



Machine Id
731117
 Component
Hydraulic System
 Fluid
PETRO CANADA HYDREX 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.

WEAR

All component wear rates are normal.

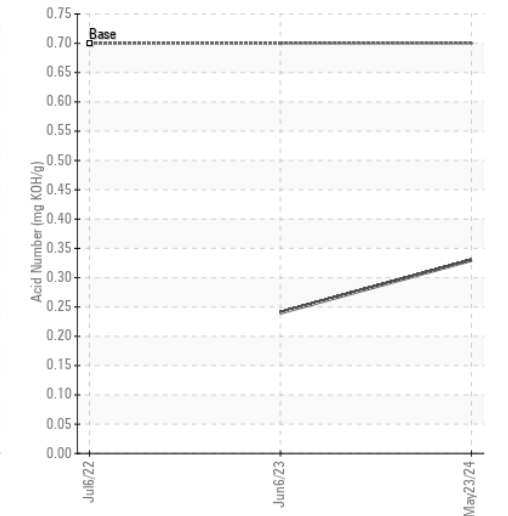
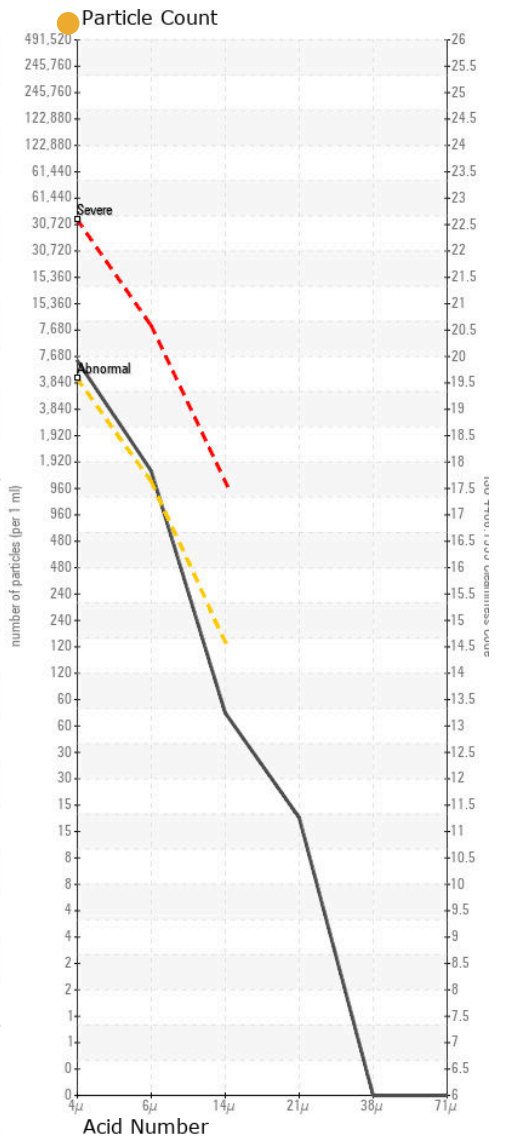
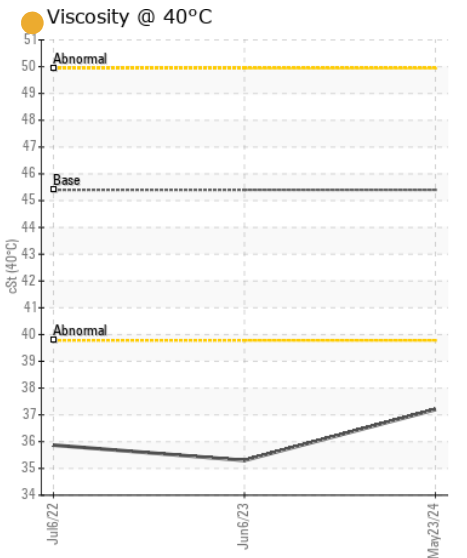
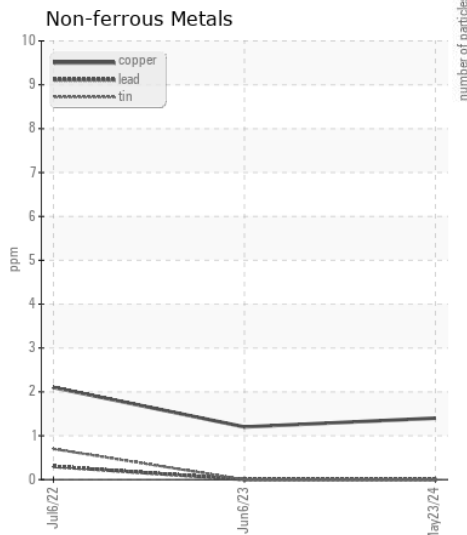
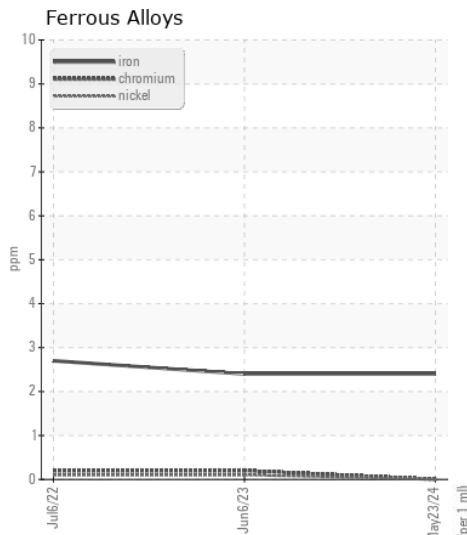
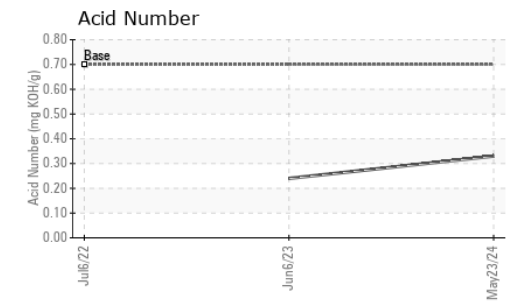
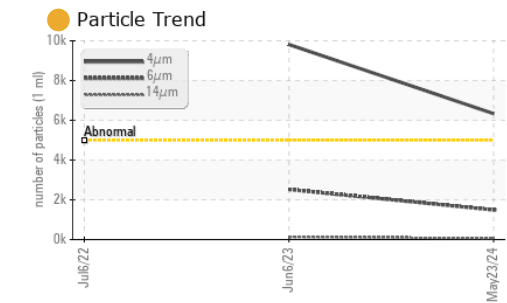
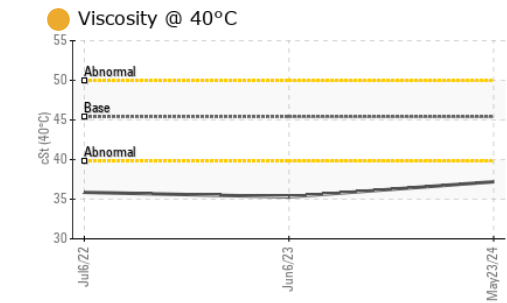
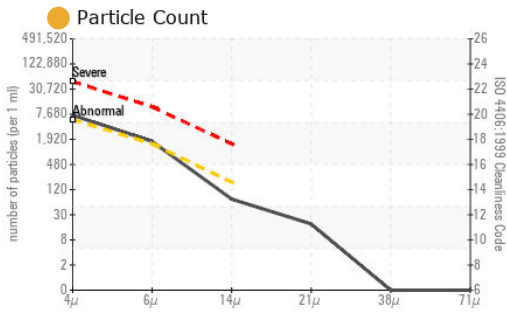
CONTAMINATION

