

Area



JOHN DEERE 300D M01-0305 1DW300DXECE650170

Transmission

JOHN DEERE HD SynTran (6 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

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The aluminum level is abnormal. The iron level is abnormal.

## CONTAMINATION

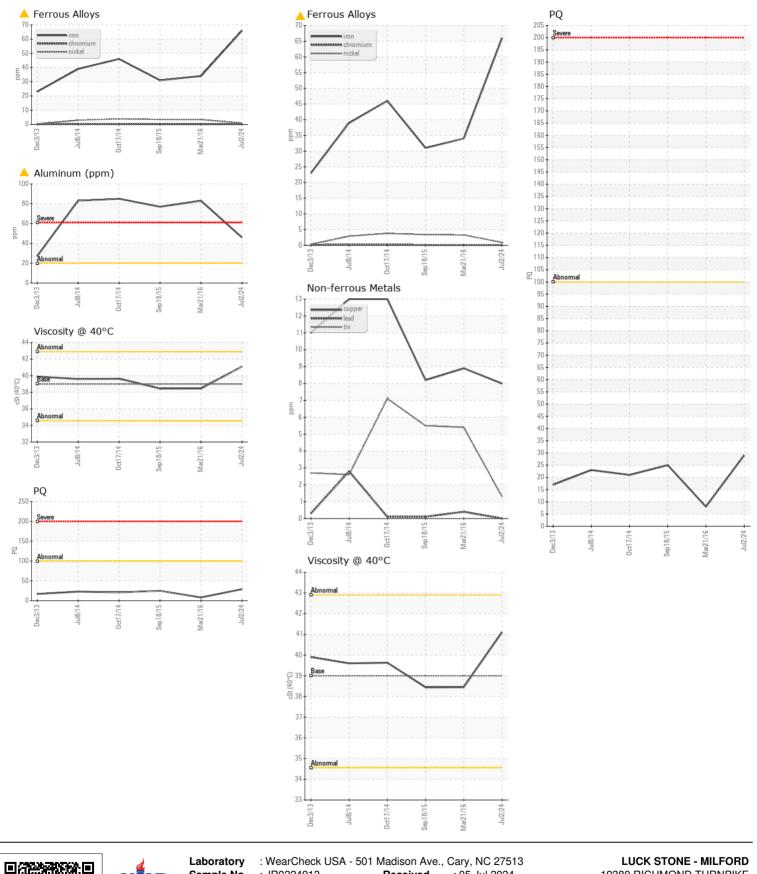
There is no indication of any contamination in the fluid.

	FL	UID	CON	<b>IDITION</b>	
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The condition of the fluid is acceptable for the time in service.

Sample Number   Client Info   JR0224913   JRNC412121   LECP1609     Sample Date   Client Info   0   2Jul 2024   21 Mar 2016   18 Sep 20     Machine Age   hrs   Client Info   0   0   520     Oil Age   hrs   Client Info   0   0   1993     Oil Changed   Client Info   Changed   Not Changed Not Changed   Not Changed Not Changed     Filter Changed   Client Info   Changed   Not Changed Not Changed   Not Changed Not Changed     Sample Status   -   ASTM D5185   Sch   ABNORMAL   ABNORMAL     PQ   ASTM D5185   Sch   4   66   34   31     Chromium   ppm   ASTM D5185   Sch   -   1   0   0     Silver   ppm   ASTM D5185   Sch   -   1   3   1   0   0     Aluminum   ppm   ASTM D5185   Sch   -   1   1   1   1   1   1   1 <td< th=""><th>13)</th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	13)						
Sample Date   Client Info   O2 Jul 2020   21 Mar 2016   18 Sep 20     Machine Age   hrs   Client Info   12271   2748   2560     Oil Age   hrs   Client Info   0   0   520     Filter Age   hrs   Client Info   0   0   1993     Oil Changed   Client Info   Changed   Not Chang   Not Chang     Sample Status   Client Info   Changed   Not Chang   Not Chang     Sample Status   Sample Status   ASTM D5185m   201   ABNORMAL   ABNORMAL     PQ   ASTM D5185m   >10   <1   <1   <1     Nickel   ppm   ASTM D5185m   >10   <1   3   3     Titanium   ppm   ASTM D5185m   >20   4 46   8 33   7   7     Lead   ppm   ASTM D5185m   >20   4 46   8 33   7   7     Lead   ppm   ASTM D5185m   >20   <1   0   0   0	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine AgehrsClient InfoI227127482560Oil AgehrsClient Info00520Filter AgehrsClient InfoChangedNot ChangedNot ChangedOil ChangedClient InfoChangedNot ChangedNot ChangedNot ChangedFilter ChangedClient InfoChangedNot ChangedNot ChangedNot ChangedSample StatusClient InfoPassedABNORMALABNORMALABNORMALPQASTM D5185m>614 6634.431.0IronppmASTM D5185m>10<1.1<1.1<1.1NickelppmASTM D5185m>10<1.13.33.1TitaniumppmASTM D5185m>20<1.13.03.1SilverppmASTM D5185m>20<1.43.07.7LeadppmASTM D5185m>100898.87.1CopperppmASTM D5185m>100898.87.1YanadiumppmASTM D5185m>201.11.19.1YanadiumppmASTM D5185m>20RONENONENONEYallow MetalscalarYisualNONENONENONENONEYallow MetalscalarYisualNONENONENONENONEYallow MetalscalarYisualNONENONENONENONEYallow MetalscalarYisualNONENO	Sample Number		Client Info		JR0224913	JRMC412121	LECP160993
Oil Age Filter AgehrsClient Info00520Filter AgehrsClient Info001993Oil ChangedClient InfoChangedNot ChangedNot ChangedFilter ChangedClient InfoChangedNot ChangedNot ChangedSample StatusClient InfoChangedNot ChangedNot ChangedPQASTM D8184>100298.025.0IronppmASTM D5185n>61663431ChromiumppmASTM D5185n>10<1<1<1NickelppmASTM D5185n>10<133TitaniumppmASTM D5185n>2044683.04JuminumppmASTM D5185n>20446834CopperppmASTM D5185n>2044698TinppmASTM D5185n>31560VanadiumppmASTM D5185n>31560White Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185n>202122WaterWC Method>0.075NEGNONENONESiliconppmASTM D5185n>202122WaterWC Method>0.075NEGNONENONESiliconppmASTM D5185n>	Sample Date		Client Info		02 Jul 2024	21 Mar 2016	18 Sep 2015
Filter Age hrs Client Info 0 0 1993   Oil Changed Client Info Changed Not Changd Not Changed   Filter Changed Client Info Changed Not Changd Not Changed   Sample Status Client Info ABNORMAL ABNORMAL ABNORMAL ABNORMAL   PQ ASTM D5185m >10 <1	Machine Age	hrs	Client Info		12271	2748	2560
Oli ChangedClient InfoChangedNot ChangedNot Changed </th <th>Oil Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th>0</th> <th>520</th>	Oil Age	hrs	Client Info		0	0	520
