IND II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area
[114101]
Machine Id
PRESS #2 AFTER FILTERS
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 68 (20000 LTR)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

WEAR

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

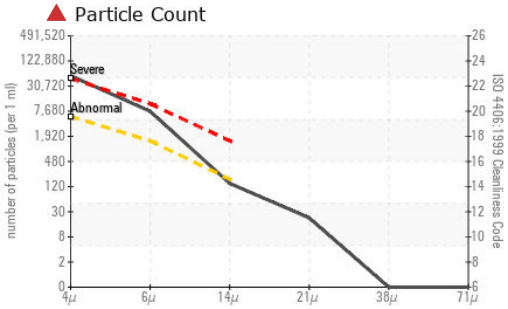
CONTAMINATION

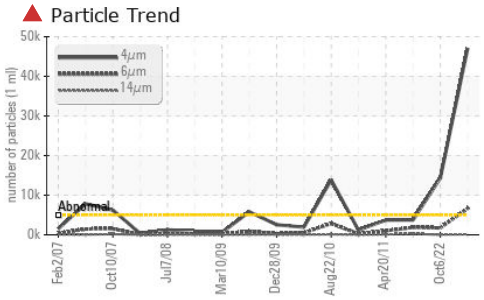
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

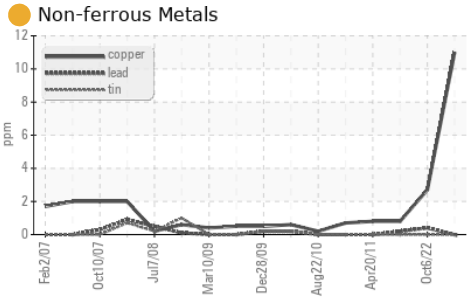
FLUID CONDITION

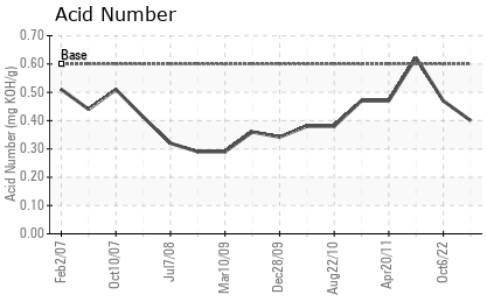
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

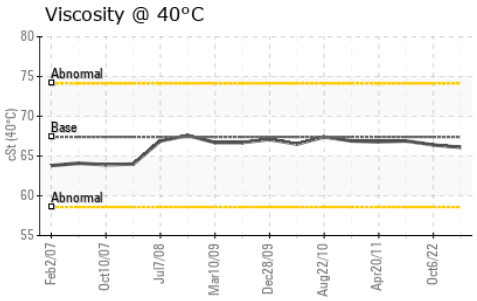
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0616919	WC0616922	WC22091246
Sample Date		Client Info		04 Apr 2024	06 Oct 2022	29 Aug 2011
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	6	0
Filter Age	yrs	Client Info		0	1	0
Oil Changed		Client Info		N/A	Filtered	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				SEVERE	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185(m)	>20	2	3	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	0
Lead	ppm	ASTM D5185(m)	>20	0	<1	<1
Copper	ppm	ASTM D5185(m)	>20	11	3	<1
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>15	0	0	<1
Potassium	ppm	ASTM D5185(m)	>20	0	0	0
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	47070	14345	3750
Particles >6µm		ASTM D7647	>1300	6637	1734	1900
Particles >14µm		ASTM D7647	>160	127	34	240
Particles >21µm		ASTM D7647	>40	19	11	30
Particles >38µm		ASTM D7647	>10	0	0	3
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	23/20/14	21/18/12	19/18/15
Silt	scalar	Visual*	NONE	NONE	NONE	LIGHT
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
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*	>0.05	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		0	<1	1
Boron	ppm	ASTM D5185(m)	0	<1	<1	0
Barium	ppm	ASTM D5185(m)	0	0	0	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	0
Calcium	ppm	ASTM D5185(m)	50	19	27	101
Phosphorus	ppm	ASTM D5185(m)	330	282	326	232
Zinc	ppm	ASTM D5185(m)	430	258	284	289
Sulfur	ppm	ASTM D5185(m)	760	527	599	595
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.40	0.47	0.622
Visc @ 40°C	cSt	ASTM D7279(m)	67.4	66.1	66.4	66.9

