BLACKSTONE LABORATORIES

OIL REPORT

LAB NUMBER:
REPORT DATE: 5/13/2011
CODE:

UNIT ID: 08 CUMMINS
CLIENT ID:
PAYMENT:

UNIT

MAKE/MODEL: Cummins 6.7L
FUEL TYPE: Diesel
ADDITIONAL INFO: 2008

OIL TYPE & GRADE: Valvoline Premium Blue 15W/40
OIL USE INTERVAL: 7,831 Miles

CLIENT

PHONE:
FAX:
ALT PHONE:
EMAIL:

COMMENTS

JOHN: We sometimes see elevated aluminum and potassium in new diesel engines, and it comes from the EGR system. We found similar aluminum and potassium levels back in January 2010, so maybe you can think of something that oil run had in common with this one that might have caused the increases. In any case, this engine is still in good shape -- those anomalies are just something we'll watch. All other wear is low and no fuel or antifreeze was present. Check back for another look. Aluminum and potassium will probably both improve.

ELEMENTS IN PARTS PER MILLION

			UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
	MI/HR on Oil	7,831		7,713	7,583	7,076	4,896	2,585	
	MI/HR on Unit	37,684		29,853	22,140	14,557	7,481	2,585	
	Sample Date	05/09/11		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	0 qts	
	ALUMINUM	**7**	3	2	2	5	3	3	3
	CHROMIUM	2	2	1	2	2	1	2	1
	IRON	44	48	26	34	36	38	**107**	25
	COPPER	4	13	5	3	5	6	**44**	9
	LEAD	2	2	2	3	1	2	3	1
	TIN	0	3	0	4	4	2	3	1
	MOLYBDENUM	48	37	34	39	36	40	38	36
	NICKEL	0	0	0	1	0	0	1	0
	MANGANESE	1	2	0	1	1	1	6	0
	SILVER	1	1	1	0	1	1	0	0
	TITANIUM	0	0	0	0	0	0	0	0
	POTASSIUM	**24**	9	4	1	**21**	5	12	6
	BORON	5	3	2	3	3	3	5	49
	SILICON	7	12	4	5	7	9	**34**	5
	SODIUM	4	8	4	9	5	5	16	6
	CALCIUM	1125	949	883	849	904	1117	993	1510
	MAGNESIUM	821	803	649	993	680	859	833	545
	PHOSPHORUS	1071	951	838	1195	852	1042	827	967
	ZINC	1262	1150	884	1324	1059	1325	1159	1159
	BARIUM	0	4	0	0	0	2	18	0

PROPERTIES

		Values Should Be*						
	SUS Viscosity @ 210°F	**66.2**	69-78	**55.5**	**59.2**	**55.2**	**62.9**	58.6
	cSt Viscosity @ 100°C	**11.94**	12.7-15.3	**8.92**	**10.00**	**8.82**	**11.04**	9.81
	Flashpoint in °F	415	>390	**375**	415	**385**	**390**	**350**
	Fuel %	<0.5	<2.0	1.5	<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	0.0
	Insolubles %	0.3	<0.8	0.3	0.3	0.3	0.4	0.2
	TBN							
	TAN							
	ISO Code							

*** THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE**

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