



OIL REPORT

LAB NUMBER:

REPORT DATE: 9/6/2016

CODE: 20/37

UNIT ID: 15 ECODIESEL

CLIENT ID:

PAYMENT: CC: Visa (Bulk)

UNIT	MAKE/MODEL:	VM Motori diesel 3.0L DOHC V-6 Eco D	OIL TYPE & GRADE:	Shell Rotella T6 5W/40
	FUEL TYPE:	Diesel	OIL USE INTERVAL:	Miles
	ADDITIONAL INFO:	Ram		

CLIENT	<input type="text"/>	PHONE: (763) 228-7121
	T&C DIESEL	FAX:
	1060 118TH LANE	ALT PHONE:
	BLAINE, MN 55434	EMAIL: todd@tcdiesel.com

COMMENTS	TODD: Sodium was on our radar last time since it might have showed coolant contamination. There's a lot less sodium here though, and we're still not seeing much potassium, so we would be surprised if coolant is a problem for this Eco Diesel. Wear metals are nice and low compared to averages and past results, so all is well mechanically. Air and oil filtration look good too, shown by the low silicon and insolubles. The viscosity was fine for 5W/40, and no excess fuel was found. If there are any problems in the works, they aren't showing up in the used oil. Nice!
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ELEMENTS IN PARTS PER MILLION	MI/HR on Oil		UNIT / LOCATION AVERAGES	4,100					UNIVERSAL AVERAGES
	MI/HR on Unit	26,700		22,100	18,000				
	Sample Date	8/31/2016		6/13/2016	5/29/2016	3/1/2016			
	Make Up Oil Added								
	ALUMINUM	3	4	3	6	4			6
	CHROMIUM	1	1	1	1	1			1
	IRON	9	12	8	19	12			33
	COPPER	1	1	1	2	1			3
	LEAD	0	1	0	1	1			0
	TIN	0	1	0	1	3			1
	MOLYBDENUM	67	60	52	63	57			24
	NICKEL	0	1	0	1	1			1
	MANGANESE	0	0	0	0	1			1
	SILVER	0	0	0	0	0			2
	TITANIUM	0	0	0	0	0			0
	POTASSIUM	2	5	6	5	5			13
	BORON	48	44	40	38	48			56
	SILICON	4	6	3	8	7			14
	SODIUM	10	14	35	4	5			3
	CALCIUM	845	923	978	937	932			1564
	MAGNESIUM	1214	1033	917	999	1002			84
	PHOSPHORUS	1092	997	981	940	973			696
	ZINC	1295	1170	1164	1140	1080			820
	BARIUM	0	0	0	0	0			0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	72.6	66-78	71.2	72.2	68.1		
	cSt Viscosity @ 100°C	13.64	11.9-15.3	13.27	13.52	12.45		
	Flashpoint in °F	420	>410	420	455	420		
	Fuel %	<0.5	<2.0	<0.5	<0.5	<0.5		
	Antifreeze %	0.0	0.0	?	0.0	0.0		
	Water %	0.0	0.0	0.0	0.0	0.0		
	Insolubles %	0.3	<0.6	0.3	0.3	0.2		
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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