Filter Changed Client Info Changed Not Changed Not Changed Not Changed Not Changed   Sample Status ABNORMAL ABNORMAL ABNORMAL ABNORMAL ABNORMAL   PQ ASTM D8184 >100 29 8.0 25.0   Iron ppm ASTM D5185m >10 <1 <1 <1   Nickel ppm ASTM D5185m >10 <1 3 3   Titanium ppm ASTM D5185m >10 <1 0 0   Aluminum ppm ASTM D5185m >0 <1 <1 1   Copper ppm ASTM D5185m >0 <1 <1 <1   Copper ppm ASTM D5185m >00 <1 <1 <1 <1   Vanadium ppm ASTM D5185m >100 8 9 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <th>Filter Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th>0</th> <th>1993</th>	Filter Age	hrs	Client Info		0	0	1993
Sample Status   ABNORMAL	Oil Changed		Client Info		Changed	Not Changd	Not Change
PQ   ASTM D8184   >100   29   8.0   25.0     Iron   ppm   ASTM D5185m   >61   66   344   31     Chromium   ppm   ASTM D5185m   >10   <1   <1   <1     Nickel   ppm   ASTM D5185m   >10   <1   3   3     Titanium   ppm   ASTM D5185m   <10   0   0   0     Silver   ppm   ASTM D5185m   >20   4   46   833   4   77     Lead   ppm   ASTM D5185m   >20   4   46   833   4   77     Lead   ppm   ASTM D5185m   >100   8   9   8   71     Copper   ppm   ASTM D5185m   >100   8   9   8   1   1   1   9   9   6   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1	Filter Changed		Client Info		Changed	Not Changd	Not Change
Iron   ppm   ASTM D5185m   >61   ▲ 66   34   31     Chromium   ppm   ASTM D5185m   >10   <1   <1   <1     Nickel   ppm   ASTM D5185m   <   <1   3   3     Titanium   ppm   ASTM D5185m   <   0   0   0     Aluminum   ppm   ASTM D5185m   >20   ▲ 46   ▲ 833   ▲ 77     Lead   ppm   ASTM D5185m   >20   ▲ 46   ▲ 833   ▲ 77     Lead   ppm   ASTM D5185m   >100   8   9   8     Tin   ppm   ASTM D5185m   >30   1   5   6   6     Vanadium   ppm   ASTM D5185m   >21   11   0   0   0     White Metal   scalar   *Visual   NONE   NONE   NONE   NONE     Silicon   ppm   ASTM D5185m   >20   11   11   2   0     Vater   vCo Metho	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Chromium   ppm   ASTM D5185m   >10   <1	PQ		ASTM D8184	>100	29	8.0	25.0
Chromium   ppm   ASTM D5185n   >10   <1	Iron	ppm	ASTM D5185m	>61	<b>6</b> 6	34	31
Nickel   ppm   ASTM D5185m   <1	Chromium		ASTM D5185m	>10	<1	<1	<1
Titanium   ppm   ASTM D5185m   <1	Nickel		ASTM D5185m		<1	3	3
Silver   ppm   ASTM D5185m   0   0   0     Aluminum   ppm   ASTM D5185m   >20   466   833   77     Lead   ppm   ASTM D5185m   >9   0   <1   <1     Copper   ppm   ASTM D5185m   >100   8   9   8     Tin   ppm   ASTM D5185m   >3   1   5   6     Vanadium   ppm   ASTM D5185m   >3   1   0   0     White Metal   scalar   *Visual   NONE   NONE   NONE   NONE   NONE     Silicon   ppm   ASTM D5185m   >21   11   11   9     Potassium   ppm   ASTM D5185m   >20   2   1   2     Water   WC Method   >0.075   NEG   NORE   NORE     Sand/Dirt   scalar   *Visual   NONE   NONE   NORM     Appearance   scalar   *Visual   NORM   NORM   NORM   <	Titanium		ASTM D5185m		<1	0	0
Aluminum   ppm   ASTM D5185m   >20   46   83   77     Lead   ppm   ASTM D5185m   >9   0   <1	Silver		ASTM D5185m				0
Lead   ppm   ASTM D5185m   >9   0   <1	Aluminum		ASTM D5185m	>20	<b>4</b> 6	<b>8</b> 3	<b>7</b> 7
Copper   ppm   ASTM D5185m   >100   8   9   8     Tin   ppm   ASTM D5185m   >3   1   5   6     Vanadium   ppm   ASTM D5185m   <   1   0   0     White Metal   scalar   *Visual   NONE   NONE   NONE   LIGH'     Yellow Metal   scalar   *Visual   NONE   NONE   NONE   NONE   NONE     Silicon   ppm   ASTM D5185m   >21   11   11   9   9     Potassium   ppm   ASTM D5185m   >20   2   1   2   9     Water   wC Method   >0.075   NEG   NEG   NONE   NONE   NONE   NONE     Debris   scalar   *Visual   NONE   NONE   NONE   NONE   NORM   <	Lead		ASTM D5185m	>9	0	<1	<1
