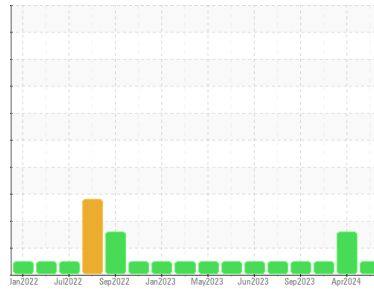




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**COLD MILL/CM-5-STAND**  
 Machine Id  
**Roll Contour HPU 1710-043-0110**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX AW 68 (150 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>KFS0004546</b>	KFS0004467	KFS0005183
Sample Date	Client Info			<b>16 Jul 2024</b>	01 Apr 2024	29 Nov 2023
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>	ATTENTION	NORMAL

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

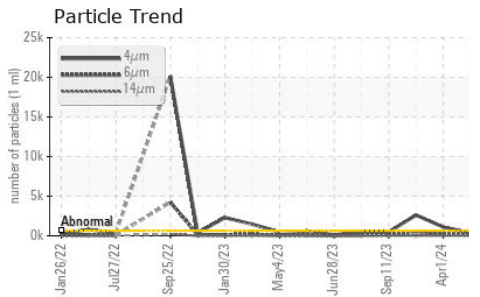
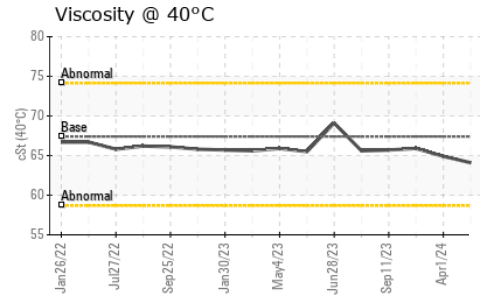
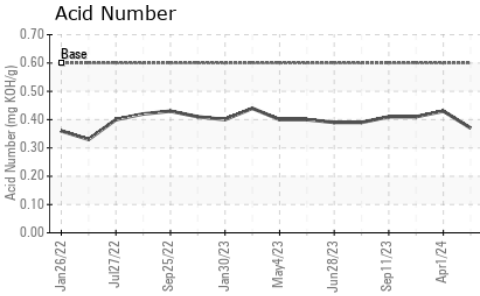
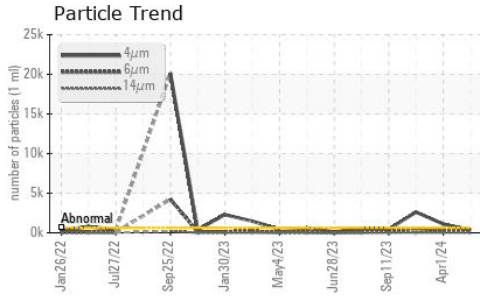
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Copper	ppm	ASTM D5185m	>20	<b>4</b>	6	2
Tin	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	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	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185m	50	<b>49</b>	52	51
Phosphorus	ppm	ASTM D5185m	330	<b>337</b>	390	347
Zinc	ppm	ASTM D5185m	430	<b>444</b>	457	458
Sulfur	ppm	ASTM D5185m	760	<b>934</b>	941	845

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

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>640	<b>354</b>	1099	2620
Particles >6µm		ASTM D7647	>160	<b>121</b>	315	532
Particles >14µm		ASTM D7647	>20	<b>11</b>	24	21
Particles >21µm		ASTM D7647	>4	<b>2</b>	6	5
Particles >38µm		ASTM D7647	>3	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>16/14/11	<b>16/14/11</b>	17/15/12	19/16/12

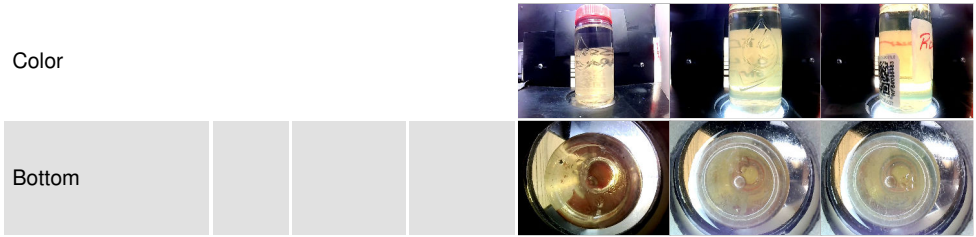
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.60	<b>0.37</b>	0.43	0.41



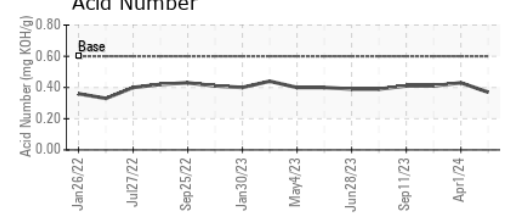
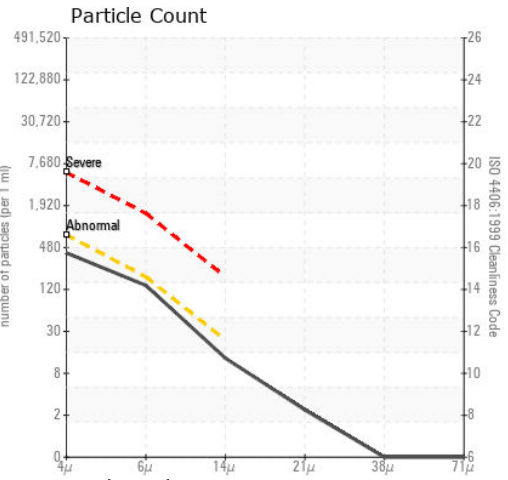
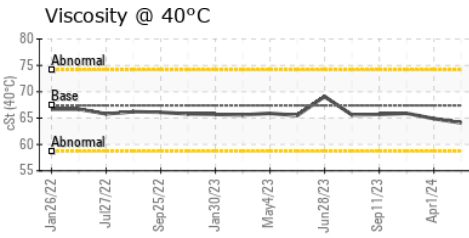
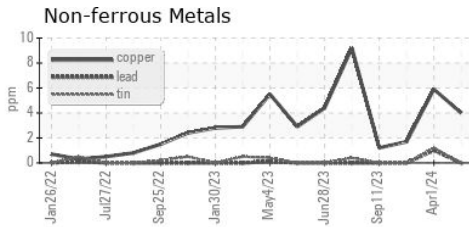
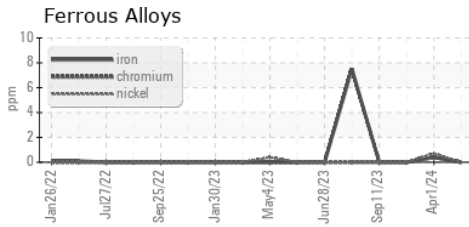
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	64.1	64.9

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0004546  
**Lab Number** : 06241620  
**Unique Number** : 11130454  
**Test Package** : IND 2  
**Received** : 19 Jul 2024  
**Tested** : 22 Jul 2024  
**Diagnosed** : 22 Jul 2024 - Wes Davis

**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)