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## JOHN DEERE 544G 1YN544GAEPLA00285

Diesel Engine

{not provided} (--- GAL)

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. Please specify the brand, type, and viscosity of the oil on your next sample.

W	EAR	

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in.

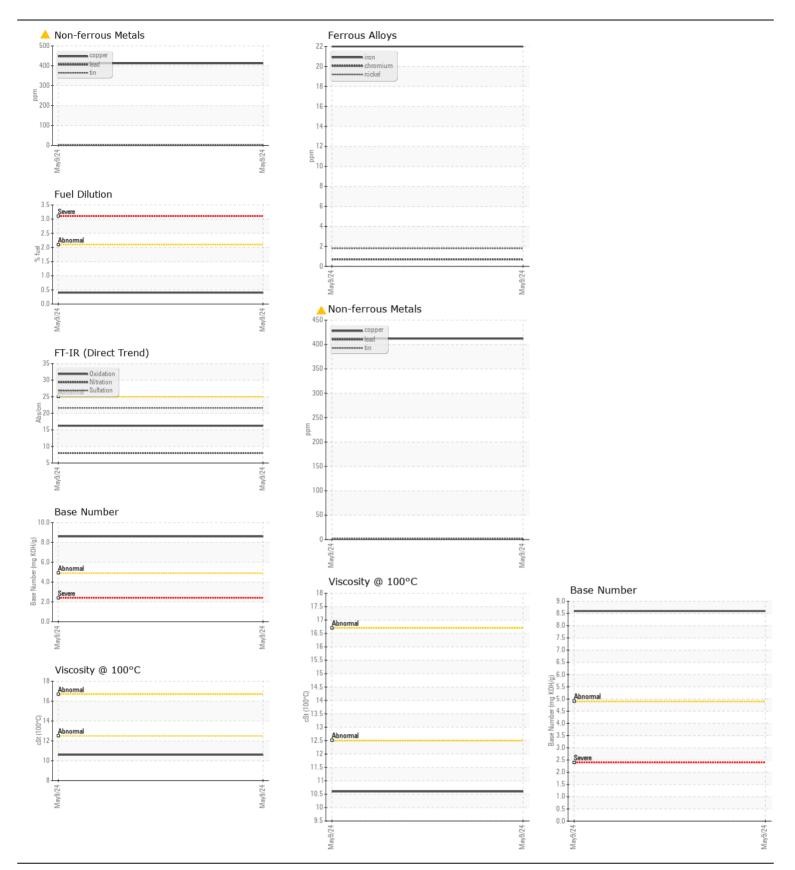
## CONTAMINATION

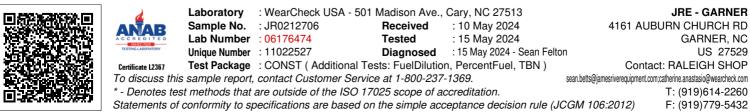
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Test     UOM     Method     Limi/Abs     Current     History1     History2       Sample Number     Client Info     98 May 2024					~~~~~		
Sample Date     Client Info     99 May 2024         Machine Age     hrs     Client Info     444         Filter Age     hrs     Client Info     0         Oil Changed     Client Info     Changed         Filter Age     Client Info     Changed         Sample Status      ABNORMAI         Sample Status      ABNORMAI         Nickel     ppm     ASTM D5185m     >51     22         Nickel     ppm     ASTM D5185m     >5     2         Silver     ppm     ASTM D5185m     >31     4         Silver     ppm     ASTM D5185m     >26     4     12         Lead     ppm     ASTM D5185m     >22     11         Yanadium     ppm     ASTM D5185m     >22	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age     hrs     Client Info     444        Oil Age     hrs     Client Info     0         Filter Age     hrs     Client Info     Changed         Filter Changed     Client Info     Changed          Sample Status     ABNORMAL          Nickel     ppm     ASTM D5185m     >51     22         Nickel     ppm     ASTM D5185m     >51     2         Silver     ppm     ASTM D5185m     >3     0         Aluminum     ppm     ASTM D5185m     >26     1         Copper     ppm     ASTM D5185m     >26     1         Vanadium     ppm     ASTM D5185m     >26     1         Vanadium     ppm     ASTM D5185m     >22     11         Vanadium     <	Sample Number		Client Info		JR0212706		
Oil Age     hrs     Client Info     444         Filter Age     hrs     Client Info     0         Oil Changed     Client Info     Changed         Sample Status     ABNORMAL         Iron     ppm     ASTM D5185m     >51     22         Nickel     ppm     ASTM D5185m     >5     2         Nickel     ppm     ASTM D5185m     >5     2         Silver     ppm     ASTM D5185m     >31     4         Aluminum     ppm     ASTM D5185m     >26     1         Qopper     ppm     ASTM D5185m     >26     4     12         Vanadium     ppm     ASTM D5185m     >26     4     12         Yellow Metal     scalar<*Visual     NONE     NONE	Sample Date		Client Info		09 May 2024		
Fitter Age     Inc     Inc     Inc     Inc     Inc     Inc       Fitter Age     Client Info     Changed       Inc     In	Machine Age	hrs	Client Info		444		
Oil Changed     Client Info     Changed         Filter Changed     Client Info     Changed         Sample Status     ASTM D5185m     >51     22         Iron     ppm     ASTM D5185m     >51     22         Nickel     ppm     ASTM D5185m     >5     2         Nickel     ppm     ASTM D5185m     >3     0         Silver     ppm     ASTM D5185m     >26     1         Copper     ppm     ASTM D5185m     >26     1         Vanadium     ppm     ASTM D5185m     >26     1         Vanadium     ppm     ASTM D5185m     >22     11         Vanadium     ppm     ASTM D5185m     >22     11         Vanadium     ppm     ASTM D5185m     >22     11	Oil Age	hrs	Client Info		444		
