



Machine Id  
**OR962**  
Component  
**Tank Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (188 LTR)**

### RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0092254</b>	GFL0056454	GFL0064908
Sample Date		Client Info		<b>19 Jan 2024</b>	25 Apr 2023	10 Jan 2023
Machine Age	hrs	Client Info		<b>13733</b>	11728	10932
Oil Age	hrs	Client Info		<b>1348</b>	3100	2400
Filter Age	hrs	Client Info		<b>700</b>	769	1500
Oil Changed		Client Info		<b>N/A</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	<b>8</b>	11	13
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>1</b>	1	2
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>75	<b>1</b>	2	2
Tin	ppm	ASTM D5185(m)	>10	<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

### CONTAMINATION

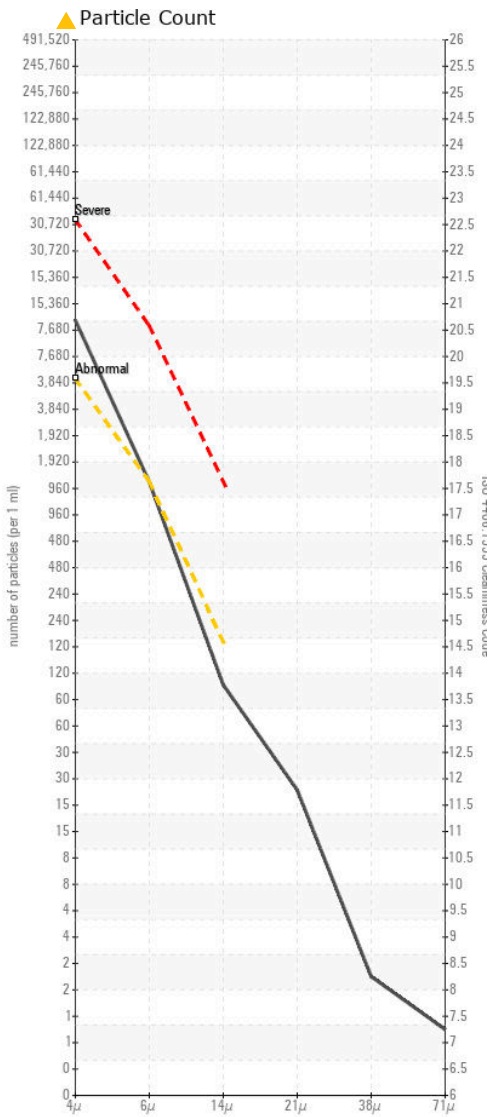
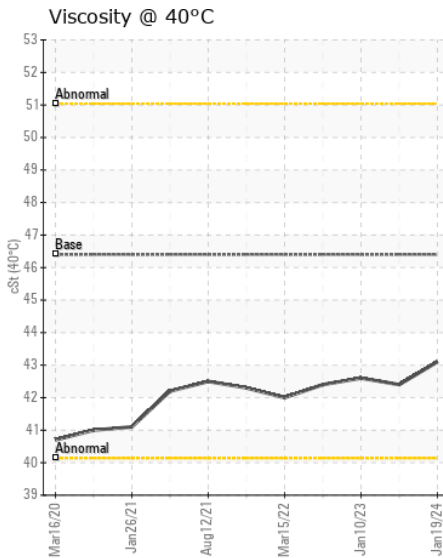
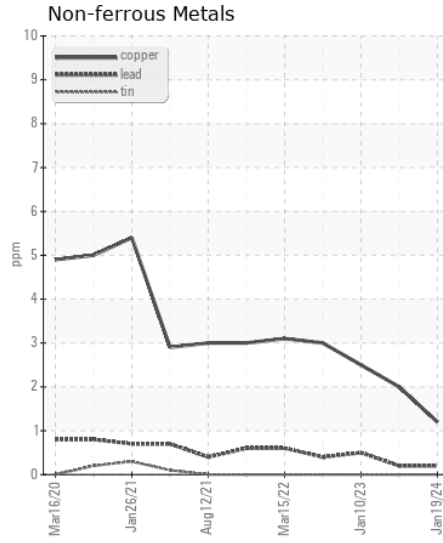
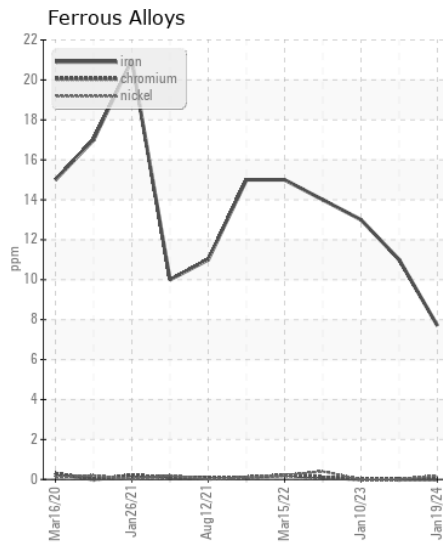
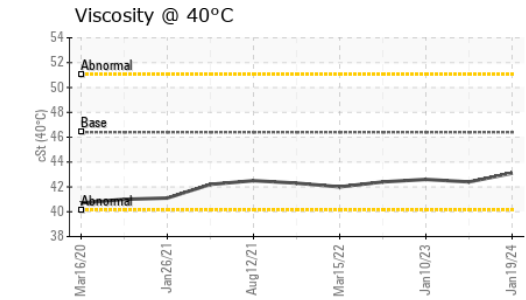
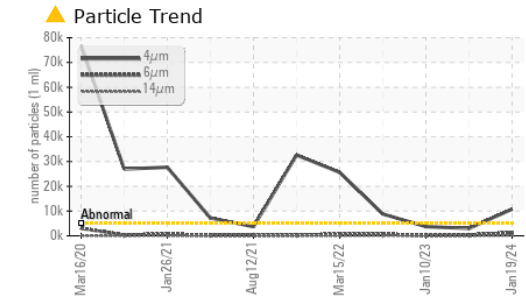
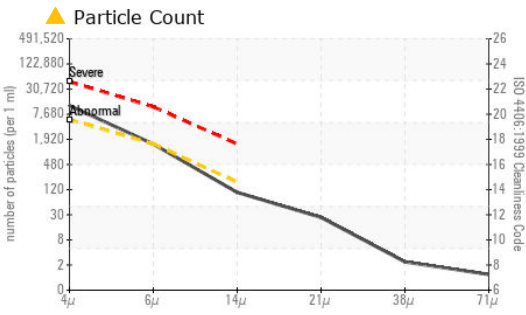
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	1	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 10760</b>	2994	3715
Particles >6µm		ASTM D7647	>1300	<b>1294</b>	270	105
Particles >14µm		ASTM D7647	>160	<b>91</b>	37	6
Particles >21µm		ASTM D7647	>40	<b>23</b>	13	1
Particles >38µm		ASTM D7647	>10	<b>2</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/17/14</b>	19/15/12	19/14/10
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</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*	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	1
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	1	2
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>16</b>	9	5
Calcium	ppm	ASTM D5185(m)	50	<b>174</b>	195	211
Phosphorus	ppm	ASTM D5185(m)	330	<b>569</b>	615	670
Zinc	ppm	ASTM D5185(m)	430	<b>714</b>	705	769
Sulfur	ppm	ASTM D5185(m)	760	<b>1421</b>	1467	1494
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	<b>43.1</b>	42.4	42.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill  
**Sample No.** : GFL0092254 **Received** : 24 Jan 2024  
**Lab Number** : 02610887 **Diagnosed** : 25 Jan 2024  
**Unique Number** : 5719982 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PrtCount )

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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