



Area
(64069P)
Machine Id
3719
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (10 GAL)

RECOMMENDATION

Check for low coolant level. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113937	GFL0093750	GFL0093754
Sample Date		Client Info		16 May 2024	13 Feb 2024	29 Dec 2023
Machine Age	hrs	Client Info		40163	39724	39473
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	29	24	21
Chromium	ppm	ASTM D5185m	>5	2	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>15	4	2	2
Lead	ppm	ASTM D5185m	>25	1	1	<1
Copper	ppm	ASTM D5185m	>100	1	3	5
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

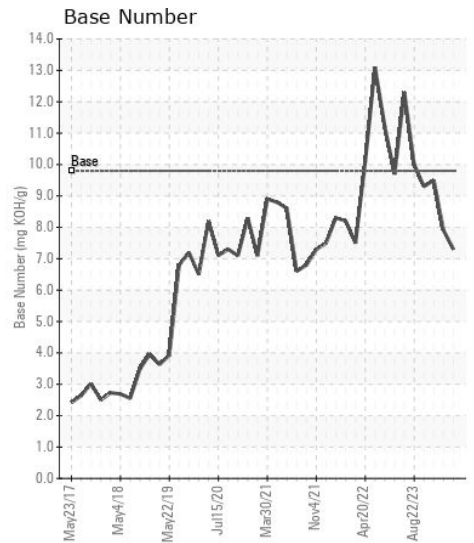
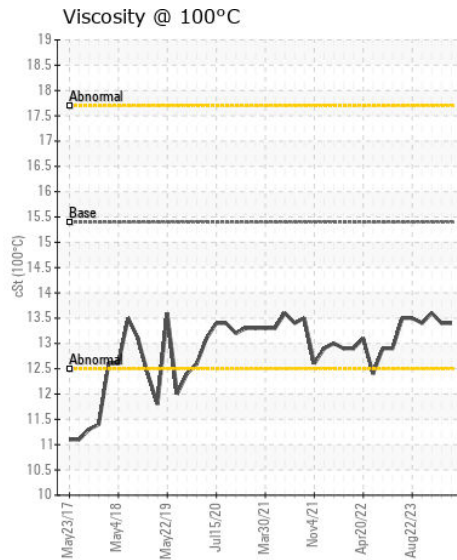
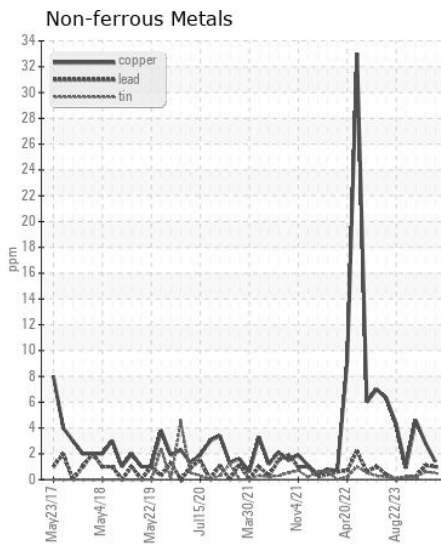
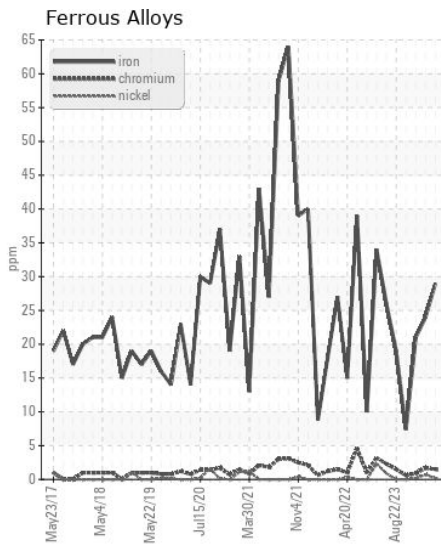
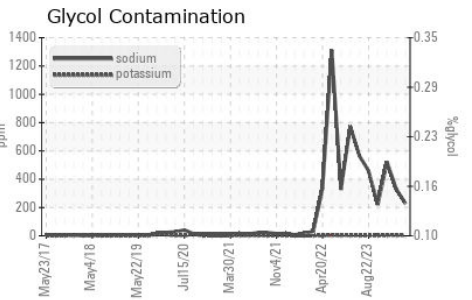
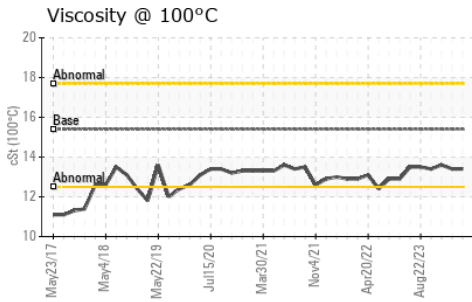
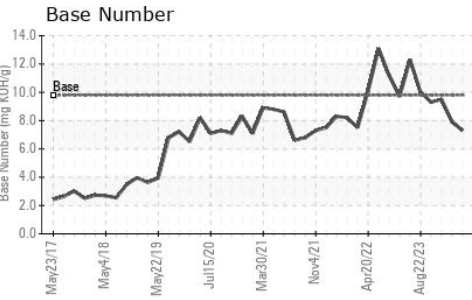
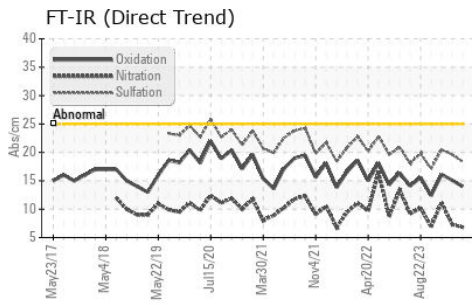
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	12	13	17
Potassium	ppm	ASTM D5185m	>20	3	3	4
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.3	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	6.8	7.3	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	19.6	20.5
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		228	331	522
Boron	ppm	ASTM D5185m	0	9	12	23
Barium	ppm	ASTM D5185m	0	0	0	10
Molybdenum	ppm	ASTM D5185m	60	65	67	77
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	886	890	862
Calcium	ppm	ASTM D5185m	1070	1111	972	977
Phosphorus	ppm	ASTM D5185m	1150	993	918	1067
Zinc	ppm	ASTM D5185m	1270	1246	1169	1124
Sulfur	ppm	ASTM D5185m	2060	3150	3018	3232
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.0	15.1	16.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.3	7.9	9.5
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.4	13.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0113937
Lab Number : 06188721
Unique Number : 11045473
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 029 - Wytheville
 2390 North 4th Street
 Wytheville, VA
 US 24382

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)

Received : 23 May 2024
Tested : 28 May 2024
Diagnosed : 28 May 2024 - Sean Felton

Contact: CHARLES CORVIN
 charles.corvin@gflenv.com; canastasio@wearcheckusa.com
 T: (276)223-4476
 F: (276)223-1283