

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

[6100299630] Miachine Id MINTO FIRE PUMP

Component Diesel Engine

SAE 15W40 (--- GAL)

Sample Authenext service interval to monitor. Sample Number Client Info WA002157 Sample Date Client Info 28 May 2024						~~~~~		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date Client Info 1 143	Resample at the next service interval to monitor.	Sample Number		Client Info		WA0021547		
Oli AgehrsClient Into%%%<		Sample Date		Client Info		28 May 2024		
Filter Age Ins Client Info 8		Machine Age	hrs	Client Info		143		
Oil Changed Client Info Changed Changed Filter Changed Client Info I Changed Sample Status Roman Roman Metal levels are typical for a new component breaking in. Iron ppm ASIM 05186 -51 12 Nickel ppm ASIM 05186 -50 0 Mater levels are typical for a new component breaking in. Nickel ppm ASIM 05186 -30 0 Titanium ppm ASIM 05186 -31 0 Aurinum ppm ASIM 05186 -30 0 Contraduition of any contamination in the oil. Coper ppm ASIM 05186 -22 5 Silicon ppm ASIM 05186 -20 S There is no indication of any contamination in the oil. Fuel -		Oil Age	hrs	Client Info		8		
Filter Changed Client Info Imaged Changed Imaged Changed Imaged		Filter Age	hrs	Client Info		8		
Sample Status NORMA Normation WEAR Iron ppm ASTU05180/m >51 12 Metal levels are typical for a new component breaking in. Chromium ppm ASTU05180/m >51 12 Nickel ppm ASTU05180/m >50 0 Alter and the set of the set		Oil Changed		Client Info		Changed		
WEAR Iron ppm ASTM D5185(n) >51 12		Filter Changed		Client Info		Changed		
Metal levels are typical for a new component breaking in. Chromium ppm ASTM D585m 5 0 Nickel ppm ASTM D585m >5 0 Titanium ppm ASTM D585m >3 0 Silver ppm ASTM D585m >3 0 Auminum ppm ASTM D585m >26 0 Lead ppm ASTM D585m >4 0 Copper ppm ASTM D585m >4 0 Tin ppm ASTM D585m >4 0 CONTAMINATION ppm ASTM D585m >20 <1 There is no indication of any contamination in the oil. Silicon pm ASTM D585m >20 <1 Glayco ppm ASTM D784M >30 0		Sample Status				NORMAL		
Metal levels are typical for a new component breaking in. Chromium ppm ASTM D585m 5 0 Nickel pm ASTM D585m >5 0 Titanium pm ASTM D585m >3 0 Silver pm ASTM D585m >3 0 Lead pm ASTM D585m >26 0 Copper pm ASTM D585m >26 0 Copper pm ASTM D585m >4 0 Tin pm ASTM D585m >4 0 CONTAMINATION pm ASTM D585m >20 <1 There is no indication of any contamination in the oil. Potassium pm ASTM D585m >20 <1 Glyco VPC Method >21 <1.0 Soot %<	WEAR	Iron	ppm	ASTM D5185(m)	>51	12		
Nickel ppm ASTM DS185m >5 0 Titanium ppm ASTM DS185m >3 0 Silver ppm ASTM DS185m >3 0 Auminum ppm ASTM DS185m >30 0 Lead ppm ASTM DS185m >26 0 Copper pm ASTM DS185m >26 2 Tin ppm ASTM DS185m >26 1 CONTAMINATION Silicon ppm ASTM DS185m >20 1	Metal levels are typical for a new component breaking in.	Chromium		ASTM D5185(m)	>11			
TitaniumpmASTM D6186mSilverpmASTM D6186m<		Nickel				0		
Aluminum ppm ASTM D5185(m) >31 <1		Titanium				<1		
Lead ppm ASTM D5185(m) >26 0 Copper ppm ASTM D5185(m) >26 2 Tin ppm ASTM D5185(m) >4 0 Vanadium ppm ASTM D5185(m) >24 0 CONTAMINATION Silicon ppm ASTM D5185(m) >22 5 There is no indication of any contamination in the oil. Potassium ppm ASTM D5185(m) >22 5 Water VM Method >21 -1-0 Glycol V WC Method s0.1 MEG Soot % % ASTM D5185(m) >20 4.4 Soot % % ASTM D7644' >30 0 FULID CONDITION Asset ASTM D5185(m) >501 18.3 </th <th>Silver</th> <th>ppm</th> <th>ASTM D5185(m)</th> <th>>3</th> <th>0</th> <th></th> <th></th>		Silver	ppm	ASTM D5185(m)	>3	0		
Copper ppm ASTM D5185/m >26 2 Tin ppm ASTM D5185/m >4 0 Vanadium ppm ASTM D5185/m >2 0 CONTAMINATION Silicon ppm ASTM D5185/m >22 5 There is no indication of any contamination in the oil. Potassium ppm ASTM D5185/m >22 5 Water Image: Silicon ppm ASTM D5185/m >20 < Glycol WC Method 50 < Soot % % ASTM D5185/m >20 4.4 Soot % % ASTM D7164 >30 0 FLUID CONDITION Sodium Abs/rm ASTM D5185/m Solia Boron ppm ASTM D5185/m Solia Molybdenum ppm<		Aluminum	ppm	ASTM D5185(m)	>31	<1		
Tin ppm ASTM D5182(m) >4 0 Vanadium ppm ASTM D5182(m) >C 0 CONTAMINATION Silicon ppm ASTM D5182(m) >22 55 Potassium ppm ASTM D5182(m) >20 <1 Fuel V MSTM D5182(m) >20 <1 Water ppm ASTM D5182(m) >20 <1 Glycol WC Method >.21 <1.0 Water WC Method >.21 NEG Glycol WC Method >.21 NEG Soot % % ASTM D7844 >3 0 Soot % % ASTM D7845 >30 18.3 FLUID CONDITION Sodium ppm ASTM D5185(m) 57 1		Lead	ppm	ASTM D5185(m)	>26	0		
VanadiumppmASTM D5185(m) $\[\] 0 \]$ $\[\]$ $\[\]$ CONTAMINATIONSiliconppmASTM D5185(m)>22 $\[\] 5 \]$ $\[\]\[\]$		Copper	ppm	ASTM D5185(m)	>26	2		
