

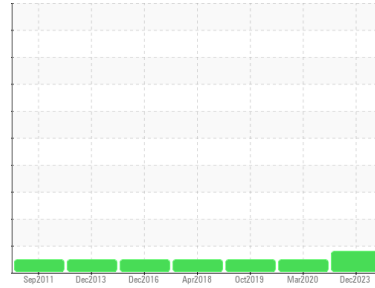
# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area  
**G.LOPES CONSTRUCTION INC./Off-Road**  
Machine Id  
**L34**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA DURATRAN (--- 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

There is a high amount of silt (particulates < 6 microns in size) present in the oil.

### 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		<b>PCA0109861</b>	PCA04160027	PCA88183049
Sample Date	Client Info		<b>20 Dec 2023</b>	30 Mar 2020	03 Oct 2019
Machine Age	hrs	Client Info	<b>32268</b>	28442	28075
Oil Age	hrs	Client Info	<b>21047</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

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

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>11</b>	10	10
Chromium	ppm	ASTM D5185m >10	<b>3</b>	2	3
Nickel	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	1	1
Lead	ppm	ASTM D5185m >10	<b>2</b>	1	1
Copper	ppm	ASTM D5185m >75	<b>7</b>	7	8
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	1	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 110	<b>90</b>	86	103
Barium	ppm	ASTM D5185m 0.0	<b>7</b>	0	0
Molybdenum	ppm	ASTM D5185m 0.0	<b>6</b>	7	6
Manganese	ppm	ASTM D5185m 1	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m 13	<b>69</b>	69	75
Calcium	ppm	ASTM D5185m 3610	<b>2997</b>	2913	3281
Phosphorus	ppm	ASTM D5185m 1192	<b>1081</b>	1055	1157
Zinc	ppm	ASTM D5185m 1455	<b>1279</b>	1205	1263
Sulfur	ppm	ASTM D5185m 2641	<b>5326</b>	---	---

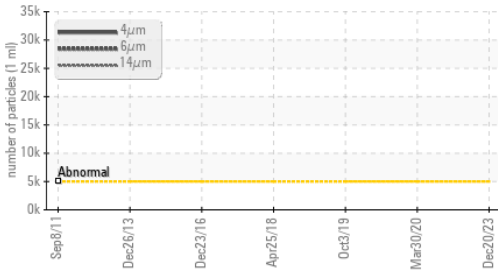
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>11</b>	14	15
Sodium	ppm	ASTM D5185m	<b>6</b>	6	7
Potassium	ppm	ASTM D5185m >20	<b>3</b>	3	2

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 30992</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>607</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>6</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>1</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 22/16/10</b>	---	---

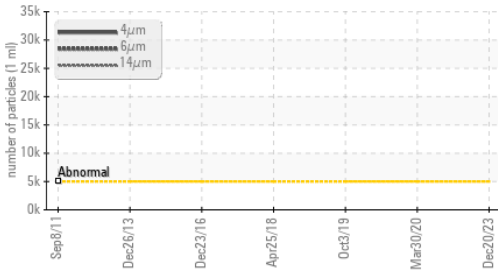
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.6	<b>0.964</b>	---	---

# OIL ANALYSIS REPORT

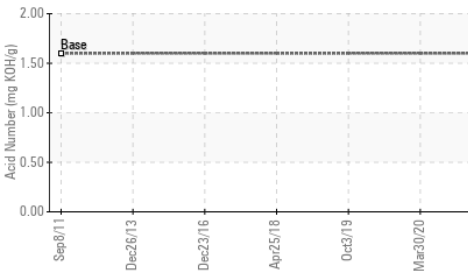
### ▲ Particle Trend



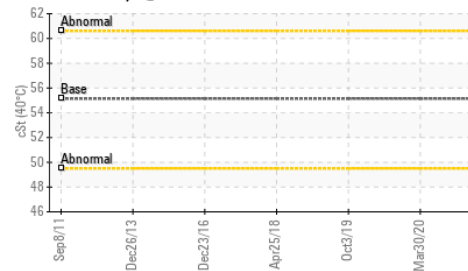
### ▲ Particle Trend



### Acid Number



### Viscosity @ 40°C



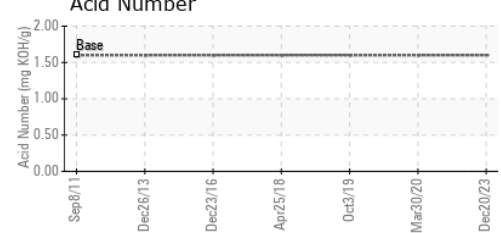
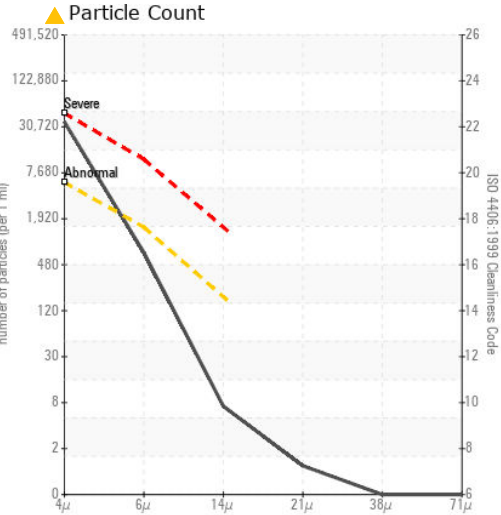
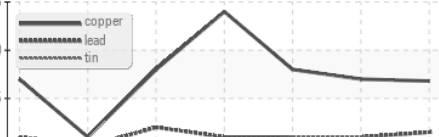
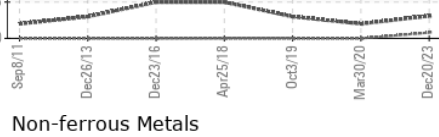
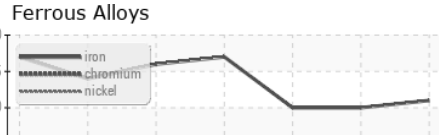
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	55.14	47.2	---

### SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				no image
Bottom				no image

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0109861 **Received** : 22 Dec 2023  
**Lab Number** : 06043160 **Diagnosed** : 27 Dec 2023  
**Unique Number** : 10803768 **Diagnostician** : Jonathan Hester  
**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)