

Machine Id

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

420131 Component Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
(Customer Sample Comment: Sample only, out of service)	Sample Number		Client Info		GFL0116293		
	Sample Date		Client Info		21 May 2024		
	Machine Age	hrs	Client Info		699818		
	Oil Age	hrs	Client Info		699818		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
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WEAR	Iron	ppm	ASTM D5185m	>120	<1		
	Chromium	ppm	ASTM D5185m	>20	0		
	Nickel	ppm	ASTM D5185m	>5	0		
	Titanium	ppm	ASTM D5185m	>2	0		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m	>20	<1		
	Lead	ppm	ASTM D5185m	>40	0		
	Copper	ppm	ASTM D5185m	>330	0		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4		
	Potassium	ppm	ASTM D5185m	>20	4		
	Fuel		WC Method	>3.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>4	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	16.2		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m	0	3		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m	60	5		
	Manganese	ppm	ASTM D5185m	0	<1		
	Magnesium	ppm	ASTM D5185m	1010	29		
	Calcium	ppm	ASTM D5185m	1070	2287		
	Phosphorus	ppm	ASTM D5185m	1150	936		
	Zinc	ppm	ASTM D5185m		1047		
	Sulfur	ppm	ASTM D5185m		4133		
	Oxidation		*ASTM D7414		9.1		
	Base Number (BN)		ASTM D2896		7.0		
	Visc @ 100°C	cSt	ASTM D445		12.9		



