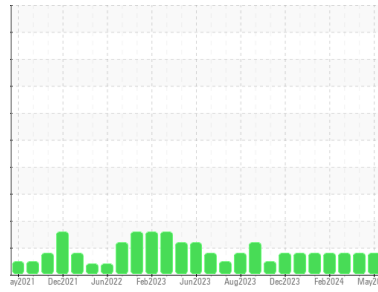




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

COLD MILL/CM-3STD-1S

Machine Id

SOUTH 3-STAND PAYOFF OP GB 1526-007-1265

Component

Gearbox

Fluid

PETRO CANADA ENDURATEX EP 320 (100 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present 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	KFS0004438	KFS0004437	KFS0004473
Sample Date	Client Info	31 May 2024	13 May 2024	03 Apr 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	ATTENTION	ABNORMAL

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	<1	0
Chromium	ppm	ASTM D5185m >15	0	0	0
Nickel	ppm	ASTM D5185m >15	0	<1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >25	0	<1	0
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	5	2	<1
Tin	ppm	ASTM D5185m >25	<1	<1	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 55	20	17	19
Barium	ppm	ASTM D5185m 0	0	2	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m 0	<1	<1	0
Magnesium	ppm	ASTM D5185m 0	0	3	0
Calcium	ppm	ASTM D5185m 0	3	6	<1
Phosphorus	ppm	ASTM D5185m 240	189	164	165
Zinc	ppm	ASTM D5185m 1	4	9	0
Sulfur	ppm	ASTM D5185m 13700	8087	8448	7678

CONTAMINANTS

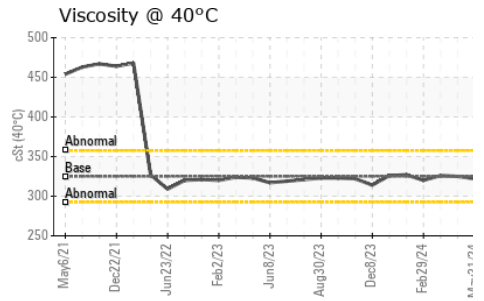
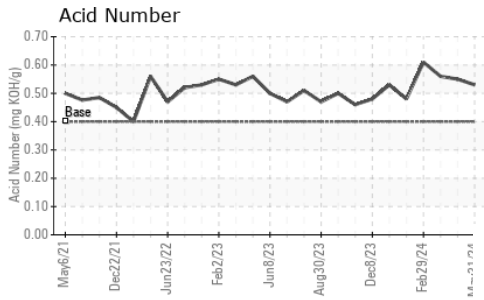
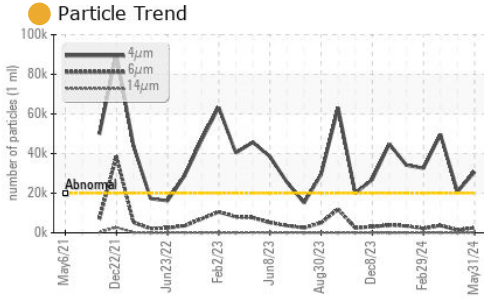
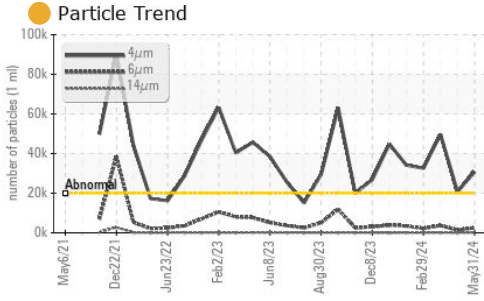
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	9	8	9
Sodium	ppm	ASTM D5185m	0	0	0
Potassium	ppm	ASTM D5185m >20	<1	1	0

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	30797	20787	49598
Particles >6µm	ASTM D7647 >5000	2530	1327	3727
Particles >14µm	ASTM D7647 >640	63	28	97
Particles >21µm	ASTM D7647 >160	14	6	12
Particles >38µm	ASTM D7647 >40	5	1	0
Particles >71µm	ASTM D7647 >10	4	1	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	22/19/13	22/18/12	23/19/14

FLUID DEGRADATION

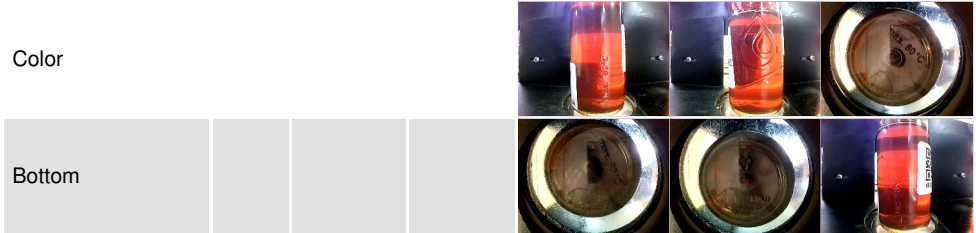
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.53	0.55	0.56



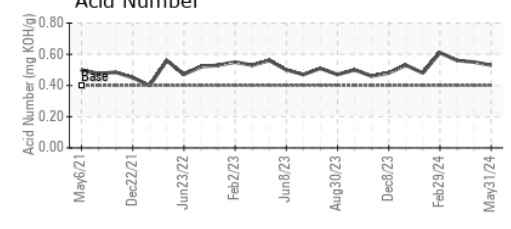
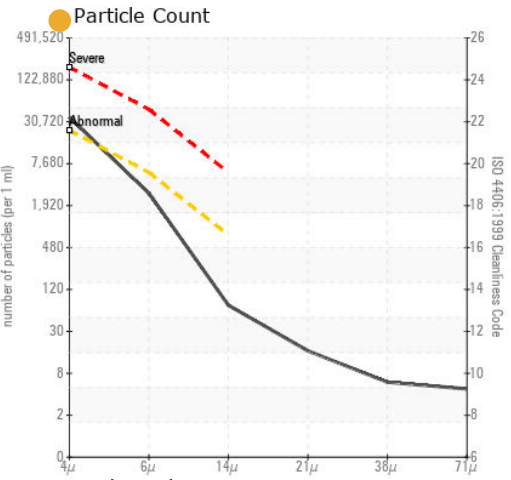
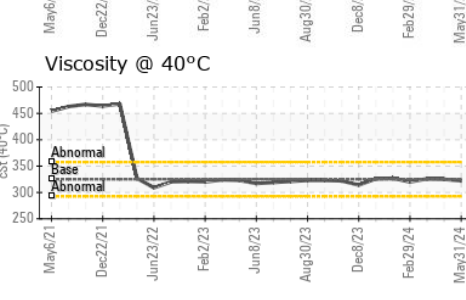
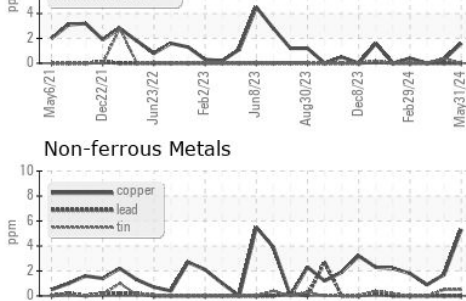
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	325	322	325

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004438 **Received** : 05 Jun 2024
Lab Number : 06200112 **Tested** : 07 Jun 2024
Unique Number : 11062235 **Diagnosed** : 07 Jun 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: PrtCount)

CONSTELLIUM
 4805 SECOND STREET
 MUSCLE SHOALS, AL
 US 35661
 Contact: Randy Nichols
 randall.nichols@constellium.com
 T: (256)386-6956
 F:

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)