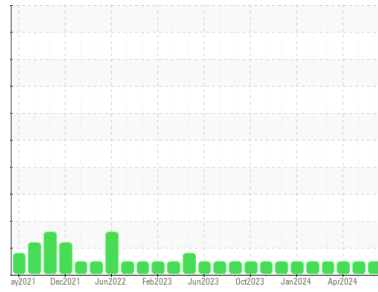




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**COLD MILL/CM-3STD-1S**

Machine Id

**AUX HPU AUX HYDRAULIC POWER UNIT**

Component

**Hydraulic System**

Fluid

**PETRO CANADA HYDREX AW 68 (1800 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>KFS0004576</b>	KFS0004480	KFS0004477
Sample Date	Client Info		<b>10 Jul 2024</b>	31 May 2024	03 Apr 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
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0
Silver	ppm	ASTM D5185m		<b>0</b>	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0
Copper	ppm	ASTM D5185m	>20	<b>0</b>	<1
Tin	ppm	ASTM D5185m	>20	<b>0</b>	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1
Magnesium	ppm	ASTM D5185m	0	<b>0</b>	0
Calcium	ppm	ASTM D5185m	50	<b>94</b>	54
Phosphorus	ppm	ASTM D5185m	330	<b>336</b>	374
Zinc	ppm	ASTM D5185m	430	<b>410</b>	456
Sulfur	ppm	ASTM D5185m	760	<b>912</b>	955

## CONTAMINANTS

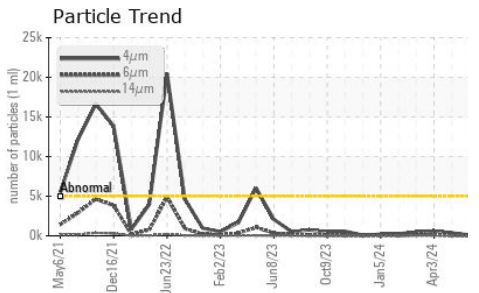
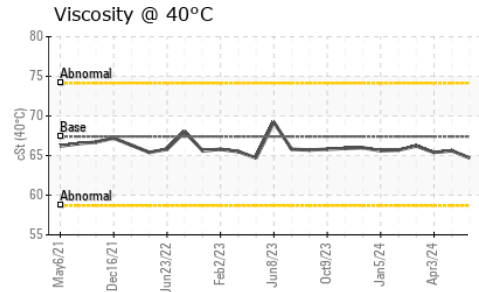
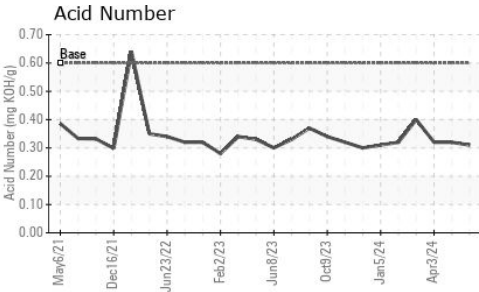
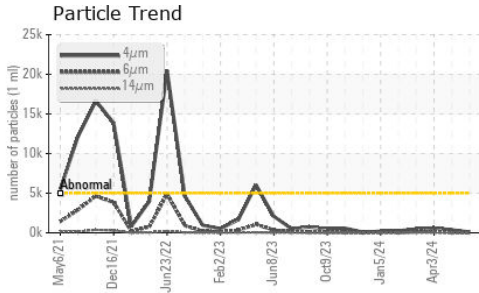
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1
Sodium	ppm	ASTM D5185m		<b>2</b>	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>99</b>	371	605
Particles >6µm	ASTM D7647	>1300	<b>29</b>	55	132
Particles >14µm	ASTM D7647	>160	<b>6</b>	4	19
Particles >21µm	ASTM D7647	>40	<b>2</b>	1	6
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>14/12/10</b>	16/13/9	16/14/11

## FLUID DEGRADATION

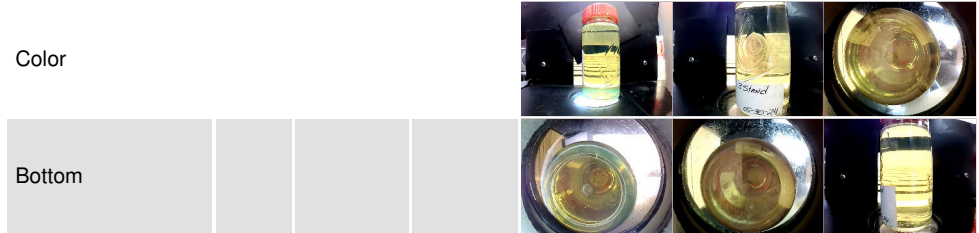
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.60	<b>0.31</b>	0.32



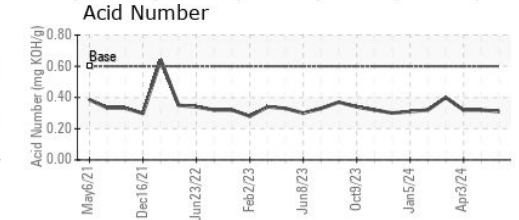
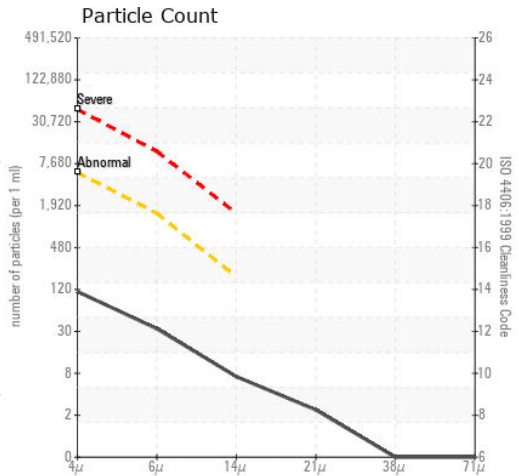
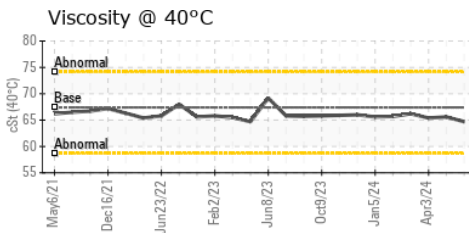
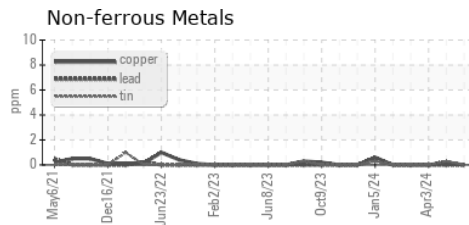
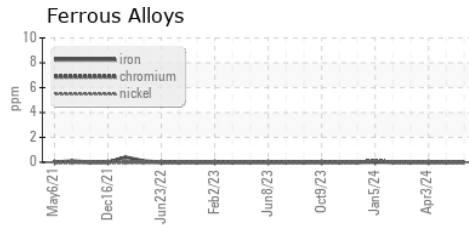
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.4

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.** : KFS0004576  
**Lab Number** : 06234822  
**Unique Number** : 11123656  
**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: Josh Edwards  
 joshua.edwards@constellium.com  
 T: (256)386-6613

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)