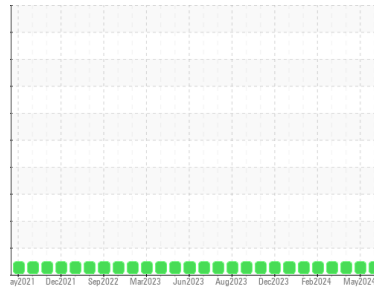




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**COLD MILL/CM-3STD-1S**  
 Machine Id  
**SOUTH 3-STAND HAGC HPU 1526-007-4410**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX AW 68 (450 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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		<b>KFS0004574</b>	KFS0004481	KFS0004434
Sample Date	Client Info		<b>10 Jul 2024</b>	31 May 2024	13 May 2024
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	5
Copper	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>0</b>	0	2
Calcium	ppm	ASTM D5185m	50	<b>50</b>	53	50
Phosphorus	ppm	ASTM D5185m	330	<b>324</b>	375	348
Zinc	ppm	ASTM D5185m	430	<b>400</b>	452	450
Sulfur	ppm	ASTM D5185m	760	<b>865</b>	951	1182

## CONTAMINANTS

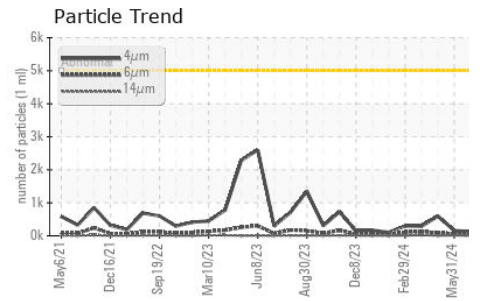
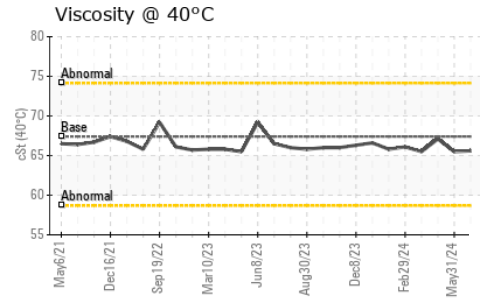
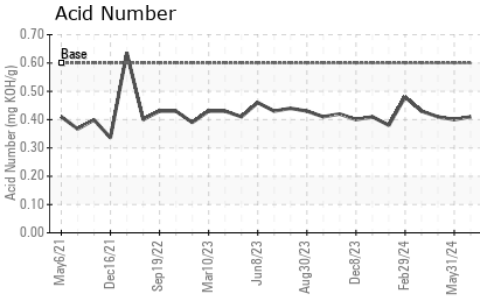
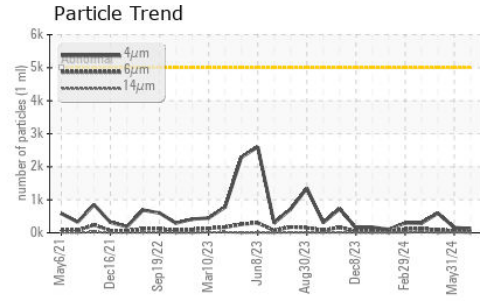
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185m		<b>2</b>	<1	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	2

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>129</b>	158	594
Particles >6µm	ASTM D7647	>1300	<b>34</b>	67	79
Particles >14µm	ASTM D7647	>160	<b>3</b>	14	7
Particles >21µm	ASTM D7647	>40	<b>1</b>	5	1
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>14/12/9</b>	14/13/11	16/13/10

## FLUID DEGRADATION

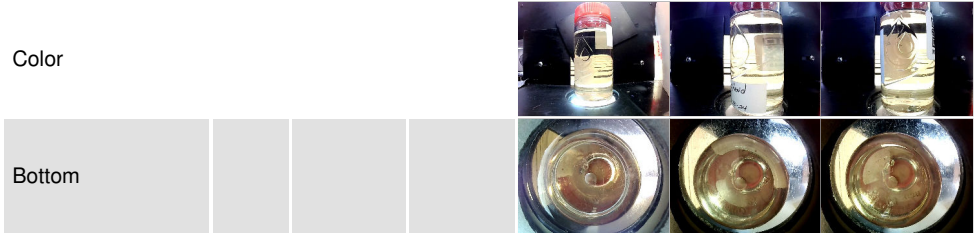
	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.60	<b>0.41</b>	0.40	0.41



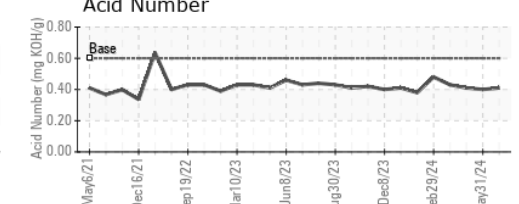
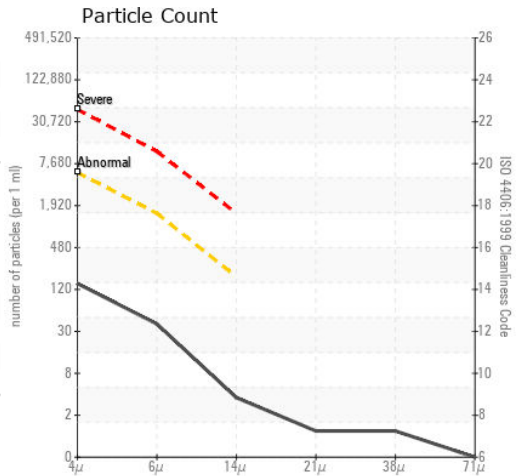
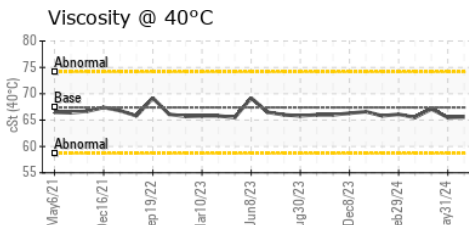
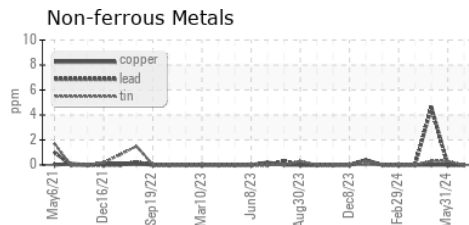
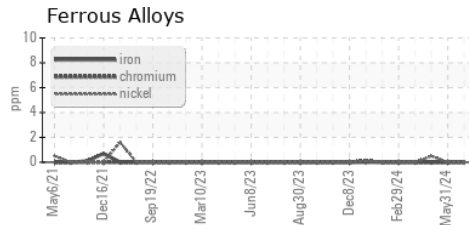
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	65.6	65.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KFS0004574  
 Lab Number : 06234824  
 Unique Number : 11123658  
 Test Package : IND 2

Received : 12 Jul 2024  
 Tested : 15 Jul 2024  
 Diagnosed : 15 Jul 2024 - Wes Davis

**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)