



GEARHEAD

OIL ANALYSIS

Matt Dettman

Location: Main

Unit ID: **Mazda Tribute**

Model:

Machine Type: Engine, Gasoline: Air-Cooled



No action recommended - all values are satisfactory

09 Jan 2015

Oil	Castrol Elixion SAE 5W-30	Sample ID	DC56D (M136)	C6DCD (L5112)			
Note:		Sampled on	03 Jan 2015	18 Oct 2014			
		Received on	09 Jan 2015	27 Oct 2014			
		h Total	137898	130439			
		h Oil		5000			
		Top up (l.)					
		Warning Limits					
ASTM D6595-00 WEAR METALS	Iron	ppm	100	9	33		
	Chrome	ppm	15	<1	<1		
	Nickel	ppm	24	<1	<1		
	Molybdenum	ppm	450	30	49		
	Aluminium	ppm	15	3	3		
	Lead	ppm	30	<1	3		
	Copper	ppm	20	5	7		
	Tin	ppm	34	<1	<1		
	Silver	ppm	24	<1	<1		
	Titanium	ppm	150	<1	<1		
ASTM D6595-00 CONTAMINANTS	Silicon	ppm	15	5	22		
	Sodium	ppm	40	12	34		
ASTM D6595-00 ADDITIVES	Calcium	ppm	9291	2242	2218		
	Magnesium	ppm	2000	14	19		
	Phosphorus	ppm	4158	738	906		
	Zinc	ppm	4808	873	1118		
	Barium	ppm	273	<1	<1		
	Boron	ppm	1632	35	22		
ASTM D445	Viscosity at 100°C	cSt		9.3	13.0		
	Soot	%	5.0	0.0	0.0		
	Oxi	abs/mm2	21.0	8.1	29.5		
	Nit	abs/mm2	21.0	6.4	12.7		
	Antiwear (ZDDP)	abs/mm2		1.6	5.9		
	Sulfate By-Products	abs/mm2		6.8	25.9		
	TBN	mgKOH/g	<2.0	4.1	4.1		
	Glycol	%	2.0	0.0	0.0		
	Water	%	0.2	0.0	0.1		
	Diesel Fuel	%		0.0	0.0		

Date 09 Jan 2015 Lab Supervisor _____