



OIL REPORT

LAB NUMBER: E54132
 REPORT DATE: 5/3/2011
 CODE: 20/501

UNIT ID: DODGE 3500
 CLIENT ID: [REDACTED]
 PAYMENT: CC: MC

UNIT	MAKE/MODEL: Cummins 6 BT 5.9L	OIL TYPE & GRADE: Amsoil 15W/40 Diesel & Marine
	FUEL TYPE: Diesel	OIL USE INTERVAL: 12,886 Miles
	ADDITIONAL INFO:	

CLIENT	[REDACTED]	PHONE: [REDACTED]
	[REDACTED]	FAX:
	[REDACTED]	ALT PHONE:
	[REDACTED]	EMAIL: [REDACTED]
	[REDACTED]	

COMMENTS MICHAEL: It's possible the exhaust brake you added at 77,265 miles is to blame for the extra copper in this sample if it shares oil with the rest of your engine. However, because copper was on the rise last time, it's still something to keep an eye on, since it could also show a problem at a brass/bronze part like a bushing or an oil cooler. Lead also increased this sample, showing more bearing wear, but it could also be from a temporary particle streak, and in that case, it will look better next time. All other wear is fine, and the TBN read strong. Check back.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	12,886	UNIT / LOCATION AVERAGES	12,820	9,400	8,092	7,967	7,861	UNIVERSAL AVERAGES
	MI/HR on Unit	88,706		75,820	63,000	53,600	45,508	37,541	
	Sample Date	04/23/11		06/18/10	05/01/09	04/29/08	05/19/07	10/06/06	
	Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	0 qts	0 qts	
ALUMINUM	4	3	3	2	2	3	4	3	
CHROMIUM	1	1	1	1	1	1	1	2	
IRON	25	20	26	18	17	15	17	23	
COPPER	247	15	73	8	8	6	9	4	
LEAD	7	2	3	3	2	1	2	2	
TIN	0	1	5	0	2	0	0	1	
MOLYBDENUM	2	32	0	2	2	2	6	29	
NICKEL	1	0	1	0	1	0	0	0	
MANGANESE	0	0	0	0	0	0	0	0	
SILVER	3	2	3	2	3	2	2	0	
TITANIUM	1	0	0	0	0	0	0	0	
POTASSIUM	8	11	3	5	4	7	12	4	
BORON	2	16	2	2	2	2	0	80	
SILICON	3	4	4	3	3	3	3	6	
SODIUM	1	3	5	3	2	4	2	4	
CALCIUM	3275	3716	3876	3755	3657	3352	4213	2640	
MAGNESIUM	11	9	10	9	9	9	11	267	
PHOSPHORUS	1019	1236	1237	1171	1133	1490	1179	1079	
ZINC	1263	1448	1546	1431	1376	1449	1470	1271	
BARIUM	0	0	0	0	0	0	0	1	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	72.3	69-78	74.7	70.7	71.9	70.9	74.7
	cSt Viscosity @ 100°C	13.55	12.7-15.3	14.19	13.14	13.45	13.18	14.17
	Flashpoint in °F	450	>415	455	450	460	445	455
	Fuel %	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
	Antifreeze %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Water %	0.0	<0.1	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.2	<0.8	0.3	0.3	0.3	0.2	0.2
	TBN	7.7		7.3	8.2	7.7		
	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