



OIL REPORT

LAB NUMBER: F19817

UNIT ID: 08 CUMMINS

REPORT DATE:

CLIENT ID:

CODE:

PAYMENT:

UNIT	MAKE/MODEL: Cummins 6.7L ISB	OIL TYPE & GRADE: Valvoline Premium Blue 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 8,062 Miles
	ADDITIONAL INFO: 2008	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS JOHN: The ISB in your Dodge Ram continues to look good based on this data. Wear metals were virtually unchanged over what we saw back in April and continue to look pretty good compared to Universal averages for this type of engine. You may be wondering why we didn't highlight aluminum now, when it was highlighted back in November at 6 ppm. That's because, this level is a lot more acceptable for an oil run ~8,000 miles. We unhighlighted titanium too since it's additive in the oil and not a concern. The viscosity was slightly low, but that's not a problem. Nice report.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	8,062	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	64,113	7,455	3,428	7,484	7,831	7,713	
	Sample Date	08/29/12	04/06/12	11/26/11	09/06/11	05/09/11	11/11/10	
	Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	0 qts	
ALUMINUM	6	4	5	6	17	7	2	3
CHROMIUM	1	1	1	1	2	2	1	1
IRON	16	39	16	15	35	44	26	24
COPPER	3	10	3	3	5	4	5	7
LEAD	2	2	2	2	5	2	2	1
TIN	0	2	0	0	0	0	0	1
MOLYBDENUM	43	39	45	47	50	48	34	36
NICKEL	0	0	0	0	0	0	0	0
MANGANESE	0	1	0	0	1	1	0	0
SILVER	1	1	1	1	1	1	1	0
TITANIUM	27	7	24	0	0	0	0	1
POTASSIUM	13	9	9	15	56	24	4	6
BORON	2	3	1	3	4	5	2	47
SILICON	3	9	3	3	6	7	4	6
SODIUM	6	7	6	6	6	4	4	6
CALCIUM	1323	1049	1274	1289	1382	1125	883	1577
MAGNESIUM	1123	883	1044	994	1054	821	649	572
PHOSPHORUS	1109	999	1131	1235	1251	1071	838	1000
ZINC	1309	1197	1316	1389	1451	1262	884	1179
BARIUM	0	3	0	0	0	0	0	0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	68.4	69-78	69.9	69.5	72.0	66.2	55.5
	cSt Viscosity @ 100°C	12.52	12.7-15.3	12.94	12.83	13.48	11.94	8.92
	Flashpoint in °F	450	>390	440	430	450	415	375
	Fuel %	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	1.5
	Antifreeze %	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 %	0.3	<0.8	0.3	0.2	0.2	0.3	0.3
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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