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## JOHN DEERE 843L C236596 (S/N 1DW843LRMF710940)

## Hydraulic System

## JOHN DEERE HYDRAU (--- GAL)

#### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: W7072 )

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All component wear rates are normal.

#### CONTAMINATION

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test     UOM     Method     Limi/AD     Current     History1     History2       Sample Dumber     Client Info     21 Jun224     23 Jun224					~~~~		
Sample Date     Client Info     21 Jun 2024     23 Jun 2022        Machine Age     hrs     Client Info     5000     1155        Oil Age     hrs     Client Info     0     0        Oil Changed     Client Info     Not Changd     Not Changd        Filter Age     hrs     Client Info     Not Changd     Not Changd        Sample Status	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age Oil Age     hrs     Client Info     5000     1155        Filter Age     hrs     Client Info     0     0        Filter Age     hrs     Client Info     Not Changd     Not Changd        Filter Changed     Client Info     Not Changd     Not Changd        Sample Status     ATTENTION     Not Changd        PQ     ASTM D5185m     >20     6     6        Chromium     ppm     ASTM D5185m     >10     0     0        Nickel     ppm     ASTM D5185m     >10     4     <1        Nickel     ppm     ASTM D5185m     >10     0     0        Aluminum     ppm     ASTM D5185m     >10     0     0        Lead     ppm     ASTM D5185m     >10     0     0        Vanadum     pm     ASTM D5185m     >20     4     2        Veitaed     scalar	Sample Number		Client Info		JR0196975	JR0098245	
Machine Age     hrs     Client Info     5000     1155        Cil Age     hrs     Client Info     0     0        Filter Age     hrs     Client Info     Not Changd      Not Changd        Sample Status     Client Info     Not Changd     Not Changd      Not Changd        PQ     ASTM D5185m     >20     6     6         Nickel     ppm     ASTM D5185m     >20     4     <1        Nickel     ppm     ASTM D5185m     >10     0     0        Nickel     ppm     ASTM D5185m     >10     <1         Aluminum     ppm     ASTM D5185m     >10     0     <1        Vanadium     ppm     ASTM D5185m     >10     0     0        Vanadum     ppm     ASTM D5185m     >20     4     2        Silicon     ppm     ASTM D5185m     >20	Sample Date		Client Info		21 Jun 2024	23 Jun 2022	
Oil Age     hrs     Client Info     5000     1155        Filter Age     hrs     Client Info     Not Changd     Not Changd        Gil Changed     Client Info     Not Changd     Not Changd        Sample Status     ATTENTION     Not Changd         PQ     ASTM D5185m     >20     6     6        Iron     ppm     ASTM D5185m     >10     4     <1        Nickel     ppm     ASTM D5185m     >10     0     0        Silver     ppm     ASTM D5185m     >10     0         Lead     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     >10     0     0        Veltow Metal     scalar     *Visual     NONE     NONE     NONE        Veltow Metal     scalar     *Visual     NONE     NONE        Veltow Metal		hrs	Client Info		5000	1155	
Filter Åge     hrs     Client Info     0     0        Oil Changed     Client Info     Not Changd     Not Changd        Sample Status     Client Info     Not Changd      Not Changd        PQ     ASTM D8184     18     17        Iron     ppm     ASTM D5185m     >20     6     6        Nickel     ppm     ASTM D5185m     >10     0     0        Nickel     ppm     ASTM D5185m     10     0         Aluminum     ppm     ASTM D5185m     0     0         Silver     ppm     ASTM D5185m     10     0         Vanadum     ppm     ASTM D5185m     0     0         Vellow Metal     scalar     *Visual     NONE     NONE        Vellow Metal     scalar     *Visual     NONE     NONE        Vellow Metal	•	hrs	Client Info		5000	1155	
