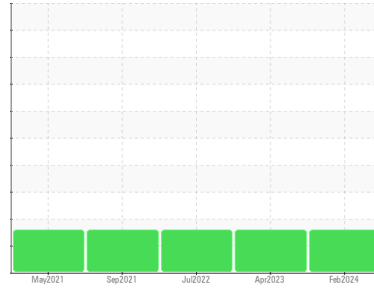


OIL ANALYSIS REPORT



Area
G.LOPES CONSTRUCTION INC./Off-Road
 Machine Id
E-691
 Component
Hydraulic System
 Fluid
PETRO CANADA DURATRAN (--- GAL)

Sample Rating Trend



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. The amount and size of particulates present in the system are acceptable.

Fluid Condition
 The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0018788	PCA0083064	PCA0066514
Sample Date	Client Info	07 Feb 2024	05 Apr 2023	05 Jul 2022
Machine Age	hrs	7103	6745	6419
Oil Age	hrs	6176	6144	6176
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	6	4	5
Chromium	ppm ASTM D5185m >10	2	<1	1
Nickel	ppm ASTM D5185m >10	0	0	0
Titanium	ppm ASTM D5185m	0	0	<1
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >10	<1	2	1
Lead	ppm ASTM D5185m >10	0	0	0
Copper	ppm ASTM D5185m >75	5	4	3
Tin	ppm ASTM D5185m >10	0	0	0
Antimony	ppm ASTM D5185m	---	---	---
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 110	66	70	68
Barium	ppm ASTM D5185m 0.0	<1	0	0
Molybdenum	ppm ASTM D5185m 0.0	8	8	9
Manganese	ppm ASTM D5185m 1	<1	<1	<1
Magnesium	ppm ASTM D5185m 13	47	53	49
Calcium	ppm ASTM D5185m 3610	1854	1770	1905
Phosphorus	ppm ASTM D5185m 1192	730	694	698
Zinc	ppm ASTM D5185m 1455	874	823	852
Sulfur	ppm ASTM D5185m 2641	2344	2246	2770

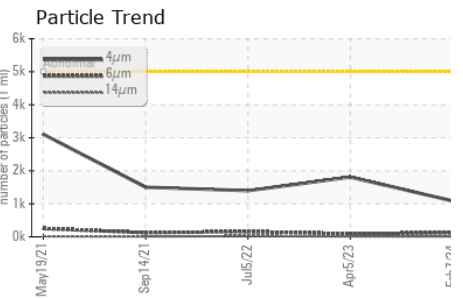
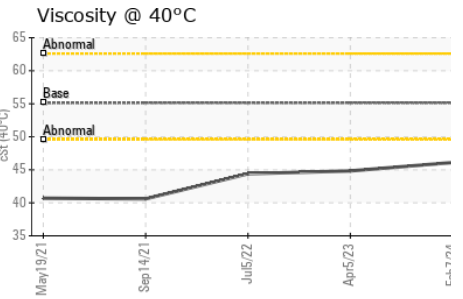
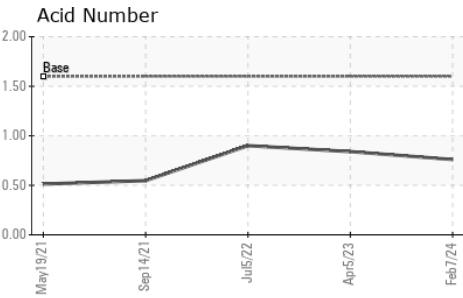
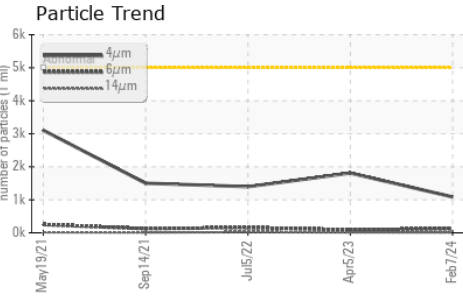
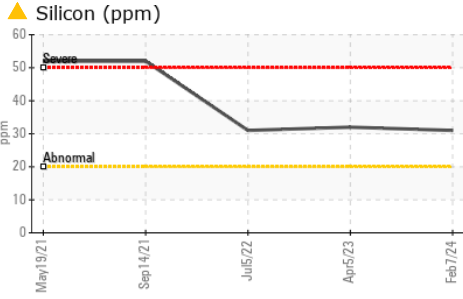
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	▲ 31	▲ 32	▲ 31
Sodium	ppm ASTM D5185m	6	6	6
Potassium	ppm ASTM D5185m >20	0	0	<1

