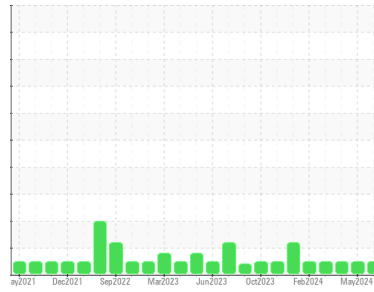




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**COLD MILL/CM-3STD-1S**  
 Machine Id  
**CENTERGUIDE HPU 1526-007-1685**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX AW 68 (200 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>KFS0004573</b>	KFS0004482	KFS0004475
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	0
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
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	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Tin	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

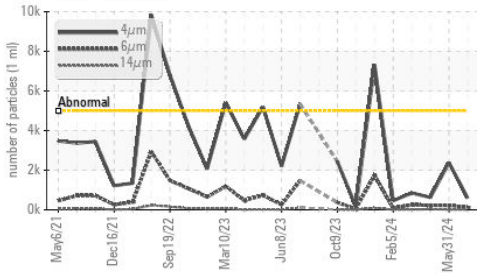
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	50	<b>55</b>	57	55
Phosphorus	ppm	ASTM D5185m	330	<b>340</b>	382	353
Zinc	ppm	ASTM D5185m	430	<b>415</b>	473	449
Sulfur	ppm	ASTM D5185m	760	<b>906</b>	996	923

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

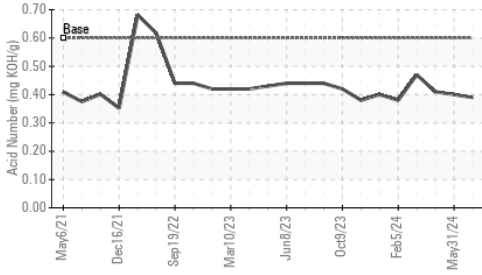
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>594</b>	2381	629
Particles >6µm		ASTM D7647	>1300	<b>124</b>	214	224
Particles >14µm		ASTM D7647	>160	<b>13</b>	17	32
Particles >21µm		ASTM D7647	>40	<b>3</b>	3	6
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>16/14/11</b>	18/15/11	16/15/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.60	<b>0.39</b>	0.40	0.41

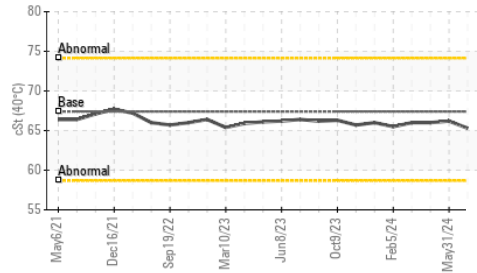
### Particle Trend



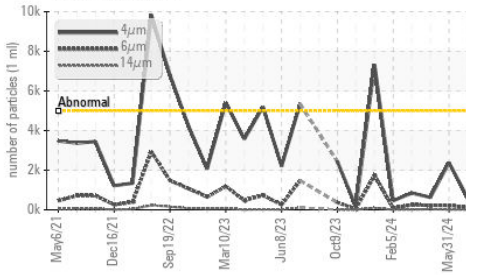
### Acid Number



### Viscosity @ 40°C



### Particle Trend



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	65.3	66.2

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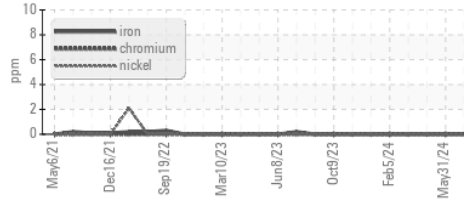
### Color



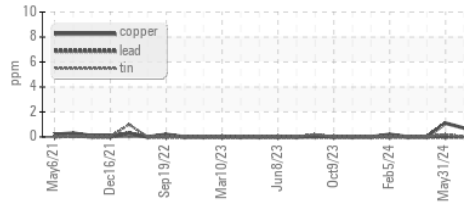
### Bottom

## GRAPHS

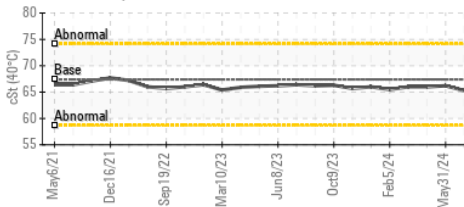
### Ferrous Alloys



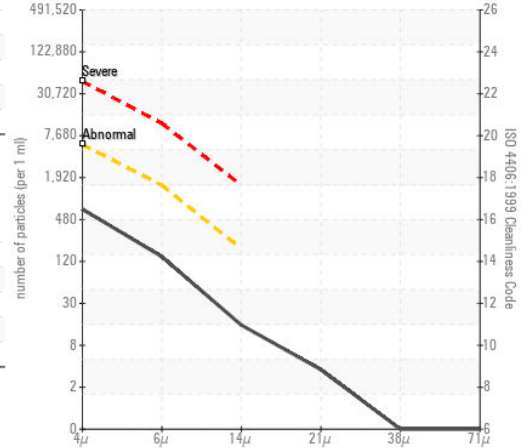
### Non-ferrous Metals



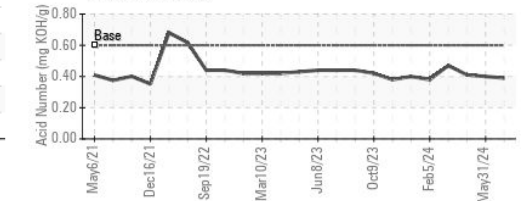
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : KFS0004573

**Lab Number** : 06234823

**Unique Number** : 11123657

**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)