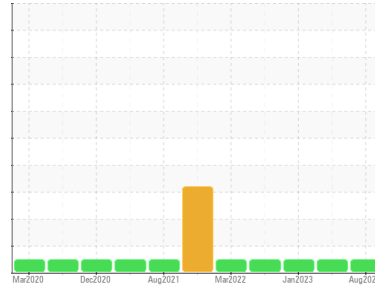




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**OR564**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (--- GAL)**

## 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		<b>GFL0087402</b>	GFL0087383	GFL0064913
Sample Date	Client Info		<b>22 Aug 2023</b>	19 Jun 2023	23 Jan 2023
Machine Age	hrs	Client Info	<b>18697</b>	18697	17502
Oil Age	hrs	Client Info	<b>2552</b>	2559	1500
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >71	<b>4</b>	3	3
Chromium	ppm	ASTM D5185(m) >11	<b>6</b>	5	4
Nickel	ppm	ASTM D5185(m) >6	<b>&lt;1</b>	<1	<1
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) >11	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >13	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >21	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>4</b>	4	3
Calcium	ppm	ASTM D5185(m) 50	<b>117</b>	118	126
Phosphorus	ppm	ASTM D5185(m) 330	<b>641</b>	647	661
Zinc	ppm	ASTM D5185(m) 430	<b>766</b>	783	786
Sulfur	ppm	ASTM D5185(m) 760	<b>1398</b>	1420	1489
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

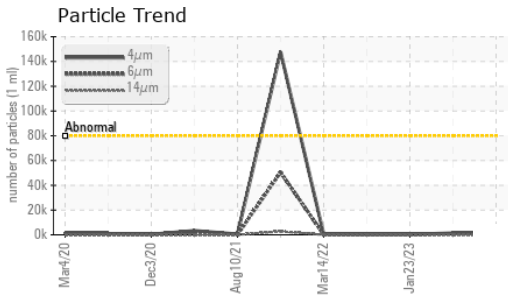
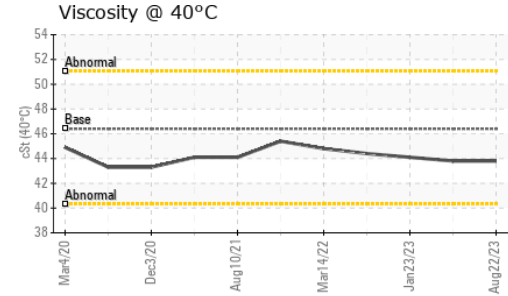
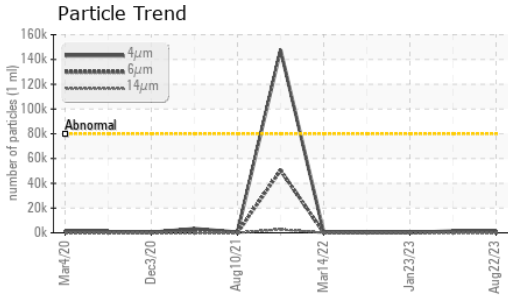
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >24	<b>2</b>	2	1
Sodium	ppm	ASTM D5185(m) >21	<b>3</b>	2	2
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80000	<b>1008</b>	1411	323
Particles >6µm	ASTM D7647	>5000	<b>368</b>	580	83
Particles >14µm	ASTM D7647	>640	<b>44</b>	97	10
Particles >21µm	ASTM D7647	>160	<b>14</b>	36	5
Particles >38µm	ASTM D7647	>40	<b>0</b>	1	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>23/19/16	<b>17/16/13</b>	18/16/14	16/14/10



# OIL ANALYSIS REPORT



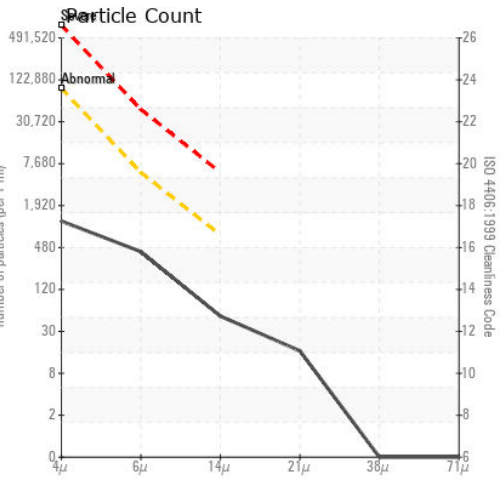
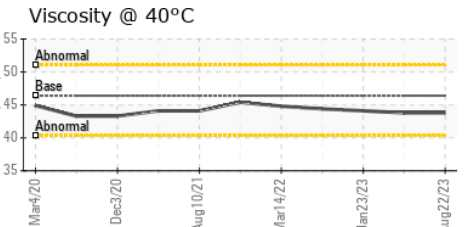
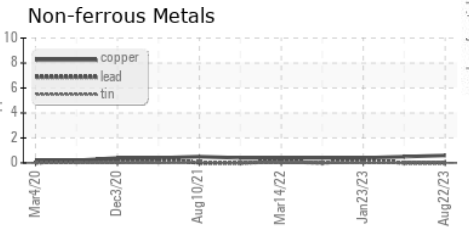
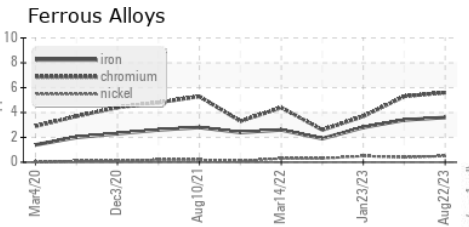
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.075	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	<b>43.8</b>	43.8	44.1

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill  
**Sample No.** : GFL0087402 **Received** : 01 Sep 2023  
**Lab Number** : 02580065 **Diagnosed** : 05 Sep 2023  
**Unique Number** : 5633125 **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.

17125 Lafleche Road,  
 Moose Creek, ON  
 CA K0C 1W0  
 Contact: Charles Bergeron  
 cbergeron@gflenv.com  
 T: (613)538-4853  
 F: