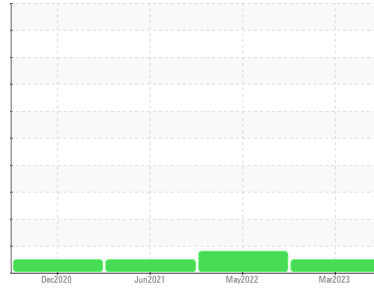


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
EBI DE COSTA RICA
Machine Id
CATERPILLAR D8T
Component
Left Final Drive
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (13 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 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		PC0073824	PC0055891	PC0041696
Sample Date	Client Info		21 Mar 2023	12 May 2022	30 Jun 2021
Machine Age	hrs	Client Info	15000	20160	20030
Oil Age	hrs	Client Info	500	0	500
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			NORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >800	51	56	44
Chromium	ppm	ASTM D5185(m) >10	1	<1	2
Nickel	ppm	ASTM D5185(m) >5	<1	<1	<1
Titanium	ppm	ASTM D5185(m) >15	<1	▲ 15	<1
Silver	ppm	ASTM D5185(m) >2	0	0	0
Aluminum	ppm	ASTM D5185(m) >75	4	14	4
Lead	ppm	ASTM D5185(m) >10	<1	<1	0
Copper	ppm	ASTM D5185(m) >75	7	<1	2
Tin	ppm	ASTM D5185(m) >8	0	<1	0
Antimony	ppm	ASTM D5185(m) >50	0	1	<1
Vanadium	ppm	ASTM D5185(m)	<1	<1	<1
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	2	5	3
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	1	<1	1
Manganese	ppm	ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 9	13	9	13
Calcium	ppm	ASTM D5185(m) 3114	2867	3040	3023
Phosphorus	ppm	ASTM D5185(m) 1099	1083	1090	1121
Zinc	ppm	ASTM D5185(m) 1245	1258	1286	1263
Sulfur	ppm	ASTM D5185(m) 7086	4305	4561	4710
Lithium	ppm	ASTM D5185(m)	<1	3	<1

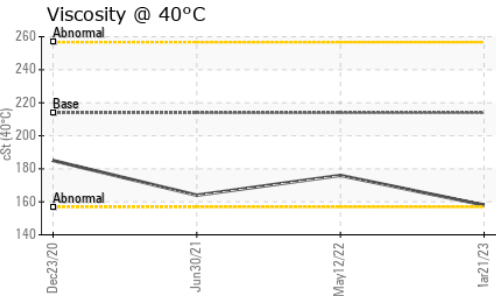
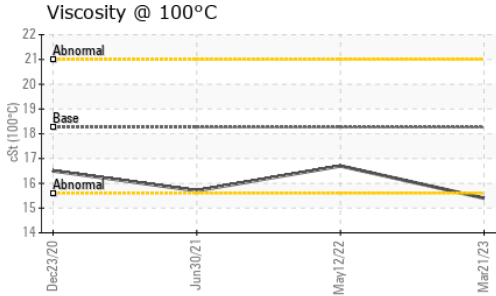
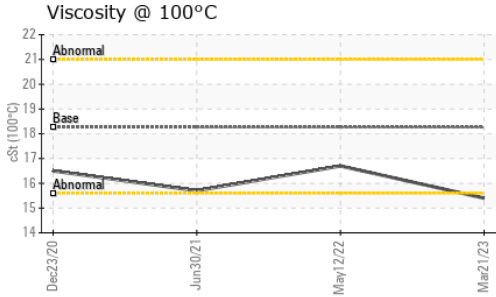
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >400	17	42	24
Sodium	ppm	ASTM D5185(m)	4	6	2
Potassium	ppm	ASTM D5185(m) >20	2	6	2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 3.27	2.37	2.00	2.51

OIL ANALYSIS REPORT

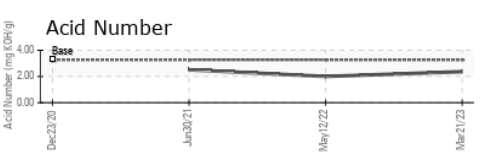
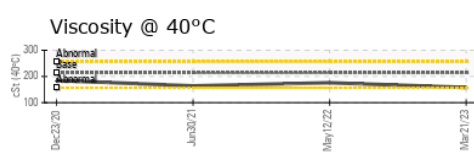
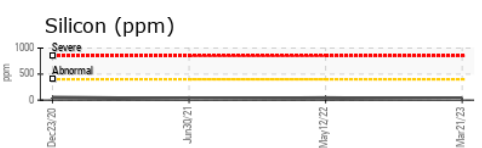
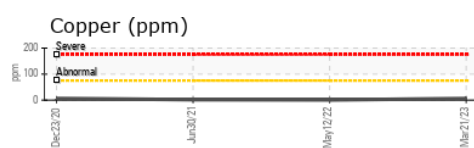
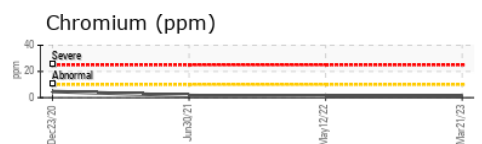
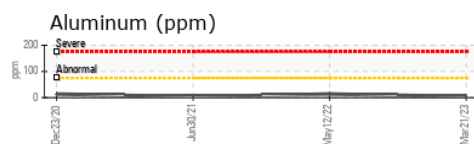
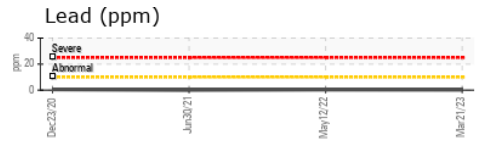
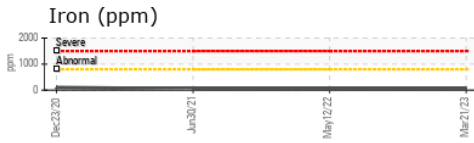


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	213.9	158	176
Visc @ 100°C	cSt	ASTM D7279(m)	18.26	15.4	16.7
Viscosity Index (VI)	Scale	ASTM D2270*	96	98	99

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **INDUSTRIAS del PETROLEO CANAD. SA**
Sample No. : PC0073824 **Received** : 13 Jul 2023
Lab Number : 02569787 **Diagnosed** : 13 Jul 2023
Unique Number : 5606833 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: KV100, TAN Man, VI)

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.

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