

OIL ANALYSIS REPORT

Sample Rating Trend

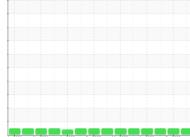




Machine Id Component

Diesel Engine Fluid

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

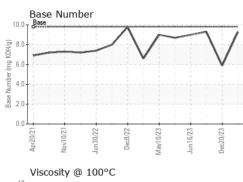


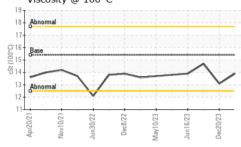


DIAGNOSIS	SAMPLE INFOR	RMATION	method	limit/base	e current	history1	history2
ecommendation	Sample Number		Client Info		GFL0116932	GFL0107074	GFL0038756
esample at the next service interval to monitor.	Sample Date		Client Info		21 Mar 2024	20 Dec 2023	19 Sep 2023
ear	Machine Age	hrs	Client Info		13982	13981	5770
component wear rates are normal.	Oil Age	hrs	Client Info		600	600	600
ontamination	Oil Changed		Client Info		Changed	Not Changd	Not Changd
ere is no indication of any contamination in the	Sample Status				NORMAL	NORMAL	NORMAL
I. Iuid Condition	CONTAMINA	ΓΙΟΝ	method	limit/base	e current	history1	history2
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	WEAR METAI	S	method	limit/base	e current	history1	history2
	Iron	ppm	ASTM D5185m	>120	3	16	3
	Chromium	ppm	ASTM D5185m	>20	0	<1	0
	Nickel	ppm	ASTM D5185m	>5	<1	<1	0
	Titanium	ppm	ASTM D5185m	>2	0	0	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	1	2	1
	Lead	ppm	ASTM D5185m	>40	0	0	0
	Copper	ppm	ASTM D5185m	>330	3	2	0
	Tin	ppm	ASTM D5185m	>15	0	<1	0
	Vanadium	ppm	ASTM D5185m		<1	0	0
	Cadmium	ppm	ASTM D5185m		0	0	0
	ADDITIVES		method	limit/base	e current	history1	history2
	Boron	ppm	ASTM D5185m	0	1	<1	2
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m		57	57	56
	Manganese	ppm	ASTM D5185m		<1	0	0
	Magnesium	ppm	ASTM D5185m		984	876	959
	Calcium	ppm	ASTM D5185m		1092	1040	1115
	Phosphorus	ppm	ASTM D5185m		1034	919	1028
	Zinc	ppm	ASTM D5185m		1230	1148	1256
	Sulfur	ppm	ASTM D5185m		3755	2702	3832
	CONTAMINA	NTS	method	limit/base	e current	history1	history2
	Silicon	ppm	ASTM D5185m	>25	4	3	8
	Sodium	ppm	ASTM D5185m		2	2	4
	Potassium	ppm	ASTM D5185m	>20	0	2	9
	INFRA-RED		method	limit/base	e current	history1	history2
	Soot %	%	*ASTM D7844	>4	0.2	0.8	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	5.4	10.1	4.4
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	21.7	17.3
	Ganation						
	FLUID DEGRA		method	limit/base	e current	history1	history2
			method *ASTM D7414		e current	history1 18.9	history2 13.0

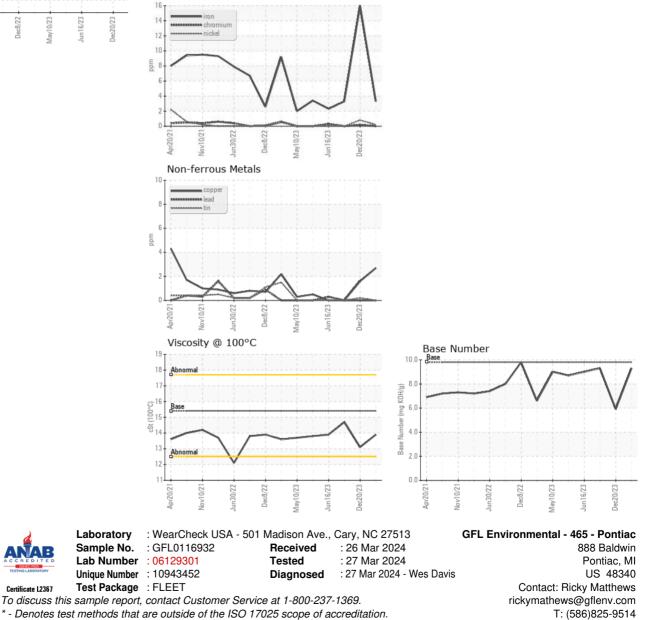


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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	13.1	14.7
GRAPHS						
Ferrous Alloys						



* - 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)

Certificate L2367

F: