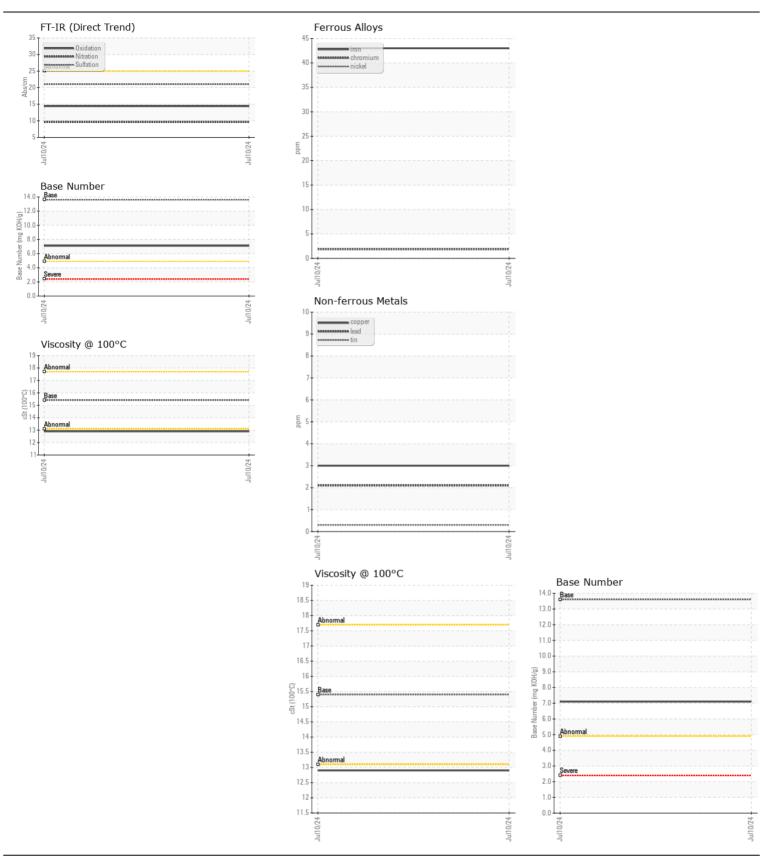
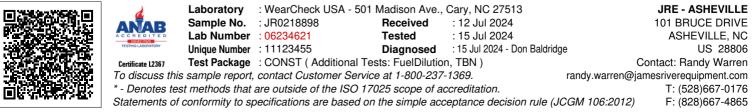


## Machine Id JOHN DEERE 130G C329972 (S/N 042024) Component Diesel Engine

## JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

Test     UOM     Method     Unitary     Nation?     Nation?       Resample at the next service interval to monitor.     Sample Nate     Client loto     10 Jul 202				<b>•</b> ••• <b>-</b> /				
Resample at the next service interval to monitor.     Sample Dat     Clent Info     10.01 2024	RECOMMENDATION		UOM	Method	Limit/Abn		History1	History2
Simple balls     Could have brack	Resample at the next service interval to monitor.	Sample Number		Client Info				
Old Aga     Inter Manuel Mathematical Mathematis Mathematis Mathematical Mathematis Mathmatical Mathematical Mat				Client Info		10 Jul 2024		
Filter Age     Ins     Client Info     Nonped		Machine Age	hrs	Client Info		3764		
Oil Changed Hiller Changed Sample Status     Client Info Norma     Changed Import Norma     Import Import Norma     Import Impor Import Impor Import Import Import Import Import Import Import Im		-	hrs	Client Info		1000		
Filter Changed Sample Status     Client info NoRMA     Changed info NoRMA     Image info NoRMA     Image info NORMA    Image info NORMA <thimag< td=""><th>Filter Age</th><td>hrs</td><td>Client Info</td><td></td><th>1000</th><td></td><td></td></thimag<>		Filter Age	hrs	Client Info		1000		
Sample Status     NOPMAL     III     IIII       WEAR     Iron     pm     ASM DBSM     >51     32     IIIII     IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Oil Changed		Client Info		Changed		
Iron     ppm     ASTV DS18m     >51     43         All component wear rates are normal.     Promound in the program of		Filter Changed		Client Info		Changed		
All component wear rates are normal.     Chromium     ppm     Mickel     ppm		Sample Status				NORMAL		
All component wear rates are normal.     Chromium     ppm     Mickel     ppm	WEAR	Iron		ASTM D5185m	<u>51</u>	12		
All component wear rates are normal.   Nickel   ppm   ASTM D516m   -5   2       Titanium   ppm   ASTM D516m   -3   0       All uminum   ppm   ASTM D516m   -3   0       All uminum   ppm   ASTM D516m   -31   7       All uminum   ppm   ASTM D516m   -31   7       Copper   ppm   ASTM D516m   -26   2       Vandum   ppm   ASTM D516m   -26   2       Vandum   ppm   ASTM D516m   -21        Vandum   ppm   ASTM D516m   -22   15       Vandum   ppm   ASTM D516m   -22   15       There is no indication of any contamination in the oil.   Silicon   ppm   ASTM D516m   -21       Suffation   Abc								
Titanium     ppm     ASTM 0515m     ···     4     ···     ···       Silver     ppm     ASTM 0515m     -33     0     ···<								
Silver     pp     ASTM D5180     >3     0         Aluminum     pp     ASTM D5180     >31     7         Capper     pp     ASTM D5180     >26     2         Copper     pp     ASTM D5180     >26     3         Vanadium     pp     ASTM D5180     >26     3         Vanadium     pp     ASTM D5180     >26     3         Vanadium     pp     ASTM D5180     >26     3         Velow Metal     scalar     'Visual     NONE     NONE         Potassium     pp     ASTM D5180     >22     15         Silicon     pp     ASTM D5180     >22     1         Giycol     with     MSTM D5180     >22     1         Silicon     pp     ASTM D518     >21     NC4					>0			
Aluminum     ppm     ASTM D5155m     >21     7        Lead     ppm     ASTM D515m     >26     2        Copper     MIX D5155m     >26     3         Vanadium     ppm     ASTM D5155m     >26     3         Vanadium     ppm     ASTM D5155m     <					. 0			
Lead     ppm     ASTM D5185m     >26     2         Copper     ppm     ASTM D5185m     -26     3         Tin     ppm     ASTM D5185m     -     -         Vanadium     ppm     ASTM D5185m     -     -         Vanadium     ppm     ASTM D5185m     -     1         Vellow Metal     scalar     Visual     NONE     NONE         Potassium     ppm     ASTM D5185m     -22     4         Fuel     %     Water     WO     Wolf     NONE     NONE        Water     Wolf     Visual     NORE          Soft %     %     WG     WG Method     0.21     NEG         Soft %     %     %     MONE     NONE     NONE         Soft %     %     % <th></th> <td></td> <td></td> <td></td> <th></th> <td></td> <td></td>								
Copper     ppm     ASTM D5185m     >26     3         Tin     ppm     ASTM D5185m     -     -         Vanadium     ppm     ASTM D5185m     -     -         White Metal     scalar     Visual     NONE     NONE         Vallow Metal     scalar     Visual     NONE     NONE         CONTAMINATION     Silion     ppm     ASTM D5185m     -22     15         Potassium     ppm     ASTM D5185m     -22     1.0         Water     Vic Method     -0.21     NEG          Glycol     WC Method     -0.21     NEG          Socit %     %     %STM D7524     -20     9.6         Socit %     %     %STM D7524     -20     9.6         Socit %     %     %ST								
Tin     ppm     ASTM D5185n     >4     <1								
Vanadium     ppm     ASTM D5185n								
White Metal Yellow Metal     scalar     "Visual     NONE     NONE         CONTAMINATION     Silicon     ppm     ASTM D5185m     >-22     15         There is no indication of any contamination in the oil.     Silicon     ppm     ASTM D5185m     >-22     4         Water     907     ASTM D5185m     >-22     4         Glycol     WC Method     >0.21     NEG         Soti %0     %     'ASTM D5185m     >-22     4         Water     WC Method     >0.21     NEG          Soli %0     %     'ASTM D784     >3     0.4         Soli %1     Statiation     Abs/irm     'ASTM D784     >3     0.4         Sulfation     Abs/irm     'ASTM D784     >30     21.0         Sulfation     Abs/irm     'Yisual     NORML					>4			
Yellow Metal     scalar     *Visual     NONE         CONTAMINATION     Silicon     ppm     ASTM D5185m     >-22     15         There is no indication of any contamination in the oil.     Potassium     ppm     ASTM D5185m     >-22     4         Waler     %     ASTM D5185m     >-20     4         Waler     WC Method            Waler     WC Method     NEG           Solt %     %     'ASTM D7644     -3     0.4         Sulfation     Abs/m     'ASTM D7644     -3     0.4         Sulfation     Abs/m     'ASTM D7145           Sulfation     Abs/m     'ASTM D7145           Sand/Dirt     scalar     'Visual     NORE     NORM <t< th=""><th></th><th></th><th></th><th>NONE</th><th></th><th></th><th></th></t<>					NONE			