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 32 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0120168	GFL0083735	GFL0033900
Sample Date		Client Info		23 May 2024	06 Jun 2023	06 Jul 2022
Machine Age	hrs	Client Info		6737	4680	3394
Oil Age	hrs	Client Info		0	4680	1350
Filter Age	hrs	Client Info		2400	1200	1350
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	2	2	3
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	1
Aluminum	ppm	ASTM D5185m	>10	0	0	0
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	1	1	2
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	2	2	3
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	6333	9814	---
Particles >6µm		ASTM D7647	>1300	1491	2519	---
Particles >14µm		ASTM D7647	>160	63	126	---
Particles >21µm		ASTM D7647	>40	16	31	---
Particles >38µm		ASTM D7647	>10	0	2	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/18/13	20/19/14	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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
Sodium	ppm	ASTM D5185m		2	2	2
Boron	ppm	ASTM D5185m	0	0	0	1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	<1
Manganese	ppm	ASTM D5185m	1	<1	0	0
Magnesium	ppm	ASTM D5185m	0	12	6	7
Calcium	ppm	ASTM D5185m	50	114	54	53
Phosphorus	ppm	ASTM D5185m	330	316	312	315
Zinc	ppm	ASTM D5185m	430	383	383	363
Sulfur	ppm	ASTM D5185m	760	931	982	990
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	0.33	0.24	---
Visc @ 40°C	cSt	ASTM D445	45.4	37.2	35.3	35.87



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0120168 **Received** : 28 May 2024
Lab Number : 06192139 **Tested** : 29 May 2024
Unique Number : 11048891 **Diagnosed** : 30 May 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: