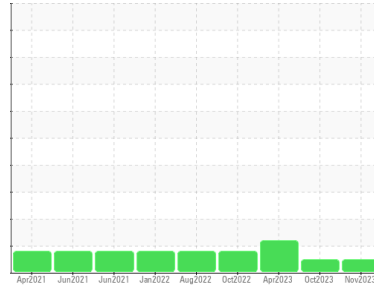


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Loader
Machine Id
SRF0110
Component
Hydraulic System
Fluid
PETRO CANADA PRODURO TO-4 SAE 30 (280 LTR)

DIAGNOSIS

Recommendation

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 oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0074865	PC0051385	PC0067289
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) >20	4	3	11
Chromium	ppm	ASTM D5185(m) >10	0	0	<1
Nickel	ppm	ASTM D5185(m) >10	0	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m)	<1	<1	0
Aluminum	ppm	ASTM D5185(m) >10	3	2	6
Lead	ppm	ASTM D5185(m) >10	<1	<1	0
Copper	ppm	ASTM D5185(m) >75	<1	<1	<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

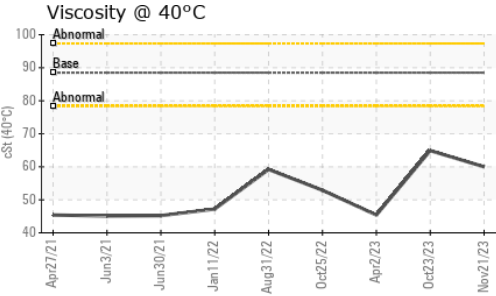
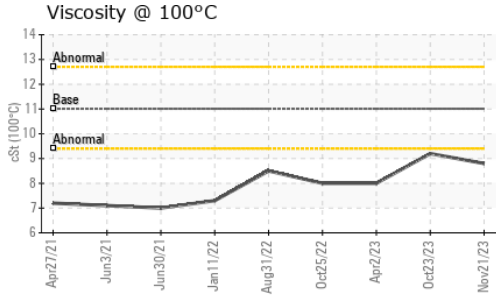
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 2	33	15	27
Barium	ppm	ASTM D5185(m) 0	<1	<1	0
Molybdenum	ppm	ASTM D5185(m) 0	3	4	34
Manganese	ppm	ASTM D5185(m) 9	0	0	<1
Magnesium	ppm	ASTM D5185(m) 1	32	36	533
Calcium	ppm	ASTM D5185(m) 3131	3171	2952	2020
Phosphorus	ppm	ASTM D5185(m) 1194	938	910	1105
Zinc	ppm	ASTM D5185(m) 1281	1142	1087	1213
Sulfur	ppm	ASTM D5185(m) 3811	2729	2734	2751
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	9	7	15
Sodium	ppm	ASTM D5185(m)	2	7	11
Potassium	ppm	ASTM D5185(m) >20	<1	2	2

OIL ANALYSIS REPORT

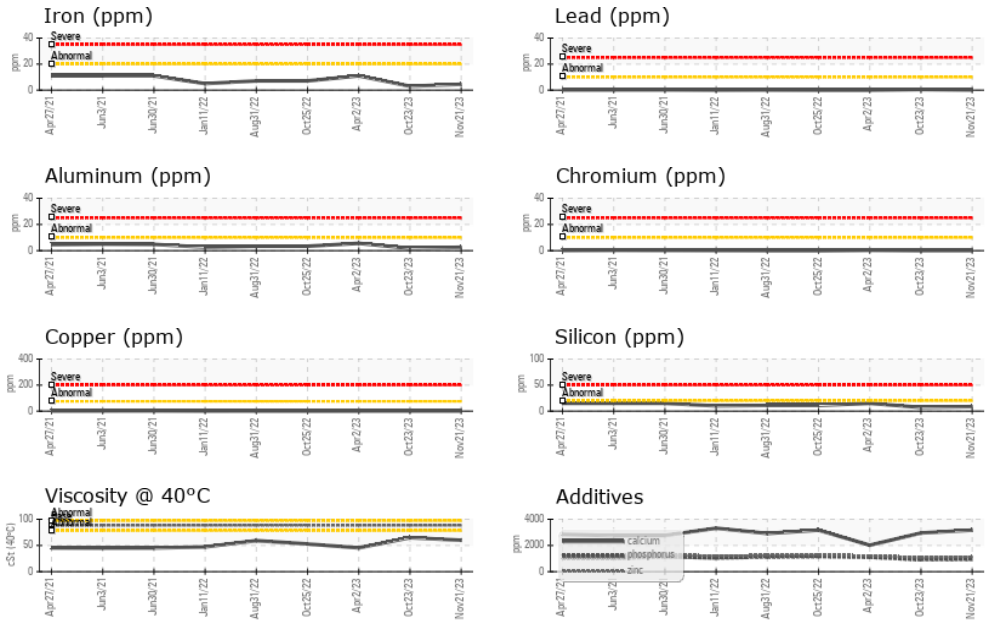


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	.2%
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	88.5	60.0	64.9 ▲ 45.4
Visc @ 100°C	cSt	ASTM D7279(m)	11.01	8.8	9.2 ▲ 8
Viscosity Index (VI)	Scale	ASTM D2270*	110	121	119 ▲ 149

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0074865 **Received** : 06 Dec 2023
Lab Number : 02601249 **Diagnosed** : 07 Dec 2023
Unique Number : 5694334 **Diagnostician** : Bill Quesnel
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.