

## Machine Id **47** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

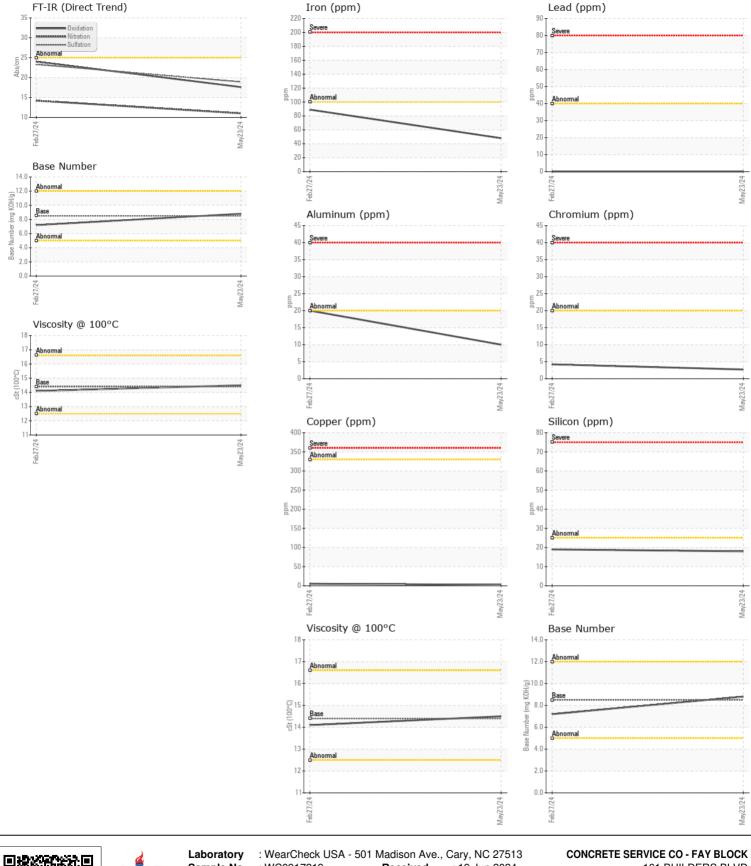
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0917219	WC0909300	
	Sample Date		Client Info		23 May 2024	27 Feb 2024	
	Machine Age	mls	Client Info		123044	123044	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		48	89	
	Chromium	ppm	ASTM D5185m		3	4	
	Nickel	ppm	ASTM D5185m	>4	<1	1	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	10	20	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m	>330	2	5	
	Tin	ppm	ASTM D5185m	>15	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	-	18	19	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2	<1	
	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844		0.7	1.4	
	Nitration	Abs/cm	*ASTM D7624	>20	11.0	14.2	
	Sulfation	Abs/.1mm	*ASTM D7415		18.9	23.3	
	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	nnm	ASTM D5185m	<158	<1	5	
	Boron	ppm	ASTM D5185m		3	8	
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		58	54	
	Manganese	ppm	ASTM D5185m	100	- 56 0	>4 <1	
	Magnesium	ppm	ASTM D5185m	450	878	763	
	•	ppm					
	Calcium	ppm	ASTM D5185m		1032	1155	
	Phosphorus	ppm	ASTM D5185m		1079	843	
	Zinc	ppm	ASTM D5185m		1219	999	
	Sulfur	ppm	ASTM D5185m		3011	3000	
	Oxidation	Abs/.1mm	*ASTM D7414		17.6	24.0	
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.8	7.2	

Visc @ 100°C cSt

ASTM D445 14.4

14.1

14.5



Sample No. : WC0917219 Received 161 BUILDERS BLVD : 19 Jun 2024 Ŭ Lab Number : 06214273 Tested : 20 Jun 2024 FAYETTEVILLE, NC Unique Number : 11087137 Diagnosed : 20 Jun 2024 - Wes Davis US 28301 Test Package : MOB 1 (Additional Tests: TBN) Contact: BRYAN VANNIMAN Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. bryanvanniman@fayblock.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (800)326-9198 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: