

AFTER 200 MILES ON FRANTE



OIL REPORT

LAB NUMBER: G37254 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: 4,929 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 second sample, taken at 217,776 miles (the spectral analysis was already completed prior to your phone conversation yesterday, so that's why those results were already included). There's been a significant drop in iron, and in the level of coolant contamination -- sodium and potassium. Insolubles improved as well (0.5% is an acceptable level for engine oil), and the particle count improved to 17/16/13.

41,182-1641

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	UNIT / LOCATION AVERAGES	4,711	4,711	UNIVERSAL AVERAGES
	MI/HR on Unit		217,548	217,548	
	Sample Date		10/01/14	10/01/14	
	Make Up Oil Added				
ALUMINUM	19		20		3
CHROMIUM	5		6		1
IRON	128		186		20
COPPER	9		7		3
LEAD	16		14		3
TIN	0		1		1
MOLYBDENUM	106		86		35
NICKEL	3		7		0
MANGANESE	2		2		0
SILVER	0		0		0
TITANIUM	2		2		0
POTASSIUM	840		1034		12
BORON	28		35		61
SILICON	33		31		11
SODIUM	270		962		5
CALCIUM	1915		2070		2521
MAGNESIUM	87		98		244
PHOSPHORUS	1107		1198		1104
ZINC	1008		1083		1271
BARIIUM	10		11		1

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	62.9		61.5	PARTICLE COUNT	ISO CODE (2)	16/13
	cSt Viscosity @ 100°C	11.04		10.65		NAS 1638 Class	8
	Flashpoint in °F	405	>415	410		ISO CODE (3)	17/16/13
	Fuel %	1.0	<2.0	0.5		>= 2 Micron	1,641
	Antifreeze %	0.54	0.0	1.92		>= 5 Micron	608
	Water %	0.0	<0.1	0.0		>= 10 Micron	168
	Insolubles %	0.5	<0.6	0.6		>= 15 Micron	65
	TBN					>= 25 Micron	15
	TAN					>= 50 Micron	1
	ISO Code	17/16/13		21/20/17 22/21/18		>= 100 Micron	0

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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NEW OIL



OIL REPORT

LAB NUMBER: G52932
 REPORT DATE: 1/2/2015
 CODE: 20/636

UNIT ID: BASELINE
 CLIENT ID: 73637
 PAYMENT: CC: MC

UNIT	MAKE/MODEL: Virgin 15W/40	OIL TYPE & GRADE: Shell Rotella T 15W/40
	FUEL TYPE:	OIL USE INTERVAL:
	ADDITIONAL INFO: Shell Rotella	

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

COMMENTS
 KEVIN: This is the baseline sample for Rotella for comparison purposes. No water or solids were found and the particle count read 17/16/14, which is clean. This is serviceable oil.

	MI/HR on Oil		UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit							
	Sample Date	12/29/14						
	Make Up Oil Added							
ELEMENTS IN PARTS PER MILLION	ALUMINUM	1	1					0
	CHROMIUM	0	0					0
	IRON	2	2					1
	COPPER	0	0					0
	LEAD	0	0					0
	TIN	0	0					0
	MOLYBDENUM	1	1					28
	NICKEL	2	2					0
	MANGANESE	0	0					0
	SILVER	0	0					0
	TITANIUM	0	0					2
	POTASSIUM	4	4					1
	BORON	43	43					63
	SILICON	4	4					5
	SODIUM	2	2					3
	CALCIUM	2098	2098					2113
	MAGNESIUM	6	6					303
	PHOSPHORUS	913	913					975
	ZINC	1010	1010					1139
	BARIIUM	0	0					0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	77.1	69-78	PARTICLE COUNT	ISO CODE (2)	17/13
	cSt Viscosity @ 100°C	14.79	12.7-15.3		NAS 1638 Class	8
	Flashpoint in °F	455	>415		ISO CODE (3)	17/16/14
	Fuel %	-			>= 2 Micron	1,818
	Antifreeze %	-			>= 5 Micron	673
	Water %	0.0	<0.1		>= 10 Micron	186
	Insolubles %	0.0	<0.8		>= 15 Micron	72
	TBN				>= 25 Micron	17
	TAN				>= 50 Micron	1
	ISO Code	17/16/14			>= 100 Micron	0

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