



# OIL REPORT

LAB NUMBER: F65298

UNIT ID: 2000 TDI

REPORT DATE: 7/23/2013

CLIENT ID: 60887

CODE: 63/501

PAYMENT: No Charge

<b>UNIT</b>	MAKE/MODEL: Volkswagen 1.9L Turbo (TDI)	OIL TYPE & GRADE: Shell Rotella T6 5W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 7,710 Miles
	ADDITIONAL INFO: ALH	

<b>CLIENT</b>	FREDERICK H BRITTAIN	PHONE: (435) 210-1011
	325 E 2550 N #103	FAX:
	NORTH OGDEN, UT 84414	ALT PHONE:
		EMAIL: slickrock_rider@yahoo.com

**COMMENTS** FREDERICK: Amended report to correct engine type and add TBN. Wear looks just fine in this sample. Universal averages show typical wear levels for this type of engine after about 8,200 miles on the oil. You ran 7,710 miles and your wear is around average, so we see no problems here. We're not sure what you're looking for but these metals are nicely balanced and show no obvious problems in the engine. The viscosity read in the upper range for a 5W/40. No fuel, coolant, or moisture found. The TBN read 6.7, plenty of active additive remaining.

<b>ELEMENTS IN PARTS PER MILLION</b>	MI/HR on Oil	7,710	<b>UNIT / LOCATION AVERAGES</b>					<b>UNIVERSAL AVERAGES</b>
	MI/HR on Unit	95,210						
	Sample Date	07/10/13						
	Make Up Oil Added	0.5 qts						
ALUMINUM	4	4					5	
CHROMIUM	2	2					2	
IRON	38	38					39	
COPPER	5	5					3	
LEAD	1	1					2	
TIN	0	0					1	
MOLYBDENUM	65	65					22	
NICKEL	3	3					1	
MANGANESE	1	1					1	
SILVER	1	1					0	
TITANIUM	0	0					0	
POTASSIUM	0	0					4	
BORON	35	35					34	
SILICON	6	6					5	
SODIUM	6	6					7	
CALCIUM	941	941					2045	
MAGNESIUM	1355	1355					347	
PHOSPHORUS	1198	1198					952	
ZINC	1368	1368					1131	
BARIUM	0	0					0	

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°F	80.7	66-78				
	cSt Viscosity @ 100°C	15.70	11.9-15.3				
	Flashpoint in °F	440	>410				
	Fuel %	<0.5	<2.0				
	Antifreeze %	0.0	0.0				
	Water %	0.0	<0.1				
	Insolubles %	0.4	<0.8				
	TBN	6.7	>1.0				
	TAN						
	ISO Code						

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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