

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION ABNORMAL

Machine Id **08163** Component **Diesel Engine** Fluid **PETRO CANADA DURON UHP 5W40 (--- 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. The fluid was specified as PETRO CANADA DURON UHP 5W40, however, a fluid match indicates that this fluid is SAE 10W30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample. Please specify the component make and model with your next sample.

WEAR

Metal levels are typical for a new component breaking in.

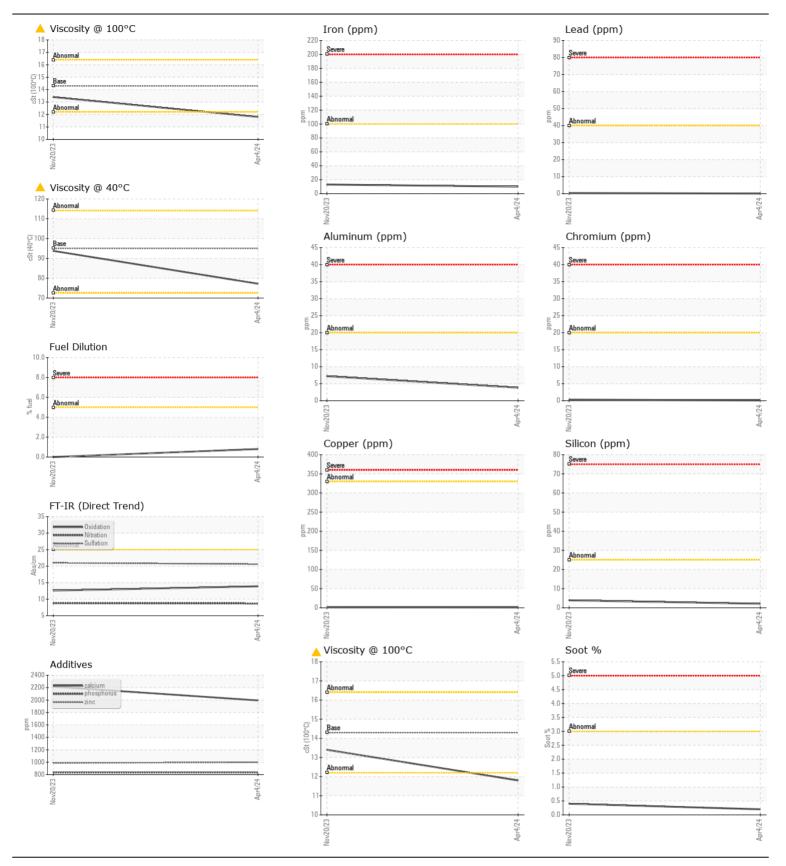
CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0082025	PC0078009	
Sample Date		Client Info		04 Apr 2024	20 Nov 2023	
Machine Age	hrs	Client Info		799	149	
Oil Age	hrs	Client Info		0	250	
Filter Age	hrs	Client Info		0	250	
Oil Changed		Client Info		Changed	Changed	
Filter Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	NORMAL	
Iron	ppm	ASTM D5185(m)	>100	10	13	
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	
Nickel	ppm	ASTM D5185(m)	>4	0	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)	>3	0	0	
Aluminum	ppm	ASTM D5185(m)	>20	4	7	
Lead	ppm	ASTM D5185(m)	>40	0	<1	
Copper	ppm	ASTM D5185(m)	>330	1	1	
Tin	ppm	ASTM D5185(m)	>15	0	<1	
Vanadium	ppm	ASTM D5185(m)		0	0	
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>25	2	4	
Potassium	ppm	ASTM D5185(m)	>20	2	3	
Fuel	%	ASTM D7593*	>5	0.8	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
Soot %	%	ASTM D7844*	>3	0.2	0.4	
Nitration	Abs/cm	ASTM D7624*	>20	8.7	8.8	
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	21.0	
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	VLITE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
0				•	0	
Sodium	ppm	ASTM D5185(m)	CE.	2	2	
Boron	ppm	ASTM D5185(m)	00	9	2	
Barium	ppm	ASTM D5185(m)	0 CE	0	0	
Molybdenum	ppm	ASTM D5185(m)	65	12	2	
Manganese	ppm	ASTM D5185(m)	0	0	0	
Magnesium	ppm	ASTM D5185(m)	1160	201	22	
Calcium	ppm	ASTM D5185(m)	820	1995	2216	
Phosphorus	ppm	ASTM D5185(m)	1160	836	835	
Zinc	ppm	ASTM D5185(m)	1260	998	987	
Sulfur	ppm	ASTM D5185(m)	3000	2798	3008	
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.9	12.6	
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	▲ 77.2	93.8	
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	▲ 11.8	13.4	
Viscosity Index (VI)	Scale	ASTM D2270*	169	147	143	

## **FLUID CONDITION**

Viscosity of sample indicates oil is within SAE 10W30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) + 286 - Shoring & Foundations CALA Sample No. 151 Ram Forest Rd, : PC0082025 Received : 12 Apr 2024 Lab Number : 02628362 Stouffville, ON Tested : 15 Apr 2024 ISO 17025:2017 Accredited CA L4A 2G8 Unique Number : 5761494 Diagnosed : 15 Apr 2024 - Kevin Marson Laboratory Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual) Contact: Shannon Abbott To discuss this sample report, contact Customer Service at 1-800-268-2131. sabbott@gipi.com Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (905)750-5900 F: Validity of results and interpretation are based on the sample and information as supplied.