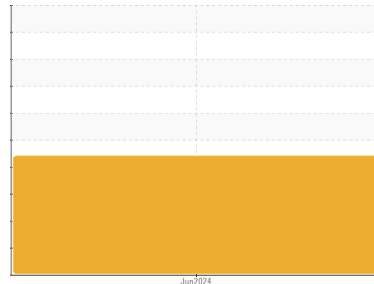




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
[97623013]
 Machine Id
Hatz 11561731
 Component
Front Diesel Engine
 Fluid
SAE 5W40 (2 LTR)

DIAGNOSIS

▲ Recommendation

We advise that you check the fuel injection system. We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. (Customer Sample Comment: Oil Level High)

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of fuel present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The water content is negligible. 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		WC0866078	---	---
Sample Date	Client Info		13 Jun 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	71	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	19	---
Chromium	ppm	ASTM D5185(m)	>20	1	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---
Titanium	ppm	ASTM D5185(m)		<1	---
Silver	ppm	ASTM D5185(m)	>3	0	---
Aluminum	ppm	ASTM D5185(m)	>20	9	---
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)		207	---
Barium	ppm	ASTM D5185(m)		<1	---
Molybdenum	ppm	ASTM D5185(m)		23	---
Manganese	ppm	ASTM D5185(m)		2	---
Magnesium	ppm	ASTM D5185(m)		7	---
Calcium	ppm	ASTM D5185(m)		1932	---
Phosphorus	ppm	ASTM D5185(m)		518	---
Zinc	ppm	ASTM D5185(m)		575	---
Sulfur	ppm	ASTM D5185(m)		2430	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	▲ 37	---
Sodium	ppm	ASTM D5185(m)		2	---
Potassium	ppm	ASTM D5185(m)	>20	1	---
Fuel	%	ASTM D7593*	>5	▲ 55.2	---
Water	%	ASTM D6304*	>0.2	0.068	---
ppm Water	ppm	ASTM D6304*	>2000	685	---
Glycol	%	ASTM D7922*		0.0	---

INFRA-RED

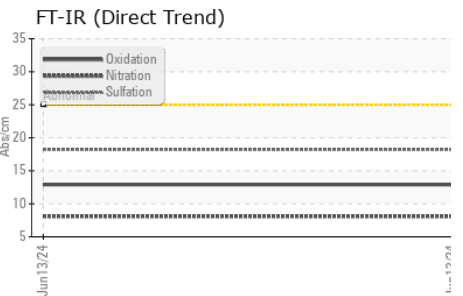
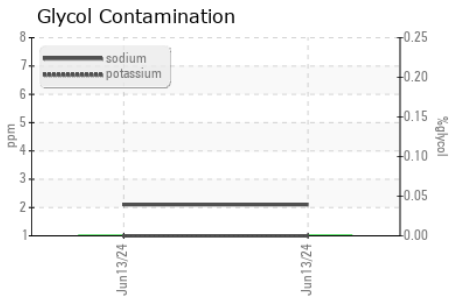
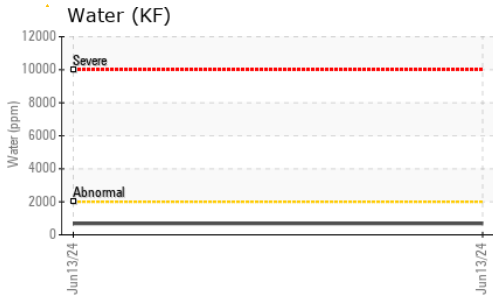
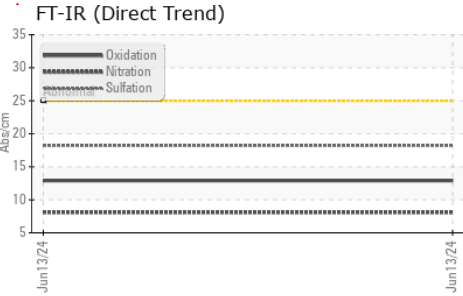
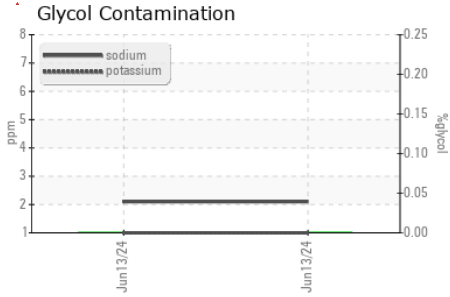
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	---
Nitration	Abs/cm	ASTM D7624*	>20	8.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.2	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.9	---