Filter Changed Sample Status     Client Info     Changed ABNORMAL         Iron     ppm     ASTM D5185m     >51     22         Chromium     ppm     ASTM D5185m     >51     22         Nickel     ppm     ASTM D5185m     >5     2         Titanium     ppm     ASTM D5185m     >5     0         Aluminum     ppm     ASTM D5185m     >26     1         Lead     ppm     ASTM D5185m     >26     4     12         Yanadium     ppm     ASTM D5185m     >26     4     12         Yellow Metal     scalar     *Visual     NONE          Yellow Metal     scalar     *Visual     NONE     NONE         Yellow Metal     scalar     *Visual     NONE     NONE         Silicon     ppm <th>Filter Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th></th> <th></th>	Filter Age	hrs	Client Info		0		
Filter Changed Sample Status     Client Info     Changed ABNORMAL         Iron     ppm     ASTM D5185m     >51     22         Chromium     ppm     ASTM D5185m     >51     22         Nickel     ppm     ASTM D5185m     >5     2         Titanium     ppm     ASTM D5185m     >5     0         Aluminum     ppm     ASTM D5185m     >26     1         Lead     ppm     ASTM D5185m     >26     4     12         Yanadium     ppm     ASTM D5185m     >26     4     12         Yellow Metal     scalar     *Visual     NONE          Yellow Metal     scalar     *Visual     NONE     NONE         Yellow Metal     scalar     *Visual     NONE     NONE         Silicon     ppm <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th>Changed</th> <th></th> <th></th>	Oil Changed		Client Info		Changed		
Iron     ppm     ASTM D5185m     >511     22         Chromium     ppm     ASTM D5185m     >11     <-1         Nickel     ppm     ASTM D5185m     >2         Titanium     ppm     ASTM D5185m     >3     0         Silver     ppm     ASTM D5185m     >31     4         Lead     ppm     ASTM D5185m     >26     1         Tin     ppm     ASTM D5185m     >26     412         Vanadium     ppm     ASTM D5185m     >4     3         Wated     scalar     *Visual     NONE     NONE         Sulfation     ppm     ASTM D5185m     >22     11         Vanadium     ppm     ASTM D5185m     >22     14         Valow Metal     scalar     *Visual     NONE	-		Client Info		Changed		
Chromium     ppm     ASTM D5185m     >5     2        Nickel     ppm     ASTM D5185m     >5     2        Titanium     ppm     ASTM D5185m     >3     0        Silver     ppm     ASTM D5185m     >3     0        Aluminum     ppm     ASTM D5185m     >36     1        Lead     ppm     ASTM D5185m     >26     1        Copper     ppm     ASTM D5185m     >26     412        Vanadium     ppm     ASTM D5185m     >26     1        Vanadium     ppm     ASTM D5185m     >26     1        Vanadium     ppm     ASTM D5185m     >21     1        Vanadium     ppm     ASTM D5185m     >22     11        Silicon     ppm     ASTM D5185m     >22     11        Fuel     %     ASTM D5185m     >22     11        <	Sample Status				ABNORMAL		
Chromium     ppm     ASTM D5185m     >5     2        Nickel     ppm     ASTM D5185m     >5     2        Titanium     ppm     ASTM D5185m     >3     0        Silver     ppm     ASTM D5185m     >3     0        Aluminum     ppm     ASTM D5185m     >36     1        Lead     ppm     ASTM D5185m     >26     1        Copper     ppm     ASTM D5185m     >26     412        Vanadium     ppm     ASTM D5185m     >26     1        Vanadium     ppm     ASTM D5185m     >26     1        Vanadium     ppm     ASTM D5185m     >21     1        Vanadium     ppm     ASTM D5185m     >22     11        Silicon     ppm     ASTM D5185m     >22     11        Fuel     %     ASTM D5185m     >22     11        <	·····						
