

## Machine Id 2084

## Component Diesel Engine

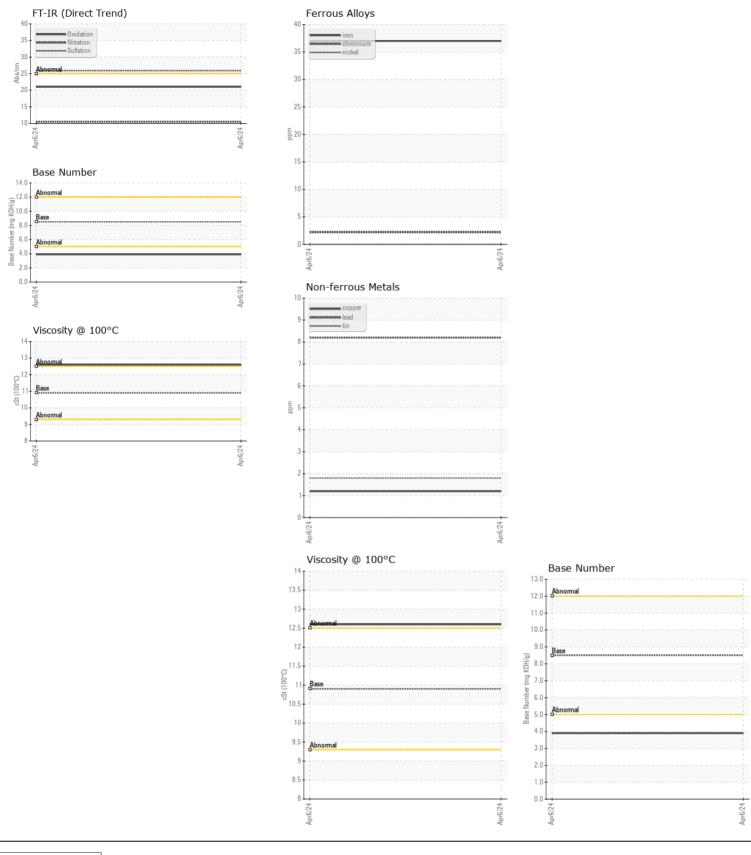
## DIESEL ENGINE OIL SAE 10W30 (--- QTS)

DESEL ENGINE OIL SAL 10W30 ( Q13)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0926078		
	Sample Date		Client Info		06 Apr 2024		
	Machine Age	mls	Client Info		20708		
	Oil Age	mls	Client Info		1624		
	Filter Age	mls	Client Info		1624		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
				. 100	07		
WEAR	Iron Chromium	ppm	ASTM D5185m ASTM D5185m		37 2		
All component wear rates are normal.	Nickel	ppm			0		
		ppm	ASTM D5185m	>4			
	Titanium	ppm	ASTM D5185m	0	0		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m	>40	8		
	Copper	ppm	ASTM D5185m		1		
	Tin	ppm	ASTM D5185m	>15	2		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		8		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		4		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.6		
	Nitration	Abs/cm	*ASTM D7624	>20	10.5		
	Sulfation	Abs/.1mm	*ASTM D7415		25.9		
	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		2		
	Boron	ppm	ASTM D5185m	250	6		
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	10	0		
	Molybdenum	ppm	ASTM D5185m	100	13		
	Manganese	ppm	ASTM D5185m		1		
	Magnesium	ppm	ASTM D5185m	450	100		
	Calcium	ppm	ASTM D5185m	3000	2295		
	Phosphorus	ppm	ASTM D5185m		962		
	Zinc	ppm	ASTM D5185m		1134		
	Sulfur	ppm	ASTM D5185m		3871		
	Oxidation	Abs/.1mm	*ASTM D7414		21.0		
	Base Number (BN)	mg KOH/g	ASTM D2896		3.9		
		o i		10.0	0.0		

Visc @ 100°C cSt

ASTM D445 10.9

12.6



**CARCO TRANSPORTATION** Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : WC0926078 Received 3403 EAST ROOSEVELT ROAD : 16 Apr 2024 Lab Number : 06150129 Tested LITTLE ROCK, AR : 17 Apr 2024 Diagnosed Unique Number : 10980207 : 18 Apr 2024 - Sean Felton US 72206 Test Package : FLEET Contact: DENNIS CATES Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. denniscates@carcotrans.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (800)967-0777 F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: DENNIS CATES - CARLIT Page 2 of 2