



OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id

OR355

Component

Hydraulic System

Fluid

PETRO CANADA HYDREX MV 32 (38 LTR)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0113414	---	---
Sample Date	Client Info	17 Apr 2024	---	---
Machine Age	hrs	Client Info	5428	---
Oil Age	hrs	Client Info	250	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184*	0	---	---	
Iron	ppm	ASTM D5185(m)	>20	32	---
Chromium	ppm	ASTM D5185(m)	>10	<1	---
Nickel	ppm	ASTM D5185(m)	>10	0	---
Titanium	ppm	ASTM D5185(m)		0	---
Silver	ppm	ASTM D5185(m)		0	---
Aluminum	ppm	ASTM D5185(m)	>10	2	---
Lead	ppm	ASTM D5185(m)	>10	0	---
Copper	ppm	ASTM D5185(m)	>75	8	---
Tin	ppm	ASTM D5185(m)	>10	0	---
Antimony	ppm	ASTM D5185(m)		0	---
Vanadium	ppm	ASTM D5185(m)		0	---
Beryllium	ppm	ASTM D5185(m)		0	---
Cadmium	ppm	ASTM D5185(m)		0	---

ADDITIVES

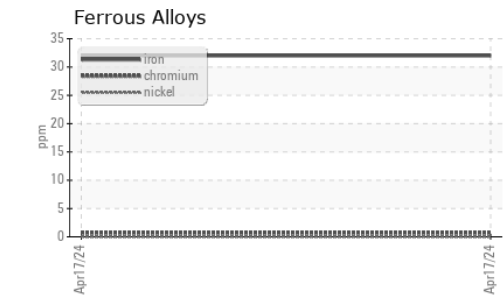
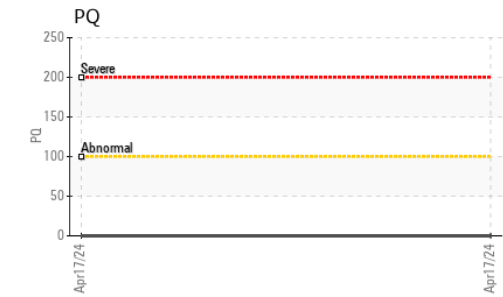
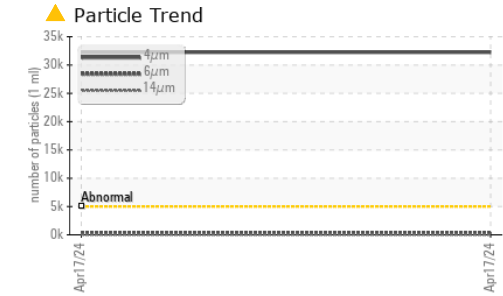
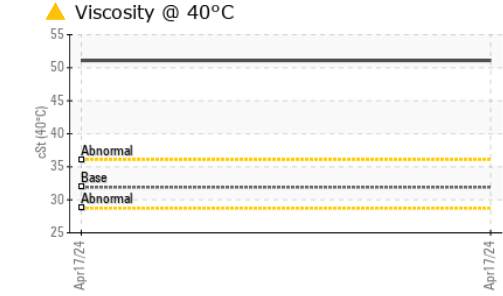
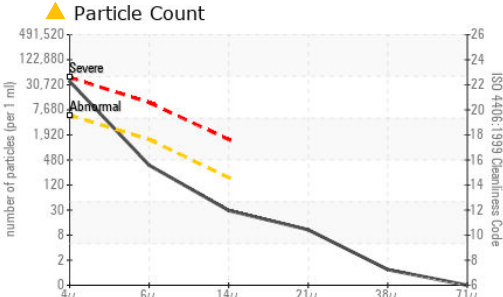
method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<1	---
Barium	ppm	ASTM D5185(m)	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---
Manganese	ppm	ASTM D5185(m)	1	<1	---
Magnesium	ppm	ASTM D5185(m)	0	5	---
Calcium	ppm	ASTM D5185(m)	50	69	---
Phosphorus	ppm	ASTM D5185(m)	330	339	---
Zinc	ppm	ASTM D5185(m)	430	425	---
Sulfur	ppm	ASTM D5185(m)	760	2754	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	6	---
Sodium	ppm	ASTM D5185(m)		4	---
Potassium	ppm	ASTM D5185(m)	>20	1	---




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FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 32245	---	---
Particles >6µm	ASTM D7647	>1300	316	---	---
Particles >14µm	ASTM D7647	>160	26	---	---
Particles >21µm	ASTM D7647	>40	9	---	---
Particles >38µm	ASTM D7647	>10	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/15/12	---	---

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	▲ 51.1	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 720 - Lafleche - Landfill**
Sample No. : GFL0113414 **Received** : 23 Apr 2024 17125 Lafleche Road,
Lab Number : 02630972 **Tested** : 23 Apr 2024 Moose Creek, ON
Unique Number : 5772125 **Diagnosed** : 24 Apr 2024 - Kevin Marson CA K0C 1W0
Test Package : MOB 1 (Additional Tests: PQ, PrtCount) Contact: Charles Bergeron
 cbergeron@gflenv.com

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.