Silicon     ppm     ASTM D5185m     >220     15        Potassium     ppm     ASTM D5185m     >20     4        Fuel     %     ASTM D5185m     >20     4        Water     WC Method     >0.21     NEG         Water     WC Method     >0.21     NEG         Glycol     WC Method     >0.21     NEG         Sol %     %     ASTM D784     >3     0.4         Sulfation     Abs/tm     'ASTM D784     >30     0.4         Sulfation     Abs/tm     'ASTM D784     >0.0     P.0         Sulfation     Abs/tm     'ASTM D784     >0.0     P.0         Sulfation     Abs/tm     'ASTM D784     >0.0     P.0         Sulfation     Abs/tm     'ASTM D784     >0     P.0								
Potassium     ppm     ASTM D5185m     >20     4      4       Fuel     %     ASTM D524     >2.1     <1.0         Vater     WC Method     >0.21     NEG          Glycol     WC Method     VC Method     >0.21     NEG         Soot %     %     %STM D784     >3     0.4         Nitration     Abs/tm     *ASTM D784     >3     0.4         Soot %     %     %STM D784     >3     0.4         Silt     scalar     *Visual     NONE     20.0         Silt     scalar     *Visual     NONE     NONE         Sand/Dirt     scalar     *Visual     NORML     NORML         The briss     scalar     *Visual     NORML     NORML         The briss <t< th=""><th></th><th>Yellow Metal</th><th>scalar</th><th>^Visual</th><th>NONE</th><th>NONE</th><th></th><th></th></t<>		Yellow Metal	scalar	^Visual	NONE	NONE		
Potassium     ppm     ASTM D5185m     >20     4      i       Fuel     %     ASTM D5185m     >2.1     <1.0         Fuel     %     ASTM D5185m     >2.01     NEG         Glycol     WC Method     0.21     NEG         Soot %     %     MSTM D7844     >3     0.4	CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	15		
Fuel     7e     ASIM D364     9c.1     C1.0     C     C       Water     W     W     W     W     W     W     C1.0     F     F       Glycol     WC     W     W     W     NEG         Soot %     %     'ASTM D7644     >3     0.4         Solt %     scalar     'Visual     NONE     NONE         Debris     scalar     'Visual     NONE     NONE         Odor     scalar     'Visual     NORM     NORM         Emulsified Water     scalar     'Visual     NORM     NORM         In the condition of the oi		Potassium	ppm	ASTM D5185m	>20	4		
Glycol     WC Method     NEG         Soot %     %     *ASTM D784     >3     0.4         Nitration     Abs/     *ASTM D784     >20     9.6         Nitration     Abs/     *ASTM D7815     >30     21.0         Sulfation     Abs/     *Visual     NONE     NONE         Sulfation     scalar     *Visual     NONE     NONE         Sand/Dirt     scalar     *Visual     NORM     NONE         Appeance     scalar     *Visual     NORM     NORM         Odor     scalar     *Visual     NORM     NORM         The BN result indicates that there is suitable alkalinity remaining in the oil is suitable of further service.     Sodium     pm     ASTM D5185m     >31     3        Molybdenum     pm     ASTM D5185m     <     -1 </th <th rowspan="12">There is no indication of any contamination in the oil.</th> <th>Fuel</th> <th>%</th> <th>ASTM D3524</th> <th>&gt;2.1</th> <th>&lt;1.0</th> <th></th> <th></th>	There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>2.1	<1.0		
