

CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

WEAR

Area **GREATER SHEDIAC SEWERAGE [180530]** KOHLER 4714301500 Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

Resample at the next service interval to monitor. Sample Number Sample Date Client Info WA019393 WA019338	DIESEL ENGINE OIL SAE 15W40 (GAL)							
Sample Date Client Info 0 9.1 2 1 5 Machine Age Nis Client Info 0 1 Oil Age Nis Client Info 0 0 121 Filter Age Nis Client Info 0 0 121 Oil Changed Client Info 0 0 121 Oil Changed Client Info 0 0 1 3 Sample Date V Client Info Normal	RECOMMENDATION		UOM	Method	Limit/Abn	Current	History1	History2
Machina Age Ins Cilent Info Ins Silent Info Ins Silent Info Silent Info <th rowspan="8">Resample at the next service interval to monitor.</th> <th>•</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Resample at the next service interval to monitor.	•						
Oil Age Irrs Client Info I 121 I Filter Age Irrs Client Info I 121 I Oil Changed Client Info I Changed Changed <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
Filter Age Ins Client Info Ins Changed Changed <th< th=""><th>-</th><th>hrs</th><th></th><th></th><th>315</th><th></th><th></th></th<>		-	hrs			315		
Oil Changed Client Info Changed Change		Oil Age	hrs	Client Info		0		
Filter Changed Client Info Changed Changed MoRMAL Mormana Sample Status NORMAL NORMAL NORMAL NORMAL Metal levels are typical for a new component breaking in. Iron pm ASM 0585m >20 0 0 Nickel ppm ASM 0585m >40 0 Nickel ppm ASM 0585m >40 0 Nickel ppm ASM 0585m >40 0 Aluminum ppm ASM 0585m >30 0 0 Aluminum ppm ASM 0585m >30 0 0 Copper ppm ASM 0585m >30 0 0 Tim ppm ASM 0585m >30 0 0 Copper ppm ASM 0585m >30 0 Copper ppm ASM 0585m <th>Filter Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th>121</th> <th></th>		Filter Age	hrs	Client Info		0	121	
Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL Normal VEAR Iron ppm ASIM 58169 >100 1 3.3		-				-	Changed	
Iron pp ASTM 5818(m) >100 1 3 Metal levels are typical for a new component breaking in. Chromium ppm ASTM 5818(m) >20 0 0 Nickel ppm ASTM 5818(m) >4 0 0 Silver ppm ASTM 5818(m) >4 0 0 Aluminum ppm ASTM 5818(m) >40 0 0 Lead ppm ASTM 5818(m) >40 0 0 Copper ppm ASTM 5818(m) >40 0 0 Contamination ppm ASTM 5818(m) >40 0 0 Contamination of any contamination in the oil. Silicon ppm ASTM 5818(m) >10 0 Fuel WC Method >0 0 0 Mater is no indication of any contamination in the oil. Fuel WC Method >0 0 <th>-</th> <th></th> <th>Client Info</th> <th></th> <th>Changed</th> <th>-</th> <th></th>		-		Client Info		Changed	-	
Metal levels are typical for a new component breaking in. Chromium Nickel ppm ASTM 05186m >20 0 0		Sample Status				NORMAL	NORMAL	
Nickel ppm ASTND518(m) >-4 0 0 Titanium ppm ASTND518(m) 0 Silver ppm ASTND518(m) 0 Aluminum ppm ASTND518(m) 0 0 Lead ppm ASTND518(m)	WEAR	Iron	ppm	ASTM D5185(m)	>100	1	3	
Titanium pp ASTM D5156/m I 0 <1	Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>20	0	0	
Silver ppm ASTM 2585(m) -3.0 0.0		Nickel	ppm	ASTM D5185(m)	>4	0	0	
Aluminum ppm ASIM D5185(m) >20 1 3 Lead ppm ASIM D5185(m) >40 0 0 Copper ppm ASIM D5185(m) >300 <1		Titanium	ppm	ASTM D5185(m)		0	<1	