Nickel     ppm     ASTM D5185m     >5     2         Titanium     ppm     ASTM D5185m     >3     0         Silver     ppm     ASTM D5185m     >31     4         Lead     ppm     ASTM D5185m     >26     1         Copper     ppm     ASTM D5185m     >26     412         Tin     ppm     ASTM D5185m     >26     412         Vanadium     ppm     ASTM D5185m     >26     412         Vanadium     ppm     ASTM D5185m     >20     4         Valoatium     ppm     ASTM D5185m     >20     4         Valoatium     ppm     ASTM D5185m     >20     4         Silicon     ppm     ASTM D5185m     >20     4         Sot %     %     ASTM D5185m	Iron	ppm	ASTM D5185m	>51	22		
Titanium     ppm     ASTM D5185m     -     <1	Chromium	ppm	ASTM D5185m	>11	<1		
Silver     ppm     ASTM D5185m     >3     0         Aluminum     ppm     ASTM D5185m     >31     4         Lead     ppm     ASTM D5185m     >26     1         Copper     ppm     ASTM D5185m     >26     412         Vanadium     ppm     ASTM D5185m     >26     412         Vanadium     ppm     ASTM D5185m     >26     412         Vanadium     ppm     ASTM D5185m     >22     11         Valion     scalar     *Visual     NONE     NONE         Vellow Metal     scalar     *Visual     NONE     NONE         Vater     WC Method     >0.21     NEG         Solf %     %     *ASTM D7644     >3     0.2         Sulfation     Abs/cm     *ASTM D7645	Nickel	ppm	ASTM D5185m	>5	2		
Aluminum     ppm     ASTM D5185m     >31     4         Lead     ppm     ASTM D5185m     >26     1         Copper     ppm     ASTM D5185m     >26     412         Tin     ppm     ASTM D5185m     >4     3         Wanadium     ppm     ASTM D5185m     >4     3         White Metal     scalar     *Visual     NONE     NONE         Yellow Metal     scalar     *Visual     NONE     NONE         Silicon     ppm     ASTM D5185m     >22     11         Yellow Metal     scalar     *Visual     NONE          Silicon     ppm     ASTM D7845     >3     0.2         Sulfation     Abs/:mm     *ASTM D7624     >20     8.0         Sulfation     Abs/:mm <th>Titanium</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>&lt;1</th> <th></th> <th></th>	Titanium	ppm	ASTM D5185m		<1		
Lead     ppm     ASTM D5185m     >26     1         Copper     ppm     ASTM D5185m     >26     ▲ 112         Tin     ppm     ASTM D5185m     >4     3         Vanadium     ppm     ASTM D5185m     <4     3         Vanadium     ppm     ASTM D5185m     >4     3         Vanadium     ppm     ASTM D5185m     >22     11         Yellow Metal     scalar     *Visual     NONE     NONE         Silicon     ppm     ASTM D5185m     >20     4         Yellow Metal     scalar     WC Method     >0.21     NEG         Water     WC Method     >0.21     NEG          Sulfation     Abs/cm<*/ASTM D7624     >20     8.0         Sulfation     Abs/cm     Ye	Silver	ppm	ASTM D5185m	>3	0		
Copper     ppm     ASTM D5185m     >26     ▲ 412         Tin     ppm     ASTM D5185m     >4     3         Vanadium     ppm     ASTM D5185m     <1         White Metal     scalar     *Visual     NONE     NONE         Yellow Metal     scalar     *Visual     NONE     NONE         Silicon     ppm     ASTM D5185m     >22     11         Potassium     ppm     ASTM D5185m     >20     4         Water     WC Method     >0.21     NEG          Sot %     %     *ASTM D7844     >3     0.2         Sulfation     Abs/rm     *ASTM D7845     >30     21.6         Sulfation     Abs/rm     *ASTM D7845     >30     21.6         Sulfation     Abs/rm     *V	Aluminum	ppm	ASTM D5185m	>31	4		
