

## Machine Id

## 4MV1979 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 40 (--- QTS)

DIESEL ENGINE OIL SA	E 40 ( Q15)					.,		
RECOMMENDATION		Test	UOM	Method	Limit/Abn	Current	History1	History2
TEOOMMENDATION		Sample Number	00111	Client Info	Linity ton	WC0919386		
Resample at the next service interval to monitor.		Sample Date		Client Info		11 Jul 2024		
		Machine Age	hrs	Client Info		740		
		Oil Age	hrs	Client Info		0		
		Filter Age	hrs	Client Info		0		
		Oil Changed		Client Info		N/A		
		Filter Changed		Client Info		N/A		
		Sample Status				NORMAL		
WEAR		Iron		ASTM D5185m	> 100	۰ ۰		
All component wear rates are normal reflect the reported issue.	I. The wear metal levels do not	Chromium	ppm	ASTM D5185m		2 0		
		Nickel	ppm	ASTM D5185m		0		
		Titanium	ppm	ASTM D5185m	>4	0		
		Silver	ppm ppm	ASTM D5185m	2	0		
		Aluminum	ppm	ASTM D5185m		2		
		Lead	ppm	ASTM D5185m		0		
		Copper	ppm	ASTM D5185m		<1		
		Tin	ppm	ASTM D5185m		0		
		Vanadium	ppm	ASTM D5185m	210	0		
		White Metal	scalar	*Visual	NONE	NONE		
		Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION		Silicon	ppm	ASTM D5185m	>25	19		
There is no indication of any contamination in the oil.		Potassium	ppm	ASTM D5185m	>20	1		
		Fuel		WC Method	>5	<1.0		
		Water		WC Method	>0.2	NEG		
		Glycol		WC Method		NEG		
		Soot %	%	*ASTM D7844	>3	0.1		
		Nitration	Abs/cm	*ASTM D7624	>20	4.4		
		Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6		
		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	>216	<1		
I LOID CONDITION		Boron	ppm	ASTM D5185m		374		
The BN result indicates that there is a	, .	Barium	ppm	ASTM D5185m		0		
oil. The AN level is acceptable for this		Molybdenum	ppm	ASTM D5185m		70		
suitable for further service.		Manganese	ppm	ASTM D5185m	100	<1		
		Magnesium	ppm	ASTM D5185m	450	393		
		Calcium	ppm	ASTM D5185m		1282		
		Phosphorus	ppm	ASTM D5185m		930		
		Zinc	ppm	ASTM D5185m		1122		
		Sulfur	ppm	ASTM D5185m		3730		
		Outstation	Alexand	*40714 07444		10.0		

Oxidation

Abs/.1mm \*ASTM D7414 >25

Acid Number (AN) mg KOH/g ASTM D8045

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

Visc @ 100°C cSt ASTM D445 14.4

13.3

1.70

7.91

12.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **Engine Power Source** 回清 Sample No. Received PO BOX 29732 : WC0919386 : 15 Jul 2024 Lab Number : 06236249 ROCK HILL, SC Tested : 16 Jul 2024 Unique Number : 11125083 : 17 Jul 2024 - Jonathan Hester Diagnosed US 29732 Test Package : MOB 2 Contact: Doug Plyler Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. doug.plyler@enginepowersource.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (704)944-1943 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (704)944-1963

Contact/Location: Doug Plyler - ENGCHA Page 2 of 2