Lead pm ASTM D5(80) >40 0 0 Copper pm ASTM D5(80) >300 <10 <10 < Tin ppm ASTM D5(80) >15 0 0 < Vanadium ppm ASTM D5(80) >15 0 0 < CONTAMINATION Silicon pm ASTM D5(80) >25 3 4 Contamination of any contamination in the oil. Fuel V Worket 3 4 Varaer pm ASTM D5(80) >25 3 4 Out Worket S Content		Silver	ppm	ASTM D5185(m)	>3	0	0	
CopperppmASTM D5186(m)-330<1		Aluminum	ppm	ASTM D5185(m)	>20	1	3	
Tin pp ASTM D5185(m) >15 0 0 Vanadium ppm ASTM D5185(m) - 0 0 CONTAMINATION Silicon ppm ASTM D5185(m) >25 3 4 Potassium ppm ASTM D5185(m) >20 0 <10		Lead	ppm	ASTM D5185(m)	>40	0	0	
Vanadium ppm ASTM D5185(m) Image: Constraint of a second of a se		Copper	ppm	ASTM D5185(m)	>330	<1	<1	
CONTAMINATION Silicon ppm ASTM D5185(m) >25 3 4 Potassium ppm ASTM D5185(m) >20 0 <1 < Fuel VC Method >5 < < Water WC Method >0.2 NEG NEG < Glycol WC Method >0.2 NEG NEG < Soot % % ASTM D7844 >3 0 0 < Soot % % ASTM D7624' >0 St.2 8.1.1 < Sulfation Abs/rm ASTM D7624' >0 St.2 8.1.1 < Sulfation Abs/rm ASTM D7624' >0 St.2 8.1.1 < FUID CONDITION Sodium ppm ASTM D5185(m) >158 1 3 Magnaese ppm ASTM D5185(m) 100 0 Magng		Tin	ppm	ASTM D5185(m)	>15	0	0	
Potassiumppm $ASTM D5185(m)$ >200<1		Vanadium	ppm	ASTM D5185(m)		0	0	
Potassiumppm $ASTM D5185(m)$ >200<1	CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	3	4	
Fuel WC Method >5 <1.0 <-1.0 <-1.0 Water IN WC Method >0.2 NEG NEG <-1.0 Glycol WC Method >0.2 NEG NEG <-1.0 Soot % % ASTM D7844 >3.0 0.0 0.0 <-1.0 Nitration Abs/cm ASTM D7844 >2.0 5.2 $8.1.0$ <-1.0 Sulfation Abs/cm ASTM D7844 >2.0 5.2 $8.1.0$ <-1.0 Sulfation Abs/cm ASTM D7844 >3.0 0.0 0.0 <-1.0 FullDCONDITION Sodium Abs/cm ASTM D5185/m >1.8 $1.8.3$ -1.0 FullDCONDITION Sodium ppm ASTM D5185/m >1.8 3.0 -1.0 Molybdenum ppm ASTM D5185/m >1.0 0.0 -1.0 -1.0 Maganese ppm ASTM D5185/m 1.00 6.6 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0	There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	0	<1	
Glycol WC Method NEG NEG NEG NEG Soot % % ASTM D7844* >3 0 0 Nitration Abs/cm ASTM D7624* >20 5.2 8.1 Sulfation Abs/cm ASTM D7624* >30 18.2 18.8 Sulfation Abs/cm ASTM D7615* >30 18.2 18.8 Emulsified Wate scalar Visual* >0.2 NEG NEG FLUID CONDITION Sodium ppm ASTM D5185/m >1.8 1 3 Boron ppm ASTM D5185/m >1.8 50 Molybdenum ppm ASTM D5185/m 10 0 0 Magnesium ppm ASTM D5185/m 100 5.8 66 Magnesium ppm ASTM D5185/m 100 5.8 66 Magnesium ppm ASTM D5185/m 100 5.8 66 Magnesium p		Fuel		WC Method	>5	<1.0	<1.0	
Soot %%ASTM D7844*>300NitrationAbs/cmASTM D7624*>205.28.1SulfationAbs/lmASTM D715*>3018.218.8Emulsified WatescalarVisual*>0.2NEGNEGEmulsified WatescalarVisual*>1.5813.3Enulsified WateppmASTM D5185(m)>15813.3Enulsified WateppmASTM D5185(m)>15813.3Enulsified WateppmASTM D5185(m)>1000.0BoronppmASTM D5185(m)1000.0BariumppmASTM D5185(m)1000.0MolybdenumppmASTM D5185(m)10058666MagnesiemppmASTM D5185(m)1005133.3PhosphorusppmASTM D5185(m)300011392.215ZincppmASTM D5185(m)15011081129		Water		WC Method	>0.2	NEG	NEG	
