

OIL ANALYSIS REPORT

Sample Rating Trend





Component Transmission (Auto)

Fluid PETRO CANADA DuraDrive HD Synthetic 668 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

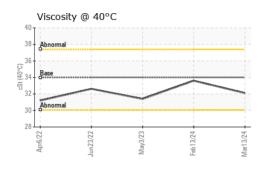
Fluid Condition

The condition of the fluid is acceptable for the time in service.

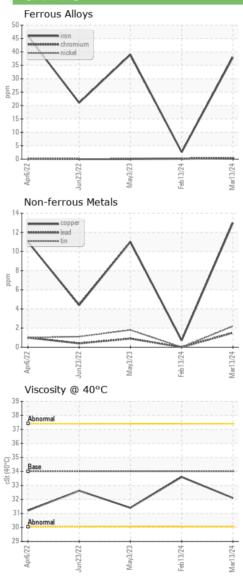
SAMPLE INFORM	NATION	method				history2
Sample Number		Client Info		GFL0106840	GFL0106850	GFL0078148
Sample Date		Client Info		13 Mar 2024	13 Feb 2024	03 May 2023
Machine Age	hrs	Client Info		9412	9171	75321
Oil Age	hrs	Client Info		600	600	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS	S i	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	38	3	39
Chromium	ppm	ASTM D5185m	>5	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>50	13	2	13
Lead	ppm	ASTM D5185m	>50	2	0	<1
Copper	ppm	ASTM D5185m	>225	13	<1	11
Tin	ppm	ASTM D5185m	>10	2	0	2
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		62	75	61
Barium	ppm	ASTM D5185m		0	10	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		4	3	5
Calcium	ppm	ASTM D5185m		136	120	145
					120	
						204
Phosphorus	ppm	ASTM D5185m		194	256	204 9
Phosphorus Zinc Sulfur					256	204 9 1625
Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base	194 7 1712	256 0	9
Phosphorus Zinc Sulfur CONTAMINAN ⁻	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		194 7 1712	256 0 1816	9 1625
Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon	ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m method		194 7 1712 current	256 0 1816 history1	9 1625 history2
Phosphorus Zinc Sulfur	ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>20	194 7 1712 current 5	256 0 1816 history1 4	9 1625 history2 4
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>20	194 7 1712 current 5 5 3	256 0 1816 history1 4 0	9 1625 history2 4 0
Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon Sodium Potassium VISUAL	ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20	194 7 1712 current 5 5 3	256 0 1816 <u>history1</u> 4 0 <1	9 1625 history2 4 0 2
Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon Sodium Potassium VISUAL White Metal	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 limit/base	194 7 1712 current 5 5 3 3 current	256 0 1816 history1 4 0 <1 history1	9 1625 history2 4 0 2 kistory2
Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm TS ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m *Visual	>20 >20 limit/base NONE	194 7 1712 current 5 5 3 current NONE	256 0 1816 history1 4 0 <1 +istory1 NONE	9 1625 history2 4 0 2 history2 NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm pm TS ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>20 >20 limit/base NONE NONE	194 7 1712 current 5 5 3 current NONE NONE	256 0 1816 history1 4 0 <1 + istory1 NONE NONE	9 1625 history2 4 0 2 2 history2 NONE NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm TS ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE	194 7 1712 current 5 5 3 current NONE NONE NONE	256 0 1816 history1 4 0 <1 + istory1 NONE NONE NONE	9 1625 4 0 2 history2 NONE NONE NONE NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE	194 7 1712 current 5 5 3 3 current NONE NONE NONE NONE	256 0 1816 <u>history1</u> 4 0 <1 <u>history1</u> NONE NONE NONE NONE	9 1625 history2 4 0 2 2 history2 NONE NONE NONE NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	194 7 1712 current 5 5 3 3 current NONE NONE NONE NONE NONE NONE	256 0 1816 history1 4 0 <1 + history1 NONE NONE NONE NONE NONE NONE	9 1625 history2 4 0 2 Vone NONE NONE NONE NONE NONE
Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon Sodium Potassium	ppm ppm pm TS ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	194 7 1712 5 5 3 current NONE NONE NONE NONE NONE NONE NONE	256 0 1816 history1 4 0 <1 +istory1 NONE NONE NONE NONE NONE NONE NONE	9 1625 history2 4 0 2 history2 NONE NONE NONE NONE NONE NONE NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm pm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE NONE NONE	194 7 1712 5 5 3 <i>current</i> NONE NONE NONE NONE NONE NONE NONE NON	256 0 1816 history1 4 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE NON	9 1625 history2 4 0 2 history2 NONE NONE NONE NONE NONE NONE NONE NON
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm pm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE	194 7 1712 current 5 5 3 current NONE NONE NONE NONE NONE NONE NONE NON	256 0 1816 history1 4 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE NON	9 1625 history2 4 0 2 history2 NONE NONE NONE NONE NONE NONE NONE NON



OIL ANALYSIS REPORT



FLUID PRO	PERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	34	32.1	33.6	31.4
SAMPLE IM	AGES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS					ō.	а.



GFL Environmental - 856 - Houston South 8515 Highway 6 South Houston, TX US 77083 : 21 Mar 2024 - Wes Davis Contact: Apolinar Zacarias pzacariascano@gflenv.com T: F:



Unique Number : 10938256 Diagnosed Test Package : FLEET Certificate L2367 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)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Tested

: 20 Mar 2024

: 21 Mar 2024

Laboratory

Sample No.

Lab Number : 06124105

: GFL0106840