



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CR 2611 Steering Gear Hyd.

Component
Steering

Fluid
PETRO CANADA HYDREX AW 32 (150 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0844539	WC0844573	WC0750115
Sample Date		Client Info		09 Feb 2024	19 Oct 2023	26 Jul 2023
Machine Age	hrs	Client Info		28484	28039	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				ATTENTION	ATTENTION	NORMAL

WEAR

Copper ppm levels are noted. All other component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>60	3	4	3
Chromium	ppm	ASTM D5185(m)	>12	3	3	2
Nickel	ppm	ASTM D5185(m)	>6	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>4	<1	0	<1
Lead	ppm	ASTM D5185(m)	>12	3	4	5
Copper	ppm	ASTM D5185(m)	>30	35	36	30
Tin	ppm	ASTM D5185(m)		<1	1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

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

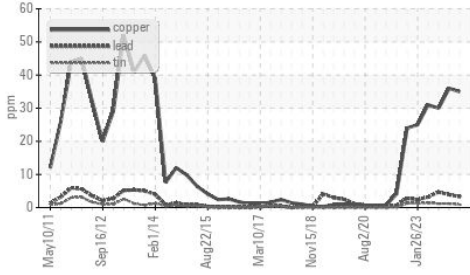
Silicon	ppm	ASTM D5185(m)	>10	0	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Water		WC Method		NEG	NEG	NEG
Particles >4µm		ASTM D7647		973	395	511
Particles >6µm		ASTM D7647	>5000	271	125	126
Particles >14µm		ASTM D7647	>640	13	12	11
Particles >21µm		ASTM D7647	>160	3	4	3
Particles >38µm		ASTM D7647	>40	0	1	0
Particles >71µm		ASTM D7647	>10	0	1	0
Oil Cleanliness		ISO 4406 (c)	>-/19/16	17/15/11	16/14/11	16/14/11
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*		NEG	NEG	NEG

FLUID CONDITION

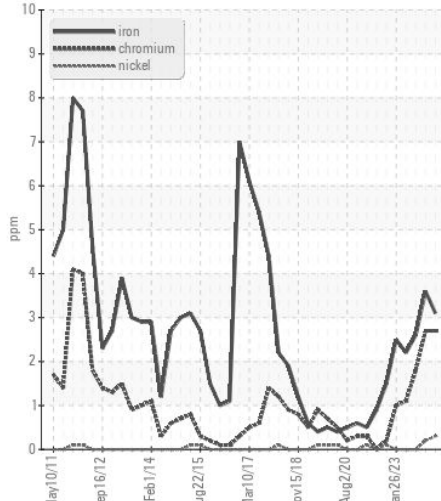
The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		0	<1	<1
Boron	ppm	ASTM D5185(m)	0	0	<1	<1
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	0	<1
Calcium	ppm	ASTM D5185(m)	50	42	47	45
Phosphorus	ppm	ASTM D5185(m)	330	316	337	350
Zinc	ppm	ASTM D5185(m)	430	369	411	388
Sulfur	ppm	ASTM D5185(m)	760	873	904	864
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	31.3	31.3	31.3

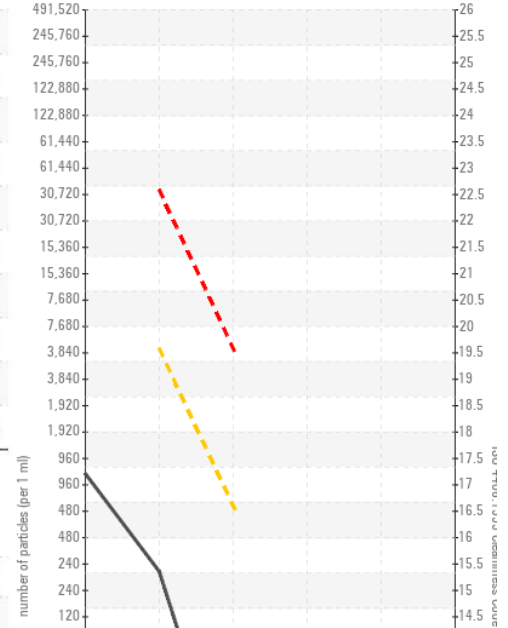
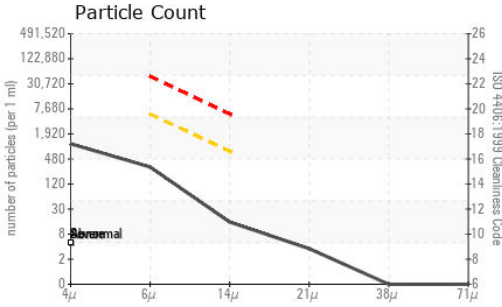
Non-ferrous Metals



