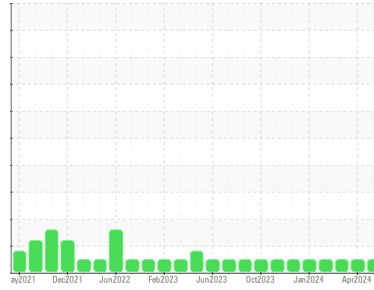




OIL ANALYSIS REPORT

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	KFS0004480	KFS0004477	KFS0004845
Sample Date	Client Info	31 May 2024	03 Apr 2024	29 Feb 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		NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

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

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	0	0	0	0
Calcium	ppm	ASTM D5185m	50	54	51	55
Phosphorus	ppm	ASTM D5185m	330	374	341	341
Zinc	ppm	ASTM D5185m	430	456	433	436
Sulfur	ppm	ASTM D5185m	760	955	917	854

CONTAMINANTS

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

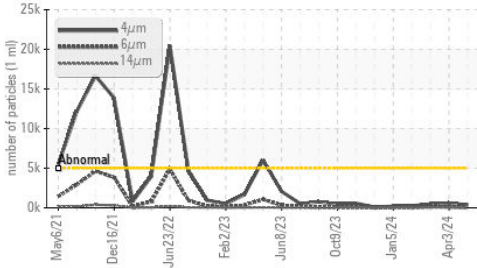
FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	371	605	470
Particles >6µm	ASTM D7647	>1300	55	132	170
Particles >14µm	ASTM D7647	>160	4	19	20
Particles >21µm	ASTM D7647	>40	1	6	5
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	16/13/9	16/14/11	16/15/11

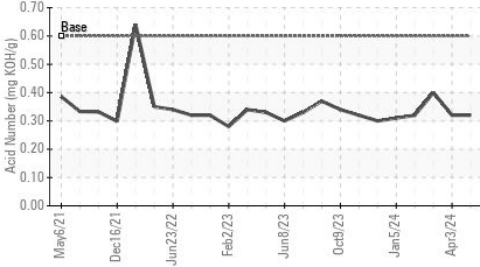
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.60	0.32	0.32	0.40

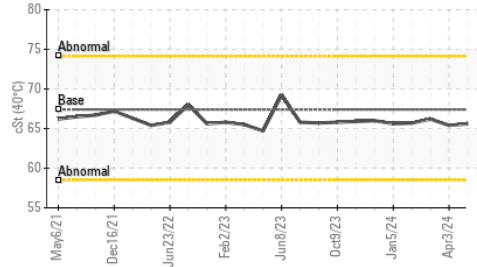
Particle Trend



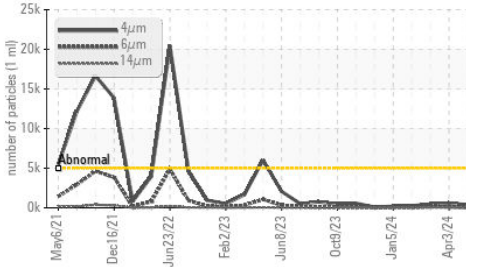
Acid Number



Viscosity @ 40°C



Particle Trend

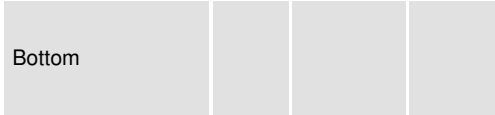


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.6	65.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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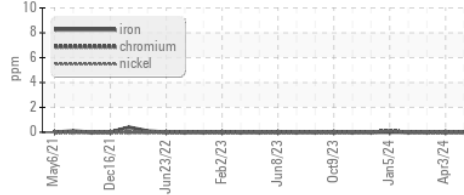
Color



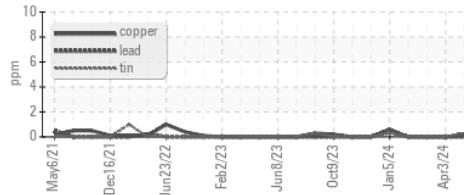
Bottom

GRAPHS

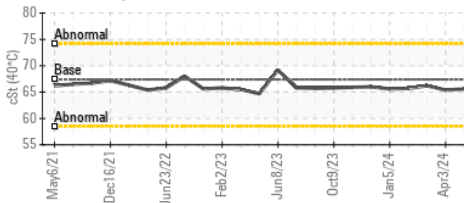
Ferrous Alloys



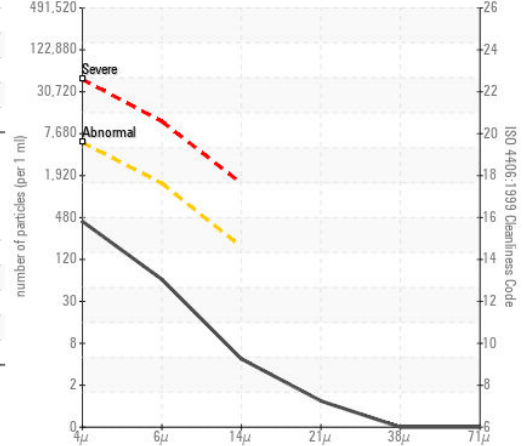
Non-ferrous Metals



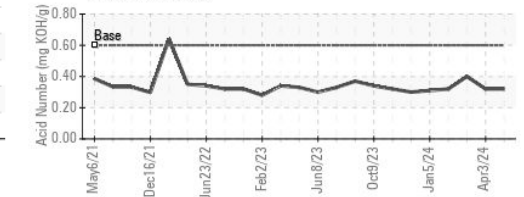
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004480
Lab Number : 06200088
Unique Number : 11062211
Test Package : IND 2

Received : 05 Jun 2024
Tested : 06 Jun 2024
Diagnosed : 06 Jun 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)

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