

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id 4629M Component Diesel Engine

## PETRO CANADA DURON SHP 15W40 (5 GAL)

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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		GFL0115198	GFL0115048	GFL0106665
	Sample Date		Client Info		23 May 2024	25 Feb 2024	29 Jan 2024
	Machine Age	hrs	Client Info		20056	19582	19386
	Oil Age	hrs	Client Info		474	300	503
	Filter Age	hrs	Client Info		474	300	503
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>90	55	21	30
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	3	<1	1
	Nickel	ppm	ASTM D5185m		<1	4	<1
	Titanium	ppm	ASTM D5185m	>2	<1	0	<1
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m		6	<1	2
	Lead	ppm	ASTM D5185m		<1	<1	0
	Copper	ppm	ASTM D5185m	>330	2	8	<1
	Tin	ppm	ASTM D5185m		<1	1	0
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u></u> 25	19	4	5
CONTAININATION	Potassium	ppm	ASTM D5185m	-	3	<1	3
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	<u> </u>	0.8	0.6	0.8
	Nitration	Abs/cm	*ASTM D7624	>20	10.4	8.4	12.1
	Sulfation	Abs/.1mm	*ASTM D7024		21.4	19.9	22.9
	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		*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	0				40		40
	Sodium	ppm	ASTM D5185m	0	10	2	18
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		1	2	0
	Barium	ppm	ASTM D5185m		0	0	12
	Molybdenum	ppm	ASTM D5185m		61	62	52
	Manganese	ppm	ASTM D5185m		1	<1	0
	Magnesium	ppm	ASTM D5185m		970	1141	769
	Calcium	ppm	ASTM D5185m		1058	1247	848
	Phosphorus	ppm	ASTM D5185m		1038	1152	833
	Zinc	ppm	ASTM D5185m		1279	1490	1042
	Sulfur	ppm	ASTM D5185m		3210	3352	2406
	Oxidation	Abs/.1mm	*ASTM D7414		18.4	15.9	20.8
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.0	6.9	6.2
		01.1		16 /		195	100

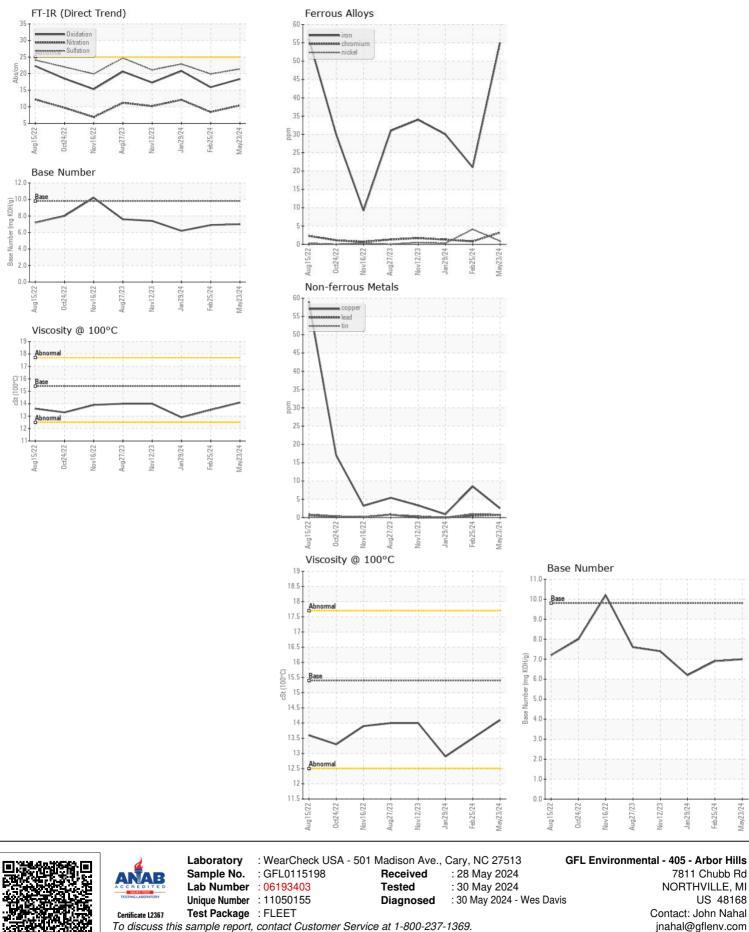
Visc @ 100°C cSt

ASTM D445 15.4

12.9

13.5

14.1



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)

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