

OIL ANALYSIS REPORT

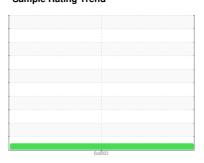
Sample Rating Trend

NORMAL



Machine Id 810057 Component **Diesel Engine**

PETRO CANADA DURO





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the

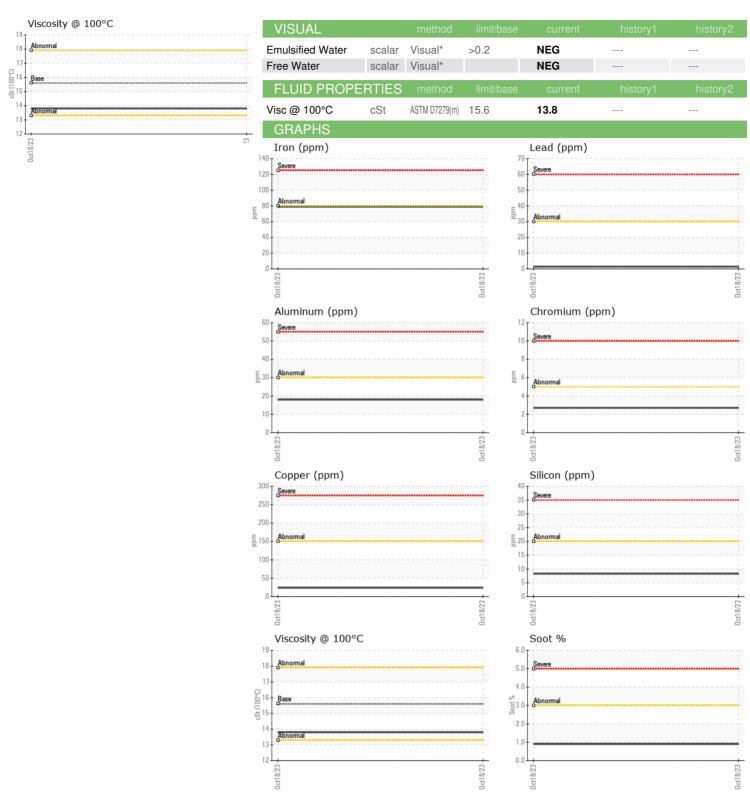
Fluid Condition

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

N SAE 15W40 (- GAL)			Oct2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Client Info		GFL0088349		
Sample Number		Client Info		18 Oct 2023		
Sample Date	lawa					
Machine Age	hrs	Client Info		2065		
Oil Obarrad	hrs	Client Info		600 Chammad		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>80	79		
Chromium	ppm	ASTM D5185(m)	>5	3		
Nickel	ppm	ASTM D5185(m)	>2	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	<1		
Aluminum	ppm	ASTM D5185(m)	>30	18		
Lead	ppm	ASTM D5185(m)	>30	1		
Copper	ppm	ASTM D5185(m)	>150	24		
Tin	ppm	ASTM D5185(m)	>5	<1		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	1	5		
Barium	ppm	ASTM D5185(m)	1	<1		
Molybdenum	ppm	ASTM D5185(m)	60	67		
Manganese	ppm	ASTM D5185(m)	1	<1		
Magnesium	ppm	ASTM D5185(m)	1010	1005		
Calcium	ppm	ASTM D5185(m)	1070	1167		
Phosphorus	ppm	ASTM D5185(m)	1150	940		
Zinc	ppm	ASTM D5185(m)	1270			
Sulfur		MOTIVI DOTOGITITI	12/0	1244		
	mag	, ,				
Lithium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	2060	1244 2133 <1		
	ppm	ASTM D5185(m)		2133		
Lithium	ppm	ASTM D5185(m) ASTM D5185(m)	2060	2133 <1		
Lithium CONTAMINAN	ppm TS	ASTM D5185(m) ASTM D5185(m) method	2060 limit/base	2133 <1 current	history1	history2
Lithium CONTAMINAN Silicon	ppm TS ppm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	2060 limit/base	2133 <1 current 8	history1	history2
Lithium CONTAMINAN Silicon Sodium	ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	2060 limit/base >20	2133 <1 current 8 2	history1	history2
Lithium CONTAMINAN Silicon Sodium Potassium	ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	2060 limit/base >20 >20	2133 <1 current 8 2 37	 history1 	 history2
CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm TS ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D7844*	limit/base >20 >20 limit/base	2133 <1 current 8 2 37 current 0.9	history1	history2 history2 history2
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm TS ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	2060 limit/base >20 >20 limit/base >3	2133 <1 current 8 2 37 current	history1 history1 history1	history2 history2 history2
Lithium CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm TS ppm ppm ppm ppm Abs/cm Abs/.1mm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D7844* ASTM D7624* ASTM D7415*	2060 limit/base >20 >20 limit/base >3 >20	2133 <1 current 8 2 37 current 0.9 11.6	history1 history1 history1	history2 history2 history2



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CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5668413

: 02591334

: GFL0088349

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 24 Oct 2023 : 24 Oct 2023 Diagnosed Diagnostician : Wes Davis

Test Package : MOB 1 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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