VanadiumppmASTM D5185m<	Copper		ASTM D5185m	>100	8	9	8
White Metalscalar*VisualNONENONENONELIGHYellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m>2111119PotassiumppmASTM D5185m>20212WaterWC Method>0.075NEGNEGNEGSilitscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMNORMLNORMNORMOdorscalar*VisualNORMLNORMLNORMLNORMEmulsified Waterscalar*Visual>0.075NEGNEGNEGSodiumppmASTM D5185m>3042211BariumppmASTM D5185m168103115111BariumppmASTM D5185m168103115111MagnesiumppmASTM D5185m<<100ManganeseppmASTM D5185m33363429PhosphorusppmASTM D5185m33363429PhosphorusppmASTM D5185m0252SulfurppmASTM D5185m980343816893	Tin	ppm	ASTM D5185m	>3	1	5	6
Yellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>2111119PotassiumppmASTM D5185m>20212WaterWC Method>0.075NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORENONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.075NEGNEGSodiumppmASTM D5185m>30422BoronppmASTM D5185m>30422ManganeseppmASTM D5185m168103115111ManganeseppmASTM D5185m1400ManganeseppmASTM D5185m333634429PhosphorusppmASTM D5185m333634429PhosphorusppmASTM D5185m0252SulfurppmASTM D5185m0343816893	Vanadium	ppm	ASTM D5185m		<1	0	0
Silicon   ppm   ASTM D5185m   >21   11   11   9     Potassium   ppm   ASTM D5185m   >20   2   1   2     Water   WC Method   >0.075   NEG   NEG   NEG     Silt   scalar   *Visual   NONE   NONE   NONE   NONE     Debris   scalar   *Visual   NONE   NONE   NONE   NONE   NONE     Sand/Dirt   scalar   *Visual   NONE   NONE   NONE   NONE     Appearance   scalar   *Visual   NORM   NORML   NORML   NORM     Odor   scalar   *Visual   NORM   NORML   NORML   NORM     Boron   ppm   ASTM D5185m   >30   4   2   2     Boron   ppm   ASTM D5185m   168   103   115   111     Barium   ppm   ASTM D5185m   3   <1	White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
PotassiumppmASTM D5185m>20212WaterWC Method>0.075NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLCdorscalar*VisualNORMLNORMLNORMLNORMLSodiumppmASTM D5185m>30422BoronppmASTM D5185m168103115111BariumppmASTM D5185m<<100MagnesiumppmASTM D5185m333634429PhosphorusppmASTM D5185m333634429PhosphorusppmASTM D5185m0252SulfurppmASTM D5185m08343816893	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
PotassiumppmASTM D5185m>20212WaterWC Method>0.075NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.075NEGNEGNEGSodiumppmASTM D5185m>30422BoronppmASTM D5185m16810311151111BariumppmASTM D5185m168103115111MagnesiumppmASTM D5185m333634429PhosphorusppmASTM D5185m333634429PhosphorusppmASTM D5185m0252SulfurppmASTM D5185m08343816893	Silicon	ppm	ASTM D5185m	>21	11	11	9
Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.075NEGNEGNEGSodiumppmASTM D5185m>304222BoronppmASTM D5185m168103115111BariumppmASTM D5185m168103115111BariumppmASTM D5185m<<100ManganeseppmASTM D5185m<<111MagnesiumppmASTM D5185m333634429PhosphorusppmASTM D5185m0252SulfurppmASTM D5185m08343816893	Potassium	ppm	ASTM D5185m	>20	2	1	2
Debrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.075NEGNEGNEGSodiumppmASTM D5185m>30422BoronppmASTM D5185m1681031151111BariumppmASTM D5185m1681031151111MagnesiumppmASTM D5185m<<100MagnesiumppmASTM D5185m333634429PhosphorusppmASTM D5185m330291268280ZincppmASTM D5185m0343816893	Water		WC Method	>0.075	NEG	NEG	NEG
