



OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Area
{UNASSIGNED}
 Machine Id
Ex0353
 Component
Hydraulic System
 Fluid
PETRO CANADA HYDREX AW 46 (206 LTR)



DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of oil. 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	GFL0092259	---	---
Sample Date	Client Info	09 Feb 2024	---	---
Machine Age	hrs Client Info	31307	---	---
Oil Age	hrs Client Info	31307	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >65	16	---	---
Chromium	ppm ASTM D5185(m) >6	<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) >5	<1	---	---
Lead	ppm ASTM D5185(m) >45	<1	---	---
Copper	ppm ASTM D5185(m) >120	3	---	---
Tin	ppm ASTM D5185(m) >4	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	3	---	---
Barium	ppm ASTM D5185(m) 0	0	---	---
Molybdenum	ppm ASTM D5185(m) 0	0	---	---
Manganese	ppm ASTM D5185(m) 0	0	---	---
Magnesium	ppm ASTM D5185(m) 0	6	---	---
Calcium	ppm ASTM D5185(m) 50	1067	---	---
Phosphorus	ppm ASTM D5185(m) 330	506	---	---
Zinc	ppm ASTM D5185(m) 430	466	---	---
Sulfur	ppm ASTM D5185(m) 760	1968	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	2	---	---
Sodium	ppm ASTM D5185(m)	2	---	---
Potassium	ppm ASTM D5185(m) >20	2	---	---

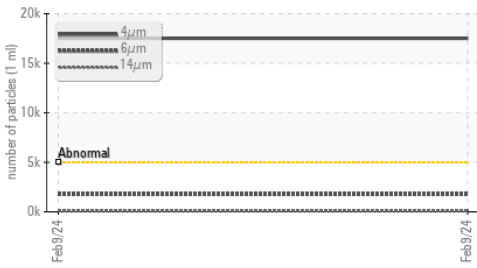
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 17510	---	---
Particles >6µm	ASTM D7647 >1300	▲ 1770	---	---
Particles >14µm	ASTM D7647 >160	81	---	---
Particles >21µm	ASTM D7647 >40	27	---	---
Particles >38µm	ASTM D7647 >10	3	---	---
Particles >71µm	ASTM D7647 >3	1	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 21/18/14	---	---

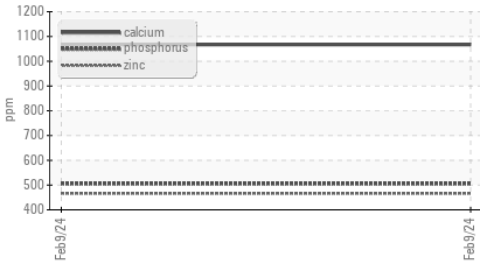


OIL ANALYSIS REPORT

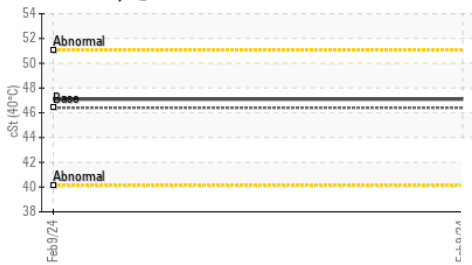
Particle Trend



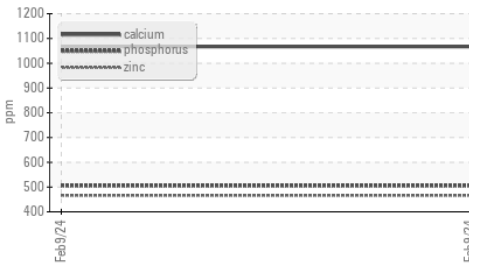
Additives



Viscosity @ 40°C



Additives



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	---

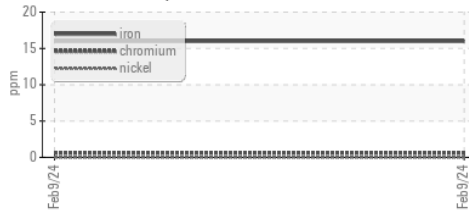
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	47.1	---

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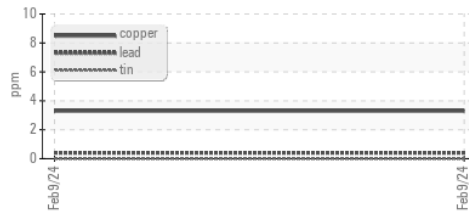
Color				no image	no image
Bottom				no image	no image

GRAPHS

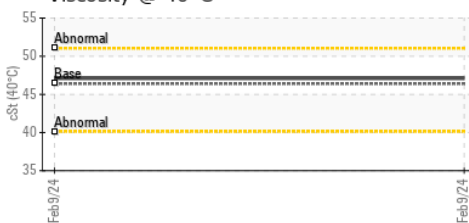
Ferrous Alloys



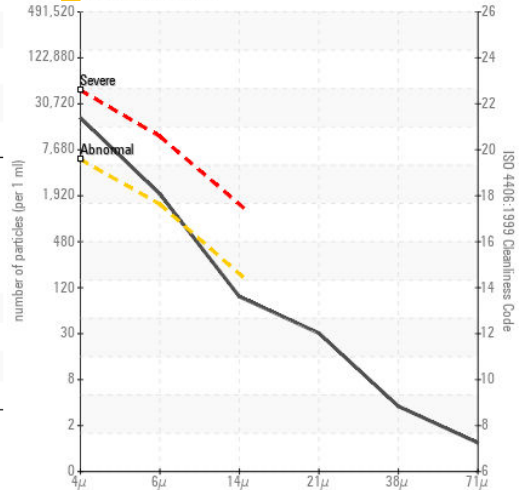
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : GFL0092259
 Lab Number : 02615398
 Unique Number : 5724493
 Test Package : MOB 1 (Additional Tests: PrtCount)

GFL Environmental - 720 - Lafleche - Landfill
 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.