

#### Machine Id JOHN DEERE 30G 1FF030GXEMK268280 Component Diesel Engine Fluid

{not provided} (--- GAL)

# RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

### **WEAR**

Metal levels are typical for a new component breaking in.

# CONTAMINATION

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There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

# FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

TestUOMMethodLimit/MCurrentHistory1History2Sample NumberClient InfoJR0221304Sample DateClient Info10 Jul 2024Machine AgehrsClient Info0Oil AgehrsClient Info0Oil ChangedClient Info0Oil ChangedClient InfoNot ChangedSample StatusSEVEREIronppmASTM D5185m>5111NickelppmASTM D5185m>51-11NickelppmASTM D5185m>51-11SilverppmASTM D5185m>51-11SilverppmASTM D5185m>53-11SilverppmASTM D5185m>2616QapperppmASTM D5185m>2616VanadiumppmASTM D5185m>2616VanadiumppmASTM D5185m>2616Valuescalar"VisualNONENONEValueScalar"VisualNONENONESiltoonppmASTM D5185m>204SiltoonppmASTM D5185m<					$\frown$		
Sample Date      Client Info      10 Jul 2024          Machine Age      hrs      Client Info      0          Oil Age      hrs      Client Info      0          Oil Changed      Client Info      Not Changd          Oil Changed      Client Info      Not Changd          Filter Changed      Client Info      Not Changd          Sample Status       SEVERE          Iron      ppm      ASTM D5185m      51      11          Nickel      ppm      ASTM D5185m      51           Silver      ppm      ASTM D5185m      -31      5          Aluminum      ppm      ASTM D5185m      >36      1          Copper      pm      ASTM D5185m      >26      2	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age      hrs      Client Info      35          Filter Age      hrs      Client Info      0          Filter Age      hrs      Client Info      Not Changd          GOI Changed      Client Info      Not Changd           Sample Status      SEVERE            Iron      ppm      ASTM D5185m      >51      11          Chromium      ppm      ASTM D5185m      >51      11          Silver      ppm      ASTM D5185m      >31      5          Aluminum      ppm      ASTM D5185m      >26      16          Vanadium      ppm      ASTM D5185m      >22      45          Vanadium      ppm      ASTM D5185m      >22      45          Vanadium      ppm      ASTM D5185m      >22      45	Sample Number		Client Info		JR0221304		
Oil Age      hrs      Client Info      0          Filter Age      hrs      Client Info      Not Changd          Oil Changed      Client Info      Not Changd           Filter Changed      Client Info      Not Changd           Sample Status      SEVERE             Chromium      ppm      ASTM D5185m      >51      11           Nickel      ppm      ASTM D5185m      >3      0          Silver      ppm      ASTM D5185m      >3      0          Lead      ppm      ASTM D5185m      >26      16          Vanadium      ppm      ASTM D5185m      >22      45          Vanadium      ppm      ASTM D5185m      >22      45	Sample Date		Client Info		10 Jul 2024		
Filter Age  hrs  Client Info  0      Oil Changed  Client Info  Not Changd      Sample Status  Client Info  Not Changd      Sample Status  SEVERE      Iron  ppm  ASTM D5185m  >51  11      Iron  ppm  ASTM D5185m  >11  <1      Nickel  ppm  ASTM D5185m  >11  <1      Nickel  ppm  ASTM D5185m  >31  5      Silver  ppm  ASTM D5185m  >26  2      Aluminum  ppm  ASTM D5185m  >26  16      Yanadium  ppm  ASTM D5185m  >22  616      Vanadium  ppm  ASTM D5185m  >22  45      Vellow Metal  scalar  'Visual  NONE  NONE      Sold (con  ppm  ASTM D5185m  >22  45      Sold (con  ppm  ASTM D5185m  >20 <t< th=""><th>Machine Age</th><th>hrs</th><th>Client Info</th><th></th><th>35</th><th></th><th></th></t<>	Machine Age	hrs	Client Info		35		
