



OIL REPORT

LAB NUMBER:
 REPORT DATE: 11/17/2010
 CODE:

UNIT ID: 08 CUMMINS
 CLIENT ID:
 PAYMENT:

UNIT	MAKE/MODEL: Cummins 6.7L	OIL TYPE & GRADE: Valvoline Premium Blue 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 7,713 Miles
	ADDITIONAL INFO: 2008	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS JOHN: Thanks for the note about taking the sample cold. That helps to explain the fuel dilution we found present in this sample at 1.5%. The fuel could be part of the reason why the viscosity was lower than spec, too. Otherwise, nothing else turned up here that would indicate a problem in the works. Wear metals read nice and low - if anything, some of them are even better than last time after a longer oil change. If that's not a sign of a solid engine with no problems, we certainly don't know what is. Insolubles are low, so overall, no problems to report here. Nice engine!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	7,713	UNIT / LOCATION AVERAGES	7,583	7,076	4,896	2,585	UNIVERSAL AVERAGES
	MI/HR on Unit	29,853		22,140	14,557	7,481	2,585	
	Sample Date	11/11/10		05/23/10	01/01/10	07/11/09	04/25/09	
	Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	0 qts	
ALUMINUM	2	3	2	5	3	3	3	3
CHROMIUM	1	2	2	2	1	2	2	1
IRON	26	48	34	36	38	107	25	25
COPPER	5	13	3	5	6	44	8	8
LEAD	2	2	3	1	2	3	1	1
TIN	0	3	4	4	2	3	1	1
MOLYBDENUM	34	37	39	36	40	38	36	36
NICKEL	0	0	1	0	0	1	0	0
MANGANESE	0	2	1	1	1	6	0	0
SILVER	1	1	0	1	1	0	0	0
TITANIUM	0	0	0	0	0	0	0	0
POTASSIUM	4	9	1	21	5	12	7	7
BORON	2	3	3	3	3	5	52	52
SILICON	4	12	5	7	9	34	5	5
SODIUM	4	8	9	5	5	16	6	6
CALCIUM	883	949	849	904	1117	993	1488	1488
MAGNESIUM	649	803	993	680	859	833	534	534
PHOSPHORUS	838	951	1195	852	1042	827	957	957
ZINC	884	1150	1324	1059	1325	1159	1167	1167
BARIUM	0	4	0	0	2	18	0	0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	55.5	69-78	59.2	55.2	62.9	58.6
	cSt Viscosity @ 100°C	8.92	12.7-15.3	10.00	8.82	11.04	9.81
	Flashpoint in °F	375	>390	415	385	390	350
	Fuel %	1.5	<2.0	<0.5	0.5	TR	6.5
	Antifreeze %	0.0	0.0	0.0	?	0.0	0.0
	Water %	0.0	<0.1	0.0	0.0	0.0	0.0
	Insolubles %	0.3	<0.8	0.3	0.3	0.4	0.2
	TBN						
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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