

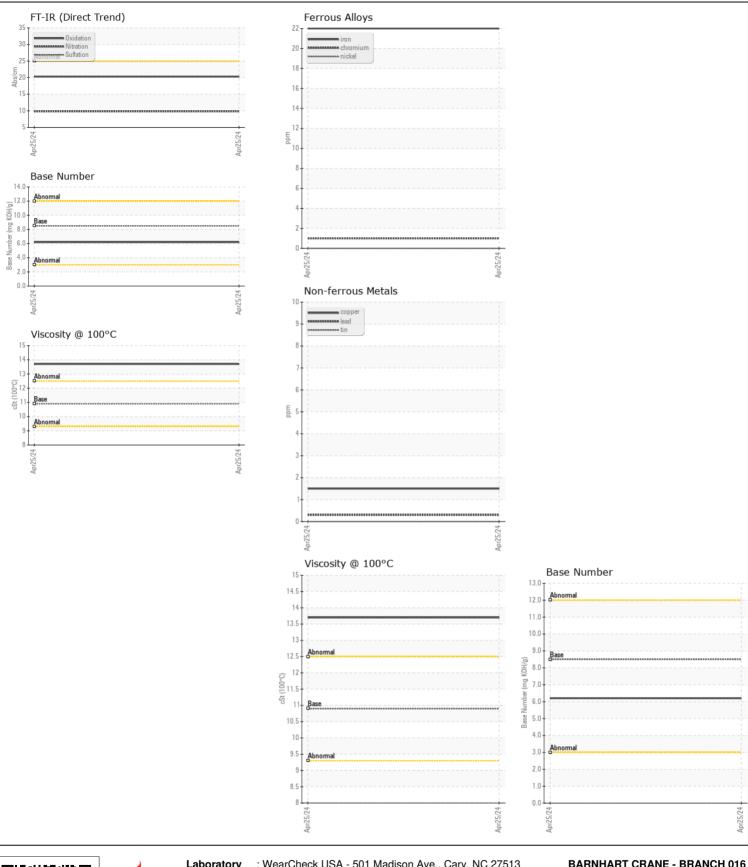
Truck 3559-Tractor **Diesel Engine** DIESEL ENGINE OIL SAE 5W30 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0919909		
	Sample Date		Client Info		25 Apr 2024		
	Machine Age	mls	Client Info		136873		
	Oil Age	mls	Client Info		3000		
	Filter Age	mls	Client Info		3000		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>80	22		
	Chromium	ppm	ASTM D5185m		1		
	Nickel		ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	>2	0		
		ppm		. 0			
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		9		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m	>5	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	6		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	9		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.7		
	Nitration	Abs/cm	*ASTM D7624	>20	9.8		
	Sulfation	Abs/.1mm	*ASTM D7415		25.0		
	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		ASTM D5185m		1		
	Boron	ppm	ASTM D5185m	250	128		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m				
		ppm			0		
	Molybdenum	ppm	ASTM D5185m	100	104		
	Manganese	ppm	ASTM D5185m	450	<1		
	Magnesium	ppm	ASTM D5185m		470		
	Calcium	ppm	ASTM D5185m		1804		
	Phosphorus	ppm	ASTM D5185m		1074		
	Zinc	ppm	ASTM D5185m	1350	1354		
	Sulfur	ppm	ASTM D5185m		4432		
	Oxidation	Abs/.1mm	*ASTM D7414		20.3		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.2		
	Vies 0 10000	- 0+	AOTA DATE	40.0	40 -		

Visc @ 100°C cSt

ASTM D445 10.9

13.7



BARNHART CRANE - BRANCH 016 Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : WC0919909 Received 13900 S. MERIDIAN : 28 May 2024 OKLAHOMA CITY, OK Lab Number : 06193244 Tested : 30 May 2024 Unique Number : 11049996 Diagnosed : 30 May 2024 - Sean Felton US 73173 Test Package : CONST (Additional Tests: TBN) Contact: John Ehr Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jehr@barnhartcrane.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)