

Machine Id PETERBILT TRK 186 Component

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		WC0903654	WC0903633	
	Sample Date		Client Info		07 Jun 2024	15 Feb 2024	
	Machine Age	mls	Client Info		275214	257133	
	Oil Age	mls	Client Info		18082	0	
	Filter Age	mls	Client Info		18082	0	
	Oil Changed		Client Info		Changed	N/A	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>110	33	42	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>4	1	3	
	Nickel	ppm	ASTM D5185m		0	1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m	>2	0	<1	
	Aluminum	ppm	ASTM D5185m		2	2	
	Lead	ppm	ASTM D5185m		0	<1	
	Copper	ppm	ASTM D5185m	>85	1	2	
	Tin	ppm	ASTM D5185m	>4	0	<1	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u>_</u> 30	4	6	
CONTAMINATION	Potassium	ppm	ASTM D5185m		<1	3	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	/ 0.1	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.8	0.9	
	Nitration	Abs/cm	*ASTM D7624		14.0	13.8	
	Sulfation	Abs/.1mm	*ASTM D7415		24.6	23.6	
	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		6	6	
	Boron	ppm	ASTM D5185m	0	1	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		68	55	
	Manganese	ppm	ASTM D5185m		<1	1	
	Magnesium	ppm	ASTM D5185m		978	820	
	Calcium	ppm	ASTM D5185m		1243	982	
	Phosphorus	ppm	ASTM D5185m		1010	890	
	Zinc	ppm	ASTM D5185m		1241	1083	
	Sulfur	ppm	ASTM D5185m		3331	2938	
	Oxidation	Abs/.1mm	*ASTM D7414		23.3	23.5	
	Base Number (BN)		ASTM D2896		5.8	5.8	
	Vies @ 10000	- 01		45.4		10.0	

Visc @ 100°C cSt

ASTM D445 15.4

13.2

14.2



