



Machine Id
CATERPILLAR AP1055D 2560903
Component
Left Auger
Fluid
PETRO CANADA ENDURATEX EP 220 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0084931	PC0072296	PC0053653
Sample Date		Client Info		08 Jan 2024	14 Apr 2023	19 Apr 2022
Machine Age	hrs	Client Info		11554	11000	10325
Oil Age	hrs	Client Info		554	500	300
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	NORMAL

WEAR

Iron ppm levels are severe.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184*		354	141	362
Iron	ppm	ASTM D5185(m)	>200	486	293	370
Chromium	ppm	ASTM D5185(m)	>10	2	1	2
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)		<1	0	<1
Lead	ppm	ASTM D5185(m)		<1	<1	0
Copper	ppm	ASTM D5185(m)		2	2	<1
Tin	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	<1	0
White Metal	scalar	Visual*	NONE	NONE	VLITE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

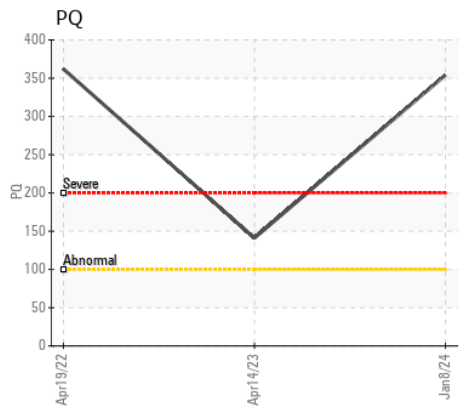
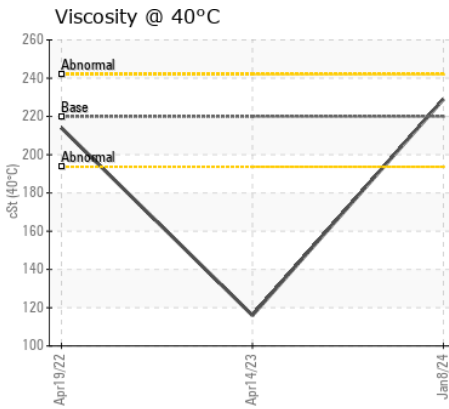
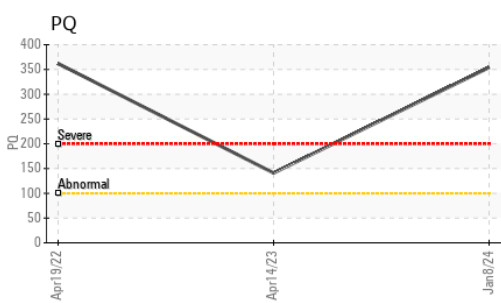
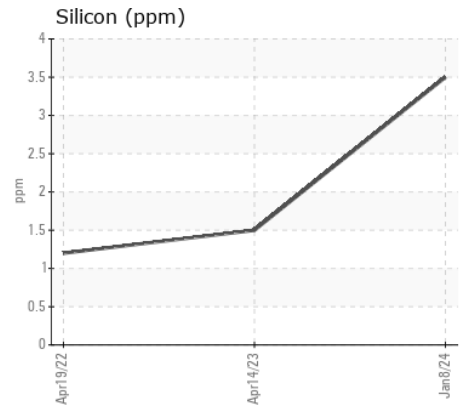
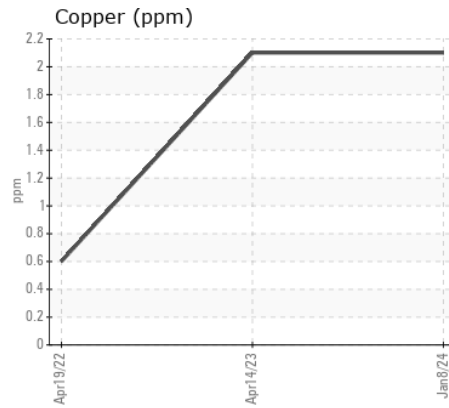
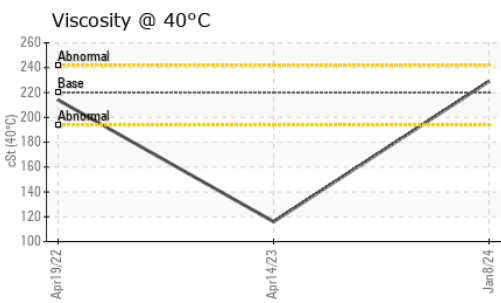
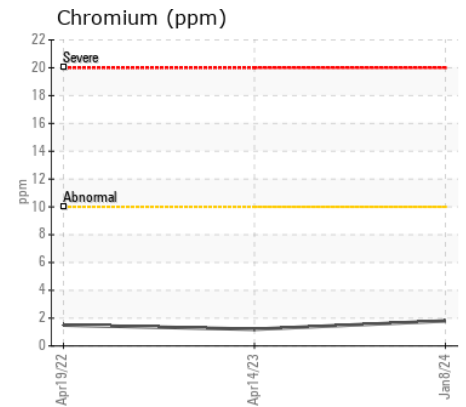
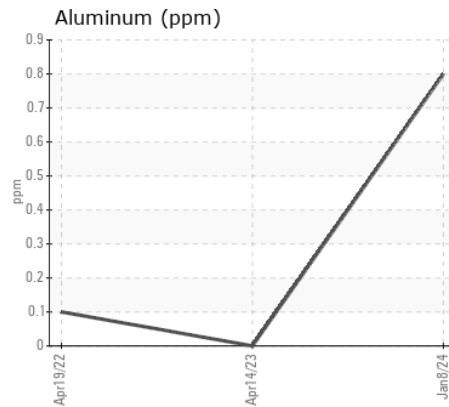
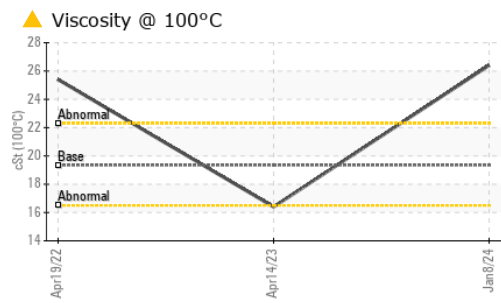
