

Machine Id DEUTZ TD2.9 1P9BP1376NV591566 Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (16 QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		LEC0031416	LEC0043318	-
	Sample Date		Client Info		09 Apr 2024	09 Nov 2023	
	Machine Age	hrs	Client Info		1024	1023	
	Oil Age	hrs	Client Info		301	300	
	Filter Age	hrs	Client Info		301	300	
	Oil Changed		Client Info		Changed	Not Changd	
	Filter Changed		Client Info		Changed	Not Changd	
	Sample Status				NORMAL	NORMAL	
				4 5 0	•	_	
WEAR	Iron	ppm	ASTM D5185m		8	7	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	<1	
	Nickel	ppm	ASTM D5185m		<1	<1	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m		0	<1	
	Aluminum	ppm	ASTM D5185m		1	2	
	Lead	ppm	ASTM D5185m	>40	<1	<1	
	Copper	ppm	ASTM D5185m		2	2	
	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	Silicon	nnm	ASTM D5185m	>120	9	10	
CONTAMINATION	Potassium	ppm ppm	ASTM D5185m		1	2	
There is no indication of any contamination in the oil.	Fuel	ppm		>5	- <1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	20.2	NEG	NEG	
	Soot %	%	*ASTM D7844	-3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	5.0	4.9	
	Sulfation	Abs/.1mm	*ASTM D7415		18.3	18.5	
	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		<1	0	
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		7	7	
	Barium	ppm	ASTM D5185m		0	<1	
	Molybdenum	ppm	ASTM D5185m	100	65	63	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		1021	916	
	Calcium	ppm	ASTM D5185m		1182	1113	
	Phosphorus	ppm	ASTM D5185m		1069	976	
	Zinc	ppm	ASTM D5185m	1350	1327	1200	
	0.16		AOTH DELOF	1050		0054	

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m 4250

ASTM D445 14.4

Abs/.1mm *ASTM D7414 >25

Base Number (BN) mg KOH/g ASTM D2896 8.5

4049

14.1

10.2

13.6

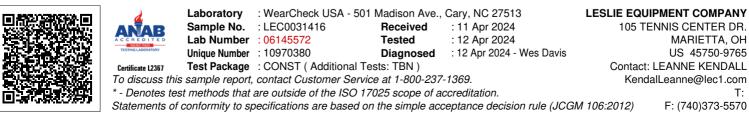
3054

14.1

10.3

13.7





Submitted By: STORE5 - CROSS LANES - NEIL BALL