



OIL REPORT

LAB NUMBER: E70554

UNIT ID: 08 CUMMINS

REPORT DATE: 9/12/2011

CLIENT ID:

CODE:

PAYMENT:

UNIT	MAKE/MODEL: Cummins 6.7L	OIL TYPE & GRADE: Valvoline Premium Blue 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 7,484 Miles
	ADDITIONAL INFO: 2008	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS JOHN: We saw high levels of potassium and aluminum in your last sample, and both have more than doubled this time around. We mentioned in the last report that those often come from the EGR system in new diesels, but the fact that they are increasing could show a problem. Lead increased also, showing bearing wear, but that might just be from the towing you noted. Another possibility is antifreeze; potassium is an indicator, but we'd normally expect to see high sodium as well, so we doubt that. Still, watch your coolant level just in case, and check back to monitor.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	7,484	UNIT / LOCATION AVERAGES	7,831	7,713	7,583	7,076	4,896	UNIVERSAL AVERAGES
	MI/HR on Unit	45,168		37,684	29,853	22,140	14,557	7,481	
	Sample Date	09/06/11		05/09/11	11/11/10	05/23/10	01/01/10	07/11/09	
	Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	0 qts	0 qts	
ALUMINUM	17	3	7	2	2	5	3	3	
CHROMIUM	2	2	2	1	2	2	1	1	
IRON	35	48	44	26	34	36	38	25	
COPPER	5	13	4	5	3	5	6	8	
LEAD	5	2	2	2	3	1	2	1	
TIN	0	3	0	0	4	4	2	1	
MOLYBDENUM	50	37	48	34	39	36	40	35	
NICKEL	0	0	0	0	1	0	0	0	
MANGANESE	1	2	1	0	1	1	1	0	
SILVER	1	1	1	1	0	1	1	0	
TITANIUM	0	0	0	0	0	0	0	0	
POTASSIUM	56	9	24	4	1	21	5	6	
BORON	4	3	5	2	3	3	3	50	
SILICON	6	12	7	4	5	7	9	5	
SODIUM	6	8	4	4	9	5	5	6	
CALCIUM	1382	949	1125	883	849	904	1117	1527	
MAGNESIUM	1054	803	821	649	993	680	859	543	
PHOSPHORUS	1251	951	1071	838	1195	852	1042	974	
ZINC	1451	1150	1262	884	1324	1059	1325	1164	
BARIUM	0	4	0	0	0	0	2	0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	72.0	69-78	66.2	55.5	59.2	55.2	62.9
	cSt Viscosity @ 100°C	13.48	12.7-15.3	11.94	8.92	10.00	8.82	11.04
	Flashpoint in °F	450	>390	415	375	415	385	390
	Fuel %	<0.5	<2.0	<0.5	1.5	<0.5	0.5	TR
	Antifreeze %	?	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	0.3	0.4
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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