



OIL REPORT

LAB NUMBER: E27032
 REPORT DATE: 9/16/2010
 CODE: 20/501

UNIT ID: 08 COBALT TC
 CLIENT ID: 43097
 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: GM 2.0L Turbocharged Ecotec	OIL TYPE & GRADE: Castrol Syntec 5W/30
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 5,000 Miles
	ADDITIONAL INFO:	

CLIENT	Iam Broke
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COMMENTS TOM: The 2.0L in your Cobalt SS is wearing quite well at 45,000 miles. Universal averages for wear metals in the oil from this type of engine are based on a 4,800-mile oil change interval. You ran your oil 5,000 miles and wear metals were well below averages. The oil's viscosity was just a bit low for a 5W/30 but this didn't harm anything. Low insolubles and silicon show good oil and air filtration and no fuel or coolant was found. The TBN was 4.0, showing plenty of active additive left in the oil; less than 1.0 is too low for extended use. Try 7,000 miles for your next oil change.

	MI/HR on Oil	5,000	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	45,000						
	Sample Date	09/04/10						
	Make Up Oil Added	0.5 qt						
ELEMENTS IN PARTS PER MILLION	ALUMINUM	3	3					4
	CHROMIUM	1	1					1
	IRON	8	8					19
	COPPER	1	1					2
	LEAD	1	1					2
	TIN	1	1					1
	MOLYBDENUM	78	78					72
	NICKEL	0	0					0
	MANGANESE	0	0					2
	SILVER	0	0					0
	TITANIUM	0	0					0
	POTASSIUM	1	1					3
	BORON	20	20					41
	SILICON	4	4					7
	SODIUM	4	4					7
	CALCIUM	2337	2337					2282
	MAGNESIUM	11	11					107
	PHOSPHORUS	628	628					686
ZINC	637	637					823	
BARIUM	1	1					0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	53.4	56-67				
	cSt Viscosity @ 100°C	8.30	9.1-12.4				
	Flashpoint in °F	395	>365				
	Fuel %	<0.5	<2.0				
	Antifreeze %	0.0	0.0				
	Water %	0.0	<0.1				
	Insolubles %	0.2	<0.6				
	TBN	4.0					
	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