

NORMAL WEAR CONTAMINATION NORMAL **FLUID CONDITION** NORMAL

(TB7705) 412005 one

Front Center Diesel Engine

PETRO CANADA DURON SHP 15W40 (42 QTS)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0115635	GFL0095966	GFL0066985
	Sample Date		Client Info		23 May 2024	04 Dec 2023	24 Aug 2023
	Machine Age	hrs	Client Info		4161	3964	3582
	Oil Age	hrs	Client Info		0	382	0
	Filter Age	hrs	Client Info		0	382	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>120	10	8	13
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	0	<1
	Nickel	ppm	ASTM D5185m		3	1	<1
	Titanium	ppm	ASTM D5185m	>2	0	0	0
	Silver	ppm	ASTM D5185m	>2	0	0	<1
	Aluminum	ppm	ASTM D5185m	>20	3	<1	2
	Lead	ppm	ASTM D5185m	>40	0	0	0
	Copper	ppm	ASTM D5185m	>330	3	2	3
	Tin	ppm	ASTM D5185m	>15	0	0	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	Silicon	ppm	ASTM D5185m	>25	2	3	3
OONTAMINATION	Potassium	ppm	ASTM D5185m		8	<1	5
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method	>3.0	<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>4	0.4	0.6	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	7.7	8.1	8.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	19.7	19.4
	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	Sodium	ppm	ASTM D5185m		3	3	4
	Boron	ppm	ASTM D5185m	0	3	7	8
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m	60	60	52	64
	Manganese	ppm	ASTM D5185m		<1	0	1
	Magnesium	ppm	ASTM D5185m	1010	954	867	963
	Calcium	ppm	ASTM D5185m	1070	1130	1050	1183
	Phosphorus	ppm	ASTM D5185m	1150	1068	869	1013
	Zinc	ppm	ASTM D5185m	1270	1241	1113	1269
	Sulfur	ppm	ASTM D5185m	2060	3700	2652	3425
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	15.6	15.2
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.7	7.7	7.2
	1/1	0.		4 - 4		10.0	

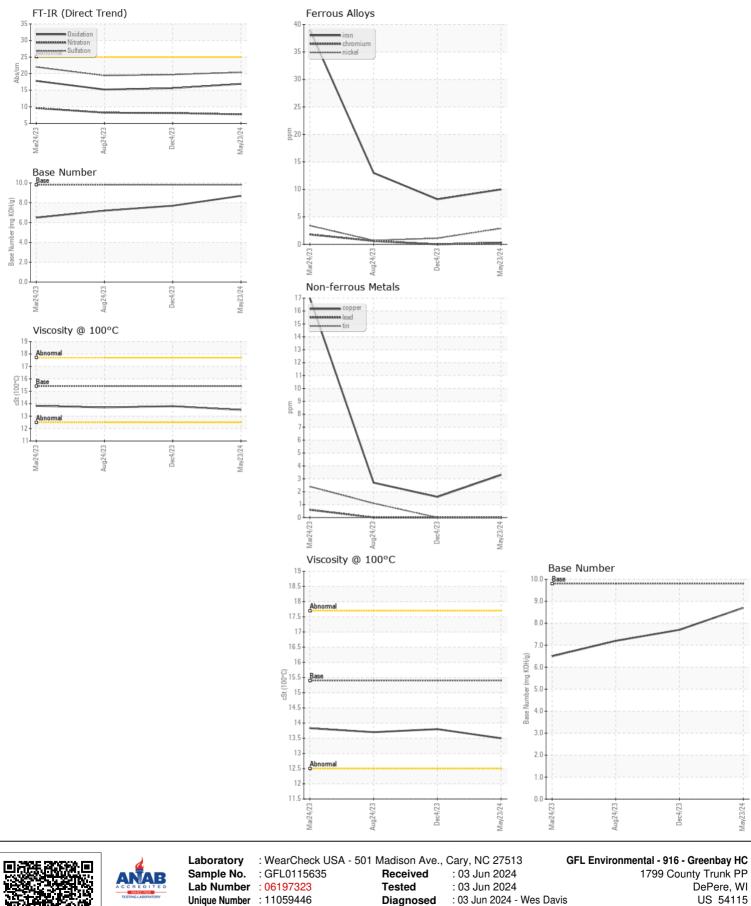
Visc @ 100°C cSt

13.8

13.7

13.5

ASTM D445 15.4



Certificate 12367 Test Package : FLEET To discuss this sample report. contact (

To discuss this sample report, contact Customer Service at 1-800-237-1369. tr * - 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)

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