Oil Changed Filter Changed Sample StatusClient Info Client InfoNot Changd Not Changd Sample StatusClient Info Client InfoNot Changd Not Changd Sample StatusIronppmASTM D5185m ASTM D5185m5111IronppmASTM D5185m ASTM D5185m5<1NickelppmASTM D5185m ASTM D5185m5<1SilverppmASTM D5185m ASTM D5185m>2616AluminumppmASTM D5185m ASTM D5185m>2616VanadiumppmASTM D5185m ASTM D5185m<4VanadiumppmASTM D5185m ASTM D5185m<245Vellow Metalscalar*VisualNONENONESiliconppmASTM D5185m ASTM D5185m>2245SiliconppmASTM D5185m ASTM D5185m>204Soti %%YaSTM D7244 ASTM D7244>30.1SulfationAbs/rmYaSTM D7244 ASTM D7244NONESoti %%YaSTM D7244 ASTM D7244NONESulfationAbs/rmYaSTM D7244 ASTM D7244NONESoti %%YaSTM D7244 ASTM D7244NONE <t< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th></th><th></th></t<>	Oil Age	hrs	Client Info		0		
Filter Changed Sample Status      Client Info      Not Change SEVERE         Iron      ppm      ASTM D5185m      551      111         Iron      ppm      ASTM D5185m      551      111         Nickel      ppm      ASTM D5185m      55      <1         Nickel      ppm      ASTM D5185m      30          Silver      ppm      ASTM D5185m      32      0          Lead      ppm      ASTM D5185m      326      16          Vanadium      ppm      ASTM D5185m      >26      16          Veltow Metal      scalar      'Visual      NONE      NONE          Veltow Metal      scalar      'Visual      NONE      NONE          Veltow Metal      scalar      'Visual      NONE      NONE          Veltow Metal      scalar      'Visual      NONE      A	Filter Age	hrs	Client Info		0		
Filter Changed Sample Status  Client Info  Not Change SEVERE      Iron  ppm  ASTM D5185m  >51  11      Iron  ppm  ASTM D5185m  >51  11      Nickel  ppm  ASTM D5185m  >5  <1      Nickel  ppm  ASTM D5185m  >5  <1      Silver  ppm  ASTM D5185m  >3  0      Aluminum  ppm  ASTM D5185m  >26  2      Copper  ppm  ASTM D5185m  >26  16      Vanadium  ppm  ASTM D5185m  >26  16      Veltow Metal  scalar  'Visual  NONE  A-1      Veltow Metal  scalar  'Visual  NONE  NONE      Veltow Metal  scalar  'Visual  NONE  A     Veltow Metal  scalar  'Visual  NONE  A     Solicon  ppm  ASTM D5185m  >20  A	Oil Changed		Client Info		Not Changd		
Sample Status      SEVERE	Filter Changed		Client Info		-		
Iron      ppm      ASTM D5185m      >51      11          Chromium      ppm      ASTM D5185m      >5      <1          Nickel      ppm      ASTM D5185m      >5      <1          Titanium      ppm      ASTM D5185m      >3      0          Aluminum      ppm      ASTM D5185m      >31      5          Lead      ppm      ASTM D5185m      >26      16          Copper      ppm      ASTM D5185m      >26      16          Vanadium      ppm      ASTM D5185m      >24      <1          Vanadium      ppm      ASTM D5185m      >22      45          Vallow Metal      scalar      'Visual      NONE      NONE          Silicon      ppm      ASTM D5185m      >20      4          Glycol      WC Method <t< th=""><th>Sample Status</th><th></th><th></th><th></th><th>-</th><th></th><th></th></t<>	Sample Status				-		
Chromium      ppm      ASTM D5185m      >11      <1							
Nickel      ppm      ASTM D5185m      >5      <1	Iron	ppm	ASTM D5185m	>51	11		
Titanium      ppm      ASTM D5185m      <1	Chromium	ppm	ASTM D5185m	>11	<1		
Silver      ppm      ASTM D5185m      >3      0          Aluminum      ppm      ASTM D5185m      >31      5          Lead      ppm      ASTM D5185m      >26      2          Copper      ppm      ASTM D5185m      >26      16          Vanadium      ppm      ASTM D5185m      >26      16          Vanadium      ppm      ASTM D5185m      >26      16          Vanadium      ppm      ASTM D5185m      >22      45          Vellow Metal      scalar      'Visual      NONE          Silicon      ppm      ASTM D5185m      >22      45          Vater      WC Method      50.21      A 3.9          Water      WC Method      50.21      NEG          Solit      scalar      'Visual      NONE <th>Nickel</th> <th>ppm</th> <th>ASTM D5185m</th> <th>&gt;5</th> <th>&lt;1</th> <th></th> <th></th>	Nickel	ppm	ASTM D5185m	>5	<1		
