

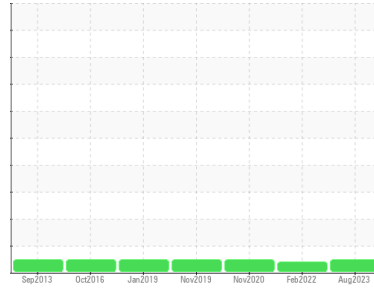
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
N.E.R./Off-Road
Machine Id
L86
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		PCA0098475	PCA0066486	PCA0018588
Sample Date	Client Info		07 Aug 2023	22 Feb 2022	23 Nov 2020
Machine Age	hrs	Client Info	106810	14990	13727
Oil Age	hrs	Client Info	13727	93083	0
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	10	18	16
Chromium	ppm	ASTM D5185m >10	1	2	2
Nickel	ppm	ASTM D5185m >10	<1	0	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >10	3	4	0
Lead	ppm	ASTM D5185m >10	3	<1	<1
Copper	ppm	ASTM D5185m >75	7	6	6
Tin	ppm	ASTM D5185m >10	1	<1	<1
Antimony	ppm	ASTM D5185m	---	0	0
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	72	88	91
Barium	ppm	ASTM D5185m 0.0	0	0	0
Molybdenum	ppm	ASTM D5185m 0.0	6	5	5
Manganese	ppm	ASTM D5185m 1	2	<1	<1
Magnesium	ppm	ASTM D5185m 13	52	71	67
Calcium	ppm	ASTM D5185m 3610	2132	2661	2459
Phosphorus	ppm	ASTM D5185m 1192	862	1076	1024
Zinc	ppm	ASTM D5185m 1455	1100	1286	1203
Sulfur	ppm	ASTM D5185m 2641	5139	5730	5436

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	11	12	9
Sodium	ppm	ASTM D5185m	11	9	8
Potassium	ppm	ASTM D5185m >20	5	0	4

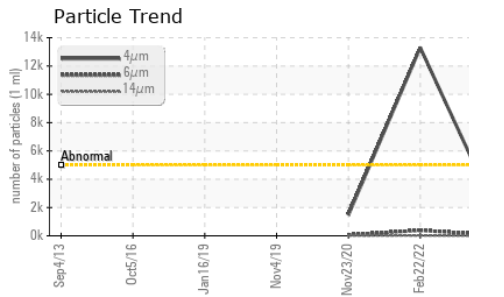
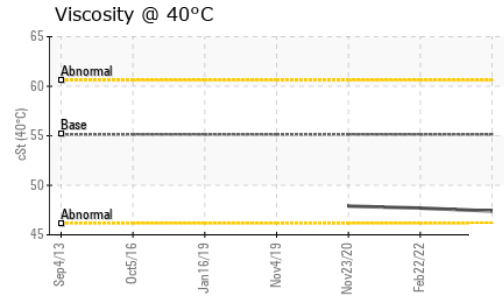
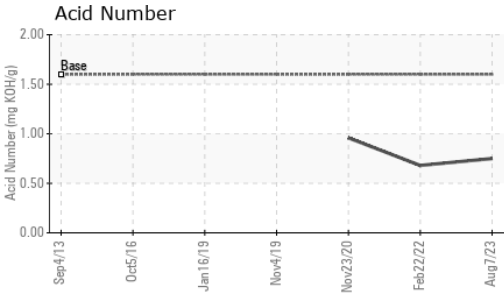
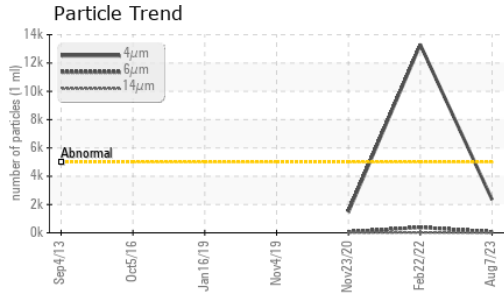
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	2341	▲ 13297	1472
Particles >6µm	ASTM D7647	>1300	66	381	66
Particles >14µm	ASTM D7647	>160	4	19	6
Particles >21µm	ASTM D7647	>40	1	7	2
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	18/13/9	▲ 21/16/11	18/13/10