Oil Changed Filter Changed Sample Status     Client Info     Not Changd ATTENTION     Not Changd Not Changd ATTENTION	0				0		
Filter Changed Sample Status     Client Info     Not Changd ATTENTION     Not Changd NORMAL        PQ     ASTM D8184     18     17        Iron     ppm     ASTM D5185m     >20     6     6        Nickel     ppm     ASTM D5185m     >10     4     <1        Nickel     ppm     ASTM D5185m     0     0         Silver     ppm     ASTM D5185m     >10     <1     2        Lead     ppm     ASTM D5185m     >10     <1     2        Copper     pm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     >10     0     0        Veltow Metal     scalar     *Visual     NONE     NONE     NONE        Veltow Metal     scalar     *Visual     NONE     NONE         Veltow Metal     scalar     *Visual     NONE     NONE	Ū.				-	÷	
Sample StatusATTENTIONNORMALPQASTM D81841817IronppmASTM D5185>2066ChromiumppmASTM D5185>104<1NickelppmASTM D5185>1000SilverppmASTM D5185>100<AluminumppmASTM D5185>10C1AluminumppmASTM D5185>100<CopperppmASTM D5185>1000VanadiumppmASTM D5185>1000VanadiumppmASTM D5185>1000VanadiumppmASTM D5185>2042Veltow Metalscalar*VisualNONENONENONEVeltow Metalscalar*VisualNONENONE1SiliconppmASTM D7647>500064652632Particles >4µmASTM D7647>1001Particles >4µmASTM D7647>100Particles >51µmASTM D7647>1001Particles >51µmASTM D7647>1001Particles >51µmASTM D7647>10NONENONESodiumscalar*VisualNON	•				v	0	
PQ     ASTM D8184     18     17        Iron     ppm     ASTM D5185m     >20     6     6        Chromium     ppm     ASTM D5185m     >10     4     <1        Nickel     ppm     ASTM D5185m     >10     0     0        Silver     ppm     ASTM D5185m     >10     0     <1        Lead     ppm     ASTM D5185m     >10     0     <1        Lead     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     >20     4     2        Vanadium     ppm     ASTM D5185m     >20     4     2        Vallow Metal     scalar     *Visual     NONE     NONE     NONE     -	-		0.101.11.10		, i i i i i i i i i i i i i i i i i i i	0	
Iron     ppm     ASTM D5185m     >20     6     6        Nickel     ppm     ASTM D5185m     >10     0     0        Titanium     ppm     ASTM D5185m     0     0        Silver     ppm     ASTM D5185m     0     <1        Aluminum     ppm     ASTM D5185m     >10     0     <1        Lead     ppm     ASTM D5185m     >10     0     <1        Copper     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     >10     0     0        Valiou     Motelal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     4     2        Particles >4µm     ASTM D7647     >100     358     470        Particles >6µm     ASTM D7647     >10     0     1							
Chromium     ppm     ASTM D5185m     >10     4     <1	PQ		ASTM D8184		18	17	
Nickel     ppm     ASTM D5185m     >10     0     0        Titanium     ppm     ASTM D5185m     0     0        Silver     ppm     ASTM D5185m     10     <1     2        Aluminum     ppm     ASTM D5185m     >10     0     <1        Lead     ppm     ASTM D5185m     >10     0     <1        Copper     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     >20     4     2        Vellow Metal     scalar     "Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D7647     >20     4     2        Particles >4µm     ASTM D7647     >160     27     33        Particles >24µm     ASTM D7647     >30     0 <th>Iron</th> <th>ppm</th> <th>ASTM D5185m</th> <th>&gt;20</th> <th>6</th> <th>6</th> <th></th>	Iron	ppm	ASTM D5185m	>20	6	6	
Titanium     ppm     ASTM D5185m     0     0        Silver     ppm     ASTM D5185m     >10     <1     2        Aluminum     ppm     ASTM D5185m     >10     0     <1        Lead     ppm     ASTM D5185m     >10     0     <1        Copper     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     0     0     0        Vanadium     ppm     ASTM D5185m     0     0     0        Vanadium     ppm     ASTM D5185m     >20     4     2        Vanadium     ppm     ASTM D5185m     >20     4     2        Vellow Metal     scalar     *Visual     NONE     NONE        Silicon     ppm     ASTM D7647     >500     6465     2632        Particles >4µm     ASTM D7647     >10     0     1	Chromium	ppm	ASTM D5185m	>10	4	<1	
