

## 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>&gt;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>&gt;20</th> <th>&lt;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>&gt;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

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1137

2497

12.7

15.2

ASTM D5185(m)

ASTM D5185(m)

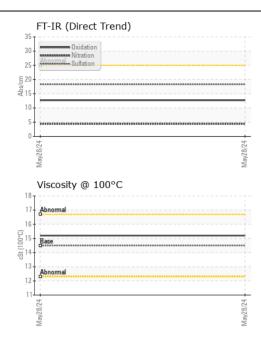
ASTM D7414\* >25

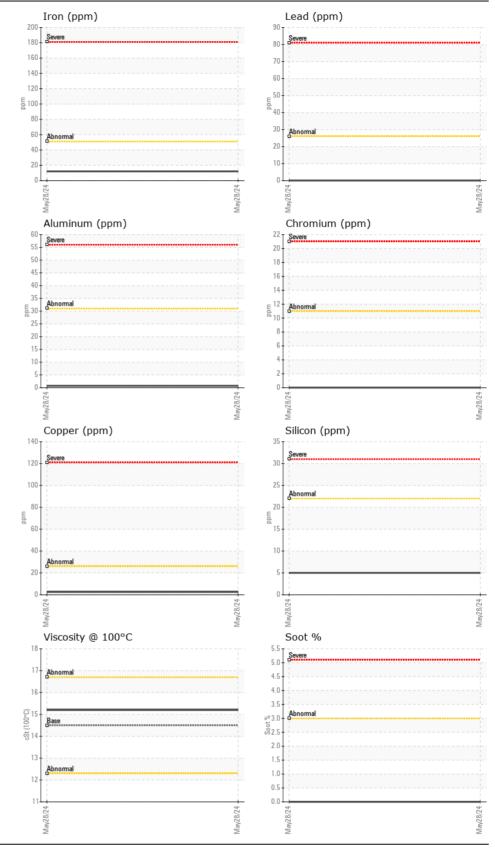
ASTM D7279(m) 14.5

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