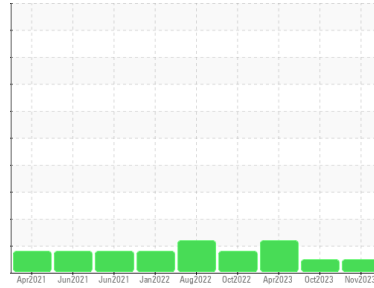


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Loader
Machine Id
SRF0110
Component
Transmission (Manual)
Fluid
PETRO CANADA PRODURO TO-4 SAE 30 (77 LTR)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of fluid. The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0074872	PC0051392	PC0067282
Sample Date	Client Info		21 Nov 2023	23 Oct 2023	02 Apr 2023
Machine Age	hrs	Client Info	28756	28318	25313
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	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 D5185(m) >200	13	15	4
Chromium	ppm	ASTM D5185(m) >5	0	<1	0
Nickel	ppm	ASTM D5185(m) >5	0	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m) >7	<1	<1	0
Aluminum	ppm	ASTM D5185(m) >25	2	5	<1
Lead	ppm	ASTM D5185(m) >45	2	3	0
Copper	ppm	ASTM D5185(m) >225	4	9	<1
Tin	ppm	ASTM D5185(m) >10	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

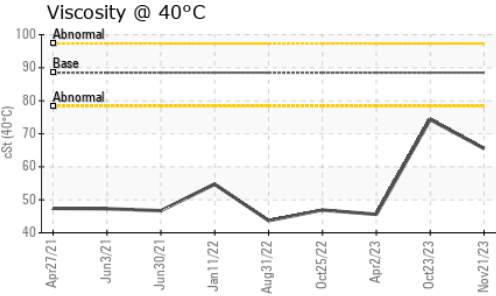
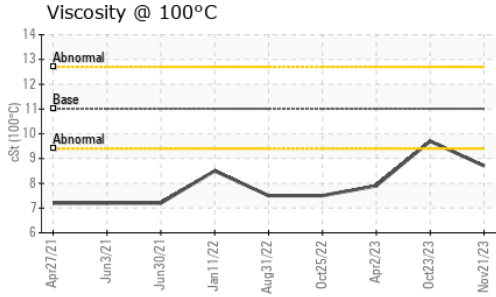
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 2	59	15	12
Barium	ppm	ASTM D5185(m) 0	<1	<1	0
Molybdenum	ppm	ASTM D5185(m) 0	2	6	21
Manganese	ppm	ASTM D5185(m) 9	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 1	18	26	306
Calcium	ppm	ASTM D5185(m) 3131	3238	3026	1972
Phosphorus	ppm	ASTM D5185(m) 1194	991	861	980
Zinc	ppm	ASTM D5185(m) 1281	1254	1085	1060
Sulfur	ppm	ASTM D5185(m) 3811	2654	2725	2574
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >125	6	8	3
Sodium	ppm	ASTM D5185(m)	2	2	1
Potassium	ppm	ASTM D5185(m) >20	<1	<1	<1

OIL ANALYSIS REPORT

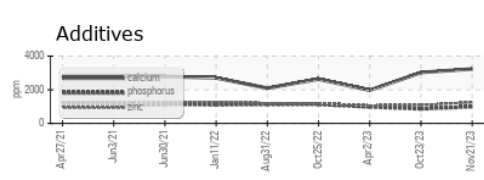
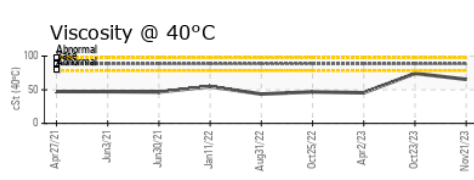
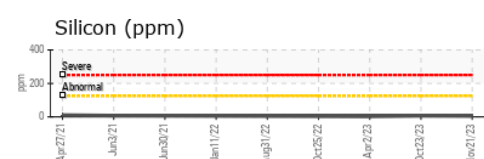
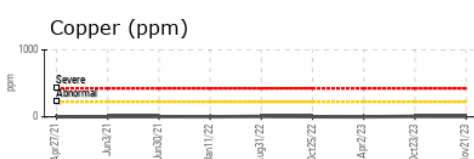
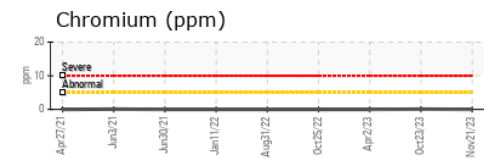
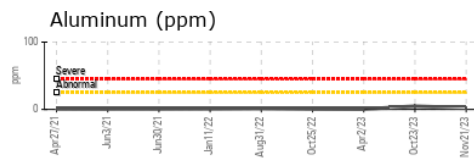
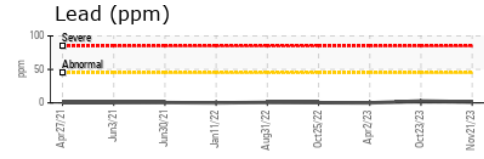
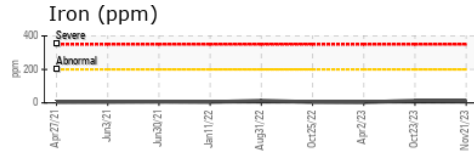


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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 D7279(m)	88.5	65.5	74.3 ▲ 45.6
Visc @ 100°C	cSt	ASTM D7279(m)	11.01	8.7	9.7 ▲ 7.9
Viscosity Index (VI)	Scale	ASTM D2270*	110	104	109 ▲ 144

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0074872 **Received** : 06 Dec 2023
Lab Number : 02601276 **Diagnosed** : 06 Dec 2023
Unique Number : 5694361 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV100, VI)

Lakeshore Gold Timmins West
 Timmins, ON
 CA
 Contact: Adam Koscielak
 adam.koscielak@HFSinclair.com
 T:
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.