CONTAMINATION Silicon ppm ASTMD5185(m) >22 5 There is no indication of any contamination in the oil. Potassium ppm ASTMD5185(m) >20 <1		Tin	ppm	ASTM D5185(m)	>4	0		
Potassium ppm ASTM D5185(m) >20 <1		Vanadium	ppm	ASTM D5185(m)		0		
FuelWC Method>2.1<1.0WaterWC Method>0.21NEGGlycolWC Method>0.2NEGSoot %%ASTM D7644*>30NitrationAbs/cmASTM D7624*>204.4SulfationAbs/tmASTM D7624*>018.3SulfationAbs/tmASTM D7624*>0.21NEGSulfationAbs/tmASTM D7624*>018.3SulfationAbs/tmASTM D7624*>0.21NEGSulfationAbs/tmASTM D7624*>018.3Burlistified WaterscalarVisual*>0.21NEGBariumppmASTM D5185(m)>571BariumppmASTM D5185(m)>571MaganeseppmASTM D5185(m)56MagnesiumppmASTM D5185(m)0MagnesiumppmASTM D5185(m)571035MagneseppmASTM D5185(m)5710MagnesiumppmASTM D5185(m)5710MagnesiumppmASTM D5185(m)5710Magnesiumppm<	CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>22	5		
FuelWC Method \sim $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ $<$ <th rowspan="8">There is no indication of any contamination in the oil.</th> <th>Potassium</th> <th>ppm</th> <th>ASTM D5185(m)</th> <th>>20</th> <th><1</th> <th></th> <th></th>	There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
Glycol WC Method NEG Soot % % ASTM D7844' -3 0 Nitration Abs/cm ASTM D7624' -20 4.4 Sulfation Abs/cm ASTM D7624' -20 18.3 Sulfation Abs/cm ASTM D7155' NEG Emulsified Water scalar Visual* -0.21 NEG FLUID CONDITION Sodium ppm ASTM D5185(m) -57 1 Boron ppm ASTM D5185(m) -57 1 Barium ppm ASTM D5185(m) -55 1 Molybdenum ppm ASTM D5185(m) - 0 Maganese ppm ASTM D5185(m) - 0 Galcium ppm ASTM D5185(m) - 1035		Fuel		WC Method	>2.1	<1.0		
Soot % % ASTM D7844* >3 0 Nitration Abs/m ASTM D7624* >20 4.4 Sulfation Abs/m ASTM D7612* >30 18.3 Sulfation Abs/m ASTM D715* >30 18.3 Emulsified Water scalar Visual* >0.21 NEG FLUID CONDITION Sodium ppm ASTM D5185(m) 57 1 Boron ppm ASTM D5185(m) -57 1 Barium ppm ASTM D5185(m) -58 Molybdenum ppm ASTM D5185(m) -58 Magnesium ppm ASTM D5185(m) Magnesium ppm ASTM D5185(m) Magnesium ppm ASTM D5185(m) <th>Water</th> <th></th> <th>WC Method</th> <th>>0.21</th> <th>NEG</th> <th></th> <th></th>		Water		WC Method	>0.21	NEG		
NitrationAbs/cmASTM D7624*>204.4SulfationAbs/cmASTM D7624*>3018.3Emulsified WaterscalarVisual*>0.21NEGNEGppmASTM D5185(m)>571BoronppmASTM D5185(m)>571BariumppmASTM D5185(m)5710MolybdenumppmASTM D5185(m)1058ManganeseppmASTM D5185(m)58MagnesiumppmASTM D5185(m)5610.35OASTM D5185(m)5710.35MagnesiumppmASTM D5185(m)5710.35MagnesiumppmASTM D5185(m)58MagnesiumppmASTM D5185(m)5010.35MagnesiumppmASTM D5185(m)5810.35MagnesiumppmASTM D5185(m)5710.35MagnesiumppmASTM D5185(m)5810.35MagnesiumppmASTM D5185(m)5710.35MagnesiumppmASTM D5185(m)5810.35MagnesiumppmASTM D5185(m)5710.35		Glycol		WC Method		NEG		
Sulfation Abs/.tmm ASTM D7415 >30 18.3 Emulsified Water scalar Visual* >0.21 NEG FLUID CONDITION Sodium ppm ASTM D5185(m) >57 1 Boron ppm ASTM D5185(m) >57 1 Barium ppm ASTM D5185(m) S Molybdenum ppm ASTM D5185(m) I Manganese ppm ASTM D5185(m) I Magnesium ppm ASTM D5185(m) I Raigenesium ppm ASTM D5185(m) I I Magnesium ppm ASTM D5185(m) I I Raigenesium ppm ASTM D5185(m) I I I I Imagnesium ppm ASTM D5185(m) I I I I I		Soot %	%	ASTM D7844*	>3	0		
Emulsified Water scalar Visual* >0.21 NEG FLUID CONDITION Sodium ppm ASTM D5185(m) >57 1 Boron ppm ASTM D5185(m) >57 1 Barium ppm ASTM D5185(m) Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the time in service. Image: Company of the bit is acceptable for the bit is accep		Nitration	Abs/cm	ASTM D7624*	>20	4.4		
FLUID CONDITION Sodium ppm ASTM D5185(m) 577 1 The condition of the oil is acceptable for the time in service. Boron ppm ASTM D5185(m) 5 1 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 Calcium ppm ASTM D5185(m) I 0		Sulfation	Abs/.1mm	ASTM D7415*	>30	18.3		
Boron ppm ASTM D5185(m) 5 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 1035		Emulsified Water	scalar	Visual*	>0.21	NEG		
Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 Calcium ppm ASTM D5185(m) 1035	FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>57	1		
Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 Calcium ppm ASTM D5185(m) 1035		Boron		ASTM D5185(m)		5		
Molybdenum ppm ASTM D5185(m) 58 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 Calcium ppm ASTM D5185(m) 1035		Barium	ppm	ASTM D5185(m)		0		
Magnesium ppm ASTM D5185(m) 947 Calcium ppm ASTM D5185(m) 1035		Molybdenum	ppm	ASTM D5185(m)		58		
Calcium ppm ASTM D5185(m) 1035		Manganese	ppm	ASTM D5185(m)		0		
		Magnesium	ppm	ASTM D5185(m)		947		
Phosphorus ppm ASTM D5185(m) 981		Calcium	ppm	ASTM D5185(m)		1035		
		Phosphorus	ppm	ASTM D5185(m)		981		