Aluminum      ppm      ASTM D5185m      >31      5          Lead      ppm      ASTM D5185m      >26      2          Copper      ppm      ASTM D5185m      >26      16          Vanadium      ppm      ASTM D5185m      >4      <1          Vanadium      ppm      ASTM D5185m      >4      <1          Vanadium      ppm      ASTM D5185m      >4      <1          Vanadium      ppm      ASTM D5185m      >22      45          Yellow Metal      scalar      *Visual      NONE      NONE          Solicon      ppm      ASTM D5185m      >20      4          Vater      WC Method      0.0.21      NEG           Soot %      %      YASTM D7624      >20      5.6          Sulfation      Abs/tmm      ASTM D7624	Titanium	ppm	ASTM D5185m		<1		
Lead      ppm      ASTM D5185m      >26      2          Copper      ppm      ASTM D5185m      >26      16          Tin      ppm      ASTM D5185m      >4      <1          Vanadium      ppm      ASTM D5185m       <1          White Metal      scalar      *Visual      NONE      NONE          Yellow Metal      scalar      *Visual      NONE      NONE          Solicon      ppm      ASTM D5185m      >20      4          Potassium      ppm      ASTM D5185m      >20      4          Water      WC Method      >0.21      NEG           Glycol      WC Method      >0.21      NEG           Soit fation      Abs/rm      'ASTM D7624      >20      5.6          Sulfation      Abs/rm      'ASTM D7624 <th>Silver</th> <th>ppm</th> <th>ASTM D5185m</th> <th>&gt;3</th> <th>0</th> <th></th> <th></th>	Silver	ppm	ASTM D5185m	>3	0		
Copper      ppm      ASTM D5185m      >26      16          Tin      ppm      ASTM D5185m      >4      <1          Vanadium      ppm      ASTM D5185m       <1          White Metal      scalar      *Visual      NONE      NONE          Yellow Metal      scalar      *Visual      NONE      NONE          Solicon      ppm      ASTM D5185m<>22      45           Potassium      ppm      ASTM D5185m<>20      4           Water      WC Method      0.21      NEG           Glycol      WC Method      0.21      NEG           Sot %      %      YASTM D7624<>20      5.6           Sulfation      Abs/.tm< *ASTM D7145<>30      14.6           Sot %      %      Yisual      N	Aluminum	ppm	ASTM D5185m	>31	5		
Tin      ppm      ASTM D5185m      >-4      <1	Lead	ppm	ASTM D5185m	>26	2		
Vanadium      ppm      ASTM D5185m      <1	Copper	ppm	ASTM D5185m	>26	16		
White Metal      scalar      *Visual      NONE          Yellow Metal      scalar      *Visual      NONE      NONE          Silicon      ppm      ASTM D5185m      >22      45          Potassium      ppm      ASTM D5185m      >20      4          Fuel      %      ASTM D5185m      >20      4          Glycol      WC Method      >0.21      NEG          Soot %      %      *ASTM D7624      >20      5.6          Sulfation      Abs/cm      *ASTM D7624      >20      5.6          Sulfation      Abs/cm      *ASTM D7624      >20      5.6          Sulfation      Abs/cm      *ASTM D7624      >20      14.6          Sulfation      Abs/cm      *ASTM D7624      >20      14.6          Sulfation      scalar      *Visual<	Tin	ppm	ASTM D5185m	>4	<1		
Yellow Metal      scalar      *Visual      NONE          Silicon      ppm      ASTM D5185m<>22      45          Potassium      ppm      ASTM D5185m<>20      4          Fuel      %      ASTM D5185m<>20      4          Water      WC Method      >0.21      NEG          Glycol      WC Method      >0.21      NEG          Soot %      %      *ASTM D7844<>3      0.1          Sulfation      Abs/tmm<*ASTM D7824<>20      5.6          Sulfation      Abs/tmm<*ASTM D7815<>30      14.6          Sulfation      Abs/tmm<*ASTM D7815<>30      14.6          Sand/Dirt      scalar<*Visual      NONE      NONE          Appearance      scalar<*Visual      NORM      NORML          Appearance      scalar<*Visual      NORM      NORML	Vanadium	ppm	ASTM D5185m		<1		
