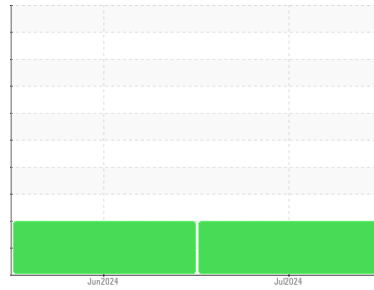


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
PU320
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

- Recommendation**
 No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
 All component wear rates are normal.
- Contamination**
 Elemental level of silicon (Si) above normal.
- Fluid Condition**
 The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0122844	PCA0122758	---
Sample Date	Client Info		09 Jul 2024	05 Jun 2024	---
Machine Age	hrs	Client Info	4500	2300	---
Oil Age	hrs	Client Info	4500	2300	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	8	20	---
Chromium	ppm	ASTM D5185m >20	<1	<1	---
Nickel	ppm	ASTM D5185m >4	<1	0	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m >3	<1	0	---
Aluminum	ppm	ASTM D5185m >20	3	5	---
Lead	ppm	ASTM D5185m >40	<1	0	---
Copper	ppm	ASTM D5185m >330	9	38	---
Tin	ppm	ASTM D5185m >15	<1	<1	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	<1	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	139	155	---
Barium	ppm	ASTM D5185m 0	0	<1	---
Molybdenum	ppm	ASTM D5185m 60	91	144	---
Manganese	ppm	ASTM D5185m 0	1	3	---
Magnesium	ppm	ASTM D5185m 1010	558	378	---
Calcium	ppm	ASTM D5185m 1070	1141	1303	---
Phosphorus	ppm	ASTM D5185m 1150	737	672	---
Zinc	ppm	ASTM D5185m 1270	872	772	---
Sulfur	ppm	ASTM D5185m 2060	2920	3029	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	▲ 26	▲ 69	---
Sodium	ppm	ASTM D5185m	3	6	---
Potassium	ppm	ASTM D5185m >20	3	6	---
Fuel	%	ASTM D3524 >5	<1.0	1.0	---

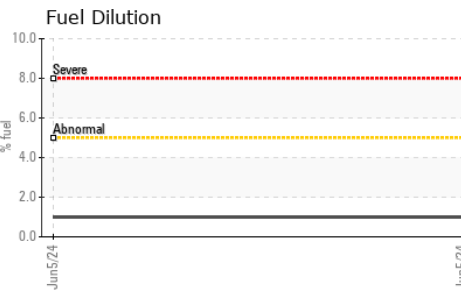
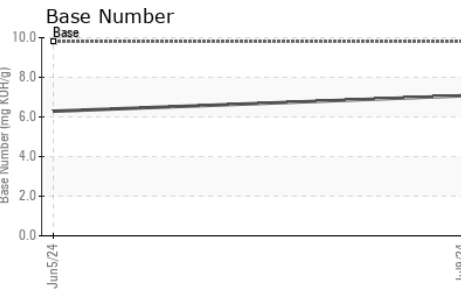
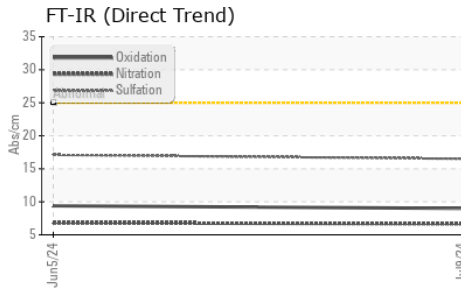
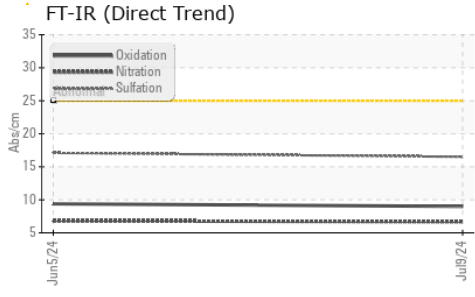
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0	0.1	---
Nitration	Abs/cm	*ASTM D7624 >20	6.7	6.8	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	16.5	17.1	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	9.0	9.4	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	7.07	6.29	---