Tin     ppm     ASTM D5185m     >4     3         Wanadium     ppm     ASTM D5185m     <1         White Metal     scalar     *Visual     NONE     NONE         Yellow Metal     scalar     *Visual     NONE     NONE         Silicon     ppm     ASTM D5185m     >20     4         Potassium     ppm     ASTM D5185m     >20     4         Fuel     %     ASTM D5185m     >20     4         Water     WC Method     >0.21     NEG          Glycol     WC Method     >0.2     NEG          Soti %     %     *ASTM D7624     >20     8.0         Sulfation     Abs/rm< *ASTM D715     >30     21.6         Sulfation     Abs/rm< *ASTM D7141     >30 <td< th=""><th>Lead</th><th>ppm</th><th>ASTM D5185m</th><th>&gt;26</th><th>1</th><th></th><th></th></td<>	Lead	ppm	ASTM D5185m	>26	1		
Vanadium     ppm     ASTM D5185m     <1	Copper	ppm	ASTM D5185m	>26	<b>412</b>		
Vanadium     ppm     ASTM D5185m     <1		ppm	ASTM D5185m	>4	3		
White Metal     scalar     *Visual     NONE         Yellow Metal     scalar     *Visual     NONE         Silicon     ppm     ASTM D5185m     >22     11         Potassium     ppm     ASTM D5185m     >20     4         Fuel     %     ASTM D5185m     >20     4         Water     WC Method     >0.21     NEG         Glycol     WC Method     >0.21     NEG         Sot %     %     *ASTM D7624     >20     8.0         Sulfation     Abs/cm<*ASTM D7624     >20     8.0         Sulfation     Abs/cm<*ASTM D7624     >20     8.0         Sulfation     Scalar     *Visual     NONE     NONE         Sulfation     scalar     *Visual     NORM     NORML	Vanadium	ppm	ASTM D5185m		<1		
Silicon     ppm     ASTM D5185m     >22     11         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     0.2         Sulfation     Abs/cm< 'ASTM D7624     >20     8.0         Sulfation     Abs/m< 'ASTM D715     >30     21.6         Sulfation     Abs/m< 'ASTM D7145     >30     21.6         Sulfation     cscalar     'Visual     NONE     NONE         Sand/Dirt     scalar     'Visual     NORH     NORML         Appearance     scalar     'Visual     NORH     NORH	White Metal		*Visual	NONE	NONE		
Silicon     ppm     ASTM D5185m     >22     11         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     0.2         Sulfation     Abs/cm< *ASTM D7624     >20     8.0         Sulfation     Abs/rm< *ASTM D715     >30     21.6         Sulfation     Abs/rm< *ASTM D7145     >30     21.6         Sulfation     ccalar     *Visual     NONE     NONE         Sand/Dirt     scalar     *Visual     NORM     NORML         Appearance     scalar     *Visual     NORM     NORML	Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium     ppm     ASTM D5185m     >20     4        Fuel     %     ASTM D3524     >2.1     0.4        Water     WC Method     >0.21     NEG        Glycol     WC Method     >0.21     NEG        Soot %     %     *ASTM D7844     >3     0.2        Nitration     Abs/cm     *ASTM D7624     >20     8.0        Sulfation     Abs/.1mm     *ASTM D7624     >0     21.6        Sulfation     Abs/.1mm     *ASTM D7624     >0     21.6        Sulfation     Abs/.1mm     *ASTM D7624     >0     NONE        Debris     scalar     *Visual     NONE     NONE							
Fuel     %     ASTM D3524     >2.1     0.4        Water     WC Method     >0.21     NEG        Glycol     WC Method     >0.21     NEG        Soot %     %     *ASTM D3524     >2.1     NEG        Soot %     %     *ASTM D7624     >20     8.0         Nitration     Abs/m     *ASTM D7624     >20     8.0         Sulfation     Abs/m     *ASTM D7615     >30     21.6         Sulfation     Abs/m     *ASTM D7624     >20     8.0         Sulfation     Abs/m     *ASTM D7615     >30     21.6         Sulfation     Abs/m     *ASTM D7614     >30     21.6         Sulfation     Scalar     *Visual     NONE     NONE         Appearance     scalar     *Visual     NORML     NORML   <	Silicon	ppm	ASTM D5185m	>22	11		