Silicon    ppm    ASTM D5185m    >22    45       Potassium    ppm    ASTM D5185m    >20    4       Fuel    %    ASTM D5185m    >20    4       Water    WC Method    >0.21    NEG       Glycol    WC Method    >0.21    NEG       Soot %    %    *ASTM D7844    >3    0.1       Nitration    Abs/cm    *ASTM D7624    >20    5.6       Sulfation    Abs/tm    *ASTM D7415    >30    14.6       Sulfation    Abs/tm    *ASTM D7415    >30    14.6        Sulfation    Abs/tm    *ASTM D7415    >30    14.6        Sulfation    scalar    *Visual    NONE         Debris    scalar    *Visual    NORE         Appearance    scalar    *Visual    NORH    NORML        Boron    ppm <t< th=""><th>White Metal</th><th>scalar</th><th>*Visual</th><th>NONE</th><th>NONE</th><th></th><th></th></t<>	White Metal	scalar	*Visual	NONE	NONE		
Potassium      ppm      ASTM D5185m      >20      4         Fuel      %      ASTM D5524      >2.1      ▲ 3.9          Water      WC Method      >0.21      NEG          Glycol      WC Method      >0.21      NEG          Soot %      %      *ASTM D7844      >3      0.1          Soot %      %      *ASTM D7844      >3      0.1          Soot %      %      *ASTM D7844      >3      0.1          Solt %      %      *ASTM D7624      >20      5.6          Sulfation      Abs/.mm      *ASTM D7624      >20      5.6          Sulfation      Abs/.imm      *ASTM D7644      >3      14.6          Sulfation      scalar      *Visual      NORE      NORE          Appearance      scalar      Visual      NORML      NOR	Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium      ppm      ASTM D5185m      >20      4         Fuel      %      ASTM D5524      >2.1      ▲ 3.9          Water      WC Method      >0.21      NEG          Glycol      WC Method      >0.21      NEG          Soot %      %      *ASTM D7844      >3      0.1          Soot %      %      *ASTM D7844      >3      0.1          Soot %      %      *ASTM D7844      >3      0.1          Solt %      %      *ASTM D7624      >20      5.6          Sulfation      Abs/.mm      *ASTM D7624      >20      5.6          Sulfation      Abs/.imm      *ASTM D7644      >3      14.6          Sulfation      scalar      *Visual      NORE      NORE          Appearance      scalar      Visual      NORML      NOR							
Fuel      %      ASTM D3524      >2.1      A 3.9          Water      WC Method      >0.21      NEG          Glycol      WC Method      >0.21      NEG          Soot %      %      *ASTM D7844      >3      0.1          Nitration      Abs/cm      *ASTM D7624      >20      5.6          Sulfation      Abs/cm      *ASTM D7624      >00      14.6          Sulfation      scalar      *Visual      NONE      NONE          Sand/Dirt      scalar      *Visual      NORM      NORML          Appearance      scalar      *Visual<	Silicon	ppm	ASTM D5185m	>22	45		
Water      WC Method      >0.21      NEG         Glycol      WC Method      NEG          Soot %      %      *ASTM D7844      >3      0.1          Nitration      Abs/cm      *ASTM D7844      >3      0.1          Sulfation      Abs/cm      *ASTM D7624      >20      5.6          Sulfation      Abs/.1mm      *ASTM D7624      >30      14.6          Sulfation      Abs/.1mm      *ASTM D7615      >30      14.6          Sulfation      Abs/.1mm      *ASTM D7615      >30      14.6          Sulfation      Abs/.1mm      *ASTM D7618      NONE          Sadd/Dirt      scalar      *Visual      NORE          Appearance      scalar      *Visual      NORML      NORML          Odor      scalar      *Visual      NORM      NORML </th <th>Potassium</th> <th>ppm</th> <th>ASTM D5185m</th> <th>&gt;20</th> <th>4</th> <th></th> <th></th>	Potassium	ppm	ASTM D5185m	>20	4		
