



OIL REPORT

LAB NUMBER: J15805

UNIT ID: 93 HDJ81

REPORT DATE: 3/10/2017

CLIENT ID: 88096

CODE: 20/685

PAYMENT: CC: Visa

UNITMAKE/MODEL: Toyota 4.2L Turbo 6cyl (1HD-T)
FUEL TYPE: Diesel
ADDITIONAL INFO:OIL TYPE & GRADE: Shell Rotella T6 5W/40
OIL USE INTERVAL: 11,931 KM**CLIENT**WINNIPEG, MB R2Y 0Y8
CANADAPHONE:
FAX:
ALT PHONE:
EMAIL:**COMMENTS**

IAN: Thanks for the notes. You said you went longer than you wanted to on this oil, and it doesn't look like the engine was upset about that. Wear metals are in good shape next to universal averages, so 11,931 km wasn't too much. Iron is the metal that accumulates with oil use and while the wear rate (ppm/km) is a little higher than last time, it's still better than the universal average wear rate, so steel parts are fine. The low flashpoint shows 0.5% fuel, which is harmless. The TBN was plenty strong at 8.8, so up to 15K km next would be okay, if you'd like. Excellent!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	11,931	UNIT / LOCATION AVERAGES	10,000					UNIVERSAL AVERAGES
	MI/HR on Unit	120,931		100,000					
	Sample Date	2/16/2017		9/18/2015					
	Make Up Oil Added	0.5 qts							
ALUMINUM	4	4	3						4
CHROMIUM	1	1	1						2
IRON	32	29	24						22
COPPER	2	2	3						4
LEAD	2	2	2						8
TIN	4	3	0						1
MOLYBDENUM	74	70	61						18
NICKEL	1	1	0						0
MANGANESE	0	0	0						0
SILVER	0	0	0						0
TITANIUM	0	0	0						0
POTASSIUM	0	1	2						3
BORON	40	36	27						29
SILICON	10	13	19						12
SODIUM	4	4	3						5
CALCIUM	974	939	870						2435
MAGNESIUM	1346	1282	1155						353
PHOSPHORUS	1163	1126	1051						1055
ZINC	1413	1370	1284						1240
BARIUM	0	0	0						0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	77.5	66-78	77.6				
	cSt Viscosity @ 100°C	14.90	11.9-15.3	14.91				
	Flashpoint in °F	405	>410	425				
	Fuel %	0.5	<2.0	<0.5				
	Antifreeze %	0.0	0.0	0.0				
	Water %	0.0	0.0	0.0				
	Insolubles %	0.3	<0.6	0.3				
	TBN	8.8	>1.0	7.4				
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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