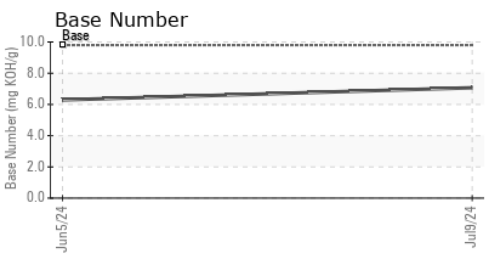
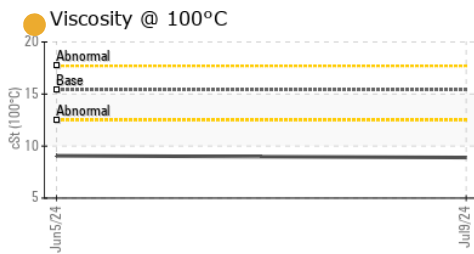
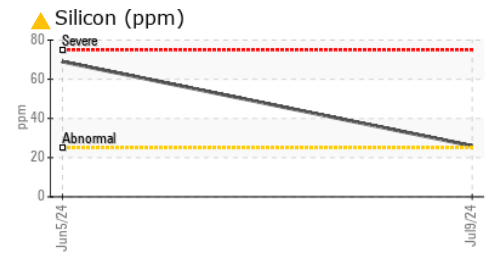
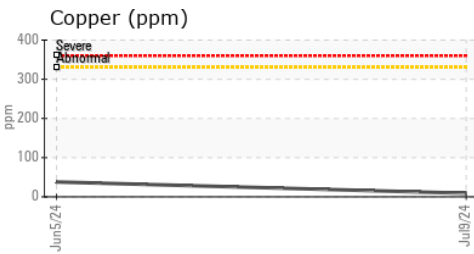
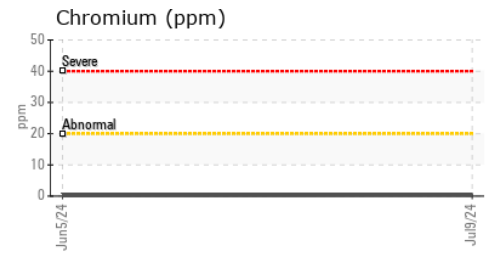
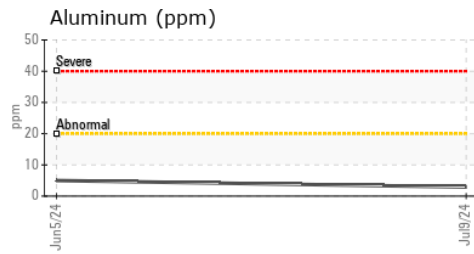
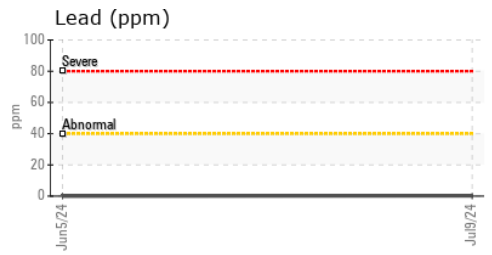
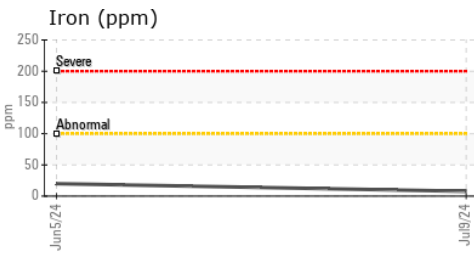
OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
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 @ 100°C	cSt	ASTM D445	15.4	8.9	9.07

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122844 **Received** : 11 Jul 2024
Lab Number : 06233423 **Tested** : 12 Jul 2024
Unique Number : 11116916 **Diagnosed** : 12 Jul 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests : FuelDilution)

G LOPES CONSTRUCTION
 565 WINTHROP ST
 TAUNTON, MA
 US 02780
 Contact: BUTCH MCGRATH
 bmcgrath@glopes.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)