Silver     ppm     ASTM D5185m     0     <1	Nickel	ppm	ASTM D5185m	>10	0	0	
Aluminum     ppm     ASTM D5185m     >10     <1	Titanium	ppm	ASTM D5185m		0	0	
Aluminum     ppm     ASTM D5185m     >10     <1	Silver		ASTM D5185m		0	<1	
Lead     ppm     ASTM D5185m     >10     0     <1	Aluminum		ASTM D5185m	>10	<1	2	
Copper     ppm     ASTM D5185m     >75     3     1        Tin     ppm     ASTM D5185m     0     0        Vanadium     ppm     ASTM D5185m     0     0        White Metal     scalar     *Visual     NONE     NONE     NONE        Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     4     2        Potassium     ppm     ASTM D5185m     >20     4     2        Patricles >4µm     ASTM D7647     >5000     6465     2632        Particles >4µm     ASTM D7647     >100     1        Particles >1µm     ASTM D7647     >40     4     8        Particles >21µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     20/16/12     19/16/12        Sadu/Dir	Lead		ASTM D5185m	>10	0	<1	
Tin     ppm     ASTM D5185m     >10     0     0        Vanadium     ppm     ASTM D5185m     0     0        White Metal     scalar     *Visual     NONE     NONE     NONE        Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Potassium     ppm     ASTM D5185m     >20     4     2        Potassium     ppm     ASTM D5185m     >20     4     2        Paticles >4µm     ASTM D7647     >5000     64655     2632        Particles >6µm     ASTM D7647     >160     27     33        Particles >6µm     ASTM D7647     >10     0     1        Particles >38µm     ASTM D7647     >10     0     1        Particles >71µm     ASTM D7647     >10     0         Silt     scalar     *Visual     NONE     NONE     NONE <th>Copper</th> <th></th> <th></th> <th>&gt;75</th> <th>3</th> <th></th> <th></th>	Copper			>75	3		
Vanadium     ppm     ASTM D5185m     0     0        White Metal     scalar     *Visual     NONE     NONE     NONE        Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     4     2        Potassium     ppm     ASTM D5185m     >20     4     2        Paticles >4µm     ASTM D5185m     >20     4     2        Particles >6µm     ASTM D7647     >5000     64655     2632        Particles >6µm     ASTM D7647     >160     27     33        Particles >38µm     ASTM D7647     >10     0     1        Particles >38µm     ASTM D7647     >30     0     0        Oil Cleanliness     ISO 4406 (c)     >107147     00     1        Sand/Dirt     scalar     *Visual     NONE     NONE        So							
White Metal     scalar     *Visual     NONE     NONE     NONE        Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     4     2        Potassium     ppm     ASTM D5185m     >20     4     2        Water     WC Method     >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >1000     6465     2632        Particles >14µm     ASTM D7647     >100     27     33        Particles >14µm     ASTM D7647     >10     0     1        Particles >38µm     ASTM D7647     >3     0     0        Particles >38µm     ASTM D7647     >3     0     0        Particles >21µm     ASTM D7647     >3     0     0        Silt     scalar     *Visual     NONE     NONE					-		
Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     4     2        Potassium     ppm     ASTM D5185m     >20     4     2        Water     WC Method     >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >5000     • 6465     2632        Particles >6µm     ASTM D7647     >100     358     470        Particles >38µm     ASTM D7647     >4     8        Particles >38µm     ASTM D7647     >10     0     1        Particles >71µm     ASTM D7647     >10     0     0        Oil Cleanliness     scalar     *Visual     NONE     NONE     NONE        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NORL     NORE <t< th=""><th>White Metal</th><th></th><th>*Visual</th><th>NONE</th><th>NONE</th><th>NONE</th><th></th></t<>	White Metal		*Visual	NONE	NONE	NONE	