Soot %     %     YASTM D7844     >3     0.4         Nitration     Abs/cm     'ASTM D762     >20     9.6         Sulfation     Abs/tm     'ASTM D762     >30     21.0         Sulfation     Abs/tm     'ASTM D762     >30     21.0         Sulfation     Abs/tm     'ASTM D762     >30     0.0N     NONE        Sulfation     Abs/tm     'ASTM D762     NON     NONE         Sulfation     Abs/tm     'Astm D745     NON     NONE         Debris     scalar     'Visual     NOR     NORM         Appearance     scalar     'Visual     NORM     NORM         Appearance     scalar     'Visual     NORM     NORM         Boron     ppm     ASTM D5185m     S1     3         Barium </th <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		
Soot %     %     YASTM D7844     >3     0.4         Nitration     Abs/cm     'ASTM D762     >20     9.6         Sulfation     Abs/tm     'ASTM D762     >30     21.0         Sulfation     Abs/tm     'ASTM D762     >30     21.0         Sulfation     Abs/tm     'ASTM D762     >30     21.0         Sulfation     Abs/tm     'ASTM D762     NONE     NONE         Sulfation     Abs/tm     'ASTM D762     NONE     NONE         Debris     scalar     'Visual     NONE     NONE         Appearance     scalar     'Visual     NORM     NORM         Appearance     scalar     'Visual     NORM     NORM         Boron     ppm     ASTM D5185m     -31     3		Glycol		WC Method		NEG		
Nitration     Abs/cm     *ASTM D7624     >20     9.6         Sulfation     Abs/tm     *ASTM D7415     >30     21.0         Silt     scalar     *Visual     NONE     NONE         Silt     scalar     *Visual     NONE     NONE         Sand/Dirt     scalar     *Visual     NONE     NONE         Appearance     scalar     *Visual     NORM     NORML         Odor     scalar     *Visual     NORML     NORML         Odor     scalar     *Visual     NORML     NORML         Odor     scalar     *Visual     NORML     NORML         Bron     ppm     ASTM D5185m     >31     3         Barium     ppm     ASTM D5185m           Manganesume <t< th=""><th>-</th><th>%</th><th>*ASTM D7844</th><th>&gt;3</th><th>0.4</th><th></th><th></th></t<>		-	%	*ASTM D7844	>3	0.4		
Siltscalar*VisualNONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORLNORLNORLOdorscalar*VisualNORLNORLNORLEmulsified Watescalar*VisualNORLNORLFLUID CONDITIONSodiumppmASTM D5185m>313BoronppmASTM D5185mBariumppmASTM D5185mMaganeseppmASTM D5185m<		Nitration						
Siltscalar*VisualNONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORLNORLNORLOdorscalar*VisualNORLNORLNORLEmulsified Watescalar*VisualNORLNORLFLUID CONDITIONSodiumppmASTM D5185m>313BoronppmASTM D5185m0BariumppmASTM D5185m0 <td< th=""><th>Sulfation</th><th>Abs/.1mm</th><th>*ASTM D7415</th><th>&gt;30</th><th>21.0</th><th></th><th></th></td<>		Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0		
