

Machine Id 529060 KENWORTH T880

Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0110975	GFL0110983	
	Sample Date		Client Info		28 May 2024	26 Feb 2024	
	Machine Age	hrs	Client Info		12549	12190	
	Oil Age	hrs	Client Info		90	172	
	Filter Age	hrs	Client Info		90	172	
	Oil Changed		Client Info		Changed	Not Changd	
	Filter Changed		Client Info		Changed	Not Changd	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	29	86	
	Chromium	ppm	ASTM D5185m	>20	<1	2	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m		88	75	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		3	7	
	Lead	ppm	ASTM D5185m		<1	7	
	Copper	ppm	ASTM D5185m	>330	<1	1	
	Tin	ppm	ASTM D5185m	>15	<1	<1	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>25	7	13	
	Potassium	ppm	ASTM D5185m		2	5	
	Fuel	le le	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.4	1	
	Nitration	Abs/cm	*ASTM D7624	>20	10.6	13.4	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	A 31.3	
	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		4	6	
	Boron	ppm	ASTM D5185m	0	85	43	
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	60	2	6	
	Manganese	ppm	ASTM D5185m		<1	1	
	Magnesium	ppm	ASTM D5185m	1010	428	464	
	Calcium	ppm	ASTM D5185m	1070	1708	1738	
	Phosphorus	ppm	ASTM D5185m	1150	1013	1015	
	Zinc	ppm	ASTM D5185m	1270	1197	1257	
	Sulfur	ppm	ASTM D5185m	2060	4059	3466	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	A 27.3	
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.5	5.3	
	Vier C 10000	- 01	AOTA DATE	45.4		45.0	

Visc @ 100°C cSt

ASTM D445 15.4

15.2

14.2



