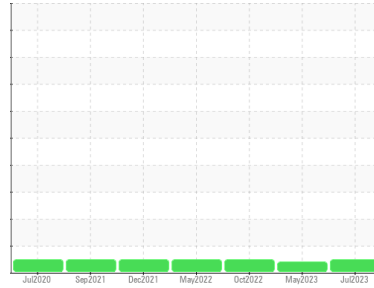




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
OR348
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		GFL0087392	GFL0064910	GFL0056453
Sample Date	Client Info		18 Jul 2023	29 May 2023	28 Oct 2022
Machine Age	hrs	Client Info	22210	21984	21186
Oil Age	hrs	Client Info	2224	2098	1331
Oil Changed	Client Info		Not Changed	Not Changd	Not Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >71	14	7	13
Chromium	ppm	ASTM D5185(m) >11	4	0	3
Nickel	ppm	ASTM D5185(m) >6	0	0	0
Titanium	ppm	ASTM D5185(m)	<1	<1	<1
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >11	2	1	2
Lead	ppm	ASTM D5185(m) >13	<1	0	0
Copper	ppm	ASTM D5185(m) >21	2	<1	2
Tin	ppm	ASTM D5185(m) >5	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	0
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	13	1
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<1	3	<1
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	11	53	13
Calcium	ppm	ASTM D5185(m) 50	134	3238	149
Phosphorus	ppm	ASTM D5185(m) 330	603	964	588
Zinc	ppm	ASTM D5185(m) 430	719	1045	677
Sulfur	ppm	ASTM D5185(m) 760	1347	3796	1318
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

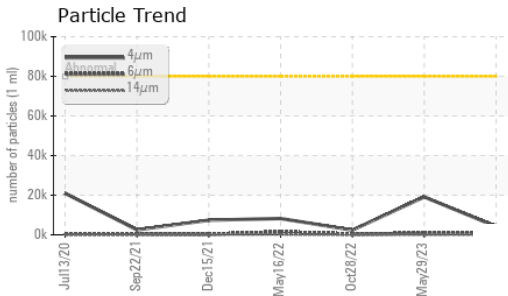
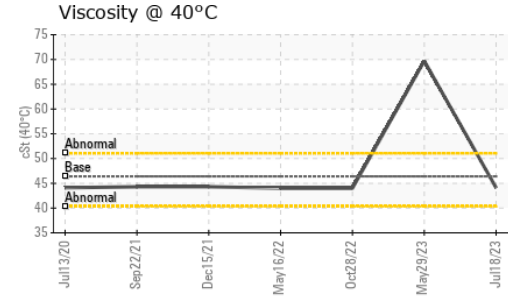
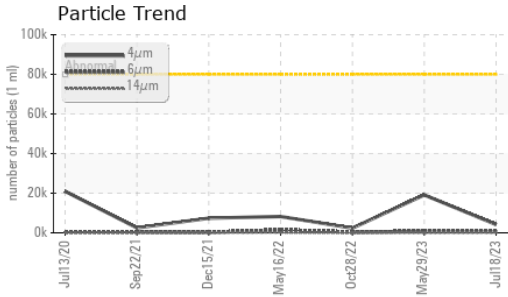
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >24	5	5	6
Sodium	ppm	ASTM D5185(m) >21	5	<1	6
Potassium	ppm	ASTM D5185(m) >20	2	<1	2

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80000	4166	19135	2380
Particles >6µm	ASTM D7647	>5000	611	794	331
Particles >14µm	ASTM D7647	>640	75	17	47
Particles >21µm	ASTM D7647	>160	28	5	17
Particles >38µm	ASTM D7647	>40	2	0	1
Particles >71µm	ASTM D7647	>10	0	0	1
Oil Cleanliness	ISO 4406 (c)	>23/19/16	19/16/13	21/17/11	18/16/13



OIL ANALYSIS REPORT

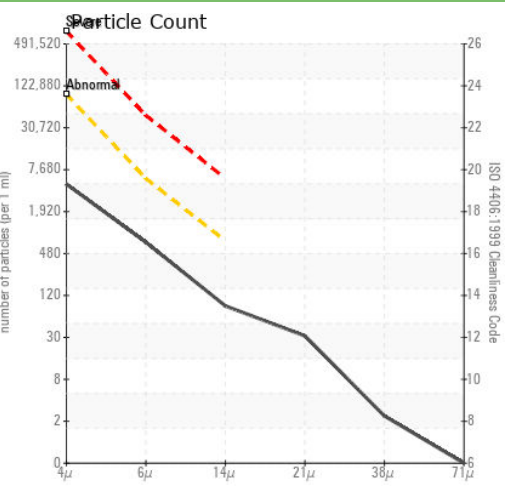
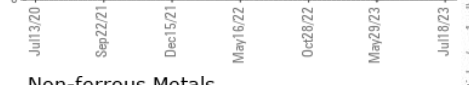
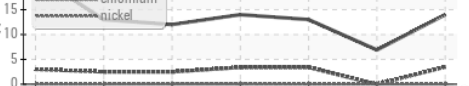


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	44.1 ▲	69.7	44.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill
Sample No. : GFL0087392 **Received** : 25 Jul 2023
Lab Number : 02571951 **Diagnosed** : 26 Jul 2023
Unique Number : 5617002 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: PrtCount)
 17125 Lafleche Road,
 Moose Creek, ON
 CA K0C 1W0
 Contact: Charles Bergeron
 cbergeron@gflenv.com
 T: (613)538-4853
 F:

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.