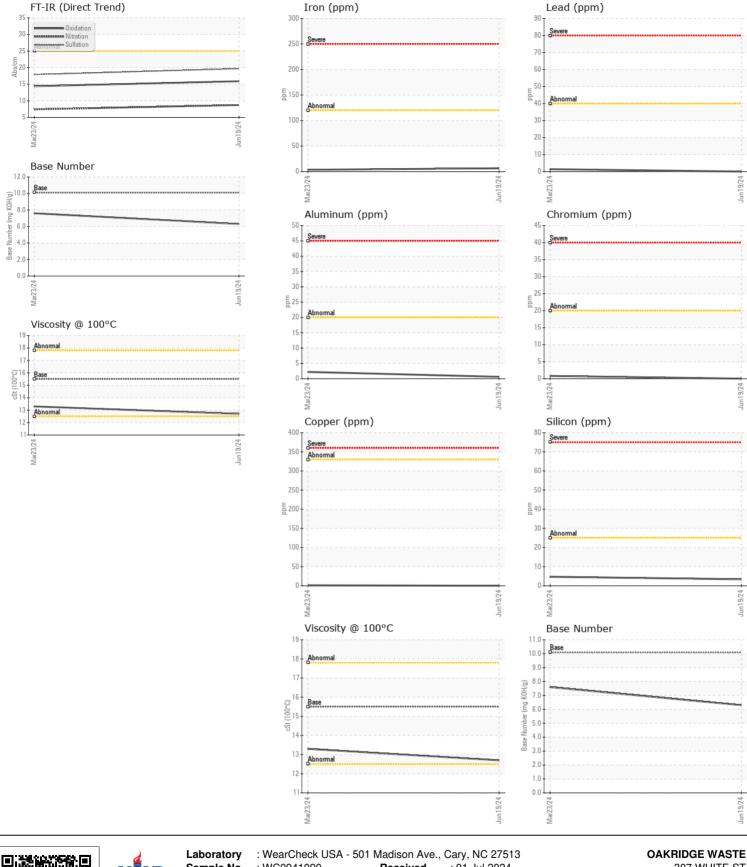


Machine Id MACK RO-30 Diesel Engine Fluid GIBRALTAR 15W/40 SUPER S-3 LX (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number	COM	Client Info	LITTICAOT	WC0941090	WC0875382	
	Sample Date		Client Info		19 Jun 2024	23 Mar 2024	
	Machine Age	hrs	Client Info		19662	18927	
	Oil Age	hrs	Client Info		600	0	
	Filter Age	hrs	Client Info		600	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>120	6	4	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	<1	
	Nickel	ppm	ASTM D5185m		0	1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m		0	<1	
	Aluminum	ppm	ASTM D5185m		<1	2	
	Lead	ppm	ASTM D5185m		0	1	
	Copper	ppm	ASTM D5185m		0	1	
	Tin	ppm	ASTM D5185m		0	1	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Silicon		ASTM D5185m	<u>\</u> 25	3	5	
CONTAMINATION	Potassium	ppm ppm	ASTM D5185m		0	2	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method	>3.0	<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	20.2	NEG	NEG	
	Soot %	%	*ASTM D7844	>4	0.3	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	8.7	7.4	
	Sulfation	Abs/.1mm	*ASTM D7415		19.7	17.9	
	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		3	<1	
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		4	5	
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	<1	
	Molybdenum	ppm	ASTM D5185m	66	65	75	
	Manganese	ppm	ASTM D5185m	1.0.1.1	0	<1	
	Magnesium	ppm	ASTM D5185m		855	799	
		ppm	ASTM D5185m		1264	1130	
	Calcium				1005	971	
	Phosphorus	ppm	ASTM D5185m		1035		
	Phosphorus Zinc	ppm	ASTM D5185m		1302	1157	
	Phosphorus Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m	1270	1302 3856	1157 3540	
	Phosphorus Zinc	ppm ppm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7414	1270 >25	1302	1157	



Sample No. : WC0941090 Received 307 WHITE ST : 01 Jul 2024 Lab Number : 06224415 Tested : 02 Jul 2024 DANBURY, CT Unique Number : 11102612 Diagnosed : 02 Jul 2024 - Jonathan Hester US 06810 Test Package : MOB 1 (Additional Tests: TBN) Contact: CHRIS CONTI Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. chris.conti@oakridgewaste.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)