



OIL REPORT

LAB NUMBER: E22713
 REPORT DATE: 8/9/2010
 CODE: 20/501

UNIT ID: 1
 CLIENT ID: 33176
 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Cummins ISB 5.9L	OIL TYPE & GRADE: Shell Rotella T 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 7,335 Miles
	ADDITIONAL INFO: 2007	

CLIENT	DAVID BUCHANAN	PHONE: (276) 476-2015
	P.O. BOX 362	FAX:
	159 BIG BARN DR	ALT PHONE:
	NICKELSVILLE, VA 24271	EMAIL: taylortown_mayor@yahoo.com

COMMENTS DAVID: All of the unusual findings from the first sample back in 2008 have improved, but unfortunately, we have a new possible issue to talk about. Potassium read high enough that we think it's possible you are getting a little anti-freeze into the oil. Without any excess sodium present, it's hard to say for sure. If you have been losing coolant, then it's likely a problem exists, else we think this is just something to watch. Wear metals look fine and the TBN was still strong at 5.0, so this oil has lots of active additive left. Check back in ~7,000 miles due to potassium.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	7,335	UNIT / LOCATION AVERAGES	6,005				UNIVERSAL AVERAGES
	MI/HR on Unit			9,876				
	Sample Date	07/23/10		10/11/08				
	Make Up Oil Added	0 qts		0 qts				
ALUMINUM	6	5	4					3
CHROMIUM	2	2	2					3
IRON	50	48	45					33
COPPER	5	6	7					3
LEAD	1	1	0					2
TIN	2	1	0					1
MOLYBDENUM	1	4	6					41
NICKEL	1	1	0					0
MANGANESE	1	2	2					1
SILVER	2	2	1					0
TITANIUM	0	0	0					0
POTASSIUM	57	41	25					2
BORON	25	22	19					56
SILICON	8	13	17					6
SODIUM	3	2	1					5
CALCIUM	2598	2229	1859					2738
MAGNESIUM	22	65	107					324
PHOSPHORUS	1066	959	852					1098
ZINC	1536	1304	1071					1296
BARIUM	1	2	3					0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	79.0	69-80	76.4			
	cSt Viscosity @ 100°C	15.27	12.7-15.8	14.61			
	Flashpoint in °F	440	>410	415			
	Fuel %	<0.5	<2.0	<0.5			
	Antifreeze %	?	0	0.0			
	Water %	0.0	0.0	0.0			
	Insolubles %	0.3	<0.6	0.6			
	TBN	5.0		6.9			
	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