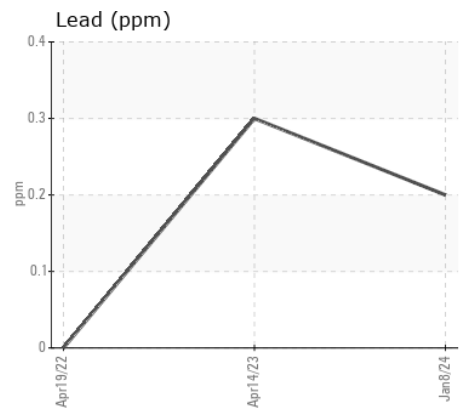
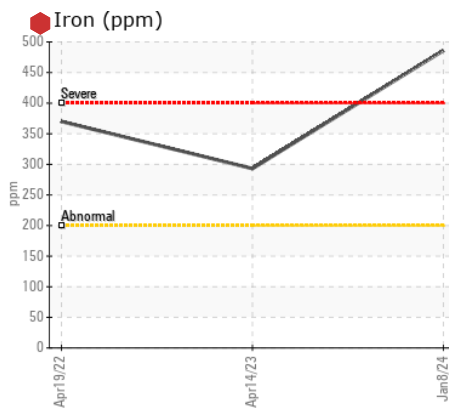
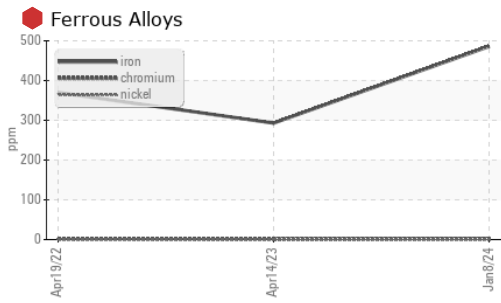
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185(m)		4	2	1
Potassium	ppm	ASTM D5185(m)	>20	2	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	LIGHT
Debris	scalar	Visual*	NONE	VLITE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185(m)		<1	0	0
Boron	ppm	ASTM D5185(m)	60	21	15	15
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<1	1	0
Manganese	ppm	ASTM D5185(m)	0	6	4	4
Magnesium	ppm	ASTM D5185(m)	0	16	11	0
Calcium	ppm	ASTM D5185(m)	0	110	87	19
Phosphorus	ppm	ASTM D5185(m)	270	372	343	410
Zinc	ppm	ASTM D5185(m)	0	68	79	18
Sulfur	ppm	ASTM D5185(m)	11200	4830	4470	5580
Visc @ 40°C	cSt	ASTM D7279(m)	220	229	▲ 116	214
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	▲ 26.4	▲ 16.4	25.4
Viscosity Index (VI)	Scale	ASTM D2270*	99	▲ 148	152	149



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0084931 **Received** : 18 Jan 2024
Lab Number : 02609761 **Diagnosed** : 19 Jan 2024
Unique Number : 5710847 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV100, PQ, VI)

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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.