

UNIT ID
UNK ID E 3-27-09
SECOND ID
MINI COOPER S
UNIT TYPE
UNLEADED GASOLINE ENGINE
APPLICATION
TRANSPORTATION

Oil Analyzers INC.

COMPANY INFORMATION
TERENCE DOORDAN

1304 W 10TH STREET
WILMINGTON, DE 198064526

ACCOUNT NUMBER OILANA75004344
DATE SAMPLED N/A
DATE RECEIVED 03/27/09
DATE COMPLETED 03/31/09

TRACKING # 09070Y02512
MANUFACTURER/MODEL FACTORY FILL
LUBE MFR
LUBE TYPE - GRADE
MICRON RATING 15
FILTER TYPE FULLFLOW
SUMP CAPACITY 0.00
HYD SYSTEM PRESSURE 0
FLUID ADDED

OVERALL SEVERITY OF REPORT
based on comments, not individual flags

ACTION SUGGESTED



LAB #
125144

LOCATION
I

ANALYST
RNF

FLUID ANALYSIS REPORT - 877-458-3315

COMMENTS Data flagged for observation only; FUEL DILUTION is at a MODERATE LEVEL; SINCE UNIT IS NEW, RINGS MAY NOT BE COMPLETELY SEATED AND ALLOWING FUEL TO GET BY THE RINGS; Cylinder region metals (pistons, rings, liners etc.) are at a MODERATE LEVEL; Manganese sources in engines include manganese/bronze valve guides and/or a fuel additive; Silicon/Dirt may be present due to new unit contamination; Infrared results indicate OXIDATION is SEVERELY HIGH; Infrared results indicate that NITRATION is at a SEVERE LEVEL; Lubricant and filter change acknowledged;

S A M P L E #	WEAR METALS PPM						CONTAMINANT METALS - PPM				MULTI-SOURCE METALS - PPM				ADDITIVE METALS PPM									
	C H R O M I U M	N I C K E L	A L U M I N U M	C O P P E R	C A D M I U M	S I L I C A T E	V A N A D I U M	S I L I C A T E	S O D I U M	P O T A S S I U M	T I T A N I U M	M O L Y B D E N E U M	A N T I O X I D A N T	M A N G A N E S E	L I T H I U M	B O R O N	M A G N E S I U M	C A L C I U M	B A R I U M	P H O S P H O R U S	Z I N C			
1	193	3	4	19	47	1	1	0	0	0	38	8	9	0	361	0	25	0	7	1015	1483	1	864	1137

S A M P L E #	DATE SAMPLED	UNIT TIME	F I L T E R	F U E L	S O O T	W A T E R	V I S	V I S	T A N	T B N	I-R	I-R	ISO	4	6	10	14	21	38	70	100	
	DATE RECEIVED	LUBE TIME	L U B E C H G	L T E R C H G	GC	Vol.	Infrared	40C CS	100C CS	Total Acid	Total Base	O X I D A	N I T R A	C O D E	M I C R O N	M I C R O N	M I C R O N	M I C R O N	M I C R O N	M I C R O N	M I C R O N	
1	N/A 03/27/09		Y	Y	3.7%	<.1%	<.1		9.8		3.96	36	33									

SAMP #																						
1																						