



OIL REPORT

LAB NUMBER: D99768
 REPORT DATE: 1/6/2010
 CODE: 44/264

UNIT ID: MJSFD-01
 CLIENT ID: 38339
 PAYMENT: CC: MC

UNIT	MAKE/MODEL: Mazda 1.3L Turbo (Rotary)	OIL TYPE & GRADE: Castrol Syntec Blend 10W/40
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 1,000 Miles
	ADDITIONAL INFO: 1993 RX-7 - Engine rebuilt at ~72K miles	

COMMENTS: MARK: Copper and lead improved nicely with the shorter oil run but fuel dilution increased to 8.0%. You noted that finding fuel at 5%-10% isn't uncommon so we'll leave it to you decide how much of a problem this is. We consider any fuel dilution over 2.0% to be cautionary. The fuel lowered the viscosity so the ending grade was quite thin, more in the ATF range. No other harmful contaminants were found. The improvement in bearing wear is encouraging but copper and lead read well above average after a short oil run. The metals may have been diluted by fuel.

ELEMENTS IN PARTS PER MILLION	MHR on Oil	1,000	UNIT / LOCATION AVERAGES	4,000					UNIVERSAL AVERAGES
	MHR on Unit	83,000		82,000					
	Sample Date	01/03/10		10/31/09					
	Make Up Oil Added	0 qts		0 qts					
	ALUMINUM	2	2	2					3
	CHROMIUM	1	1	1					2
	IRON	12	18	24					13
	COPPER	10	16	22					4
	LEAD	23	33	42					5
	TIN	0	2	3					0
	MOLYBDENUM	5	11	16					22
	NICKEL	0	1	1					0
	MANGANESE	0	0	0					5
	SILVER	0	0	0					0
	TITANIUM	0	0	0					0
	POTASSIUM	2	3	3					3
	BORON	8	11	14					11
	SILICON	12	11	10					16
	SODIUM	19	18	17					8
	CALCIUM	1410	1808	2206					1862
	MAGNESIUM	7	9	10					14
	PHOSPHORUS	536	647	758					629
	ZINC	675	814	952					768
	BARIUM	0	0	0					2

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	48.7	65-78	57.8				
		cSt Viscosity @ 100°C	6.88	11.6-14.8	9.59			
	Flashpoint in °F	215	>375	285				
	Fuel %	8.0	<2.0	5.0				
	Anfresne %	0.0	0	0.0				
	Water %	0.0	<0.1	0.0				
	Insolubles %	0.3	<0.6	0.3				
	TBN			5.7				
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com