

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

## (YA130683) Machine Id

## **3703**

**Diesel Engine** 

## PETRO CANADA DURON SHP 15W40 (8 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0116377	GFL0116382	GFL0098780
	Sample Date		Client Info		01 Jul 2024	11 Apr 2024	01 Feb 2024
	Machine Age	hrs	Client Info		9961	9961	9961
	Oil Age	hrs	Client Info		9961	9961	9961
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	Changed
	Filter Changed		Client Info		N/A	N/A	Changed
	Sample Status				NORMAL	SEVERE	ABNORMAL
WEAR	Iron	ppm	ASTM D5185m	>75	26	4	▲ 111
	Chromium	ppm	ASTM D5185m	>5	2	<1	<u> </u>
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	<1	<u>6</u>
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		8	2	13
	Lead	ppm	ASTM D5185m		0	<1	4
	Copper	ppm	ASTM D5185m		<1	<1	13
	Tin	ppm	ASTM D5185m		<1	<1	2
	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	14	3	11
	Potassium	ppm	ASTM D5185m		2	2	7
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		0.3	▲ 10.4	<1.0
	Water	,	WC Method		NEG	NEG	NEG
	Glycol		WC Method	/ 0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>6	0.2	0.2	1.4
	Nitration	Abs/cm	*ASTM D7624		5.1	7.1	12.5
	Sulfation	Abs/.1mm	*ASTM D7415		16.8	17.8	24.6
	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		2	3	17
	Boron	ppm	ASTM D5185m	0	7	8	5
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		54	53	65
	Manganese	ppm	ASTM D5185m		<1	<1	2
	Magnesium	ppm	ASTM D5185m		922	780	957
	Calcium	ppm	ASTM D5185m		1029	1019	1068
	Phosphorus	ppm	ASTM D5185m		1017	928	974
	Zinc	ppm	ASTM D5185m		1202	1053	1241
	Sulfur	ppm	ASTM D5185m		3523	2929	2838
	Oxidation	Abs/.1mm	*ASTM D7414		12.3	14.0	22.1
	Base Number (BN)		ASTM D2896		8.5	8.4	7.0
		- C/		45.4	40 -	A 10 F	10.0

Visc @ 100°C cSt

ASTM D445 15.4

**1**0.5

12.9

13.5

