

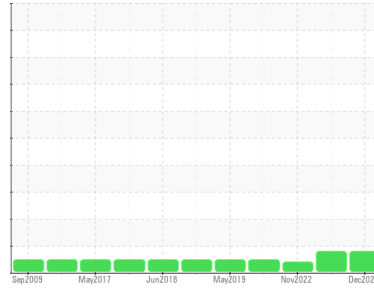
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
G.LOPES CONSTRUCTION INC./Off-Road
Machine Id
L14
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (--- GAL)



DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0109719	PCA0083406	PCA0083199
Sample Date	Client Info			05 Dec 2023	06 Dec 2022	07 Nov 2022
Machine Age	hrs	Client Info		37180	35953	35531
Oil Age	hrs	Client Info		13497	13628	13206
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	8	9	6
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	2	3	2
Lead	ppm	ASTM D5185m	>10	3	4	2
Copper	ppm	ASTM D5185m	>75	4	5	2
Tin	ppm	ASTM D5185m	>10	<1	<1	2
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1

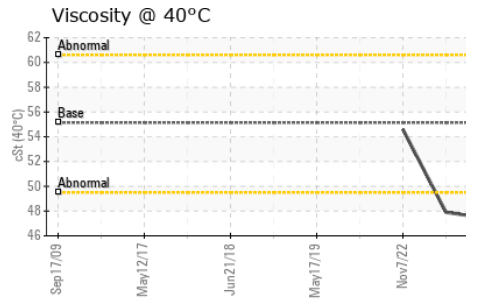
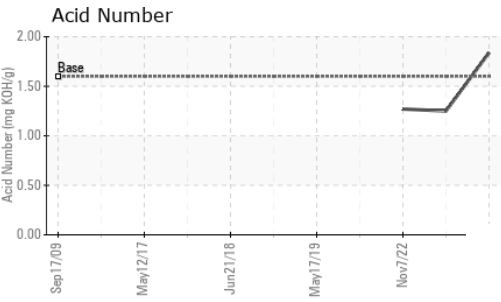
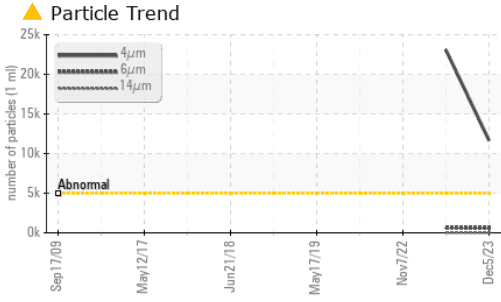
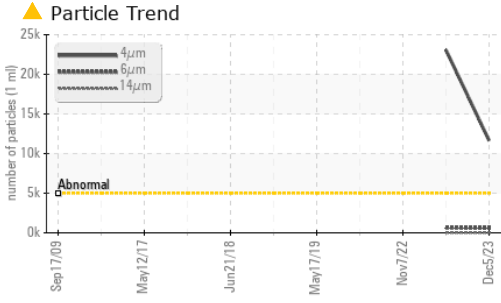
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	110	78	103	66
Barium	ppm	ASTM D5185m	0.0	0	0	1
Molybdenum	ppm	ASTM D5185m	0.0	5	6	5
Manganese	ppm	ASTM D5185m	1	0	<1	<1
Magnesium	ppm	ASTM D5185m	13	55	60	62
Calcium	ppm	ASTM D5185m	3610	2838	3214	2744
Phosphorus	ppm	ASTM D5185m	1192	1035	1045	963
Zinc	ppm	ASTM D5185m	1455	1262	1327	1210
Sulfur	ppm	ASTM D5185m	2641	5537	6705	4722

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	9	10	9
Sodium	ppm	ASTM D5185m		<1	4	2
Potassium	ppm	ASTM D5185m	>20	2	0	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 11648	▲ 23063	---	
Particles >6µm	ASTM D7647	>1300	591	622	---	
Particles >14µm	ASTM D7647	>160	22	22	---	
Particles >21µm	ASTM D7647	>40	6	6	---	
Particles >38µm	ASTM D7647	>10	0	1	---	
Particles >71µm	ASTM D7647	>3	0	1	---	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/16/12	▲ 22/16/12	---	

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.6	1.84	1.25	1.27

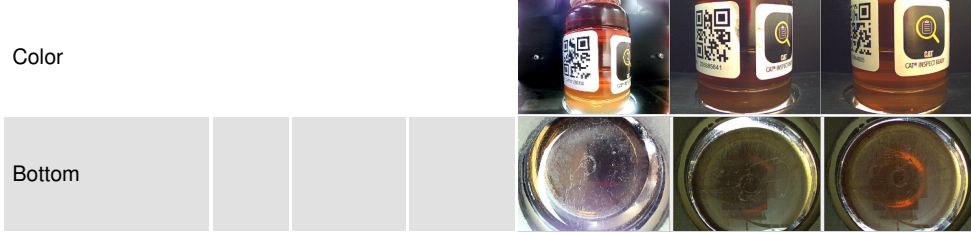
OIL ANALYSIS REPORT



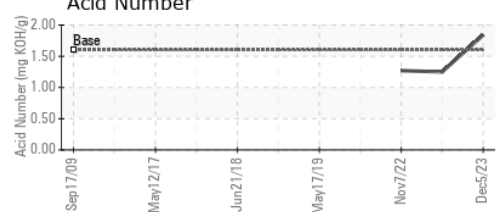
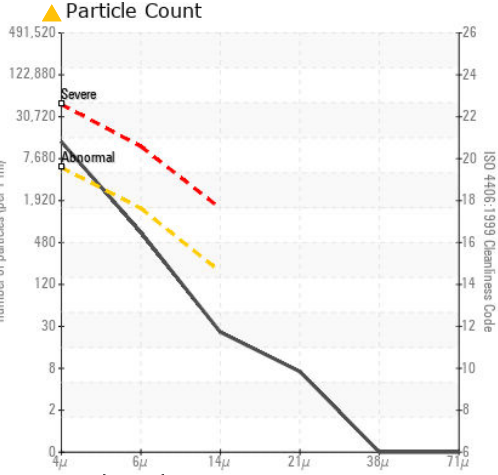
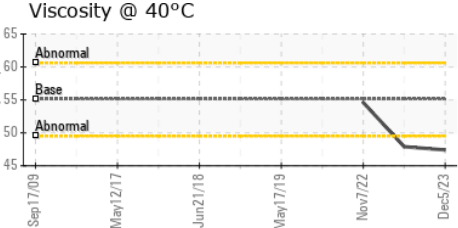
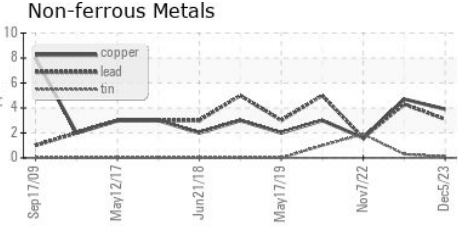
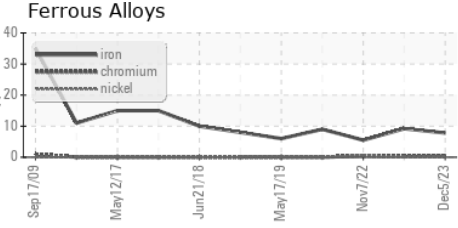
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	55.14	47.4	47.9

SAMPLE IMAGES method limit/base current history1 history2



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109719 **Received** : 07 Dec 2023
Lab Number : 06027679 **Diagnosed** : 08 Dec 2023
Unique Number : 10777470 **Diagnostician** : Wes Davis
Test Package : MOB 2

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

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)