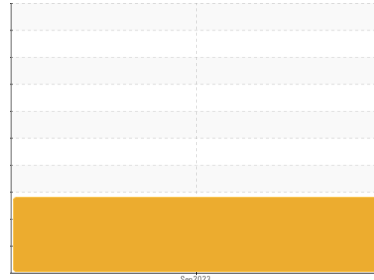


Area
SHARP BUS LINES
Machine Id
IC 1121
Component
Diesel Engine
Fluid
PETRO CANADA 15W40 (20 LTR)



DIAGNOSIS

Recommendation
We advise that you check the fuel injection system. 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 high 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	PC0081532	---	---
Sample Date	Client Info	22 Sep 2023	---	---
Machine Age	kms Client Info	217010	---	---
Oil Age	kms Client Info	4234	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		SEVERE	---	---

CONTAMINATION method limit/base current history1 history2

Glycol	WC Method	NEG	---	---
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WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>100	47	---	---
Chromium	ppm	ASTM D5185(m)	>20	1	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>20	8	---	---
Lead	ppm	ASTM D5185(m)	>40	4	---	---
Copper	ppm	ASTM D5185(m)	>330	2	---	---
Tin	ppm	ASTM D5185(m)	>15	<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)		10	---	---
Barium	ppm	ASTM D5185(m)		<1	---	---
Molybdenum	ppm	ASTM D5185(m)		55	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		779	---	---
Calcium	ppm	ASTM D5185(m)		887	---	---
Phosphorus	ppm	ASTM D5185(m)		831	---	---
Zinc	ppm	ASTM D5185(m)		977	---	---
Sulfur	ppm	ASTM D5185(m)		2068	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>25	5	---	---
Sodium	ppm	ASTM D5185(m)		4	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel	%	ASTM D7593*	>5	11.5	---	---

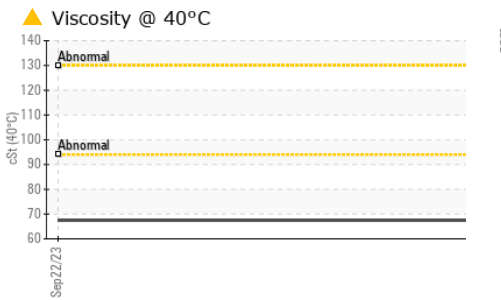
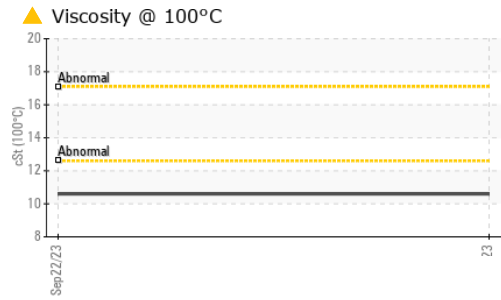
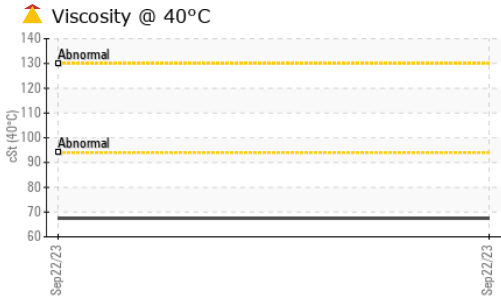
INFRA-RED method limit/base current history1 history2

Soot %	%	ASTM D7844*	>3	0.9	---	---
Nitration	Abs/cm	ASTM D7624*	>20	12.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.8	---	---

FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs/.1mm	ASTM D7414*	>25	24.2	---	---
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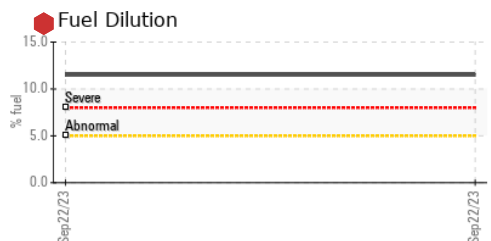
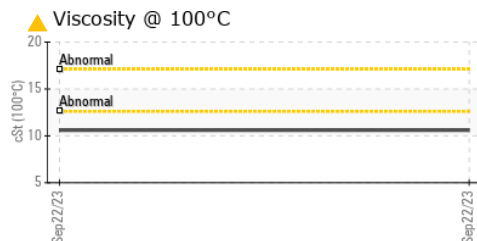
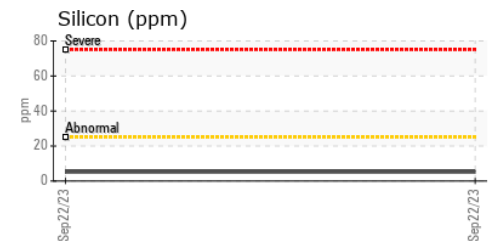
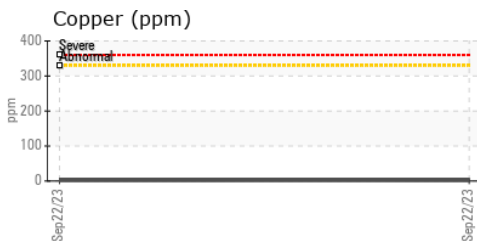
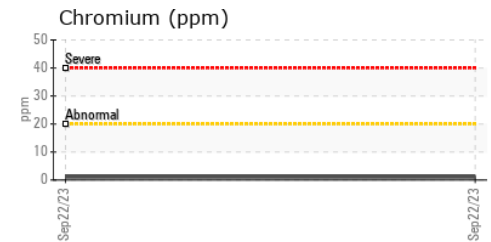
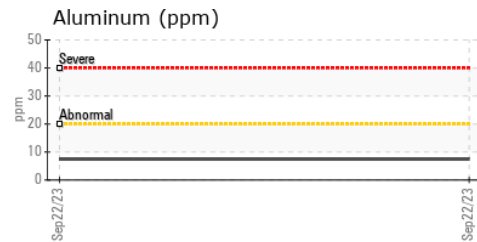
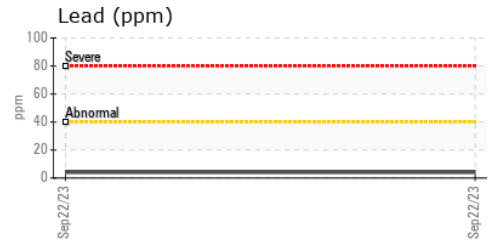
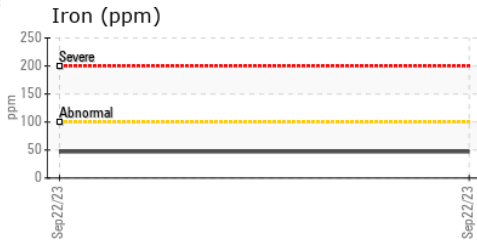
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	VLITE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	▲ 67.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	▲ 10.6	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	145	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0081532 **Received** : 18 Oct 2023
Lab Number : 02589867 **Diagnosed** : 19 Oct 2023
Unique Number : 5658933 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual)

ICSB - Brantford
 567 Oak Park Rd.
 Brantford, ON
 CA N3T 5L8
 Contact: Doug Hall
 Djhall@sharpbus.com
 T: (519)751-3434
 F:

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.