

Machine Id
TORQUE MASTER L-13 BASE REDUCTION

Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX EP 220 (--- GAL)

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			PCA0119625	PCA0012649	PCA0012635
Sample Date	Client Info			08 Mar 2024	23 Oct 2021	22 Feb 2020
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG

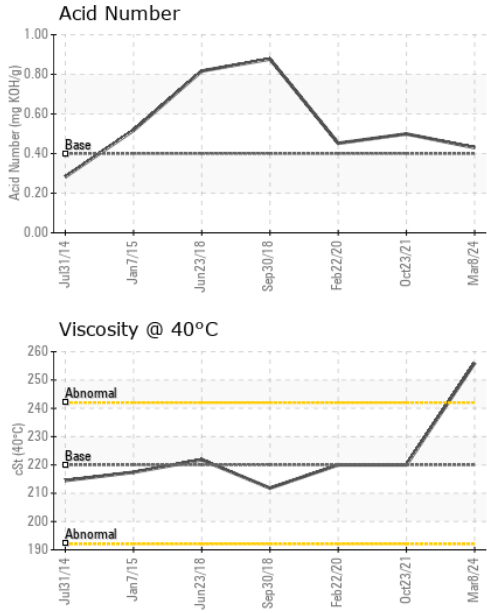
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	2	2	3
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m	>100	<1	0	0
Copper	ppm	ASTM D5185m	>200	0	0	<1
Tin	ppm	ASTM D5185m	>25	0	0	0
Antimony	ppm	ASTM D5185m	>5	---	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	60	57	65	76
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0	0
Calcium	ppm	ASTM D5185m	0	0	0	<1
Phosphorus	ppm	ASTM D5185m	270	215	263	259
Zinc	ppm	ASTM D5185m	0	0	0	0
Sulfur	ppm	ASTM D5185m	11200	7297	12434	12055

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	3	1	6
Sodium	ppm	ASTM D5185m		<1	0	<1
Potassium	ppm	ASTM D5185m	>20	0	0	0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	0.43	0.499	0.452

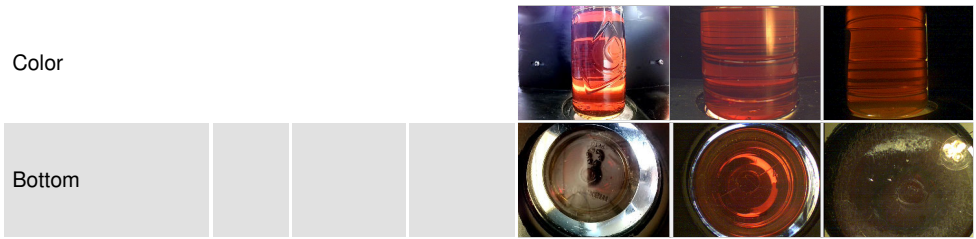
OIL ANALYSIS REPORT



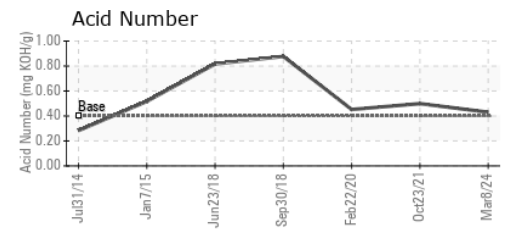
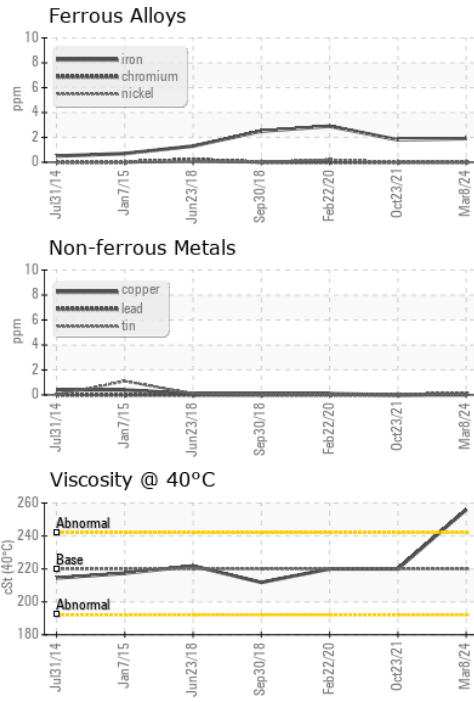
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 D445	220	256	220

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0119625
Lab Number : **06120262**
Unique Number : 10929095
Test Package : IND 2

Received : 15 Mar 2024
Tested : 19 Mar 2024
Diagnosed : 19 Mar 2024 - Don Baldrige

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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)