



OIL REPORT

LAB NUMBER: H81247
REPORT DATE: 9/30/2016
CODE: 20/685

UNIT ID: LUCKY STARS
CLIENT ID: 65829
PAYMENT: CC: Visa

UNIT

MAKE/MODEL: Cummins ISB 5.9L (Pickup)
FUEL TYPE: Diesel
ADDITIONAL INFO: 2004 Ram 2500

OIL TYPE & GRADE: Shell Rotella T 15W/40
OIL USE INTERVAL: 13,252 Miles

CLIENT

WILLIAM HYATT
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COMMENTS

WILLIAM: We certainly can't complain about these results - you're running about double the average oil change interval, yet still getting wear at about the same level as average. This is another great report for this ISB. As usual, the only thing we highlighted is the slightly high viscosity. That obviously hasn't hurt anything, and we're not going to worry about it. No significant contamination was found, and the TBN remained strong at 5.1. Everything looks good from here, so go ahead and try 15,000 miles next, then check back to see the effects.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	13,252	UNIT / LOCATION AVERAGES	11,000	11,894	10,866	11,000	10,000	UNIVERSAL AVERAGES
	MI/HR on Unit	172,875		159,400	148,400	136,550	125,684	115,000	
	Sample Date	9/18/2016		2/3/2016	8/30/2015	3/22/2015	11/8/2014	6/15/2014	
	Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	0 qts	0 qts	
	ALUMINUM	2	2	2	2	2	2	3	3
	CHROMIUM	1	1	1	1	1	1	1	1
	IRON	28	23	25	29	21	26	26	25
	COPPER	1	1	1	1	1	1	2	5
	LEAD	3	3	3	3	3	3	3	2
	TIN	0	0	0	0	0	3	0	1
	MOLYBDENUM	0	7	1	1	1	1	2	37
	NICKEL	0	0	1	0	0	0	1	0
	MANGANESE	0	0	0	0	0	0	0	0
	SILVER	0	0	0	0	0	0	0	1
	TITANIUM	0	0	0	0	0	0	0	2
	POTASSIUM	7	8	8	5	7	10	14	6
	BORON	16	25	18	19	24	20	22	80
	SILICON	3	3	3	4	2	3	3	5
	SODIUM	5	5	3	5	5	3	4	5
	CALCIUM	2261	2192	2322	2434	2410	2314	2317	2146
	MAGNESIUM	10	121	10	9	9	13	27	449
	PHOSPHORUS	958	974	975	1021	972	967	970	1104
	ZINC	1158	1156	1142	1311	1204	1157	1172	1295
	BARIUM	0	0	0	0	0	0	0	0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	83.0	69-80	82.0	81.6	81.0	84.4	80.0
	cSt Viscosity @ 100°C	16.26	12.7-15.8	16.02	15.92	15.78	16.61	15.52
	Flashpoint in °F	435	>410	430	435	445	460	440
	Fuel %	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
	Antifreeze %	0.0	0	0.0	0.0	0.0	0.0	0.0
	Water %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.3	<0.6	0.1	0.1	0.1	0.3	0.1
	TBN	5.1	>1.0		5.4	6.4	5.0	4.4
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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