



P.O. NUMBER CC: Visa
 CODE: 20/13260/37

UNIT NUMBER 1 OF 1
 REPORT DATE: 12/18/03
 LAB NUMBER: C08632

OIL REPORT

CLIENT	CONTACT:	PHONE: (860) 295-9986
	NAME: RON STYGAR	FAX:
	ADDRESS: 12 OAK DR	E-MAIL: ronstygaraol.com
	MARLBOROUGH, CT 06447	

UNIT	EQUIPMENT MAKE: BMW	OIL USE INTERVAL: 4,518 Miles
	EQUIPMENT MODEL: 3.2L I-6 (S-54)	OIL TYPE & GRADE: Castrol 10W/60 (Gas)
	FUEL TYPE: Gasoline (Unleaded)	MAKE-UP OIL ADDED: 0 qts
	ADDITIONAL INFO: M-Z3 Coupe '01	

COMMENTS
 RON: You kept this oil in place the same miles as the last, which is great for comparison's sake. Lead dropped right down to where it should be. We don't know why it read high last time (possibly a particle streak) but it's normal now, which is great. Other wear looks terrific, and is reading even better than what we found last time. If you're not interested in extending your oil change intervals, we think running the oil 4500 miles is perfect for the way this engine wears. We didn't find any harmful contamination in the oil. Nice BMW! No problems found.

ELEMENTS IN PARTS PER MILLION	MI/HR ON OIL	4,518	UNIT / LOCATION AVERAGES	4,531																UNIVERSAL AVERAGES	
	MI/HR ON UNIT	23,059		18,541																	
	SAMPLE DATE	12/04/03		08/12/03																	
ALUMINUM	4	5	5																	5	
CHROMIUM	1	1	1																		1
IRON	9	12	14																		11
COPPER	7	9	10																		8
LEAD	2	5	8																		3
TIN	1	2	2																		0
MOLYBDENUM	1	1	0																		19
NICKEL	1	1	1																		1
MANGANESE	0	0	0																		3
SILVER	0	0	0																		0
TITANIUM	0	0	0																		0
POTASSIUM	0	0	0																		1
BORON	118	111	103																		89
SILICON	5	5	5																		6
SODIUM	2	3	3																		4
CALCIUM	1539	1722	1904																		1628
MAGNESIUM	558	601	643																		553
PHOSPHORUS	753	859	964																		808
ZINC	927	1021	1114																		958
BARIUM	0	0	0																		0

PROPERTIES	TEST	cST VISCOSITY @ 40 °C	SUS VISCOSITY @ 100 °F	VISCOSITY INDEX	cST VISCOSITY @ 100 °C	SUS VISCOSITY @ 210 °F	FLASHPOINT IN °F	FUEL %	ANTIFREEZE %	WATER %	INSOLUBLES %
	VALUES SHOULD BE					86-98	>370	<1.0	0	0.0	<0.6
	TESTED VALUES WERE					90.7	395	<0.5	0.0	0.0	0.2