



Area

(62A0X10) ALEXANDER CITY

Machine Id

711006

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0085973	GFL0079728	GFL0079737
Sample Date		Client Info		17 Jun 2024	09 May 2024	10 Apr 2024
Machine Age	hrs	Client Info		6319	6324	6197
Oil Age	hrs	Client Info		6319	1882	6197
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	29	32	36
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	5	6	6
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

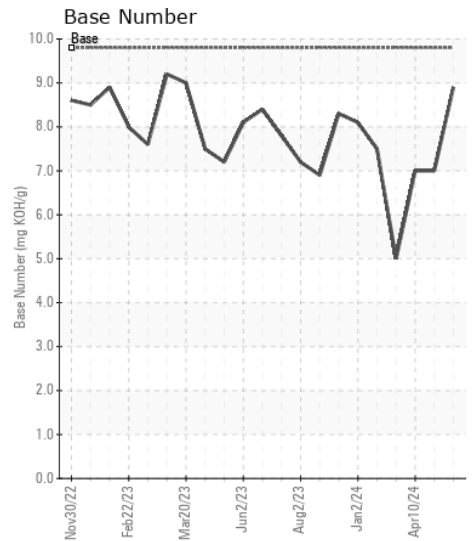
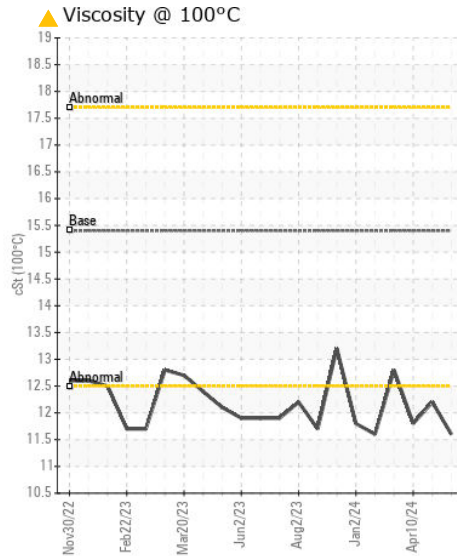
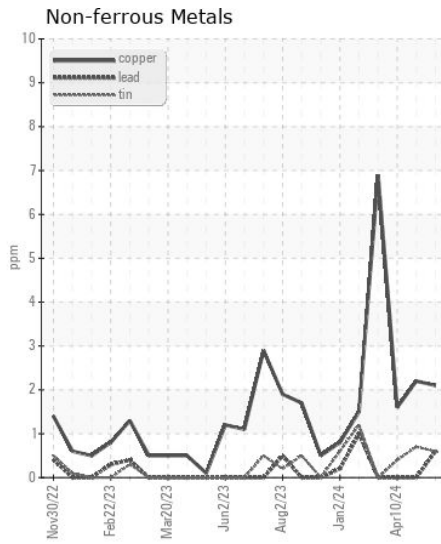
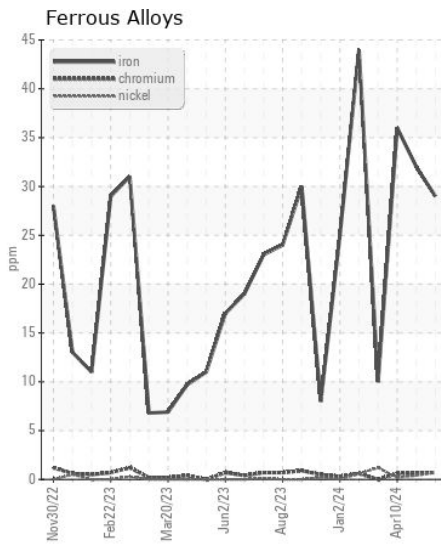
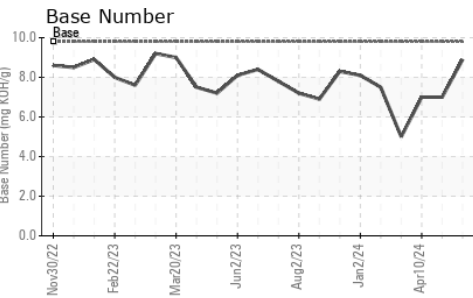
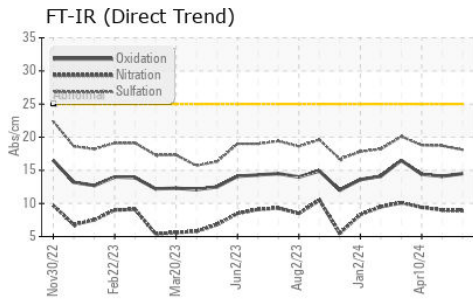
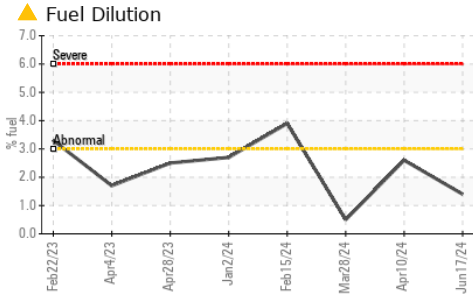
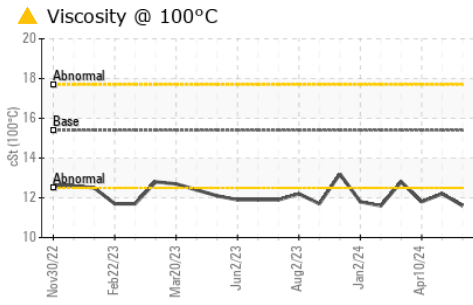
Light fuel dilution occurring.

Silicon	ppm	ASTM D5185m	>25	6	7	7
Potassium	ppm	ASTM D5185m	>20	12	12	32
Fuel	%	ASTM D3524	>3.0	▲ 1.4	<1.0	▲ 2.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.4	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.0	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.1	18.7	18.8
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. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		33	34	38
Boron	ppm	ASTM D5185m	0	16	10	9
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	60	62	61	60
Manganese	ppm	ASTM D5185m	0	1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	841	821	827
Calcium	ppm	ASTM D5185m	1070	1072	1022	1056
Phosphorus	ppm	ASTM D5185m	1150	991	970	945
Zinc	ppm	ASTM D5185m	1270	1146	1150	1102
Sulfur	ppm	ASTM D5185m	2060	2973	3028	3274
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	14.1	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.9	7.0	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.6	12.2	▲ 11.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0085973 **Received** : 25 Jun 2024
Lab Number : 06219290 **Tested** : 27 Jun 2024
Unique Number : 11097487 **Diagnosed** : 27 Jun 2024 - Wes Davis
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 172 - Montgomery-Alexander City-Tallahassee
 Multiple Sites
 Montgomery, AL
 US 36108
 Contact: Lisa Goldman
 lisa.reeves@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)