



Client

Location:

Client Location

Unit ID:

Advance Mixer 138

Model:

Caterpillar - CAT C-10

Machine Type:

Engine





Iron is still elevated indicating some internal engine wear. Possible sources: Liners, Gears, Tappets, Rings

All other elements are acceptable. Oil is suitable for continued use

Re-sample at normal intervals

System Admin, 28 Aug 2015

Oil Mobil Delvac 1300 15w40		Sample ID		367D4 (P2248)	2DF96 (P1850)		
Note: Oil Changed		Sampled on		27 Aug 2015	10 Jul 2015		
		Received on		27 Aug 2015	10 Jul 2015		
		h/m Total		25954	255581		
		h/m Oil		373	397		
		Top up (l.)					
							
ASTM D6595-00 WEAR METALS	Iron	ppm	0 - 150	61	59		
	Chrome	ppm	0 - 10	2	2		
	Nickel	ppm		<1	<1		
	Molybdene	ppm		57	51		
	Aluminium	ppm	0 - 20	1	2		
	Lead	ppm	0 - 25	7	5		
	Copper	ppm	0 - 120	4	5		
	Tin	ppm	0 - 10	<1	<1		
	Silver	ppm		<1	<1		
	Titanium	ppm		<1	<1		
ASTM D6595-00 CONTAMINANT S	Silicon	ppm	0 - 25	4	4		
	Sodium	ppm	0 - 15	8	9		
	Vanadium	ppm		<1	<1		
	Potassium	ppm		<1	<1		
	Lithium	ppm		<1	<1		
ASTM D6595-00 ADDITIVES	Calcium	ppm		1197	1121		
	Magnesium	ppm		827	711		
	Phosphorus	ppm		1195	1307		
	Zinc	ppm		1576	1528		
	Barium	ppm		<1	<1		
	Boron	ppm		29	29		
MET-MEC-005	Fuel dilution	%		0	0		
ASTM D445	Viscosity at 40°C	cSt		107	111		
ASTM D445	Viscosity at 100°C	cSt	12.0 - 18.0	13.8	15.8		
ASTM D2270-98	Viscosity index	°C		129	152		
ASTM E2412	TAN	mg KOH/g	0.00 - 5.00		6.53		
	TBN	mg KOH/g	5.25 - 11.55	5.55	7.50		
	WaterPPM	ppm		109.9	375.1		
	OX	abs/mm2		14.8	15.1		
	NIT	abs/mm2		0.7	0.8		
	SUL	abs/mm2		20.8	21.1		
	Glycol	%	0.0 - 0.5	0.0	0.0		
	Soot	%wt		0.6	0.7		

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Warning Limits						

Date 17 Oct 2015