NitrationAbs/cmASTM D7624*>205.28.1SulfationAbs/tmASTM D7624*>3018.218.8Emulsified WatescalarVisual*>0.2NEGNEGFLUID CONDITIONSodiumppmASTM D5185(m)>158133BoronppmASTM D5185(m)1000BariumppmASTM D5185(m)1000MolybdenumppmASTM D5185(m)100588666ManganeseppmASTM D5185(m)300011392215CalciumppmASTM D5185(m)300011392215PhosphorusppmASTM D5185(m)11098910530ZincppmASTM D5185(m)13011081129		Glycol		WC Method		NEG	NEG	
SulfationAbs/.1mmASTM D7415'>3018.218.8Emulsified WatescalarVisual*>0.2NEGNEGFLUID CONDITIONSodiumppmASTM D5185(m)>15813BoronppmASTM D5185(m)250850.0BariumppmASTM D5185(m)10000MolybdenumppmASTM D5185(m)1005866ManganeseppmASTM D5185(m)450824333MagnesiumppmASTM D5185(m)300011392215PhosphorusppmASTM D5185(m)15015011081129ZincppmASTM D5185(m)135011081129		Soot %	%	ASTM D7844*	>3	0	0	
Emulsified WaterscalarVisual*>0.2NEGNEGFLUID CONDITIONSodiumppmASTM D5185(m)>15813BoronppmASTM D5185(m)2508500BariumppmASTM D5185(m)1000MolybdenumppmASTM D5185(m)1005866ManganeseppmASTM D5185(m)300011392215MagnesiumppmASTM D5185(m)300011392215PhosphorusppmASTM D5185(m)15010010531129		Nitration	Abs/cm	ASTM D7624*	>20	5.2	8.1	
FLUID CONDITION Sodium ppm ASTM D5185(m) >158 1 3 The condition of the oil is acceptable for the time in service. Boron ppm ASTM D5185(m) 250 8 500 0 Barium ppm ASTM D5185(m) 10 0 0 Molybdenum ppm ASTM D5185(m) 10 58 666 0 Manganese ppm ASTM D5185(m) 450 824 333 0 Calcium ppm ASTM D5185(m) 3000 1139 2215 Phosphorus ppm ASTM D5185(m) 150 989 1053 0 Zinc ppm ASTM D5185(m) 150 1108 1129		Sulfation	Abs/.1mm	ASTM D7415*	>30	18.2	18.8	
BoronppmASTM D5185(m)250850BariumppmASTM D5185(m)1000MolybdenumppmASTM D5185(m)1005866ManganeseppmASTM D5185(m)1005866MagnesiumppmASTM D5185(m)450824333CalciumppmASTM D5185(m)300011392215PhosphorusppmASTM D5185(m)115098910530ZincppmASTM D5185(m)135011081129		Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
Barium ppm ASTM D5185(m) 10 0 0 Molybdenum ppm ASTM D5185(m) 100 58 66 Manganese ppm ASTM D5185(m) 100 <58	FLUID CONDITION					1	3	
Molybdenum ppm ASTM D5185(m) 100 58 66 Manganese ppm ASTM D5185(m) 50 <1 Magnesium ppm ASTM D5185(m) 450 824 33 Calcium ppm ASTM D5185(m) 3000 1139 2215 Phosphorus ppm ASTM D5185(m) 1150 989 1053 Zinc ppm ASTM D5185(m) 1350 1108 1129	The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	250	8	50	
Manganese ppm ASTM D5185(m) Image: Calcium ppm ASTM D5185(m) 450 824 333 Calcium ppm ASTM D5185(m) 3000 1139 2215 Phosphorus ppm ASTM D5185(m) 1150 989 10533 Zinc ppm ASTM D5185(m) 1350 1108 1129		Barium	ppm	ASTM D5185(m)	10	0	0	
Magnesium ppm ASTM D5185(m) 450 824 33 Calcium ppm ASTM D5185(m) 3000 1139 2215 Phosphorus ppm ASTM D5185(m) 1150 989 1053 Zinc ppm ASTM D5185(m) 1350 1108 1129		Molybdenum	ppm	ASTM D5185(m)	100	58	66	
Calcium ppm ASTM D5185(m) 3000 1139 2215 Phosphorus ppm ASTM D5185(m) 1150 989 1053 Zinc ppm ASTM D5185(m) 1350 1108 1129		Manganese	ppm	ASTM D5185(m)		0	<1	
Phosphorus ppm ASTM D5185(m) 1150 989 1053 Zinc ppm ASTM D5185(m) 1350 1108 1129		Magnesium	ppm	ASTM D5185(m)	450	824	33	
Zinc ppm ASTM D5185(m) 1350 1108 1129		Calcium	ppm	ASTM D5185(m)	3000	1139	2215	
		Phosphorus	ppm	ASTM D5185(m)	1150	989	1053	
Sulfur ppm ASTM D5185(m) 4250 2718 3217		Zinc	ppm	ASTM D5185(m)	1350	1108	1129	
		Sulfur	ppm	ASTM D5185(m)	4250	2718	3217	

Oxidation

Visc @ 100°C cSt

Abs/.1mm ASTM D7414* >25

ASTM D7279(m) 14.4

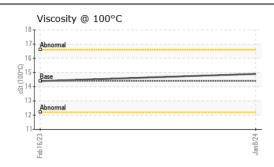
Contact/Location: Doug Balser - DDAMON

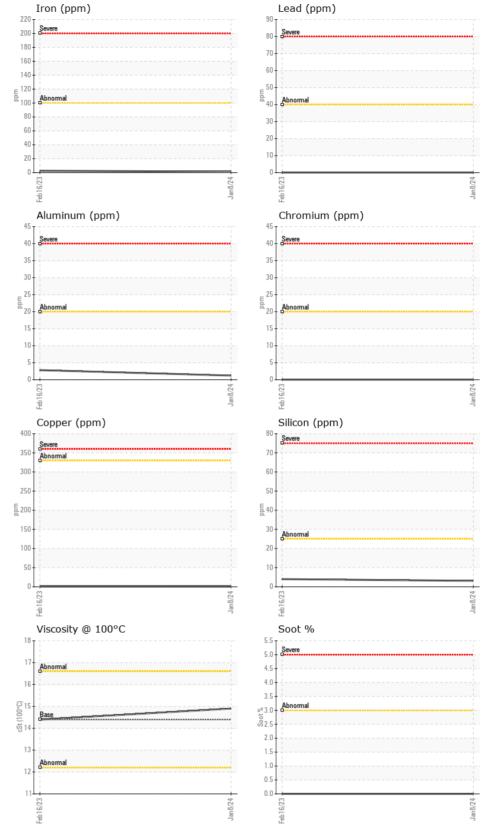
13.1

14.4

13.3

14.9







CALA Sample No. Recieved : 16 Jan 2024 : WA0019592 Lab Number : 02608939 Diagnosed : 16 Jan 2024 ISO 17025:2017 Accredited Laboratory Unique Number : 5710025 : Wes Davis Diagnostician 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.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

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

Laboratory

Contact/Location: Doug Balser - DDAMON

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