



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id  
**23144 CPP SYSTEM (S/N H1746)**  
 Component  
**Variable Pitch Prop**  
 Fluid  
**PETRO CANADA HYDREX AW 68 (1700 LTR)**

## RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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. Resample in 30-45 days to monitor this situation.

## WEAR

All component wear rates are normal.

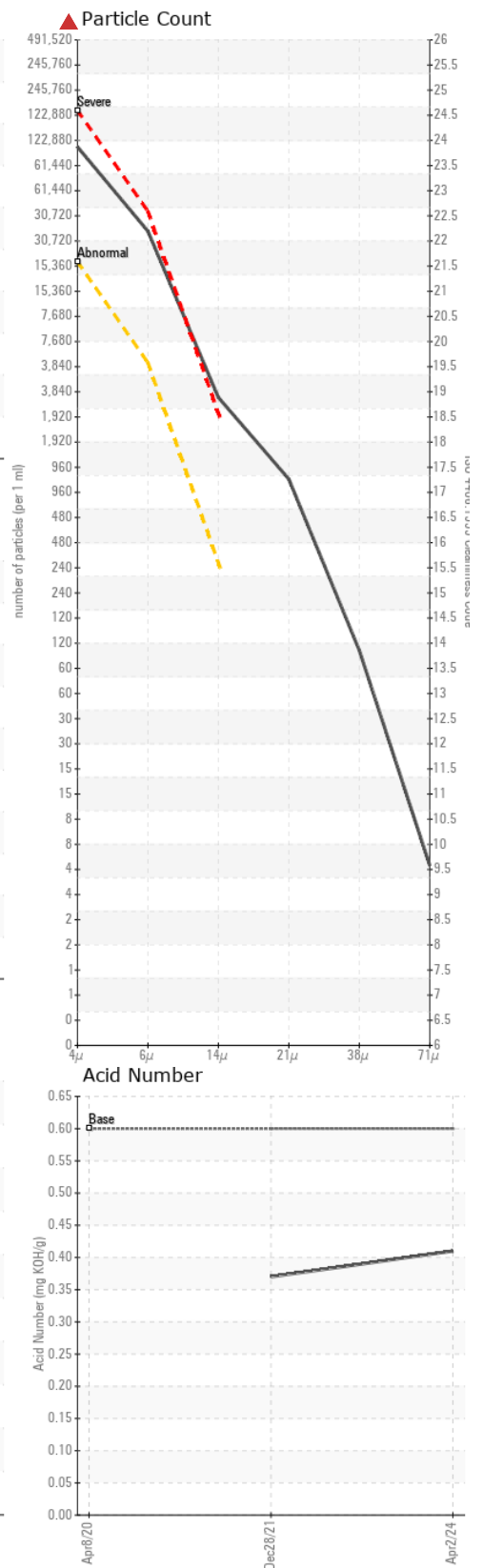
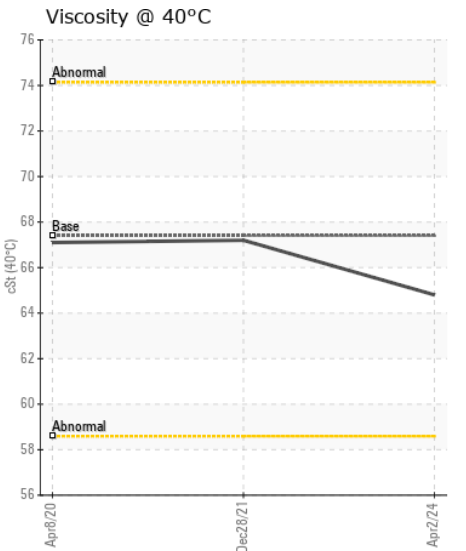
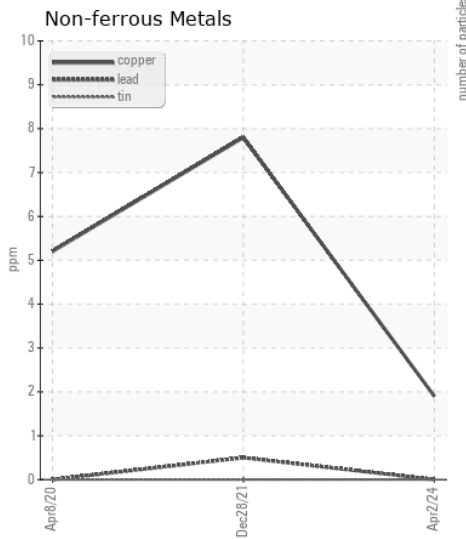
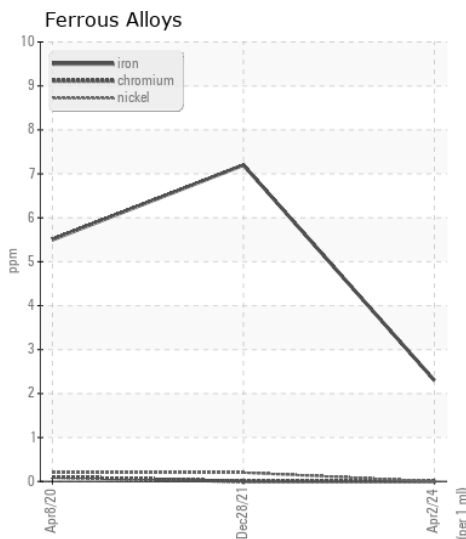
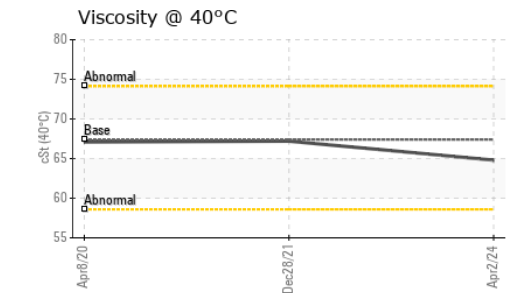
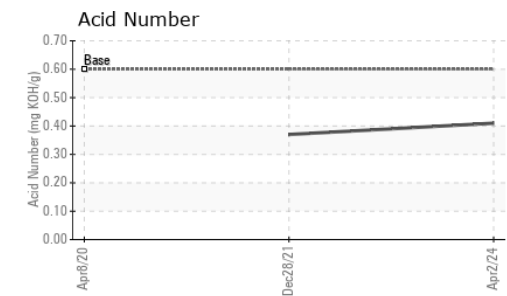
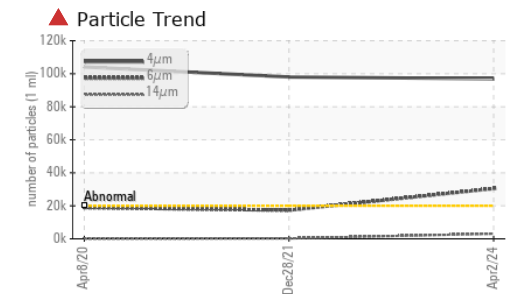
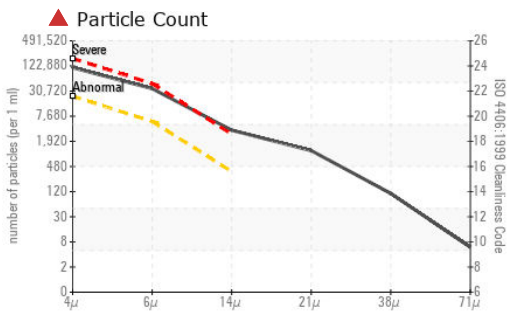
## CONTAMINATION