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

Contact/Location: Doug Balser - DDAMON

1137

2497

12.7

15.2

ASTM D5185(m)

ASTM D5185(m)

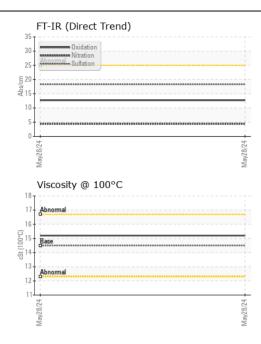
ASTM D7414* >25

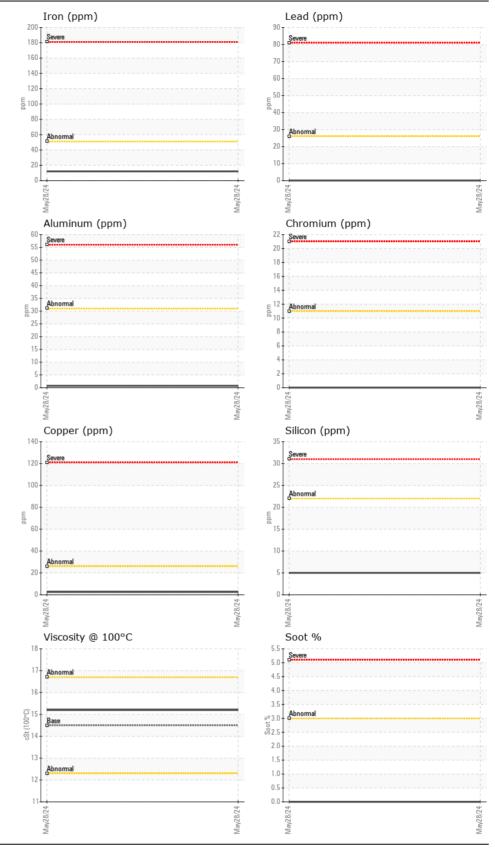
ASTM D7279(m) 14.5

ppm

ppm

Abs/.1mm





Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received : 30 May 2024 : WA0021547 Lab Number : 02638838 Tested : 30 May 2024 ISO 17025:2017 Accredited Laboratory Diagnosed Unique Number : 5788000 : 30 May 2024 - Wes Davis Test Package : MOB 1 To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Wajax Power Systems 485 VENTURE DR MONCTON, NB CA E1H 2P4 Contact: Doug Balser dbalser@wajax.com T: (506)855-5371 F: (506)870-4448

Contact/Location: Doug Balser - DDAMON Page 2 of 2