MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
411037
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV 32 (--- GAL)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. We advise that you check for visible metal particles in the oil. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation. The fluid was specified as PETRO CANADA HYDREX MV 32, however, a fluid match indicates that this fluid is SAE 75W80 Tractor TDH Fluid. Please confirm the oil type and grade on your next sample.

WEAR

Light concentration of visible metal present.

CONTAMINATION

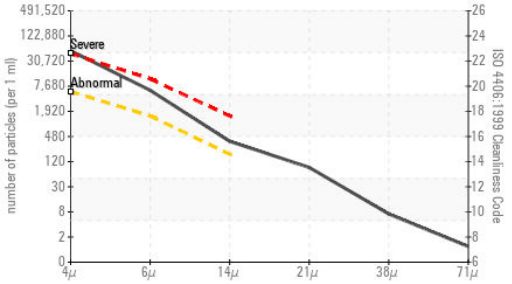
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

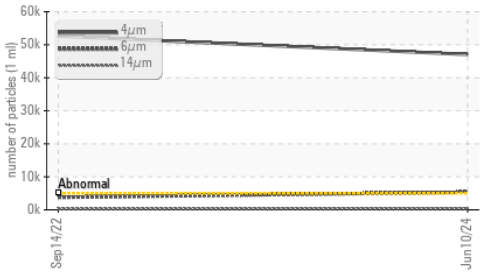
Viscosity of sample indicates oil is within SAE 75W80 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119497	GFL0046754	---
Sample Date		Client Info		10 Jun 2024	14 Sep 2022	---
Machine Age	hrs	Client Info		3783	38082	---
Oil Age	hrs	Client Info		3783	20513	---
Filter Age	hrs	Client Info		3783	20513	---
Oil Changed		Client Info		Not Changd	N/A	---
Filter Changed		Client Info		Not Changd	N/A	---
Sample Status				SEVERE	SEVERE	---
Iron	ppm	ASTM D5185(m)	>50	11	8	---
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>4	<1	0	---
Titanium	ppm	ASTM D5185(m)		<1	<1	---
Silver	ppm	ASTM D5185(m)		<1	0	---
Aluminum	ppm	ASTM D5185(m)	>5	2	2	---
Lead	ppm	ASTM D5185(m)	>4	<1	<1	---
Copper	ppm	ASTM D5185(m)	>15	8	0	---
Tin	ppm	ASTM D5185(m)	>4	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	▲ VLITE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185(m)	>15	4	9	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	▲ 47047	▲ 52637	---
Particles >6µm		ASTM D7647	>1300	▲ 5336	▲ 3783	---
Particles >14µm		ASTM D7647	>160	▲ 324	● 208	---
Particles >21µm		ASTM D7647	>40	● 77	● 69	---
Particles >38µm		ASTM D7647	>10	6	3	---
Particles >71µm		ASTM D7647	>3	1	1	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/20/16	▲ 23/19/15	---
Silt	scalar	Visual*	NONE	VLITE	NONE	---
Debris	scalar	Visual*	NONE	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---
Sodium	ppm	ASTM D5185(m)		2	<1	---
Boron	ppm	ASTM D5185(m)	0	67	● 109	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	0	---
Manganese	ppm	ASTM D5185(m)	1	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	0	8	13	---
Calcium	ppm	ASTM D5185(m)	50	2080	● 3648	---
Phosphorus	ppm	ASTM D5185(m)	330	776	● 1189	---
Zinc	ppm	ASTM D5185(m)	430	917	● 1267	---
Sulfur	ppm	ASTM D5185(m)	760	1968	● 2881	---
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	▲ 47.3	▲ 51.5	---

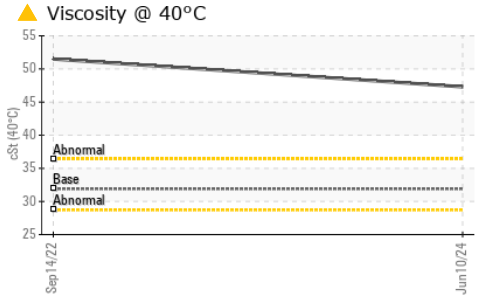
Particle Count



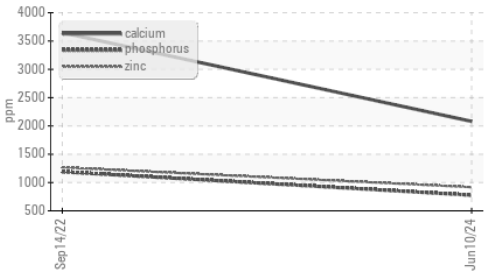
Particle Trend



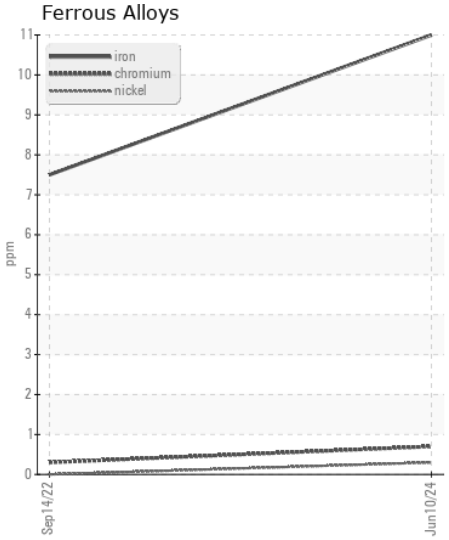
Viscosity @ 40°C



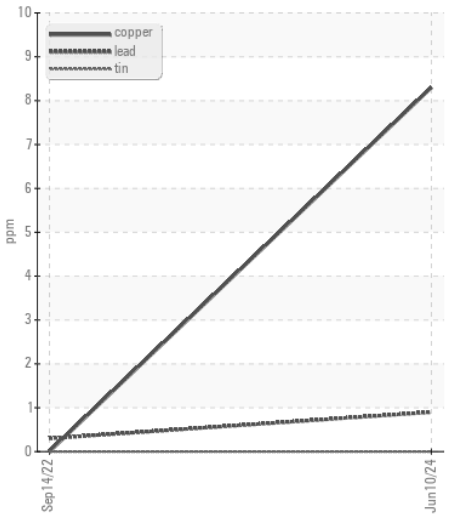
Additives



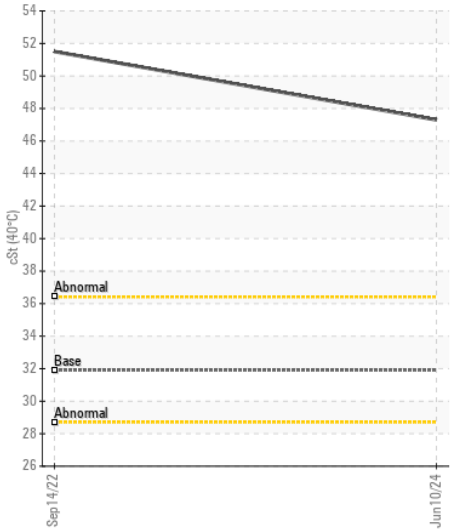
Ferrous Alloys



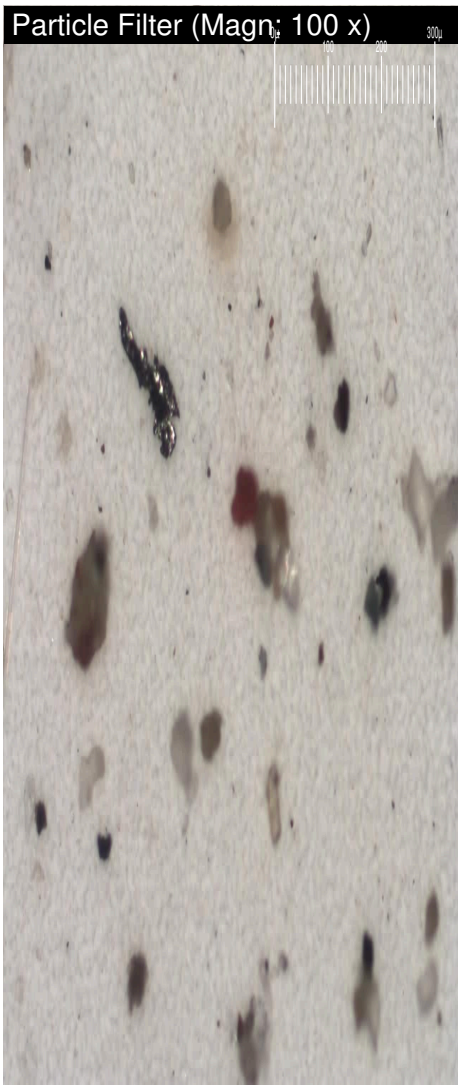
Non-ferrous Metals



Viscosity @ 40°C



Particle Filter (Magn: 100 x)



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119497
Lab Number : 02644919
Unique Number : 5802458
Test Package : MOB 1 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, PrtCount, PrtFilter)

Received : 02 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 04 Jul 2024 - Kevin Marson

GFL Environmental - 582 - Nanaimo
3469 Aqua Terra Rd.,
Cassidy, BC
CA V0R 1H0
Contact: GFL Tech
wcgfldemo@gmail.com
T:
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.