

Machine Id **TDI 1482** Component **Diesel Engine** DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Metal levels are typical for a new component breaking in.

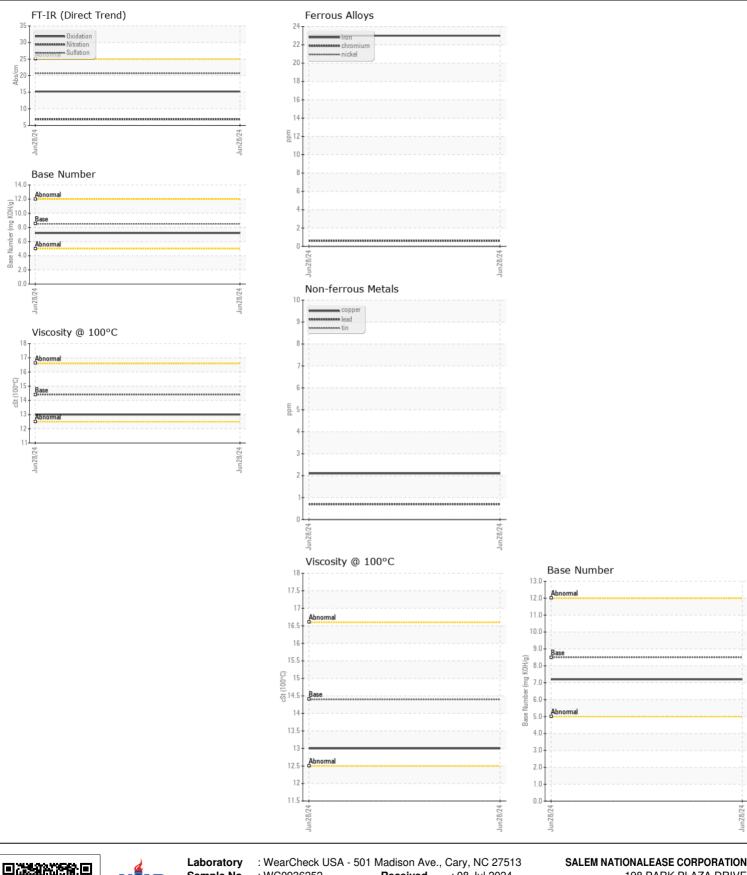
CONTAMINATION

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0936252		
Sample Date		Client Info		28 Jun 2024		
Machine Age	mls	Client Info		69536		
Oil Age	mls	Client Info		25000		
Filter Age	mls	Client Info		25000		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185m	>100	23		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	8		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	2		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	8		
Potassium	ppm	ASTM D5185m	>20	23		
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.2		
Nitration	Abs/cm	*ASTM D7624	>20	6.8		
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7		
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		
			4 5 0	•		
Sodium	ppm	ASTM D5185m	>158	2		
Boron	ppm	ASTM D5185m		277		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	83		
Manganese	ppm	ASTM D5185m	450	<1		
Magnesium	ppm	ASTM D5185m	450	383		
Calcium	ppm	ASTM D5185m	3000	1675		
Phosphorus	ppm	ASTM D5185m	1150	1073		
Zinc	ppm	ASTM D5185m	1350	1292		
Sulfur	ppm	ASTM D5185m	4250	3862		
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.2		
Visc @ 100°C	cSt	ASTM D445	14.4	13.0		

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 SALEM NATIONALEASE CORPORATION Sample No. : WC0936252 Received 198 PARK PLAZA DRIVE : 08 Jul 2024 Lab Number : 06231068 Tested WINSTON SALEM, NC : 10 Jul 2024 Diagnosed Unique Number : 11114561 : 10 Jul 2024 - Wes Davis US 27105 Test Package : FLEET **Contact: Audrey Hopkins** Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. Audrey.Hopkins@salemcorp.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (336)767-9642 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:

Contact/Location: Audrey Hopkins - SALWIN Page 2 of 2