Glycol      WC Method      NEG         Soot %      %      *ASTM D7844      >3      0.1         Nitration      Abs/cm      *ASTM D7624      >20      5.6         Sulfation      Abs/lmm      *ASTM D7624      >20      NONE         Sulfation      Abs/lmm      *ASTM D7614      >30      14.6          Sulfation      scalar      *Visual      NONE      NONE          Sand/Dirt      scalar      *Visual      NORM      NORML          Appearance      scalar      *Visual      NORM      NORML          Odor      scalar      *Visual      >0.21      NEG          Boron	Fuel	%	ASTM D3524	>2.1	<b>A</b> 3.9		
Soot %      %      *ASTM D7844      >3      0.1          Nitration      Abs/cm      *ASTM D7624      >20      5.6          Sulfation      Abs/.1mm      *ASTM D7624      >20      5.6          Sulfation      Abs/.1mm      *ASTM D7624      >30      14.6          Sulfation      Abs/.1mm      *ASTM D7624      >30      14.6          Sulfation      Abs/.1mm      *ASTM D7624      >30      14.6          Sulfation      Abs/.1mm      *ASTM D7624      >00      NONE          Debris      scalar      *Visual      NONE      NORE          Sand/Dirt      scalar      *Visual      NORM      NORML          Appearance      scalar      *Visual      NORM      NORML          Odor      scalar      *Visual      >0.21      NEG	Water		WC Method	>0.21	NEG		
Nitration      Abs/cm      *ASTM D7624      >20      5.6          Sulfation      Abs/.tmm      *ASTM D7415      >30      14.6          Silt      scalar      *Visual      NONE      NONE          Debris      scalar      *Visual      NONE      NONE          Sand/Dirt      scalar      *Visual      NONE      NONE          Appearance      scalar      *Visual      NORM      NORML          Odor      scalar      *Visual      NORM      NORML          Godor      scalar      *Visual      NORM      NORML          Odor      scalar      *Visual      >0.21      NEG          Boron      ppm      ASTM D5185m      >31      19          Barium      ppm      ASTM D5185m      122          Magnesium      ppm      A	Glycol		WC Method		NEG		
Sulfation      Abs/.1mm      *ASTM D7415      >30      14.6          Silt      scalar      *Visual      NONE      NONE          Debris      scalar      *Visual      NONE      NONE          Sand/Dirt      scalar      *Visual      NONE      NONE          Appearance      scalar      *Visual      NORM      NORML          Odor      scalar      *Visual      NORM      NORML          Odor      scalar      *Visual      NORM      NORML          Godor      scalar      *Visual      >0.21      NEG          Boron      ppm      ASTM D5185m      >31      19          Barium      ppm      ASTM D5185m      12          Magnesium      ppm      ASTM D5185m      38          Magnesium      ppm      ASTM D5185m <t< th=""><th>Soot %</th><th>%</th><th>*ASTM D7844</th><th>&gt;3</th><th>0.1</th><th></th><th></th></t<>	Soot %	%	*ASTM D7844	>3	0.1		
Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLOdorscalar*VisualNORMLNORMLCdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>3119BoronppmASTM D5185m>3112BariumppmASTM D5185m122MolybdenumppmASTM D5185m102MagnesiumppmASTM D5185m388PhosphorusppmASTM D5185m1118ZincppmASTM D5185m5848SulfurppmASTM D5185m5848SulfurppmASTM D5185m5848SulfurppmASTM D5185m5848SulfurppmASTM D289612.2	Nitration	Abs/cm	*ASTM D7624	>20	5.6		
Debrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLCdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>3119BoronppmASTM D5185m46BariumppmASTM D5185m12MolybdenumppmASTM D5185m102MagneseppmASTM D5185m38MagnesiumppmASTM D5185m3854PhosphorusppmASTM D5185m1118ZincppmASTM D5185m5848SulfurppmASTM D5185m5848OxidationAbs/.1mm*ASTM D289612.2	Sulfation	Abs/.1mm	*ASTM D7415	>30	14.6		