Debris   scalar   *Visual   NONE       Sand/Dirt   scalar   *Visual   NONE   NONE      Appearance   scalar   *Visual   NORML   NORML      Odor   scalar   *Visual   NORML   NORML      FUID CONDITION   Sodium   ppm   ASTM D5185m   >31   3      Boron   ppm   ASTM D5185m   0       Barium   ppm   ASTM D5185m   0       Maganese   ppm   ASTM D5185m   <1       Magnesium   ppm   ASTM D5185m   <1       Calcium   ppm   ASTM D5185m   <11       Sulfur   ppm   ASTM D5185m   <1		Silt	scalar			NONE		
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m>313BoronppmASTM D5185m>33BariumppmASTM D5185m<52MolybdenumppmASTM D5185m<616MagnesiumppmASTM D5185m<<1379MagnesiumppmASTM D5185m<1143ZincppmASTM D5185m<3174SulfurppmASTM D5185m3174SulfurppmASTM D5185m3174SulfurppmASTM D5185m3174SulfurppmASTM D5185m3174SulfurppmASTM D5185m3174SulfurppmASTM D5185m16.67.1SulfurppmASTM D5185m16.67.1<		Debris		*Visual	NONE	NONE		
Appearancescalar*VisualNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGFLUID CONDITIONSodiumppmASTM D5185m>313BoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MaganeseppmASTM D5185m616PhosphorusppmASTM D5185m1379SulfurppmASTM D5185m1143SulfurppmASTM D5185m3174SulfurppmASTM D5185m3174SulfurppmASTM D5185m3174SulfurppmASTM D5185m13.6SulfurppmASTM D5185m3174SulfurppmASTM D5185m13.6SulfurppmASTM D5185m </th <th>Sand/Dirt</th> <th></th> <th></th> <th></th> <th>NONE</th> <th></th> <th></th>		Sand/Dirt				NONE		
Odorscalar*VisualNORMLEmulsified Waterscalar*Visual>0.21NEGNEGSodiumppmASTM D5185m>313BoronppmASTM D5185m>3152BariumppmASTM D5185m0MolybdenumppmASTM D5185m1010MaganeseppmASTM D5185m101143MagnesiumppmASTM D5185m1143PhosphorusppmASTM D5185m1143SulfurppmASTM D5185m1143OxidationAbs/.1mm'ASTM D5185m16.6114.4OxidationAbs/.1mm'ASTM D5185m13.67.1Base Number (BN)mg KOHlgASTM D28613.67.1								
Emulsified Waterscalar*Visual>0.21NEGFLUID CONDITIONThe BN result indicates that there is suitable alkalinity remaining in the oil is suitable for further service.SodiumppmASTM D5185m>313BariumppmASTM D5185m0MalganeseppmASTM D5185m0MagnesiumppmASTM D5185m616CalciumppmASTM D5185m616PhosphorusppmASTM D5185m1379ZincppmASTM D5185m1143SulfurppmASTM D5185m3174OxidationAbs/:Imm'ASTM D7141>2514.4Base Number (BN)mg KOHgASTM D289613.67.1								
Sodium   ppm   ASTM D5185m   >31   3      Boron   ppm   ASTM D5185m   52       Barium   ppm   ASTM D5185m   0       Barium   ppm   ASTM D5185m   0       Molybdenum   ppm   ASTM D5185m   7       Manganese   ppm   ASTM D5185m   616       Magnesium   ppm   ASTM D5185m   616       Phosphorus   ppm   ASTM D5185m   1143       Zinc   ppm   ASTM D5185m   3174       Sulfur   ppm   ASTM D5185m   3174       Oxidation   Abs/.1mm<*ASTM D7141		Emulsified Water		*Visual				
Boron   ppm   ASTM D5185m   Image: Section of the condition of the coil is suitable alkalinity remaining in the condition of the coil is suitable for further service.   Barium   ppm   ASTM D5185m   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is suitable for further service.   Image: Section of the coil is service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   Image: Section of the coil is set for further service.   <								
