



OIL REPORT

LAB NUMBER: J56433
 REPORT DATE: 8/25/2017
 CODE: 1/685

UNIT ID: 204501
 CLIENT ID: XXXXXXXXXX
 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Isuzu 6.6L Duramax	OIL TYPE & GRADE: Diesel Engine Oil
	FUEL TYPE: Diesel	OIL USE INTERVAL: 6,203 Miles
	ADDITIONAL INFO: 2010 Chevy 4500	

CLIENT	HUBB FILTERS, INC - CALIFORNIA	PHONE: (415) 986-8238
	233 TAMALPAIS DR	FAX:
	STE B	ALT PHONE:
	CORTE MADERA, CA 94925	EMAIL: rcummins@hubbfilters.com

COMMENTS HUBB: Wear metals held steady this time around, and that's a good sign that internal parts are wearing well, even with the extra lead. It would certainly be nice to see lead in the average range like the other metals, but it looks like some extra lead may just be the norm for this particular unit and the use it sees. Not all engines wear exactly like averages, and that's fine. As long as oil pressure is okay, let's just monitor lead from here. The viscosity was fine and the TBN shows lots of active additive left in the oil at 4.6. Nice report, even with the extra lead.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	6,203	UNIT / LOCATION AVERAGES	6,690				UNIVERSAL AVERAGES
	MI/HR on Unit	77,329		71,123				
	Sample Date	7/17/2017		6/2/2017				
	Make Up Oil Added							
ALUMINUM	3	3	3				3	
CHROMIUM	1	1	1				0	
IRON	24	26	26				14	
COPPER	4	4	3				10	
LEAD	21	8	20				2	
TIN	1	1	2				1	
MOLYBDENUM	54	56	64				42	
NICKEL	0	0	0				0	
MANGANESE	0	0	0				0	
SILVER	0	0	0				0	
TITANIUM	0	0	0				0	
POTASSIUM	3	5	3				5	
BORON	13	59	11				117	
SILICON	17	17	13				9	
SODIUM	3	3	4				5	
CALCIUM	1264	1279	1085				1870	
MAGNESIUM	891	789	954				480	
PHOSPHORUS	1012	1000	993				1065	
ZINC	1267	1203	1184				1246	
BARIUM	0	0	0				0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	74.7		67.6			
	cSt Viscosity @ 100°C	14.17		12.31			
	Flashpoint in °F	460	>415	470			
	Fuel %	<0.5	<2.0	<0.5			
	Antifreeze %	0.0	0.0	0.0			
	Water %	0.0	0.0	0.0			
	Insolubles %	0.4	<0.6	0.3			
	TBN	4.6	>1.0	6.2			
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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