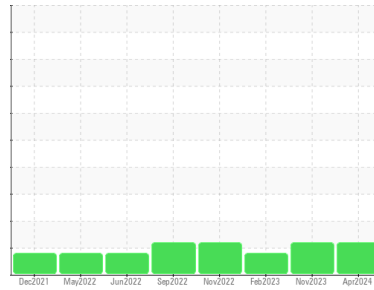




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
COLD MILL/CM-3STD-2N
 Machine Id
PINION LUBE 1536-001-0950
 Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX EP 460 (5000 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KFS0004402	KFS0004867	KFS0002534
Sample Date	Client Info	08 Apr 2024	10 Nov 2023	08 Feb 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	ATTENTION

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	4	2	1
Chromium	ppm	ASTM D5185m >15	0	0	0
Nickel	ppm	ASTM D5185m >15	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	0	<1
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	0	0	<1
Tin	ppm	ASTM D5185m >25	<1	0	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 55	0	0	0
Barium	ppm	ASTM D5185m 0	0	0	<1
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m 0	<1	0	0
Magnesium	ppm	ASTM D5185m 2	0	0	0
Calcium	ppm	ASTM D5185m 6	2	<1	<1
Phosphorus	ppm	ASTM D5185m 240	120	125	113
Zinc	ppm	ASTM D5185m 3	0	2	1
Sulfur	ppm	ASTM D5185m 10310	5847	4746	5765

CONTAMINANTS

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

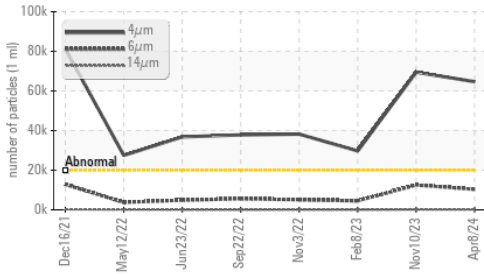
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	▲ 64658	▲ 69452	● 29721
Particles >6µm	ASTM D7647 >5000	▲ 10317	▲ 12517	● 4531
Particles >14µm	ASTM D7647 >640	179	182	76
Particles >21µm	ASTM D7647 >160	30	20	10
Particles >38µm	ASTM D7647 >40	1	0	0
Particles >71µm	ASTM D7647 >10	0	0	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	▲ 23/21/15	▲ 23/21/15	● 22/19/13

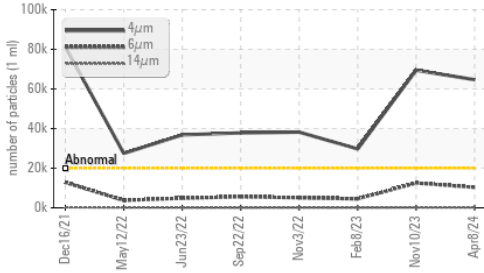
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.5	0.41	0.41	0.35

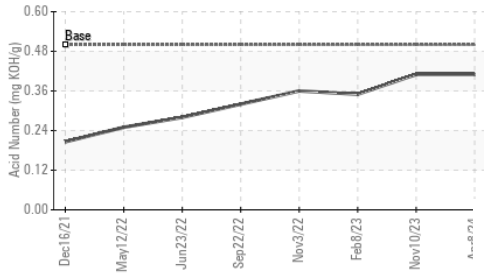
▲ Particle Trend



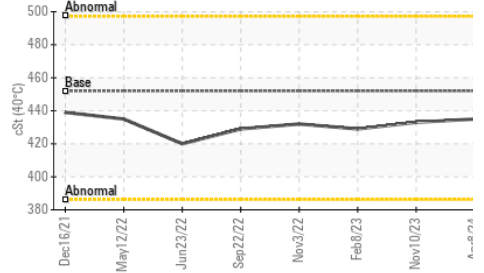
▲ Particle Trend



Acid Number



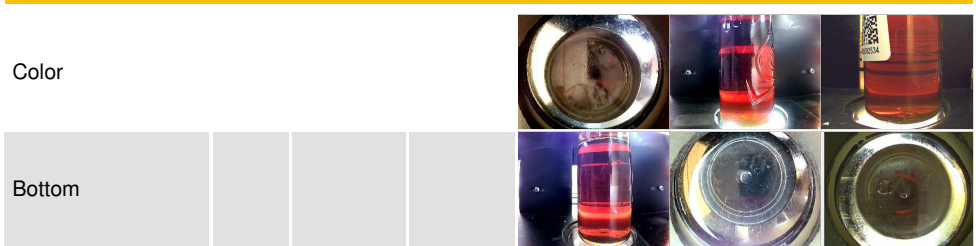
Viscosity @ 40°C



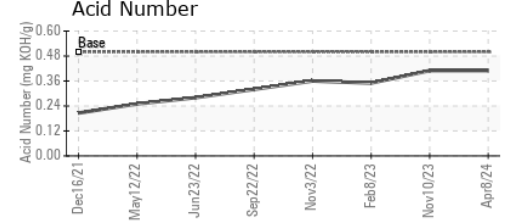
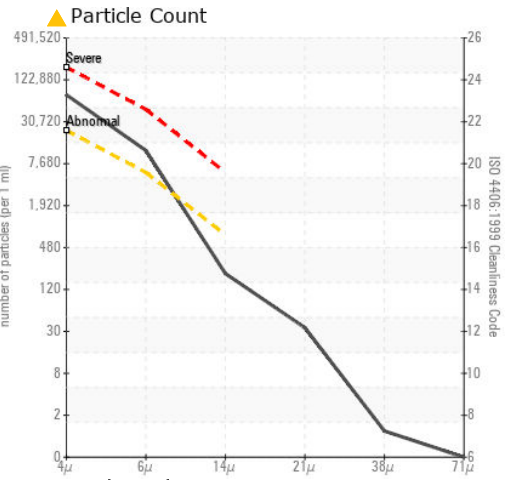
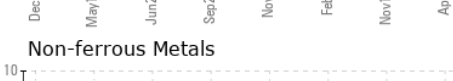
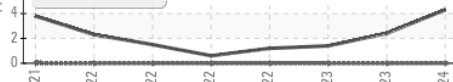
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	452	435	429

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004402 **Received** : 09 Apr 2024
Lab Number : 06143018 **Tested** : 10 Apr 2024
Unique Number : 10967826 **Diagnosed** : 10 Apr 2024 - Wes Davis
Test Package : IND 2 (Additional Tests: PrtCount)

CONSTELLIUM
 4805 SECOND STREET
 MUSCLE SHOALS, AL
 US 35661
 Contact: Randy Nichols
 randall.nichols@constellium.com

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)