Water     WC Method     >0.21     NEG         Glycol     WC Method     NEG          Soot %     %     *ASTM D7844     >3     0.2         Nitration     Abs/.mm     *ASTM D7624     >20     8.0         Sulfation     Abs/.mm     *ASTM D7624     >20     8.0         Sulfation     Abs/.mm     *ASTM D7624     >30     21.6         Sulfation     Abs/.mm     *ASTM D7624     >30     21.6         Sulfation     Abs/.mm     *ASTM D7624     >30     21.6         Sulfation     Abs/.mm     *ASTM D7141     >30     21.6         Debris     scalar     *Visual     NOR     NORML     NORML         Appearance     scalar     *Visual     NOR     NOR         Sodium     p	Potassium	ppm	ASTM D5185m	>20	4		
Glycol     WC Method     NEG         Soot %     %     *ASTM D7844     >3     0.2         Nitration     Abs/cm     *ASTM D7624     >20     8.0         Sulfation     Abs/cm     *ASTM D7615     >30     21.6         Sulfation     Abs/cm     *Visual     NONE     NONE         Sulfation     Abs/cm     *Visual     NONE     NONE         Debris     scalar     *Visual     NONE     NONE         Sand/Dirt     scalar     *Visual     NORM     NORML         Appearance     scalar     *Visual     NORM     NORML         Odor     scalar     *Visual     NORM     NORML         Boron     ppm     ASTM D5185m     >31     2         Malganese     ppm     ASTM D5185m	Fuel	%	ASTM D3524	>2.1	0.4		
Soot %     %     *ASTM D7844     >3     0.2         Nitration     Abs/cm     *ASTM D7624     >20     8.0         Sulfation     Abs/.1mm     *ASTM D7415     >30     21.6         Silt     scalar     *Visual     NONE     NONE         Debris     scalar     *Visual     NONE     NONE         Sand/Dirt     scalar     *Visual     NONE     NORML         Appearance     scalar     *Visual     NORML     NORML         Odor     scalar     *Visual     NORML     NORML         Odor     scalar     *Visual     >0.21     NEG         Odor     scalar     *Visual     >0.21     NEG         Boron     ppm     ASTM D5185m<>31     2          Magnesium     pp	Water		WC Method	>0.21	NEG		
Nitration     Abs/cm     *ASTM D7624     >20     8.0        Sulfation     Abs/1mm     *ASTM D7624     >30     21.6         Sulfation     Abs/1mm     *ASTM D7415     >30     21.6         Silt     scalar     *Visual     NONE     NONE         Debris     scalar     *Visual     NONE     NONE         Sand/Dirt     scalar     *Visual     NORE          Appearance     scalar     *Visual     NORML     NORML         Odor     scalar     *Visual     NORML     NORML         Odor     scalar     *Visual     >0.21     NEG         Boron     ppm     ASTM D5185m     316          Barium     ppm     ASTM D5185m     4          Magnesium     ppm	Glycol		WC Method		NEG		
SulfationAbs/.1mm*ASTM D7415>3021.6Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLCdorscalar*Visual>0.21NEGEmulsified Waterscalar*Visual>0.21NEGBoronppmASTM D5185m316BariumppmASTM D5185m5MalganeseppmASTM D5185m4MagnesiumppmASTM D5185m696PhosphorusppmASTM D5185m1378ZincppmASTM D5185m1044SulfurppmASTM D5185m3032OxidationAbs/.1mm'ASTM D7414>2516.2Base Number (BN)mg KOHgASTM D28968.6	Soot %	%	*ASTM D7844	>3	0.2		
Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLSodiumppmASTM D5185m>312BoronppmASTM D5185m>316BariumppmASTM D5185m5MolybdenumppmASTM D5185m229MagnesiumppmASTM D5185m4PhosphorusppmASTM D5185m1378ZincppmASTM D5185m1044SulfurppmASTM D5185m30322SulfurppmASTM D5185mSulfurkb:/im'ASTM D5185mSulfurppmASTM D5185mSulfurkb:/im'ASTM D5185mSulfurkb:/im'ASTM D5185m	Nitration	Abs/cm	*ASTM D7624	>20	8.0		