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.075NEGNEGNEGNEGSodiumppmASTM D5185m>304222BoronppmASTM D5185m168103115111BariumppmASTM D5185m168103115111MagnesiumppmASTM D5185m1<100MagnesiumppmASTM D5185m333634429PhosphorusppmASTM D5185m330291268280ZincppmASTM D5185m0343816893	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORML<	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.075NEGNEGNEGNEGSodiumppmASTM D5185m>304222BoronppmASTM D5185m168103115111BariumppmASTM D5185m168103115111BariumppmASTM D5185m<<100MolybdenumppmASTM D5185m<<1100ManganeseppmASTM D5185m<<111MagnesiumppmASTM D5185m333634429PhosphorusppmASTM D5185m330291268280ZincppmASTM D5185m0252SulfurppmASTM D5185m980343816893	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Waterscalar*Visual>0.075NEGNEGNEGSodiumppmASTM D5185m>30422BoronppmASTM D5185m168103115111BariumppmASTM D5185m168103115111BariumppmASTM D5185m<<100MolybdenumppmASTM D5185m<<100ManganeseppmASTM D5185m<<111MagnesiumppmASTM D5185m333634429PhosphorusppmASTM D5185m330291268280ZincppmASTM D5185m0252SulfurppmASTM D5185m980343816893	Appearance	scalar	*Visual	NORML	NORML	NORML	NORMI
Sodium   ppm   ASTM D5185m<>30   4   2   2     Boron   ppm   ASTM D5185m   168   103   115   111     Barium   ppm   ASTM D5185m   168   103   115   111     Barium   ppm   ASTM D5185m   168   103   115   111     Barium   ppm   ASTM D5185m   <<1   0   0     Molybdenum   ppm   ASTM D5185m   <<1   1   1     Magnesium   ppm   ASTM D5185m   <<1   1   0     Calcium   ppm   ASTM D5185m   33   36   34   29     Phosphorus   ppm   ASTM D5185m   330   291   2688   280     Zinc   ppm   ASTM D5185m   0   2   5   2     Sulfur   ppm   ASTM D5185m   980   343   816   893	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
Boron   ppm   ASTM D5185m   168   103   115   111     Barium   ppm   ASTM D5185m   <1   0   0     Molybdenum   ppm   ASTM D5185m   <1   0   0     Manganese   ppm   ASTM D5185m   <1   1   1     Magnesium   ppm   ASTM D5185m   <<1   <1   0     Calcium   ppm   ASTM D5185m   <<1   <1   0     Phosphorus   ppm   ASTM D5185m   33   36   34   29     Phosphorus   ppm   ASTM D5185m   330   291   2688   280     Zinc   ppm   ASTM D5185m   0   2   5   2     Sulfur   ppm   ASTM D5185m   980   343   816   893	Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	NEG
Barium   ppm   ASTM D5185m   <1	Sodium	ppm	ASTM D5185m	>30	4	2	2
Molybdenum   ppm   ASTM D5185m   <1	Boron	ppm	ASTM D5185m	168	103	115	111
Manganese   ppm   ASTM D5185m   <1	Barium	ppm	ASTM D5185m		<1	0	0
Magnesium   ppm   ASTM D5185m    <1	Molybdenum	ppm	ASTM D5185m		<1	0	0
Calcium   ppm   ASTM D5185m   33   36   34   29     Phosphorus   ppm   ASTM D5185m   330   291   268   280     Zinc   ppm   ASTM D5185m   0   2   5   2     Sulfur   ppm   ASTM D5185m   980   343   816   893	Manganese	ppm	ASTM D5185m		<1	1	1
Phosphorus   ppm   ASTM D5185m   330   291   268   280     Zinc   ppm   ASTM D5185m   0   2   5   2     Sulfur   ppm   ASTM D5185m   980   343   816   893	Magnesium	ppm	ASTM D5185m		<1	<1	0
Zinc   ppm   ASTM D5185m   0   2   5   2     Sulfur   ppm   ASTM D5185m   980   343   816   893	Calcium	ppm	ASTM D5185m	33	36	34	29
Sulfur   ppm   ASTM D5185m   980   343   816   893	Phosphorus	ppm	ASTM D5185m	330	291	268	280
	Zinc	ppm	ASTM D5185m	0	2	5	2
Visc @ 40°C cSt ASTM D445 39 41.1 38.45 38.44	Sulfur	ppm	ASTM D5185m	980	343	816	893
	Visc @ 40°C	cSt	ASTM D445	39	41.1	38.45	38.44

Contact/Location: BRYAN MORRIS - LUCMIL



Sample No. : JR0224913 Received : 05 Jul 2024 19380 RICHMOND TURNPIKE Lab Number : 06228863 Tested MILFORD, VA : 08 Jul 2024 Unique Number : 11112356 Diagnosed : 08 Jul 2024 - Don Baldridge US 22514 Test Package : CONST (Additional Tests: PQ) Contact: BRYAN MORRIS Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. bmorris@luckstone.com T: (804)400-3630 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x: