



OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Area
[817928]
Machine Id
188054

Component
Diesel Engine
Fluid

PETRO CANADA DURON SHP 10W30 (--- GAL)



DIAGNOSIS

Recommendation

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

Wear

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		CU0021205	---	---
Sample Date	Client Info		18 Sep 2023	---	---
Machine Age	hrs	Client Info	33196	---	---
Oil Age	hrs	Client Info	1768	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	7	---	---
Chromium	ppm	ASTM D5185(m)	>20	0	---	---
Nickel	ppm	ASTM D5185(m)	>2	0	---	---
Titanium	ppm	ASTM D5185(m)	>2	<1	---	---
Silver	ppm	ASTM D5185(m)	>2	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>20	2	---	---
Lead	ppm	ASTM D5185(m)	>40	0	---	---
Copper	ppm	ASTM D5185(m)	>330	2	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
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)	2	39	---	---
Barium	ppm	ASTM D5185(m)	0	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	50	44	---	---
Manganese	ppm	ASTM D5185(m)	0	0	---	---
Magnesium	ppm	ASTM D5185(m)	950	263	---	---
Calcium	ppm	ASTM D5185(m)	1050	994	---	---
Phosphorus	ppm	ASTM D5185(m)	995	589	---	---
Zinc	ppm	ASTM D5185(m)	1180	675	---	---
Sulfur	ppm	ASTM D5185(m)	2600	2083	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS

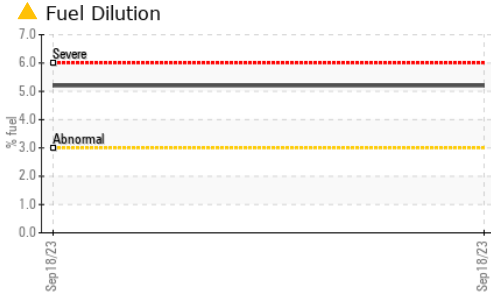
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	8	---	---
Sodium	ppm	ASTM D5185(m)		23	---	---
Potassium	ppm	ASTM D5185(m)	>20	4	---	---
Fuel	%	ASTM D7593*	>3.0	▲ 5.2	---	---

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	9.8	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.5	---	---



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FLUID DEGRADATION	method	limit/base	current	history1	history2
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Oxidation	Abs./1mm	ASTM D7414*	>25	14.6	---	---
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VISUAL	method	limit/base	current	history1	history2
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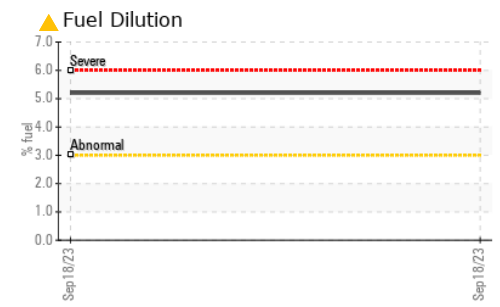
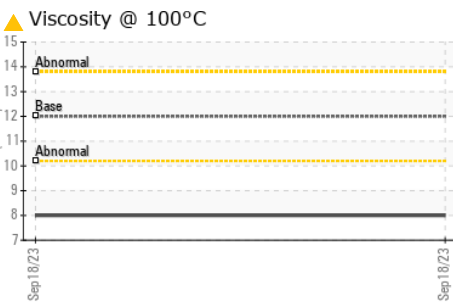
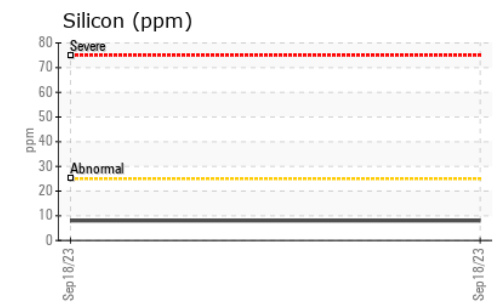
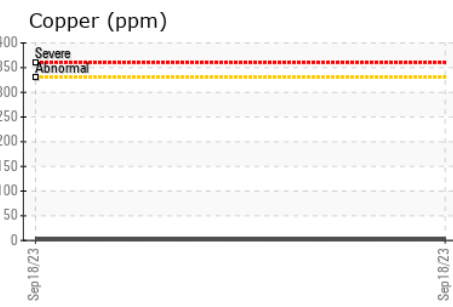
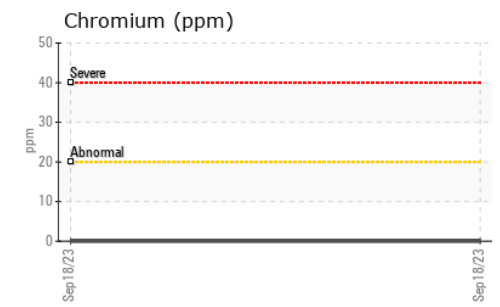
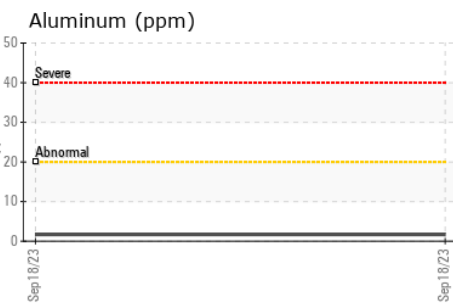
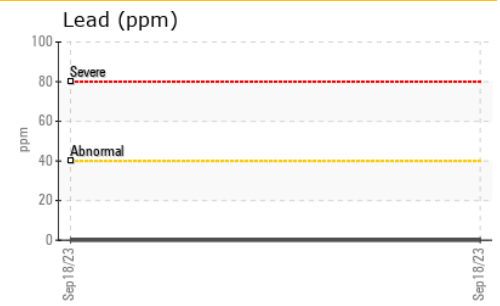
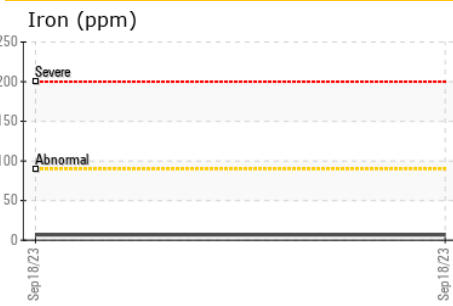
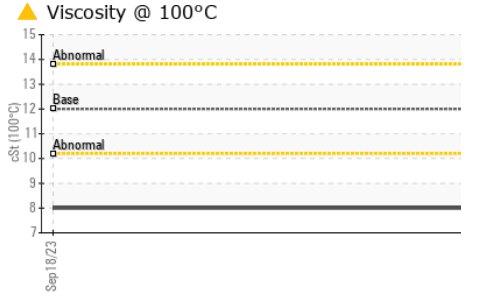
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
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Free Water	scalar	Visual*		NEG	---	---
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FLUID PROPERTIES	method	limit/base	current	history1	history2
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Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 8	---	---
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0021205 **Received** : 26 Oct 2023
Lab Number : **02592032** **Diagnosed** : 27 Oct 2023
Unique Number : 5669111 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

CITY OF TORONTO
 120 DISCO ROAD
 TORONTO, ON
 CA M9W 1M4
 Contact: DAVE C

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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