There is a high amount of particulates (2 to 100 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		<b>WC0867278</b>	WC0599733	WC0446973
Sample Date		Client Info		<b>02 Apr 2024</b>	28 Dec 2021	08 Apr 2020
Machine Age	mths	Client Info		<b>6</b>	88677	0
Oil Age	mths	Client Info		<b>0</b>	0	0
Filter Age	mths	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>Not Changed</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>25	<b>2</b>	7	6
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>55	<b>2</b>	8	5
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	1	0
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>▲ 96947</b>	▲ 98031	▲ 104109
Particles >6µm		ASTM D7647	>5000	<b>▲ 30425</b>	▲ 17323	▲ 18922
Particles >14µm		ASTM D7647	>320	<b>▲ 3100</b>	242	50
Particles >21µm		ASTM D7647	>80	<b>▲ 1009</b>	55	6
Particles >38µm		ASTM D7647	>20	<b>▲ 96</b>	3	0
Particles >71µm		ASTM D7647	>4	<b>5</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/15	<b>▲ 24/22/19</b>	▲ 24/21/15	▲ 24/21/13
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	<b>NEG</b>	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	8	4
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	2	<1
Calcium	ppm	ASTM D5185(m)	50	<b>54</b>	60	65
Phosphorus	ppm	ASTM D5185(m)	330	<b>324</b>	330	323
Zinc	ppm	ASTM D5185(m)	430	<b>424</b>	406	412
Sulfur	ppm	ASTM D5185(m)	760	<b>703</b>	729	738
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.41</b>	0.37	---
Visc @ 40°C	cSt	ASTM D7279(m)	67.4	<b>64.8</b>	67.2	67.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0867278  
**Lab Number** : 02628223  
**Unique Number** : 5761355  
**Test Package** : MAR 2  
**Received** : 11 Apr 2024  
**Tested** : 12 Apr 2024  
**Diagnosed** : 12 Apr 2024 - Wes Davis

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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.