Debrisscalar*VisualNONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>312BoronppmASTM D5185m316BariumppmASTM D5185m5MolybdenumppmASTM D5185m4MagnesiumppmASTM D5185m696PhosphorusppmASTM D5185m1378ZincppmASTM D5185m1044SulfurppmASTM D5185m3032OxidationAbs/.1mm*ASTM D5185m3032Base Number (BN)mg KOHgASTM D28968.6	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6		
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>312BoronppmASTM D5185m>316BariumppmASTM D5185m5MolybdenumppmASTM D5185m229MagnesiumppmASTM D5185m4MagnesiumppmASTM D5185m1378PhosphorusppmASTM D5185m1044ZincppmASTM D5185m3332SulfurppmASTM D5185m3032OxidationAbs/.1mm*ASTM D28968.6	Silt	scalar	*Visual	NONE	NONE		
Appearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>312BoronppmASTM D5185m>316BariumppmASTM D5185m5MolybdenumppmASTM D5185m229ManganeseppmASTM D5185m4CalciumppmASTM D5185m696PhosphorusppmASTM D5185m1378ZincppmASTM D5185m1044SulfurppmASTM D5185m3032OxidationAbs/.1mm*ASTM D2868.6	Debris	scalar	*Visual	NONE	NONE		
Odorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>312BoronppmASTM D5185m>316BariumppmASTM D5185m5MolybdenumppmASTM D5185m229ManganeseppmASTM D5185m4MagnesiumppmASTM D5185m696CalciumppmASTM D5185m1378PhosphorusppmASTM D5185m926SulfurppmASTM D5185m3032OxidationAbs/.1mm*ASTM D5185m3032Base Number (BN)mg KOHgASTM D28968.6	Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water     scalar     *Visual     >0.21     NEG        Sodium     ppm     ASTM D5185m     >31     2         Boron     ppm     ASTM D5185m     >31     2         Barium     ppm     ASTM D5185m     316         Molybdenum     ppm     ASTM D5185m     5         Maganese     ppm     ASTM D5185m     4         Magnesium     ppm     ASTM D5185m     4         Calcium     ppm     ASTM D5185m     696         Phosphorus     ppm     ASTM D5185m     926         Zinc     ppm     ASTM D5185m     3032         Sulfur     ppm     ASTM D5185m     3032         Oxidation     Abs/.1mm<*ASTM D2896     8.6	Appearance	scalar	*Visual	NORML	NORML		
Sodium     ppm     ASTM D5185m     >31     2        Boron     ppm     ASTM D5185m     316         Barium     ppm     ASTM D5185m     5         Barium     ppm     ASTM D5185m     5         Molybdenum     ppm     ASTM D5185m     229         Manganese     ppm     ASTM D5185m     4         Magnesium     ppm     ASTM D5185m     696         Calcium     ppm     ASTM D5185m     1378         Phosphorus     ppm     ASTM D5185m     926         Zinc     ppm     ASTM D5185m     3032         Sulfur     ppm     ASTM D5185m     3032         Oxidation     Abs/.1mm     'ASTM D2896     8.6	Odor	scalar	*Visual	NORML	NORML		
Boron     ppm     ASTM D5185m     316        Barium     ppm     ASTM D5185m     5         Barium     ppm     ASTM D5185m     5         Molybdenum     ppm     ASTM D5185m     229         Manganese     ppm     ASTM D5185m     4         Magnesium     ppm     ASTM D5185m     696         Calcium     ppm     ASTM D5185m     696         Phosphorus     ppm     ASTM D5185m     926         Zinc     ppm     ASTM D5185m     3032         Sulfur     ppm     ASTM D5185m     3032         Oxidation     Abs/.1mm<*ASTM D7414 >25     16.2         Base Number (BN)     mg KOH/g     ASTM D2896     8.6	Emulsified Water	scalar	*Visual	>0.21	NEG		