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.6	0.75	0.68	0.959

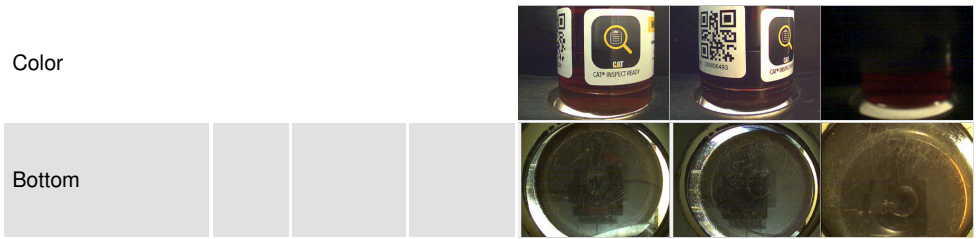
OIL ANALYSIS REPORT



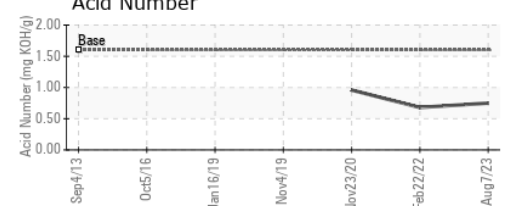
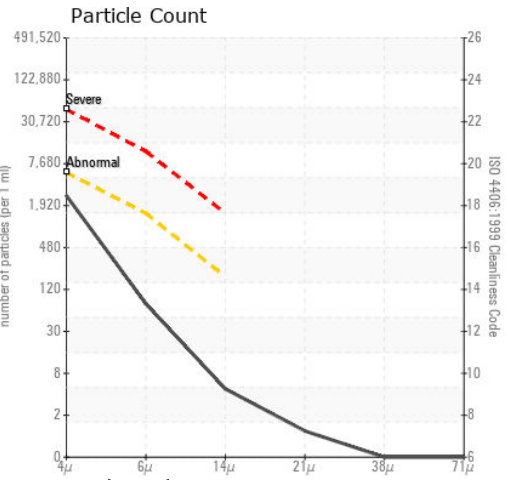
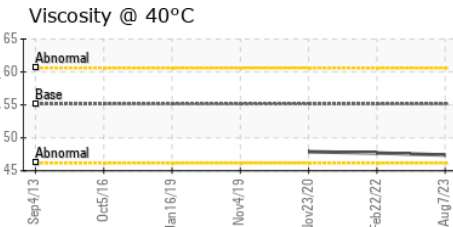
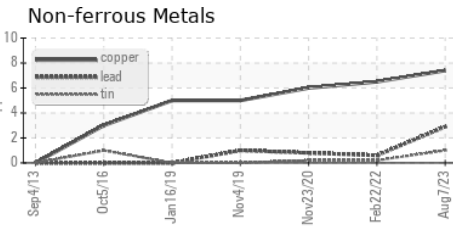
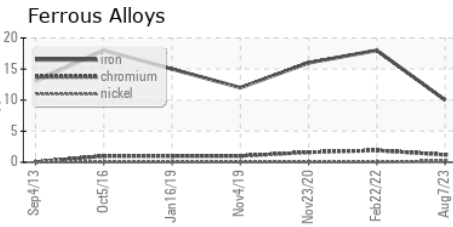
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0098475
Lab Number : 05920688
Unique Number : 10592602
Test Package : MOB 2

Received : 10 Aug 2023
Diagnosed : 11 Aug 2023
Diagnostician : Don Baldrige

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)