



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Area

(86J0TW)

Machine Id

729043-361418

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (8 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0065434	GFL0105209	GFL0098765
Sample Date		Client Info		12 Apr 2024	14 Feb 2024	22 Dec 2023
Machine Age	hrs	Client Info		14867	10473	14418
Oil Age	hrs	Client Info		150	300	150
Filter Age	hrs	Client Info		150	300	150
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				MARGINAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	14	10	18
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	0	2	<1
Copper	ppm	ASTM D5185m	>330	<1	2	3
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

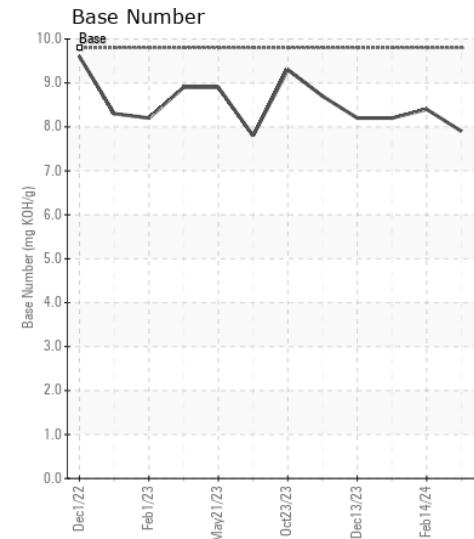
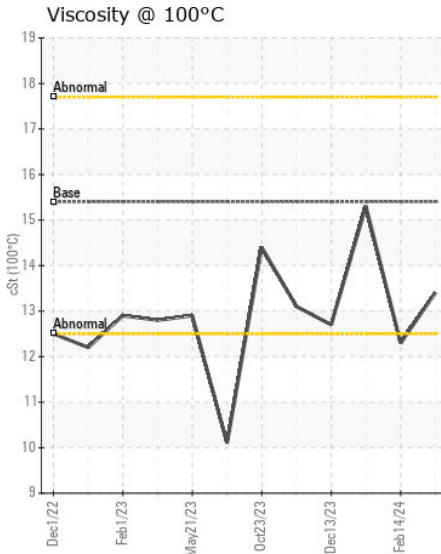
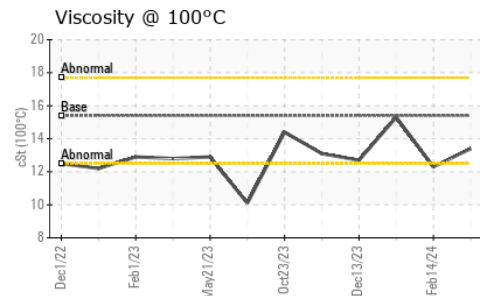
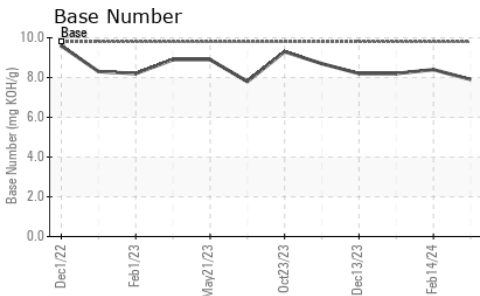
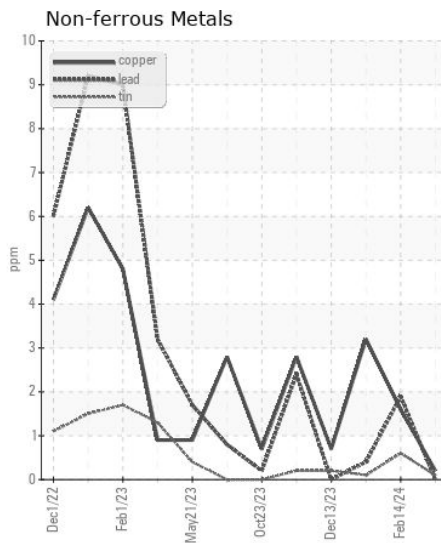
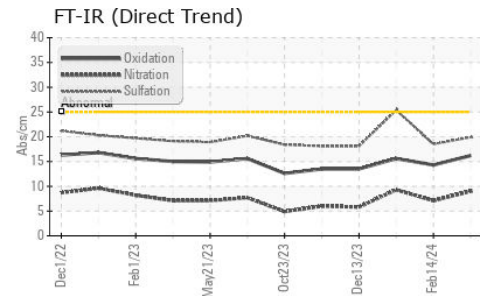
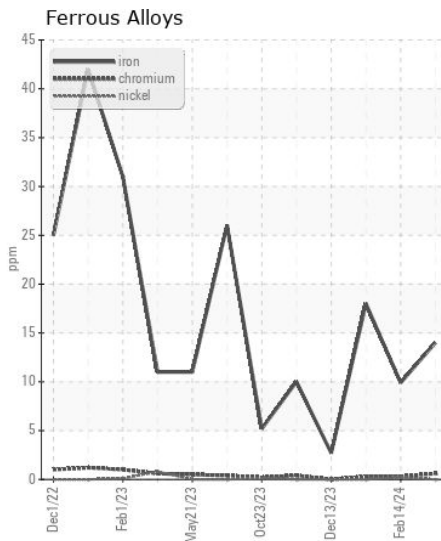
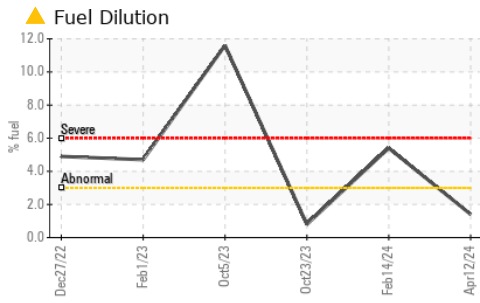
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	4	2	4
Potassium	ppm	ASTM D5185m	>20	<1	1	12
Fuel	%	ASTM D3524	>3.0	▲ 1.4	▲ 5.4	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.6	0.4	▲ 3.7
Nitration	Abs/cm	*ASTM D7624	>20	9.0	7.1	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	18.5	25.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	5	28
Boron	ppm	ASTM D5185m	0	1	3	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	61	53	60
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	996	838	901
Calcium	ppm	ASTM D5185m	1070	1102	905	1013
Phosphorus	ppm	ASTM D5185m	1150	1121	918	939
Zinc	ppm	ASTM D5185m	1270	1334	1137	1152
Sulfur	ppm	ASTM D5185m	2060	3567	2775	3061
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	14.3	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.9	8.4	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	▲ 12.3	15.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0065434 **Received** : 16 Apr 2024
Lab Number : 06150123 **Tested** : 19 Apr 2024
Unique Number : 10980201 **Diagnosed** : 19 Apr 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 829 - Wilco Hauling
 5054 Highway HH
 Hartville, MO
 US 65667
 Contact: James Jones
 james.jones@gflenv.com
 T: (417)349-5006
 F:

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)