



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
731121
Component
Front Hydraulic System
Fluid
PETRO CANADA ENVIRON MV 46 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0124064	GFL0083793	GFL0033994
Sample Date		Client Info		18 Jun 2024	05 Jul 2023	29 Jun 2022
Machine Age	hrs	Client Info		7814	5778	2198
Oil Age	hrs	Client Info		0	2400	1350
Filter Age	hrs	Client Info		2400	2400	1350
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<1	7	7
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	2	2	2
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

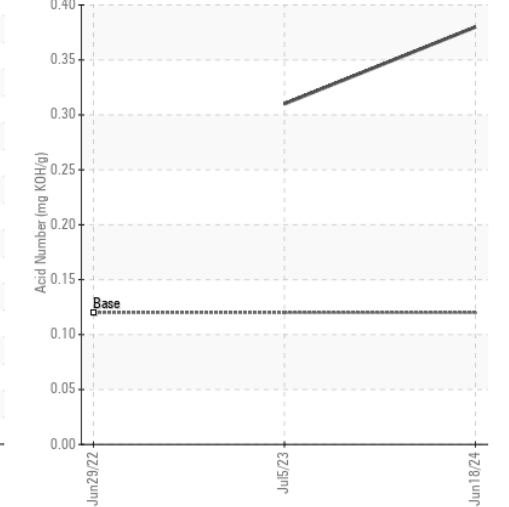
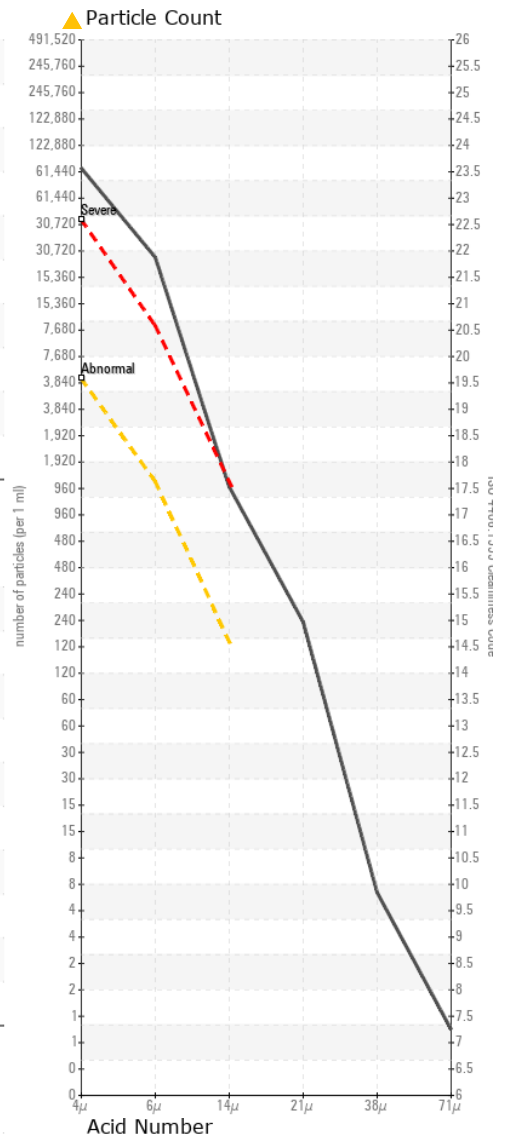
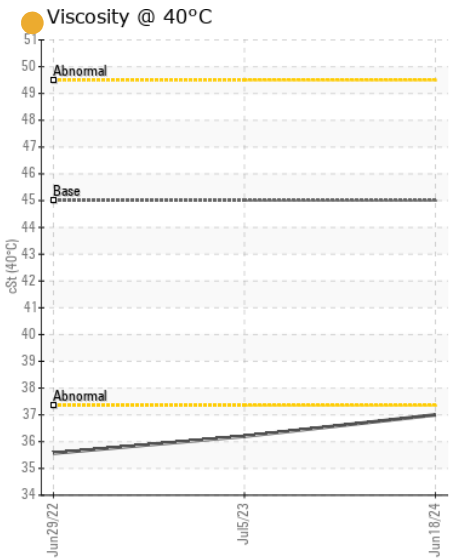
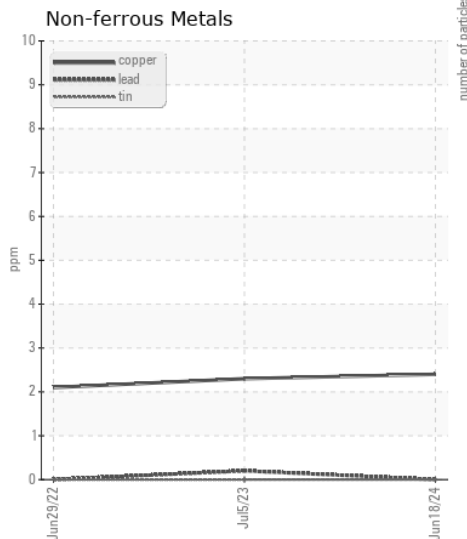
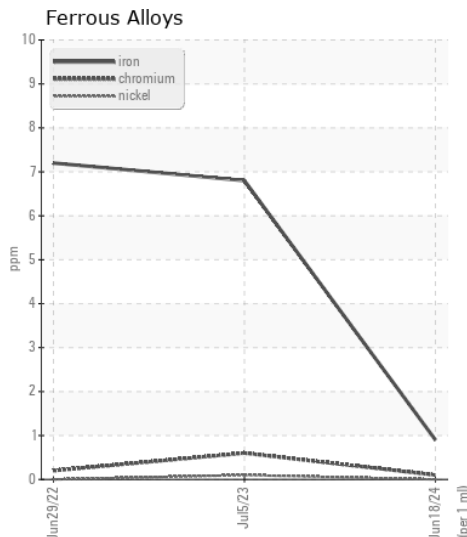
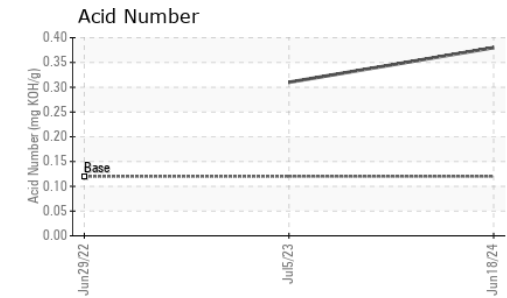
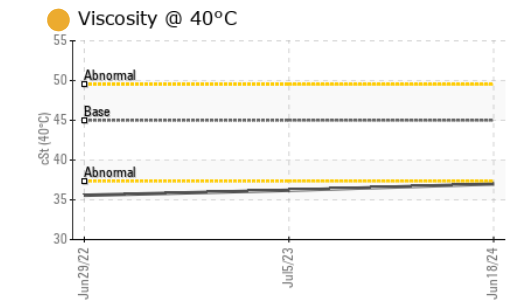
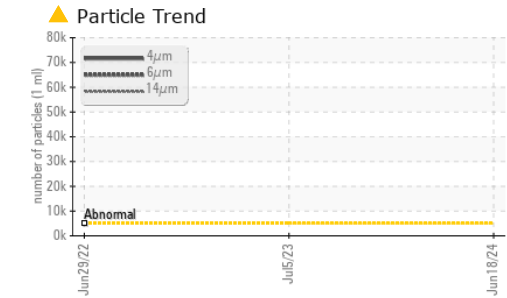
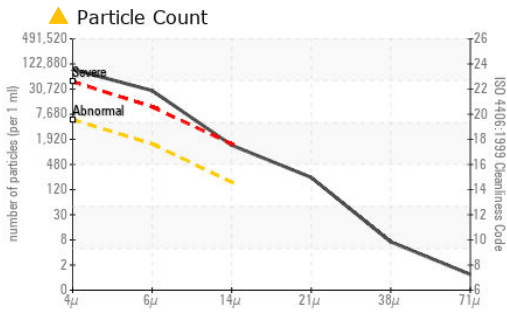
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	3	3	3
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 78599	---	---
Particles >6µm		ASTM D7647	>1300	▲ 24489	---	---
Particles >14µm		ASTM D7647	>160	▲ 1215	---	---
Particles >21µm		ASTM D7647	>40	▲ 207	---	---
Particles >38µm		ASTM D7647	>10	6	---	---
Particles >71µm		ASTM D7647	>3	1	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/22/17	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		3	2	1
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	<1
Manganese	ppm	ASTM D5185m	0	0	0	0
Magnesium	ppm	ASTM D5185m	0	6	6	5
Calcium	ppm	ASTM D5185m	0	75	60	59
Phosphorus	ppm	ASTM D5185m	650	310	291	310
Zinc	ppm	ASTM D5185m	0	373	372	371
Sulfur	ppm	ASTM D5185m	1420	1015	1070	1008
Acid Number (AN)	mg KOH/g	ASTM D8045	0.12	0.38	0.31	---
Visc @ 40°C	cSt	ASTM D445	45.0	● 37.0	● 36.2	● 35.57



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124064 **Received** : 25 Jun 2024
Lab Number : 06219618 **Tested** : 26 Jun 2024
Unique Number : 11097815 **Diagnosed** : 26 Jun 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: PrtCount)

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Loyce Stewart
 loyce.stewart@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: