



# OIL ANALYSIS REPORT

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

Machine Id  
**DZ-8**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KFS0003902</b>	KFS0004052	KFS0002900
Sample Date		Client Info		<b>07 May 2024</b>	14 Feb 2024	21 Nov 2023
Machine Age	hrs	Client Info		<b>6880</b>	6632	6085
Oil Age	hrs	Client Info		<b>0</b>	0	6085
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	SEVERE	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>3</b>	8	19
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>0</b>	0	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

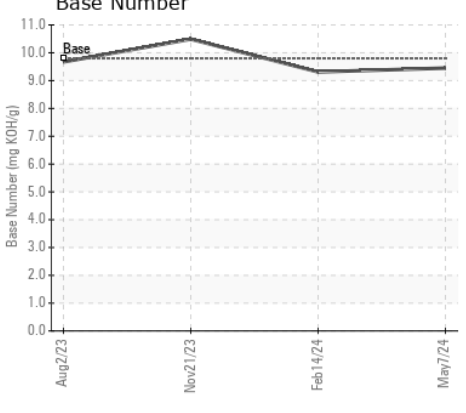
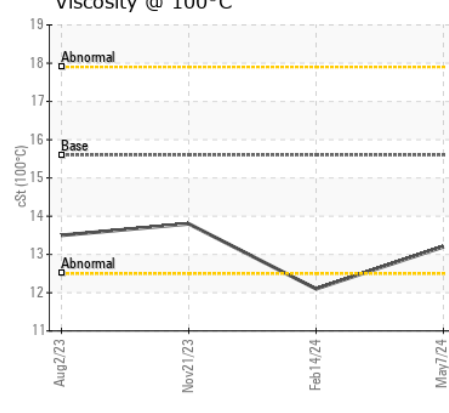
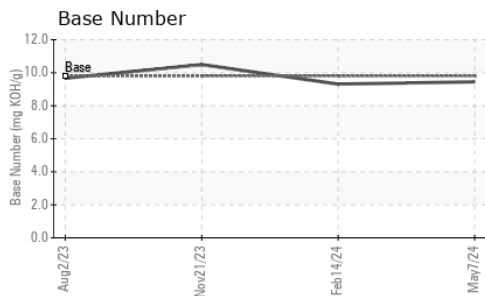
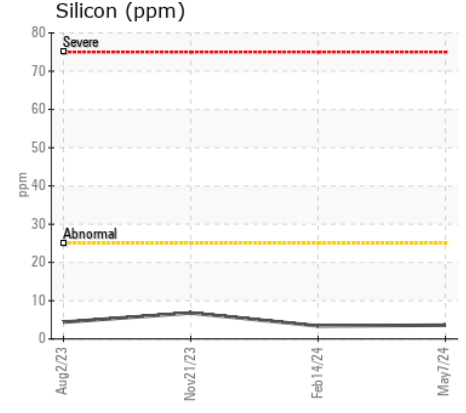
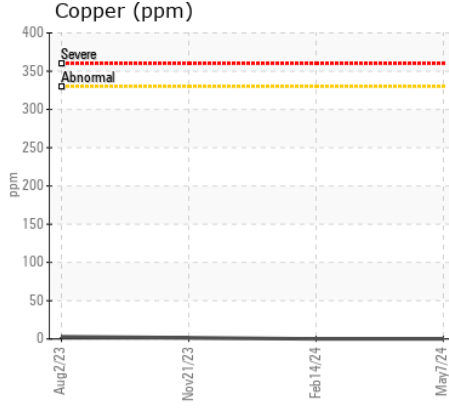
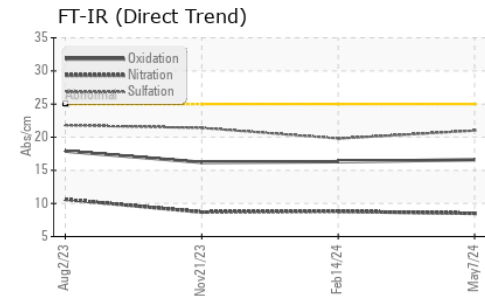
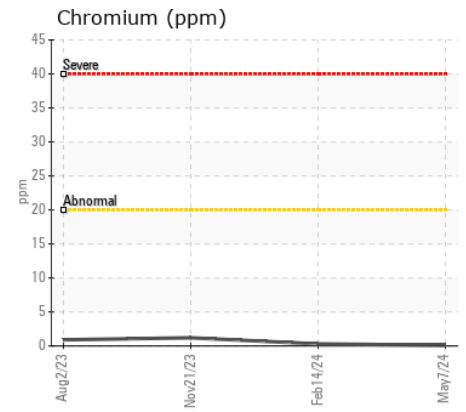
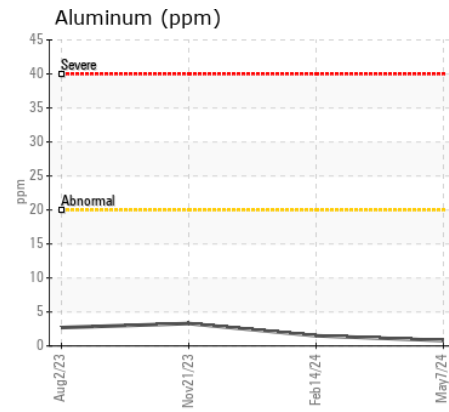
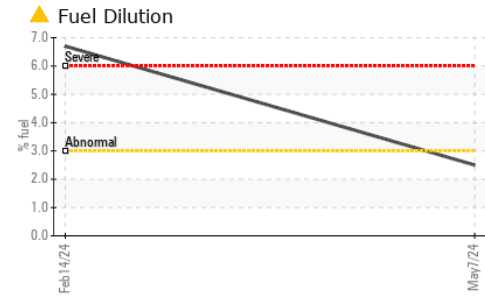
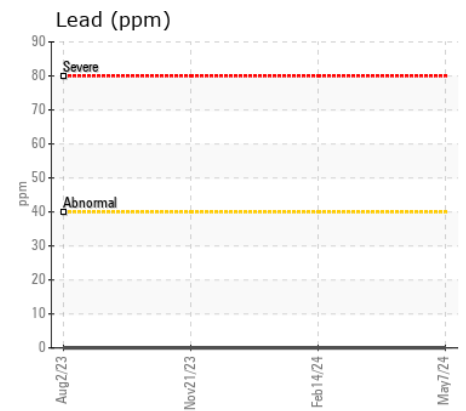
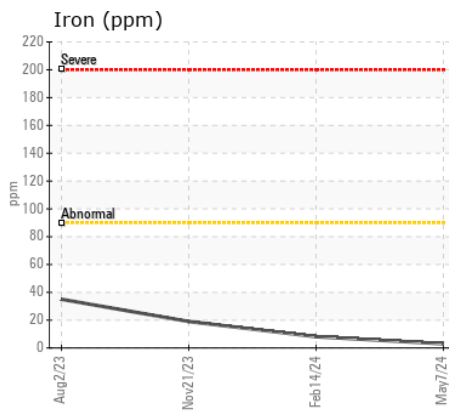
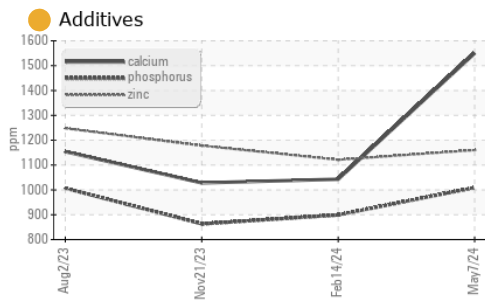
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	7
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	1
Fuel	%	ASTM D3524	>3.0	<b>▲ 2.5</b>	▲ 6.7	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.6</b>	0.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	8.8	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.0</b>	19.8	21.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	1	<1
Boron	ppm	ASTM D5185m		<b>● 42</b>	2	2
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>37</b>	51	59
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>● 447</b>	809	892
Calcium	ppm	ASTM D5185m		<b>● 1550</b>	1043	1028
Phosphorus	ppm	ASTM D5185m		<b>1009</b>	899	863
Zinc	ppm	ASTM D5185m		<b>1160</b>	1121	1178
Sulfur	ppm	ASTM D5185m		<b>3497</b>	3074	3087
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	16.3	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.45</b>	9.31	10.49
Visc @ 100°C	cSt	ASTM D445	15.6	<b>13.2</b>	▲ 12.1	13.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0003902 **Received** : 13 May 2024  
**Lab Number** : 06177884 **Tested** : 16 May 2024  
**Unique Number** : 11029210 **Diagnosed** : 16 May 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: PercentFuel )

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Certificate L2367  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)