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	1086	1810	1396
Particles >6µm	ASTM D7647 >1300	124	88	156
Particles >14µm	ASTM D7647 >160	10	13	20
Particles >21µm	ASTM D7647 >40	3	6	6
Particles >38µm	ASTM D7647 >10	0	3	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	17/14/10	18/14/11	18/14/11

OIL ANALYSIS REPORT

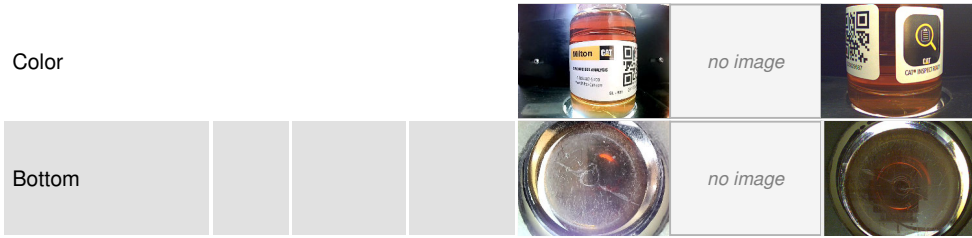


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.6	0.76	0.84	0.90

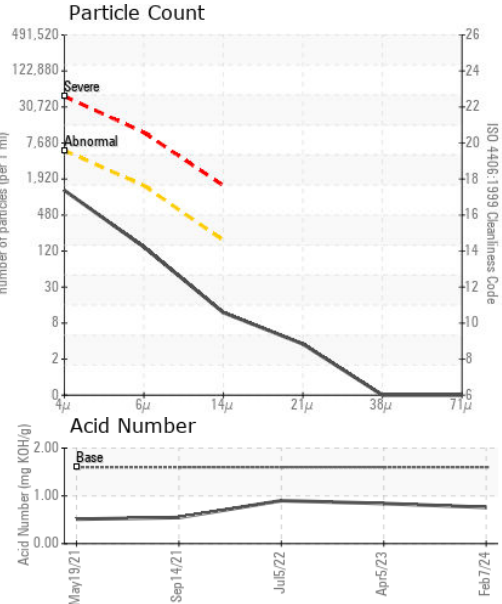
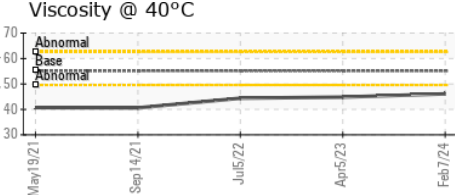
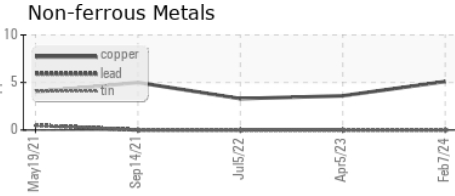
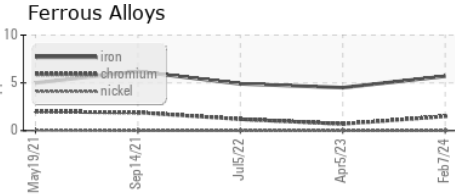
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	55.14	46.1	44.83	44.4

SAMPLE IMAGES



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0018788
Lab Number : 06084766
Unique Number : 10872211
Test Package : MOB 2

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)