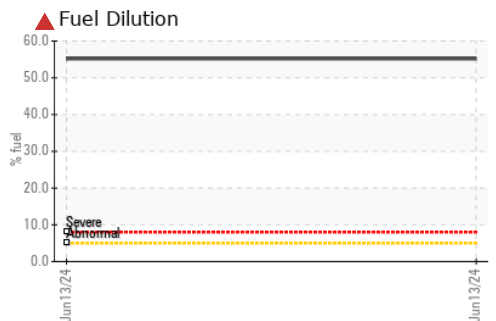
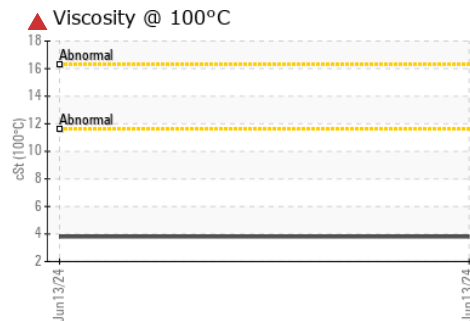
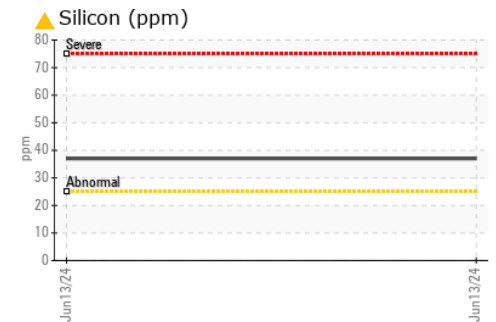
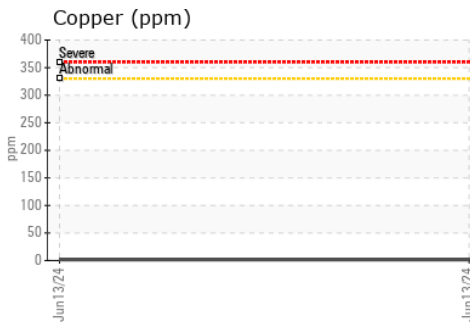
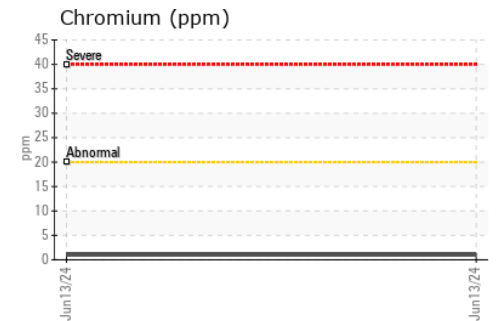
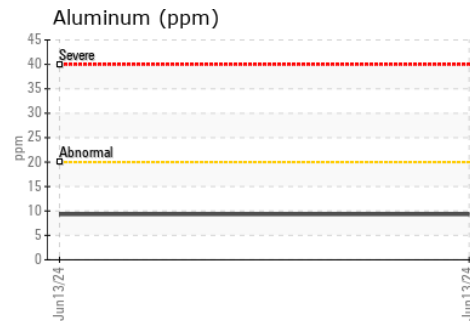
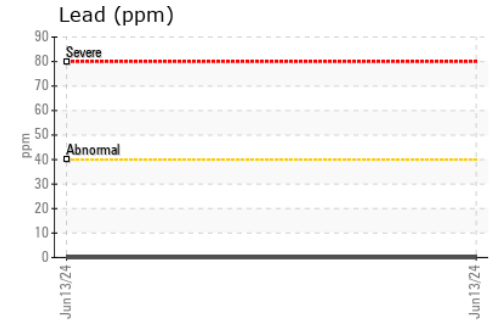
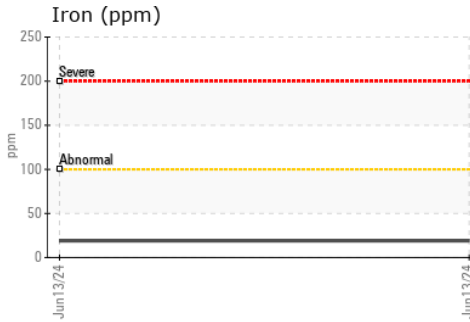
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	.2%	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	▲ 3.8	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0866078
Lab Number : 02642284
Unique Number : 5799823
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KF, PercentFuel)

BPT COMPONENTS & PARTS INC.
 1790 BONHILL ROAD
 MISSISSAUGA, ON
 CA L5T 1C8
 Contact: Mason Burgess
 mason@bpt.on.ca
 T: (905)670-7667
 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.