



OIL REPORT

LAB NUMBER: F18648
 REPORT DATE: 9/6/2012
 CODE: 22/461

UNIT ID: HO3500 SRW
 CLIENT ID: 17684
 PAYMENT: CC: Visa (Bulk)

UNIT	MAKE/MODEL: Cummins ISB 6.7L	OIL TYPE & GRADE: Chevron Delo 400 LE 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 6,580 Miles
	ADDITIONAL INFO: 2011 Dodge Ram 3500 HD	

CLIENT	MICHAEL LOFTIS	PHONE: (208) 431-6652
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COMMENTS MICHAEL: We went into detail about the excess potassium and aluminum in the last sample, and while these two metals are likely coming from the EGR system, we will continue to keep tabs on both in the future. All other wear metals read normally, though iron (from steel parts) did increase quite a bit. The iron could come from hard use/heavy hauling or periods of extra idling. Mountain driving in western Montana could certainly play a role. Whatever the cause, the extra iron isn't enough to cause concern. The TBN of 2.3 shows that the oil held up well after 6,580 miles.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	6,580	UNIT / LOCATION AVERAGES	5,971						
	MI/HR on Unit	23,282		16,702						UNIVERSAL AVERAGES
	Sample Date	08/17/12		05/26/12						
	Make Up Oil Added	0 qts		0 qts						
ALUMINUM	15	15	14							4
CHROMIUM	2	2	1							1
IRON	40	37	33							26
COPPER	4	5	5							6
LEAD	1	1	0							2
TIN	1	1	1							1
MOLYBDENUM	83	47	10							14
NICKEL	1	1	0							0
MANGANESE	1	1	1							0
SILVER	0	0	0							0
TITANIUM	0	0	0							0
POTASSIUM	36	40	43							6
BORON	445	238	30							27
SILICON	6	6	5							7
SODIUM	4	4	3							4
CALCIUM	1715	1913	2110							2145
MAGNESIUM	375	203	31							234
PHOSPHORUS	1100	998	896							1036
ZINC	1326	1180	1034							1236
BARIUM	0	0	0							0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	79.4	69-81	73.0					
	cSt Viscosity @ 100°C	15.38	12.7-16.0	13.75					
	Flashpoint in °F	425	>415	395					
	Fuel %	<0.5	<2.0	0.5					
	Antifreeze %	?	0.0	?					
	Water %	0.0	<0.1	0.0					
	Insolubles %	0.4	<0.8	0.4					
	TBN	2.3	>1.0	4.0					
	TAN								
	ISO Code								

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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