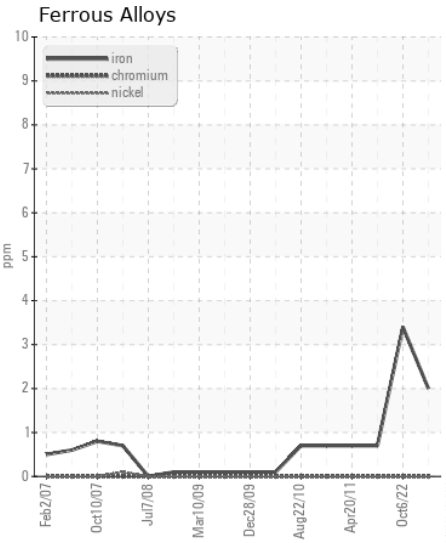


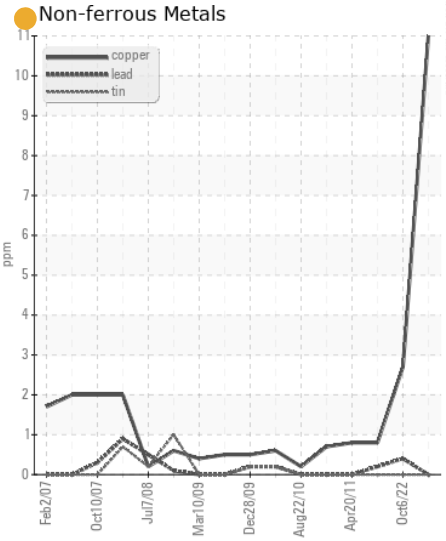


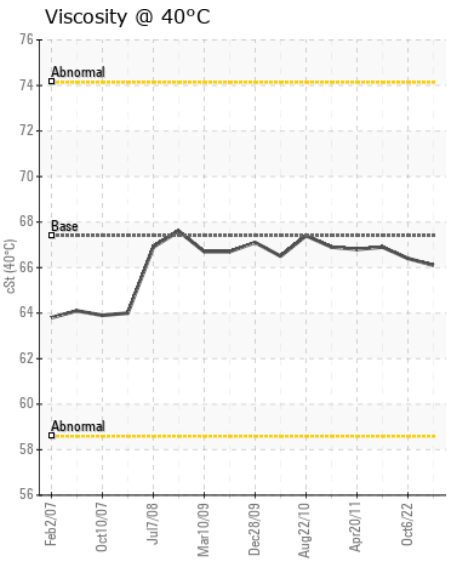


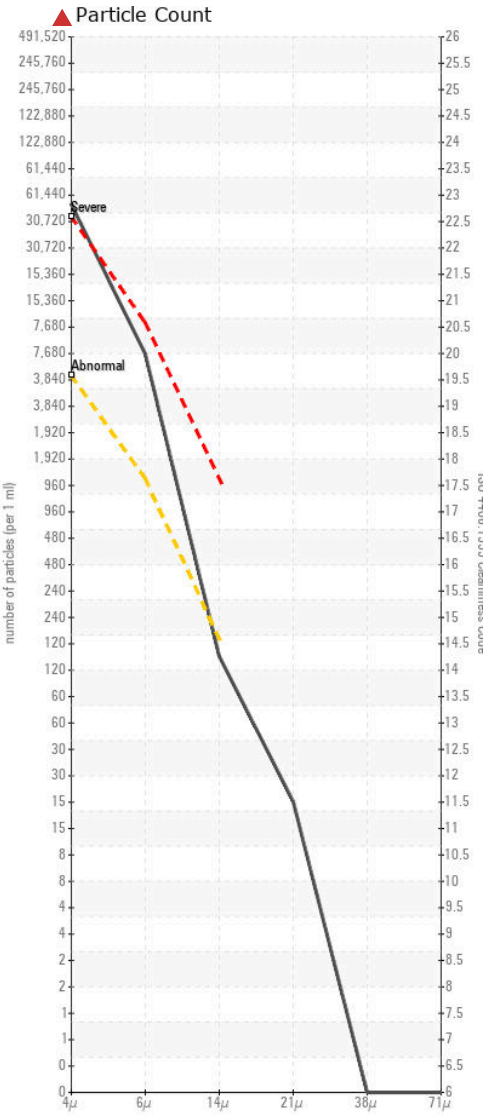


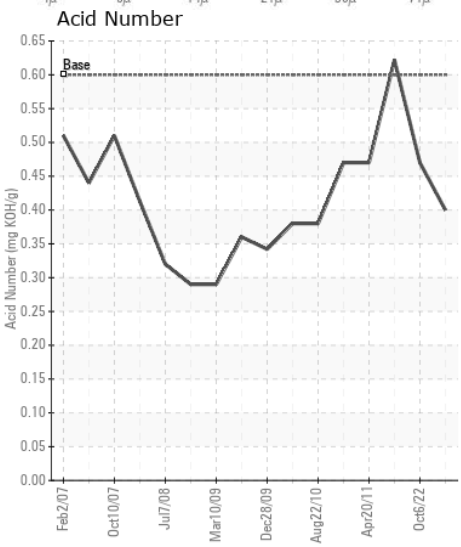












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0616919
Lab Number : 02627361
Unique Number : 5760493
Test Package : IND 2

Received : 08 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 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.