

#### NORMAL WEAR CONTAMINATION **ABNORMAL FLUID CONDITION ABNORMAL**



RECOMMENDATION

#### Machine Id 124-0806 nonen **Diesel Engine**

# PETRO CANADA DURON HP 15W40 (--- GAL)

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

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All component wear rates are normal.

### **CONTAMINATION**

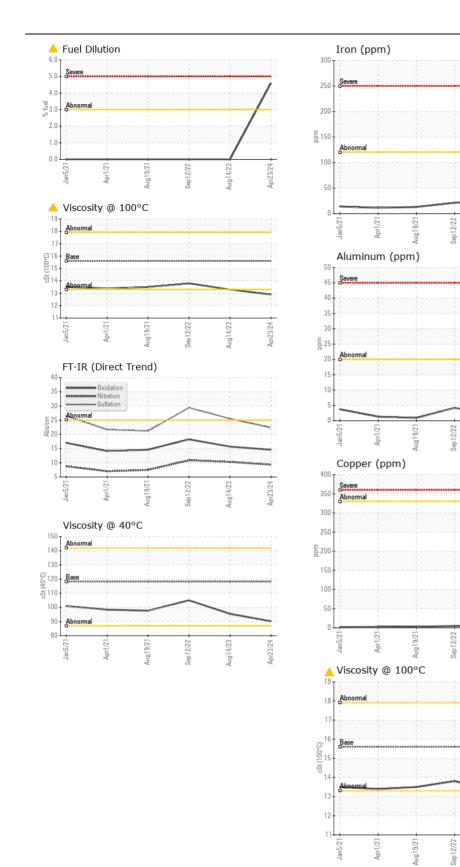
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

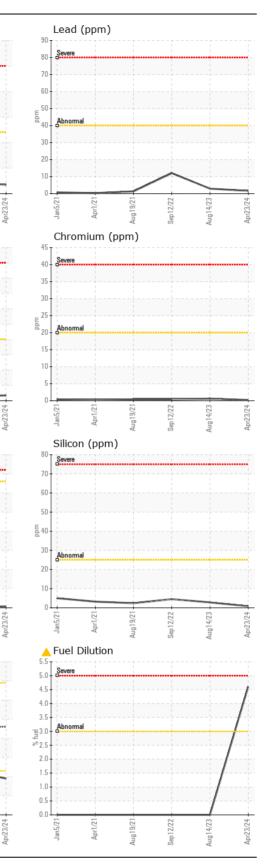
## **FLUID CONDITION**

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0073060	PC0071392	PC0061075
Sample Date		Client Info		23 Apr 2024	14 Aug 2023	12 Sep 2022
Machine Age	hrs	Client Info		26797	373584	24259
Oil Age	hrs	Client Info		1000	600	500
Filter Age	hrs	Client Info		1000	600	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
 Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>120	17	24	21
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	4
Lead	ppm	ASTM D5185(m)	>40	2	3	12
Copper	ppm	ASTM D5185(m)	>330	3	4	5
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
 Silicon	ppm	ASTM D5185(m)	>25	<1	3	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel	%	ASTM D7593*	>3.0	<b>4</b> .6	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	2.3	2.7	3.1
Nitration	Abs/cm	ASTM D7624*	>20	9.3	10.3	10.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.4	25.5	29.4
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		2	2	1
Boron	ppm	ASTM D5185(m)	0	2	8	189
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	57	62	113
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	923	944	639
Calcium	ppm	ASTM D5185(m)	1070	994	1028	1495
Phosphorus	ppm	ASTM D5185(m)	1150	925	990	702
Zinc	ppm	ASTM D5185(m)	1270	1101	1119	765
Sulfur	ppm	ASTM D5185(m)	2060	2256	2328	1976
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.6	15.7	18.2
	-		118.2	00.0	95.4	105
Visc @ 40°C	cSt	ASTM D7279(m)	110.2	90.2	33.4	100
Visc @ 40°C Visc @ 100°C	cSt cSt	ASTM D7279(m) ASTM D7279(m)	15.6	90.2	13.3	13.8

138 Contact/Location: Doug Francis - LAVCLI





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Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : PC0073060 Received : 15 May 2024 Lab Number : 02635567 Tested : 16 May 2024 ISO 17025:2017 Accredited : 16 May 2024 - Wes Davis Unique Number : 5776720 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, 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.

LAVIS CONTRACTING

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