Boron     ppm     ASTM D5185m     316        Barium     ppm     ASTM D5185m     5         Barium     ppm     ASTM D5185m     5         Molybdenum     ppm     ASTM D5185m     229         Manganese     ppm     ASTM D5185m     4         Magnesium     ppm     ASTM D5185m     696         Calcium     ppm     ASTM D5185m     696         Phosphorus     ppm     ASTM D5185m     926         Zinc     ppm     ASTM D5185m     3032         Sulfur     ppm     ASTM D5185m     3032         Oxidation     Abs/.1mm<*ASTM D7414 >25     16.2         Base Number (BN)     mg KOH/g     ASTM D2896     8.6							
Barium     ppm     ASTM D5185m     5        Molybdenum     ppm     ASTM D5185m     229        Manganese     ppm     ASTM D5185m     4        Magnesium     ppm     ASTM D5185m     4        Magnesium     ppm     ASTM D5185m     6966        Calcium     ppm     ASTM D5185m     1378        Phosphorus     ppm     ASTM D5185m     926        Zinc     ppm     ASTM D5185m     1044        Sulfur     ppm     ASTM D5185m     3032        Oxidation     Abs/.1mm< *ASTM D7414 >25     16.2         Base Number (BN)     mg KOH/g     ASTM D2896     8.6	_			>31			
Molybdenum     ppm     ASTM D5185m     229        Manganese     ppm     ASTM D5185m     4        Magnesium     ppm     ASTM D5185m     696        Magnesium     ppm     ASTM D5185m     696        Calcium     ppm     ASTM D5185m     1378        Phosphorus     ppm     ASTM D5185m     926        Zinc     ppm     ASTM D5185m     1044        Sulfur     ppm     ASTM D5185m     3032        Oxidation     Abs/.1mm< *ASTM D7414 >25     16.2        Base Number (BN)     mg KOH/g     ASTM D2896     8.6							
Manganese     ppm     ASTM D5185m     4        Magnesium     ppm     ASTM D5185m     696         Calcium     ppm     ASTM D5185m     1378         Phosphorus     ppm     ASTM D5185m     926         Zinc     ppm     ASTM D5185m     1044         Sulfur     ppm     ASTM D5185m     3032         Oxidation     Abs/.1mm     *ASTM D7414     >25     16.2         Base Number (BN)     mg KOH/g     ASTM D2896     8.6							
Magnesium     ppm     ASTM D5185m     696         Calcium     ppm     ASTM D5185m     1378         Phosphorus     ppm     ASTM D5185m     926         Zinc     ppm     ASTM D5185m     1044         Sulfur     ppm     ASTM D5185m     3032         Oxidation     Abs/.1mm     *ASTM D7414     >25     16.2         Base Number (BN)     mg KOH/g     ASTM D2896     8.6							
Calcium     ppm     ASTM D5185m     1378        Phosphorus     ppm     ASTM D5185m     926        Zinc     ppm     ASTM D5185m     1044        Sulfur     ppm     ASTM D5185m     3032        Oxidation     Abs/.1mm     *ASTM D7414<>25     16.2        Base Number (BN)     mg KOH/g     ASTM D2896     8.6	-						
Phosphorus     ppm     ASTM D5185m     926        Zinc     ppm     ASTM D5185m     1044        Sulfur     ppm     ASTM D5185m     3032        Oxidation     Abs/.1mm     *ASTM D7414<>25     16.2        Base Number (BN)     mg KOH/g     ASTM D2896     8.6	•						
Zinc     ppm     ASTM D5185m     1044        Sulfur     ppm     ASTM D5185m     3032        Oxidation     Abs/.1mm     *ASTM D7414     >25     16.2        Base Number (BN)     mg KOH/g     ASTM D2896     8.6							
Sulfur     ppm     ASTM D5185m     3032         Oxidation     Abs/.1mm     *ASTM D7414     >25     16.2         Base Number (BN)     mg KOH/g     ASTM D2896     8.6		ppm					
Oxidation     Abs/.1mm     *ASTM D7414     >25     16.2        Base Number (BN)     mg KOH/g     ASTM D2896     8.6							
Base Number (BN)     mg KOH/g     ASTM D2896     8.6		ppm	ASTM D5185m				
		Abs/.1mm		>25			
Visc @ 100°C cSt ASTM D445 10.6	( )	mg KOH/g			8.6		
	Visc @ 100°C	cSt	ASTM D445		10.6		

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.





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