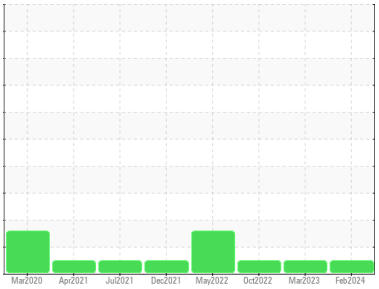
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
OR346
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (180 LTR)

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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0092309**	GFL0030416	GFL0056439
Sample Date		Client Info		**09 Feb 2024**	09 Mar 2023	27 Oct 2022
Machine Age	hrs	Client Info		**25326**	25326	24719
Oil Age	hrs	Client Info		**22793**	1253	646
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.075	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>71	**5**	5	2
Chromium	ppm	ASTM D5185(m)	>11	**1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>6	**<1**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	<1	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>11	**1**	<1	<1
Lead	ppm	ASTM D5185(m)	>13	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>21	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>5	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	<1	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

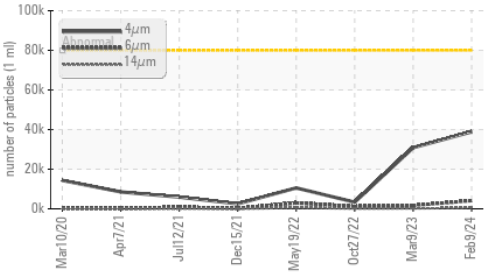
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**<1**	<1	1
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**0**	<1	<1
Manganese	ppm	ASTM D5185(m)	0	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	0	**7**	6	4
Calcium	ppm	ASTM D5185(m)	50	**112**	140	134
Phosphorus	ppm	ASTM D5185(m)	330	**609**	675	664
Zinc	ppm	ASTM D5185(m)	430	**769**	784	781
Sulfur	ppm	ASTM D5185(m)	760	**1500**	1484	1490
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>24	**2**	2	<1
Sodium	ppm	ASTM D5185(m)	>21	**1**	1	1
Potassium	ppm	ASTM D5185(m)	>20	**1**	<1	<1

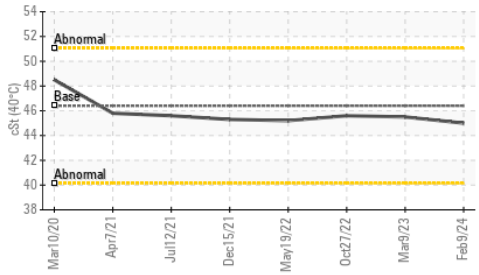
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>80000	**38886**	30862	3346
Particles >6µm		ASTM D7647	>5000	**4127**	1658	1171
Particles >14µm		ASTM D7647	>640	**405**	207	122
Particles >21µm		ASTM D7647	>160	**100**	75	36
Particles >38µm		ASTM D7647	>40	**7**	3	2
Particles >71µm		ASTM D7647	>10	**1**	0	1
Oil Cleanliness		ISO 4406 (c)	>23/19/16	**22/19/16**	22/18/15	19/17/14

OIL ANALYSIS REPORT

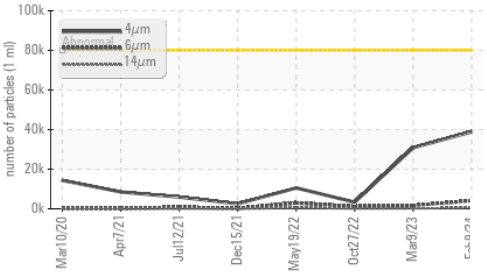
Particle Trend



Viscosity @ 40°C



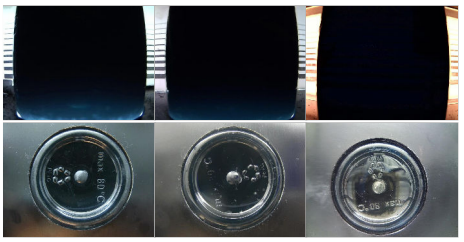
Particle Trend



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	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*	>0.075	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

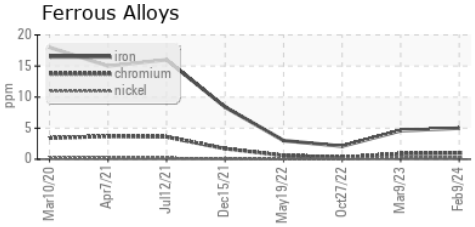
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	**45.0**	45.5	45.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

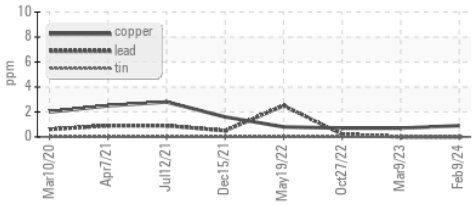


GRAPHS

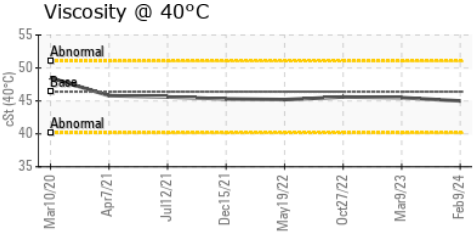
Ferrous Alloys



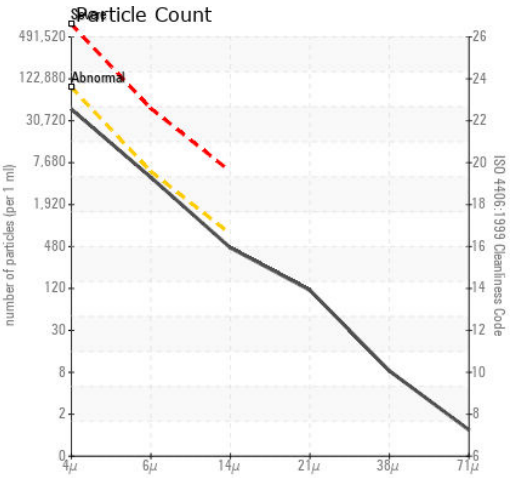
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0092309
Lab Number : 02615394
Unique Number : 5724489
Test Package : MOB 1 (Additional Tests: PrtCount)

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Wes Davis

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.

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