

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id 728091 Component Diesel Engine

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

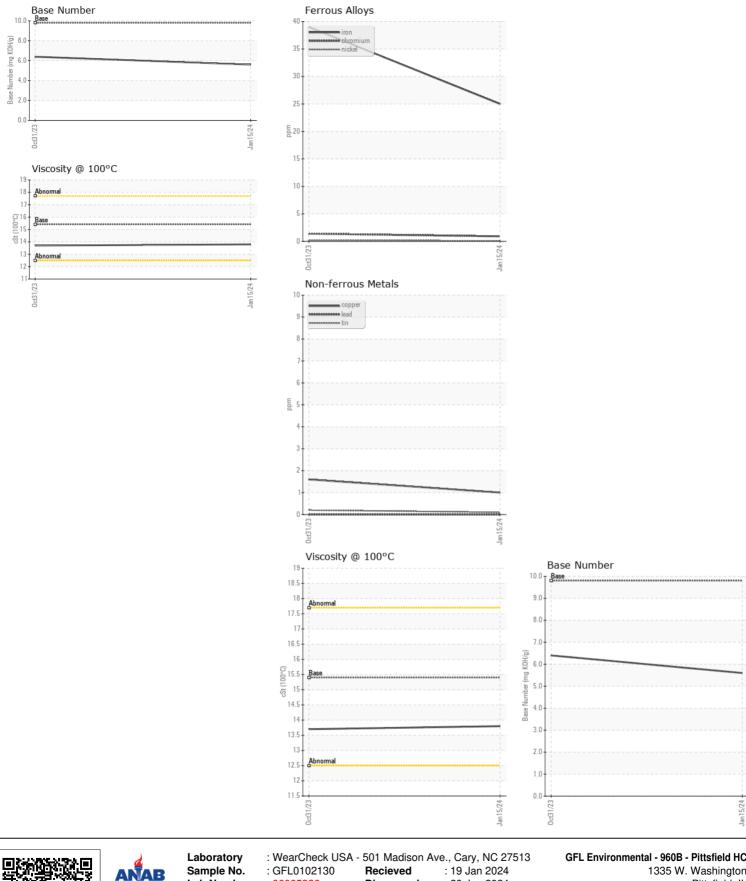
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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0102130	GFL0087959	
	Sample Date		Client Info		15 Jan 2024	31 Oct 2023	
	Machine Age	hrs	Client Info		0	0	
	Oil Age	hrs	Client Info		600	600	
	Filter Age	hrs	Client Info		600	600	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>80	25	39	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>5	<1	1	
	Nickel	ppm	ASTM D5185m	>2	<1	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>30	4	15	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m	>150	1	2	
	Tin	ppm	ASTM D5185m	>5	<1	<1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	5	8	
	Potassium	ppm	ASTM D5185m	>20	7	29	
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.6	0.7	
	Nitration	Abs/cm	*ASTM D7624	>20	9.7	10.8	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	22.4	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		8	9	
	Boron	ppm	ASTM D5185m	0	2	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	
	Molybdenum	ppm	ASTM D5185m		59	56	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		1024	915	
	Calcium	ppm	ASTM D5185m		1057	1078	
	Phosphorus	ppm	ASTM D5185m		1089	969	
	Zinc	ppm	ASTM D5185m		1299	1206	
	Sulfur	ppm	ASTM D5185m		3025	2796	
	Oxidation	Abs/.1mm	*ASTM D7414		17.7	19.7	
	Base Number (BN)				5.6	6.4	
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Visc @ 100°C cSt

13.8

13.7

ASTM D445 15.4



GFL Environmental - 960B - Pittsfield HC 1335 W. Washington Lab Number : 20 Jan 2024 Pittsfield, IL : 06065326 Diagnosed : 10836708 Unique Number Diagnostician : Wes Davis US 62363 Test Package : FLEET Contact: David Bradshaw Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. david.bradshaw@gflenv.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: