



OIL REPORT

LAB NUMBER: F94654

UNIT ID: 02 M3

REPORT DATE: 1/31/2014

CLIENT ID: 70151

CODE: 20/501

PAYMENT: CC: Visa

UNIT	MAKE/MODEL:	BMW 3.2L (S-54) Inline 6 Cylinder	OIL TYPE & GRADE:	Total Quartz Synthetic 10W/60
	FUEL TYPE:	Gasoline (Unleaded)	OIL USE INTERVAL:	2,003 Miles
	ADDITIONAL INFO:			

CLIENT	CHRIS ZEH	PHONE: (429) 239-3959
	MERIDIAN PL NE	FAX:
	LAKE STEVENS, WA 98258	ALT PHONE:
		EMAIL: chriszeh@hotmail.com

COMMENTS	CHRIS: You mentioned that this was a cold sample, so we're not surprised that there was a little fuel present. At 1.8%, this fuel could easily be operational in nature and shouldn't have caused you any trouble had you decided to run this oil even longer. You had five track days on this oil, and metals look pretty good compared to averages, which are based on 5,000 miles. Bearing wear (iron, copper, and lead) is fine, and the TBN still shows active additive left at 4.0. Try six or seven track days next time, and we'll see what wear looks like. If it's okay, even longer should be fine.
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ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	2,003	UNIT / LOCATION AVERAGES							UNIVERSAL AVERAGES
	MI/HR on Unit	106,503								
	Sample Date	01/23/14								
	Make Up Oil Added	0.5 qt								
	ALUMINUM	5		5						
	CHROMIUM	0		0						
	IRON	7		7						
	COPPER	5		5						
	LEAD	2		2						
	TIN	0		0						
	MOLYBDENUM	46		46						
	NICKEL	0		0						
	MANGANESE	0		0						
	SILVER	1		1						
	TITANIUM	0		0						
	POTASSIUM	0		0						
	BORON	70		70						
	SILICON	2		2						
	SODIUM	4		4						
	CALCIUM	1646		1646						
	MAGNESIUM	45		45						1772
	PHOSPHORUS	796		796						491
	ZINC	849		849						847
	BARIUM	0		0						1008
										0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	84.7	80-95					
	cSt Viscosity @ 100°C	16.69	15.5-19.4					
	Flashpoint in °F	360	>395					
	Fuel %	1.8	<2.0					
	Antifreeze %	0.0	0.0					
	Water %	0.0	<0.1					
	Insolubles %	0.3	<0.6					
	TBN	4.0	>1.0					
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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