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.   Barium   ppm   ASTM D5185m   0       Molybdenum   ppm   ASTM D5185m   7       Manganese   ppm   ASTM D5185m     616       Magnesium   ppm   ASTM D5185m    616       Calcium   ppm   ASTM D5185m    616       Phosphorus   ppm   ASTM D5185m    994       Zinc   ppm   ASTM D5185m    994       Sulfur   ppm   ASTM D5185m    1143       Oxidation   Abs/.1mm   *ASTM D5185m    3174       Base Number (BN)   mg KOHg   ASTM D2896   13.6   7.1	FLUID CONDITION		ppm		>31			
oil. The condition of the oil is suitable for further service.   Bandin   ppm   ASTM D5185m   0       Molybdenum   ppm   ASTM D5185m   0        Manganese   ppm   ASTM D5185m   0   616       Magnesium   ppm   ASTM D5185m   0   616       Calcium   ppm   ASTM D5185m   1379       Phosphorus   ppm   ASTM D5185m   0   994       Zinc   ppm   ASTM D5185m   1143       Sulfur   ppm   ASTM D5185m   3174       Oxidation   Abs/.1mm   *ASTM D5185m   314.4       Base Number (BN)   mg KOHg   ASTM D2896   13.6   7.1	The BN result indicates that there is suitable alkalinity remaining in the		ppm					
Molybdenum   ppm   ASIM D5185m   7       Manganese   ppm   ASTM D5185m								
Magnesium   ppm   ASTM D5185m   616       Calcium   ppm   ASTM D5185m   1379       Phosphorus   ppm   ASTM D5185m   994       Zinc   ppm   ASTM D5185m   1143       Sulfur   ppm   ASTM D5185m   1143       Oxidation   Abs/.1mm   *ASTM D5185m   3174       Base Number (BN)   mg KOH/g   ASTM D2896   13.6   7.1		,				7		
Calcium   ppm   ASTM D5185m   1379       Phosphorus   ppm   ASTM D5185m   994       Zinc   ppm   ASTM D5185m   1143       Sulfur   ppm   ASTM D5185m   1143       Oxidation   Abs/.1mm   *ASTM D5185m   25   14.4       Base Number (BN)   mg KOHg   ASTM D2896   13.6   7.1		-	ppm					
Phosphorus   ppm   ASTM D5185m   994       Zinc   ppm   ASTM D5185m   1143       Sulfur   ppm   ASTM D5185m   1143       Oxidation   Abs/.1mm   *ASTM D5185m   114.4       Base Number (BN)   mg KOHg   ASTM D2896   13.6   7.1		-	ppm					
Zinc   ppm   ASTM D5185m   1143       Sulfur   ppm   ASTM D5185m   3174       Oxidation   Abs/.1mm   *ASTM D7414   >25   14.4       Base Number (BN)   mg KOH/g   ASTM D2896   13.6   7.1			ppm					
Sulfur     ppm     ASTM D5185m     3174         Oxidation     Abs/.1mm     *ASTM D7414     >25     14.4         Base Number (BN)     mg KOH/g     ASTM D2896     13.6     7.1		Phosphorus	ppm	ASTM D5185m		994		
Oxidation     Abs/.1mm     *ASTM D7414     >25     14.4         Base Number (BN)     mg KOH/g     ASTM D2896     13.6     7.1		Zinc	ppm			1143		
Base Number (BN)     mg KOH/g     ASTM D2896     13.6     7.1		Sulfur	ppm	ASTM D5185m		3174		
		Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4		
Visc @ 100°C cSt ASTM D445 15.4 🔰 12.9 /		Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.1		
		Visc @ 100°C	cSt	ASTM D445	15.4	12.9		





Contact/Location: Randy Warren - VANASH Page 2 of 2