Sand/Dirtscalar*VisualNONENOREAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>3119BoronppmASTM D5185m12BariumppmASTM D5185m112MolybdenumppmASTM D5185m102MaganeseppmASTM D5185m338CalciumppmASTM D5185m33854PhosphorusppmASTM D5185m1118ZincppmASTM D5185m1274SulfurppmASTM D5185m5848SulfurppmASTM D5185m5848SulfurppmASTM D5185m5848SulfurppmASTM D5185m5848Base Number (BN)mg KOHgASTM D2896112.2	Silt	scalar	*Visual	NONE	NONE		
Appearance      scalar      *Visual      NORML      NORML          Odor      scalar      *Visual      NORML      NORML          Emulsified Water      scalar      *Visual      >0.21      NEG          Sodium      ppm      ASTM D5185m      >31      19          Boron      ppm      ASTM D5185m      >31      19          Barium      ppm      ASTM D5185m      46          Molybdenum      ppm      ASTM D5185m      102          Magnese      ppm      ASTM D5185m      <11          Magnesium      ppm      ASTM D5185m      38          Phosphorus      ppm      ASTM D5185m      3854          Zinc      ppm      ASTM D5185m      1118          Sulfur      ppm      ASTM D5185m      5848	Debris	scalar	*Visual	NONE	NONE		
Odorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>3119BoronppmASTM D5185m46BariumppmASTM D5185m12MolybdenumppmASTM D5185m102ManganeseppmASTM D5185m<102MagnesiumppmASTM D5185m388PhosphorusppmASTM D5185m3854ZincppmASTM D5185m1118SulfurppmASTM D5185m5848OxidationAbs/.1mm*ASTM D289612.2	Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water      scalar      *Visual      >0.21      NEG         Sodium      ppm      ASTM D5185m      >31      19          Boron      ppm      ASTM D5185m      >31      19          Barium      ppm      ASTM D5185m      46          Molybdenum      ppm      ASTM D5185m      12          Manganese      ppm      ASTM D5185m      102          Magnesium      ppm      ASTM D5185m      <11          Calcium      ppm      ASTM D5185m      3854          Phosphorus      ppm      ASTM D5185m      3854          Zinc      ppm      ASTM D5185m      1118          Sulfur      ppm      ASTM D5185m      5848          Oxidation      Abs/.1mm      *ASTM D2896      12.2	Appearance	scalar	*Visual	NORML	NORML		
Sodium      ppm      ASTM D5185m      >31      19         Boron      ppm      ASTM D5185m      46          Barium      ppm      ASTM D5185m      12          Molybdenum      ppm      ASTM D5185m      102          Manganese      ppm      ASTM D5185m      <102          Magnesium      ppm      ASTM D5185m      <11          Calcium      ppm      ASTM D5185m      3854          Phosphorus      ppm      ASTM D5185m      3854          Zinc      ppm      ASTM D5185m      1118          Sulfur      ppm      ASTM D5185m      5848          Oxidation      Abs/.1mm *ASTM D7414<>25      7.7          Base Number (BN)      mg KOHg      ASTM D2896      12.2	Odor	scalar	*Visual	NORML	NORML		
Boron      ppm      ASTM D5185m      46          Barium      ppm      ASTM D5185m      12          Molybdenum      ppm      ASTM D5185m      102          Manganese      ppm      ASTM D5185m      <1          Magnesium      ppm      ASTM D5185m      <1          Magnesium      ppm      ASTM D5185m      38          Calcium      ppm      ASTM D5185m      3854          Phosphorus      ppm      ASTM D5185m      1118          Zinc      ppm      ASTM D5185m      5848          Sulfur      ppm      ASTM D7141<>25      7.7          Base Number (BN)      mg KOH/g      ASTM D2896      12.2	Emulsified Water	scalar	*Visual	>0.21	NEG		
Boron      ppm      ASTM D5185m      46          Barium      ppm      ASTM D5185m      12          Molybdenum      ppm      ASTM D5185m      102          Manganese      ppm      ASTM D5185m      <1          Magnesium      ppm      ASTM D5185m      <1          Magnesium      ppm      ASTM D5185m      38          Calcium      ppm      ASTM D5185m      3854          Phosphorus      ppm      ASTM D5185m      1118          Zinc      ppm      ASTM D5185m      5848          Sulfur      ppm      ASTM D7141<>25      7.7          Base Number (BN)      mg KOH/g      ASTM D2896      12.2							
Barium      ppm      ASTM D5185m      12         Molybdenum      ppm      ASTM D5185m      102         Manganese      ppm      ASTM D5185m      <1         Magnesium      ppm      ASTM D5185m      <1         Magnesium      ppm      ASTM D5185m      38         Calcium      ppm      ASTM D5185m      3854         Phosphorus      ppm      ASTM D5185m      1118         Zinc      ppm      ASTM D5185m      1274         Sulfur      ppm      ASTM D5185m      5848         Oxidation      Abs/.1mm *ASTM D7414 >25      7.7          Base Number (BN)      mg KOH/g      ASTM D2896      12.2				>31	-		
Molybdenum      ppm      ASTM D5185m      102         Manganese      ppm      ASTM D5185m      <1         Magnesium      ppm      ASTM D5185m      38         Magnesium      ppm      ASTM D5185m      38         Calcium      ppm      ASTM D5185m      3854         Phosphorus      ppm      ASTM D5185m      1118         Zinc      ppm      ASTM D5185m      1274         Sulfur      ppm      ASTM D5185m      5848         Oxidation      Abs/.1mm *ASTM D7414 >25      7.7         Base Number (BN)      mg KOH/g      ASTM D2896      12.2							
Manganese      ppm      ASTM D5185m      <1							
Magnesium      ppm      ASTM D5185m      38          Calcium      ppm      ASTM D5185m      3854          Phosphorus      ppm      ASTM D5185m      1118          Zinc      ppm      ASTM D5185m      1274          Sulfur      ppm      ASTM D5185m      5848          Oxidation      Abs/.1mm      *ASTM D7414      >25      7.7          Base Number (BN)      mg KOH/g      ASTM D2896      12.2							
Calcium      ppm      ASTM D5185m      3854          Phosphorus      ppm      ASTM D5185m      1118          Zinc      ppm      ASTM D5185m      1274          Sulfur      ppm      ASTM D5185m      5848          Oxidation      Abs/.1mm      *ASTM D7414      >25      7.7          Base Number (BN)      mg KOH/g      ASTM D2896      12.2	0						
Phosphorus      ppm      ASTM D5185m      1118          Zinc      ppm      ASTM D5185m      1274          Sulfur      ppm      ASTM D5185m      5848          Oxidation      Abs/.1mm      *ASTM D7414      >25      7.7          Base Number (BN)      mg KOH/g      ASTM D2896      12.2	•						
Zinc      ppm      ASTM D5185m      1274          Sulfur      ppm      ASTM D5185m      5848          Oxidation      Abs/.1mm      *ASTM D7414      >25      7.7          Base Number (BN)      mg KOH/g      ASTM D2896      12.2							
Sulfur      ppm      ASTM D5185m      5848         Oxidation      Abs/.1mm      *ASTM D7414      >25      7.7         Base Number (BN)      mg KOH/g      ASTM D2896      12.2		ppm					
Oxidation      Abs/.1mm      *ASTM D7414      >25      7.7         Base Number (BN)      mg KOH/g      ASTM D2896      12.2	-						
Base Number (BN)      mg KOH/g      ASTM D2896      12.2							
				>25			
Visc @ 100°C cSt ASTM D445 🛛 🔺 9.6	( )	mg KOH/g	ASTM D2896		12.2		
	Visc @ 100°C	cSt	ASTM D445		9.6		



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - STEPHENSON** Sample No. : JR0221304 Received 245 YARDMASTER COURT : 12 Jul 2024 Lab Number : 06234670 Tested STEPHENSON, VA : 16 Jul 2024 Unique Number : 11123504 Diagnosed : 16 Jul 2024 - Wes Davis US 22656-1761 Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN) Contact: PHIL DAUGHERTY Certificate L2367 pdaugherty@jamesriverequipment.com To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (540)869-0549

Contact/Location: PHIL DAUGHERTY - JAMWIN Page 2 of 2