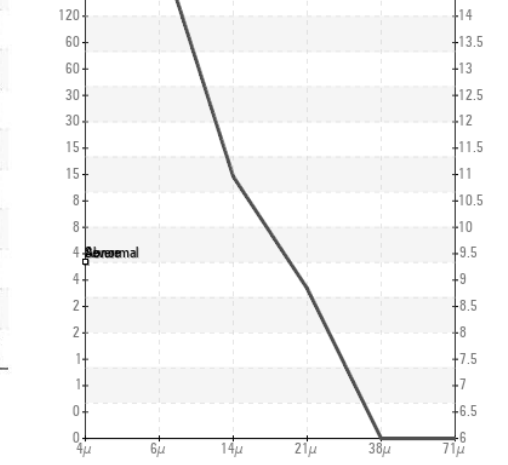
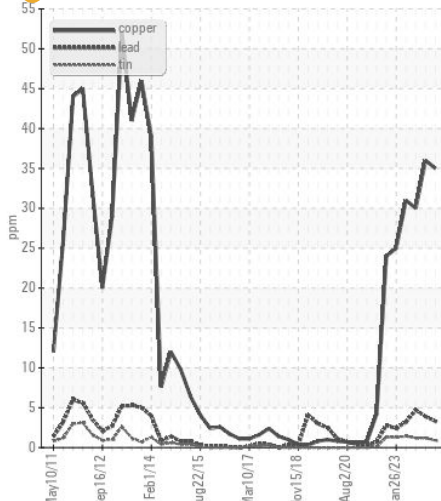
Ferrous Alloys



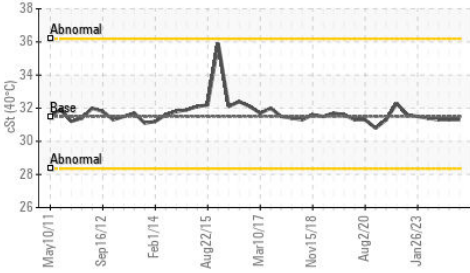
Particle Count



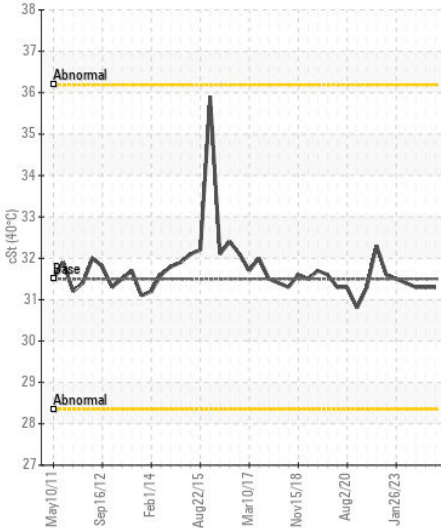
Non-ferrous Metals



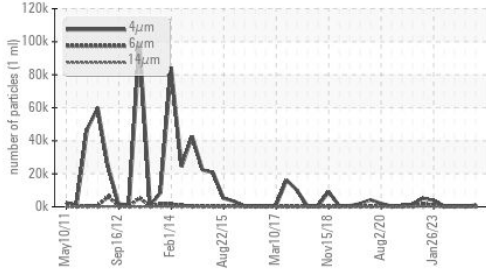
Viscosity @ 40°C



Viscosity @ 40°C



Particle Trend



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0844539
Lab Number : 02618962
Unique Number : 5736072
Test Package : MAR 5 (Additional Tests: ICP, KV40, PrtCount, Spat, Visual)

Received : 29 Feb 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Kevin Marson

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.