



OIL REPORT

LAB NUMBER: G36984 UNIT ID: CHADMILLISOR F350
 REPORT DATE: 10/7/2014 CLIENT ID: 73637
 CODE: 20/636 PAYMENT: CC: MC

UNIT	MAKE/MODEL: Navistar 6.0L Power Stroke	OIL TYPE & GRADE: Diesel Engine Oil
	FUEL TYPE: Diesel	OIL USE INTERVAL: 4,711 Miles
	ADDITIONAL INFO: Ford F-350	

CLIENT	KEVIN ADAMS	PHONE:
	LUBRICATION SPECIALTIES	FAX:
	255 NEAL AVE	ALT PHONE:
	MT. GILEAD, OH 43338	EMAIL:

COMMENTS KEVIN: This is the initial test at 217,548 miles. Metals are very high in this sample, primarily iron (from steel parts), along with aluminum and chrome (pistons/rings) and copper and lead, from bearings. The high levels of potassium and sodium indicate a coolant leak, with ~1.92% antifreeze present in this oil sample. That's probably causing a lot of the wear, along with the high insolubles. The initial particle count reading was 22/21/18.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	4,711	UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
	MI/HR on Unit	217,548							
	Sample Date	10/01/14							
	Make Up Oil Added								
ALUMINUM	20								3
CHROMIUM	6								1
IRON	186								20
COPPER	7								3
LEAD	14								3
TIN	1								1
MOLYBDENUM	86								35
NICKEL	7								0
MANGANESE	2								0
SILVER	0								0
TITANIUM	2								0
POTASSIUM	1034								12
BORON	35								61
SILICON	31								11
SODIUM	962								5
CALCIUM	2070								2521
MAGNESIUM	98								244
PHOSPHORUS	1198								1104
ZINC	1083								1271
BARIUM	11								1

Values Should Be*

PROPERTIES	Values Should Be*		PARTICLE COUNT	ISO CODE (2)	
SUS Viscosity @ 210°F	61.5		NAS 1638 Class	21/18	12
cSt Viscosity @ 100°C	10.65		ISO CODE (3)	22/21/18	
Flashpoint in °F	410	>415	>= 2 Micron	41,182	
Fuel %	0.5	<2.0	>= 5 Micron	15,258	
Antifreeze %	1.92	0.0	>= 10 Micron	4,224	
Water %	0.0	<0.1	>= 15 Micron	1,631	
Insolubles %	0.6	<0.6	>= 25 Micron	391	
TBN			>= 50 Micron	37	
TAN			>= 100 Micron	1	
ISO Code	22/21/18				

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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