sample Date		Client Info		<b>30 Apr 2024</b>	08 Jan 2024	23 Aug 2023
Machine Age	kms	Client Info		<b>515628</b>	485157	457009
Oil Age	kms	Client Info		<b>30000</b>	30000	30000
Filter Age	kms	Client Info		<b>30000</b>	30000	30000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	<b>23</b>	20	22
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	1	2
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>150	<b>4</b>	4	6
Copper	ppm	ASTM D5185(m)	>90	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

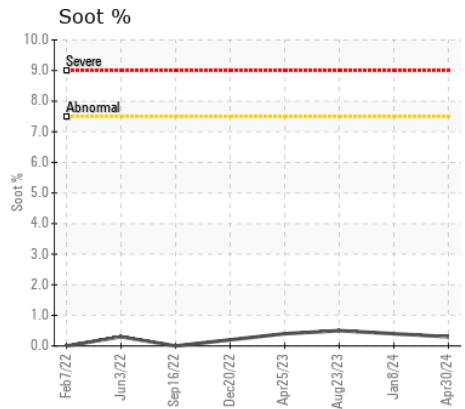
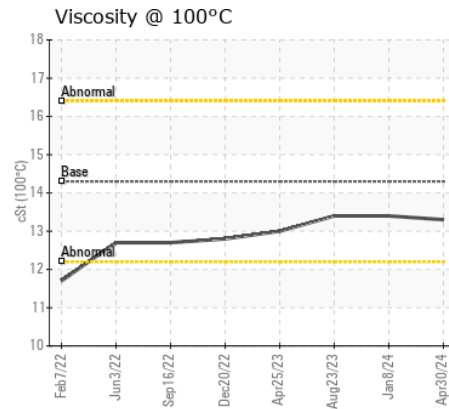
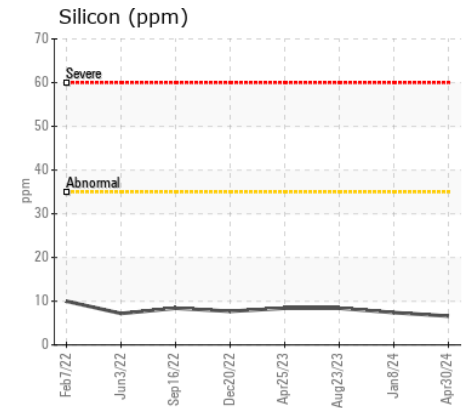
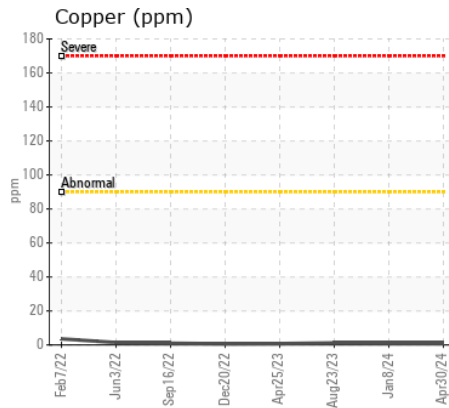
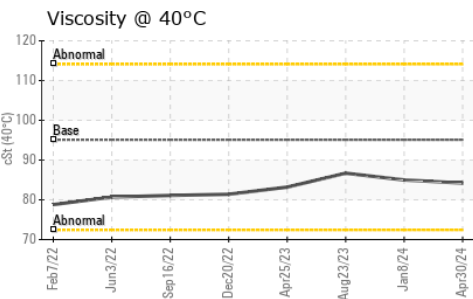
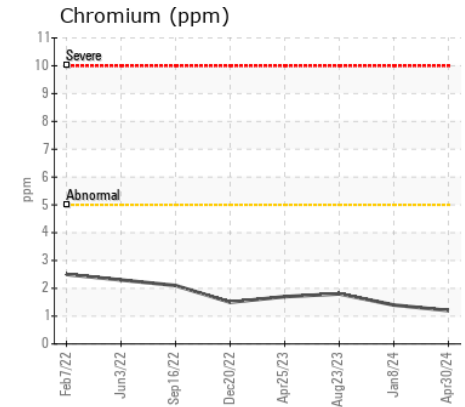
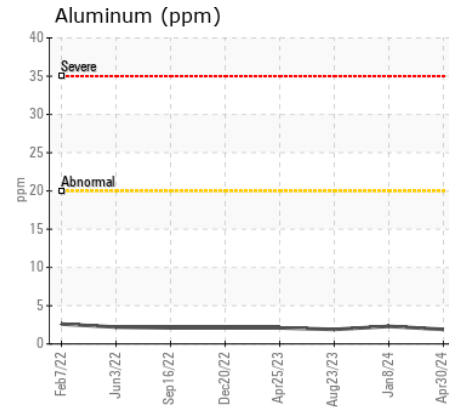
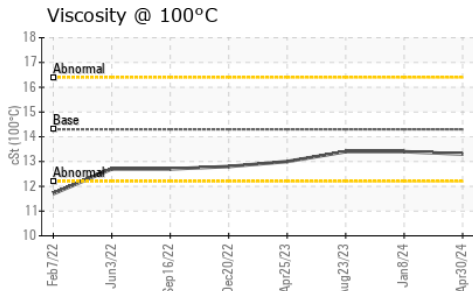
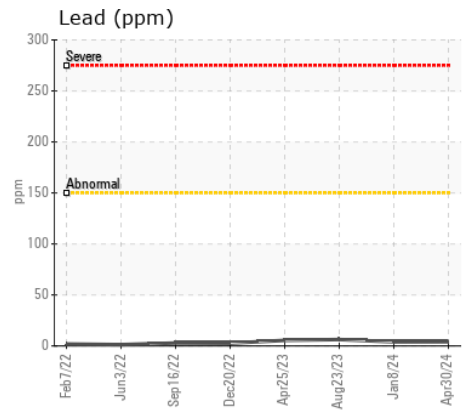
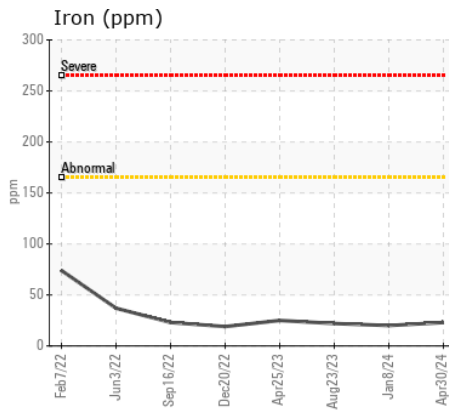
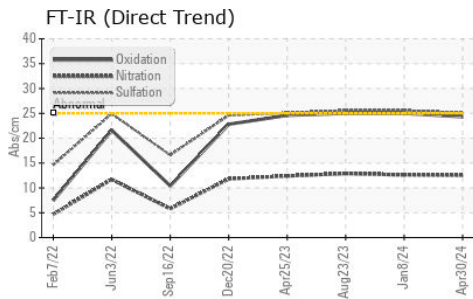
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>7</b>	7	8
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	1	1
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
Soot %	%	ASTM D7844*	>7.5	<b>0.3</b>	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.5</b>	12.6	12.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.1</b>	25.6	25.6
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>5</b>	5	5
Boron	ppm	ASTM D5185(m)	65	<b>31</b>	26	21
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	65	<b>66</b>	63	65
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1160	<b>1178</b>	1154	1185
Calcium	ppm	ASTM D5185(m)	820	<b>927</b>	926	905
Phosphorus	ppm	ASTM D5185(m)	1160	<b>1067</b>	1076	1121
Zinc	ppm	ASTM D5185(m)	1260	<b>1286</b>	1269	1273
Sulfur	ppm	ASTM D5185(m)	3000	<b>2765</b>	2932	2713
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>24.3</b>	25.0	25.0
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	<b>84.2</b>	85.0	86.7
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	<b>13.3</b>	13.4	13.4
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>159</b>	159	156



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078279 **Received** : 13 May 2024  
**Lab Number** : 02634881 **Tested** : 13 May 2024  
**Unique Number** : 5776034 **Diagnosed** : 13 May 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

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.

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