Silicon     ppm     ASTM D5185m     >20     4     2        Potassium     ppm     ASTM D5185m     >20     4     2        Water     WC Method     >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >5000     6465     2632        Particles >6µm     ASTM D7647     >100     358     470        Particles >6µm     ASTM D7647     >100     27     33        Particles >1µm     ASTM D7647     >10     0     1        Particles >71µm     ASTM D7647     >10     0         Particles >71µm     ASTM D7647     >10     0         Oil Cleanliness     ISO 4406 (c) >19/17/1     0/16/12     19/16/12        Sand/Dirt     scalar     *Visual     NONE     NONE        Sand/Dirt     scalar     *Visual     NORML     NORML        Appearance     scalar <th>Yellow Metal</th> <th>scalar</th> <th>*Visual</th> <th>NONE</th> <th>-</th> <th>NONE</th> <th></th>	Yellow Metal	scalar	*Visual	NONE	-	NONE	
Potassium     ppm     ASTM D5185m     >20     4     2        Water     WC Method >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >5000     ● 6465     2632        Particles >6µm     ASTM D7647     >160     27     33        Particles >14µm     ASTM D7647     >10     0     1        Particles >21µm     ASTM D7647     >10     0     1        Particles >38µm     ASTM D7647     >10     0     1        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     •20/16/12     19/16/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NORM         Appearance     scalar     *Visual     NORM     NORM     NORML        Emul							
Water     WC Method     >0.1     NEG        Particles >4µm     ASTM D7647     >5000     6465     2632        Particles >6µm     ASTM D7647     >1300     358     470        Particles >14µm     ASTM D7647     >160     27     33        Particles >21µm     ASTM D7647     >40     4     8        Particles >38µm     ASTM D7647     >40     4     8        Particles >38µm     ASTM D7647     >3     0     0        Particles >31µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Silt     scalar     *Visual     NONE     NONE     NONE        Silt     scalar     *Visual     NONE     NORML     NORML        Appearance     scalar     *Visual     NORM     NORML     NORML        Boron     ppm     A	Silicon	ppm	ASTM D5185m	>20	4	2	
Particles >4µm     ASTM D7647     >5000     6465     2632        Particles >6µm     ASTM D7647     >1300     358     470        Particles >14µm     ASTM D7647     >160     27     33        Particles >21µm     ASTM D7647     >40     4     8        Particles >38µm     ASTM D7647     >10     0     1        Particles >38µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Silt     scalar     *Visual     NONE     NONE     NONE        Silt     scalar     *Visual     NORM     NORML     NORML        Appearance     scalar     *Visual     NORM     NORML     NORML        Gotor	Potassium	ppm	ASTM D5185m	>20	4	2	
Particles >6µm     ASTM D7647     >1300 <b>358</b> 470        Particles >14µm     ASTM D7647     >160 <b>27</b> 33        Particles >21µm     ASTM D7647     >40 <b>4</b> 8        Particles >38µm     ASTM D7647     >10 <b>0</b> 1        Particles >71µm     ASTM D7647     >3 <b>0</b> 0        Oil Cleanliness     ISO 4406 (c)     >19/17/14 <b>20/16/12</b> 19/16/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NORM     NORML         Appearance     scalar     *Visual     NORM     NORML         Gor     scalar     *Visual     NORM     NORML         Boron     ppm     ASTM D5185m     1     0	Water		WC Method	>0.1	NEG	NEG	
Particles >14µm     ASTM D7647     >160     27     33        Particles >21µm     ASTM D7647     >40     4     8        Particles >38µm     ASTM D7647     >10     0     1        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     20/16/12     19/16/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NOR     NORE     NORE        Appearance     scalar     *Visual     NOR     NORML     NORML        Gdor     scalar     *Visual     NOR     NORML     NORML        Baron     ppm     ASTM D5185m     1     0        Boron     ppm     ASTM D5185m     0     0 <tr< th=""><th>Particles &gt;4µm</th><th></th><th>ASTM D7647</th><th>&gt;5000</th><th>6465</th><th>2632</th><th></th></tr<>	Particles >4µm		ASTM D7647	>5000	6465	2632	
Particles >21µm     ASTM D7647     >40     4     8        Particles >38µm     ASTM D7647     >10     0     1        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     20/16/12     19/16/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE         Sand/Dirt     scalar     *Visual     NORE     NONE         Appearance     scalar     *Visual     NORM     NORML     NORML        Godor     scalar     *Visual     NOR     NORML     NORML        Boron     ppm     ASTM D5185m     1     0         Barium     ppm     ASTM D5185m     I     0         Magnesium     ppm     ASTM D5185m     I     0 <th>Particles &gt;6µm</th> <th></th> <th>ASTM D7647</th> <th>&gt;1300</th> <th>358</th> <th>470</th> <th></th>	Particles >6µm		ASTM D7647	>1300	358	470	
Particles >38µm     ASTM D7647     >10     0     1        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     •20/16/12     19/16/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NOR     NONE     NONE        Appearance     scalar     *Visual     NORM     NORML     NORML        Odor     scalar     *Visual     NOR     NORM     NORML        Gotor     scalar     *Visual     NOR     NORML     NORML        Boron     ppm     ASTM D5185m     1     0         Barium     ppm     ASTM D5185m     0	Particles >14µm		ASTM D7647	>160	27	33	
Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     20/16/12     19/16/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NOR     NONE     NONE        Appearance     scalar     *Visual     NORL     NORML     NORML        Odor     scalar     *Visual     NORL     NORML     NORML        Godor     scalar     *Visual     NORL     NORML     NORML        Godor     scalar     *Visual     NORL     NORML     NORML        Boron     ppm     ASTM D5185m     1     0         Barium     ppm     ASTM D5185m     0     0         Magnesium     ppm     ASTM D5185m <th>Particles &gt;21µm</th> <th></th> <th>ASTM D7647</th> <th>&gt;40</th> <th>4</th> <th>8</th> <th></th>	Particles >21µm		ASTM D7647	>40	4	8	
Oil CleanlinessISO 4406 (c)>19/17/1420/16/1219/16/12Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m10BoronppmASTM D5185m00MolybdenumppmASTM D5185m0<-1MagneseppmASTM D5185m53MagnesiumppmASTM D5185m727962596ZincppmASTM D5185m110822ZincppmASTM D5185m150031091530Acid Number (AN)mg KOHgASTM D5185m1.01.100.69	Particles >38µm		ASTM D7647	>10	0	1	
Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m10BoronppmASTM D5185m<1<1BariumppmASTM D5185m00MalganeseppmASTM D5185m<10MagnesiumppmASTM D5185m53PhosphorusppmASTM D5185m727962596ZincppmASTM D5185m9001110822SulfurppmASTM D5185m150031091530Acid Number (AN)mg KOH/gASTM D5185m1.01.100.69	Particles >71µm		ASTM D7647	>3	0	0	
Debrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m10BoronppmASTM D5185m<1<1BariumppmASTM D5185m00MolybdenumppmASTM D5185m0<1MagneseppmASTM D5185m<53CalciumppmASTM D5185m727962596ZincppmASTM D5185m9001110822ZincppmASTM D5185m1.031091530Acid Number (AN)mg KOH/gASTM D8451.01.100.69	Oil Cleanliness		ISO 4406 (c)	>19/17/14	0/16/12	19/16/12	
Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m10BoronppmASTM D5185m00BariumppmASTM D5185m00MolybdenumppmASTM D5185m0<-1MagneseppmASTM D5185m53MagnesiumppmASTM D5185m53PhosphorusppmASTM D5185m727962596ZincppmASTM D5185m9001110822SulfurppmASTM D5185m1.01.100.69	Silt	scalar	*Visual	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m10BoronppmASTM D5185m1BariumppmASTM D5185m00MolybdenumppmASTM D5185m0<MagneseppmASTM D5185m0MagnesiumppmASTM D5185m53PhosphorusppmASTM D5185m727962596ZincppmASTM D5185m9001110822SulfurppmASTM D5185m1.031091530Acid Number (AN)mg KOHgASTM D80451.01.100.69	Debris	scalar	*Visual	NONE	NONE	NONE	
Odorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m10BoronppmASTM D5185m<1<1BariumppmASTM D5185m00MolybdenumppmASTM D5185m0<1MagneseppmASTM D5185m<10<1MagnesiumppmASTM D5185m<53PhosphorusppmASTM D5185m727962596ZincppmASTM D5185m9001110822SulfurppmASTM D5185m1.031091530Acid Number (AN)mg KOH/gASTM D80451.01.100.69	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Emulsified Water     scalar     *Visual     >0.1     NEG     NEG        Sodium     ppm     ASTM D5185m     1     0        Boron     ppm     ASTM D5185m      <1     <1        Barium     ppm     ASTM D5185m     0     0         Molybdenum     ppm     ASTM D5185m     0     <1         Magnese     ppm     ASTM D5185m     0     <1     0        Magnesium     ppm     ASTM D5185m     <5     3        Calcium     ppm     ASTM D5185m     727     962     5966        Zinc     ppm     ASTM D5185m     900     1110     822        Sulfur     ppm     ASTM D5185m     1500     3109     1530        Acid Number (AN)     mg KOH/g     ASTM D5185m     1.0     1.10     0.69	Appearance	scalar	*Visual	NORML	NORML	NORML	
Sodium     ppm     ASTM D5185m     1     0        Boron     ppm     ASTM D5185m     <1     <1        Barium     ppm     ASTM D5185m     0     0        Molybdenum     ppm     ASTM D5185m     0     <        Magnese     ppm     ASTM D5185m     0     <1        Magnesium     ppm     ASTM D5185m     <1     0        Magnesium     ppm     ASTM D5185m     <5     3        Phosphorus     ppm     ASTM D5185m     727     962     5966        Zinc     ppm     ASTM D5185m     900     1110     822        Sulfur     ppm     ASTM D5185m     1500     3109     1530        Acid Number (AN)     mg KOH/g     ASTM D5185m     1.0     1.10     0.69	Odor	scalar	*Visual	NORML	NORML	NORML	
Boron     ppm     ASTM D5185m     <1	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Boron     ppm     ASTM D5185m     <1							
Barium     ppm     ASTM D5185m     0     0        Molybdenum     ppm     ASTM D5185m     0     <1        Manganese     ppm     ASTM D5185m      0     <1        Magnesium     ppm     ASTM D5185m      <1     0        Magnesium     ppm     ASTM D5185m      5     3        Calcium     ppm     ASTM D5185m     87     1518     146        Phosphorus     ppm     ASTM D5185m     727     962     596        Zinc     ppm     ASTM D5185m     900     1110     822        Sulfur     ppm     ASTM D5185m     1500     3109     1530        Acid Number (AN)     mg KOH/g     ASTM D8045     1.0     1.10     0.69							
Molybdenum     ppm     ASTM D5185m     0     <1							
Manganese     ppm     ASTM D5185m     <1							
Magnesium     ppm     ASTM D5185m     5     3        Calcium     ppm     ASTM D5185m     87     1518     146        Phosphorus     ppm     ASTM D5185m     727     962     596        Zinc     ppm     ASTM D5185m     900     1110     822        Sulfur     ppm     ASTM D5185m     1500     3109     1530        Acid Number (AN)     mg KOH/g     ASTM D8045     1.0     1.10     0.69							
Calcium     ppm     ASTM D5185m     87     1518     146        Phosphorus     ppm     ASTM D5185m     727     962     596        Zinc     ppm     ASTM D5185m     900     1110     822        Sulfur     ppm     ASTM D5185m     1500     3109     1530        Acid Number (AN)     mg KOH/g     ASTM D8045     1.0     1.10     0.69	<b>U</b>						
Phosphorus     ppm     ASTM D5185m     727     962     596        Zinc     ppm     ASTM D5185m     900     1110     822        Sulfur     ppm     ASTM D5185m     1500     3109     1530        Acid Number (AN)     mg KOH/g     ASTM D8045     1.0     1.10     0.69	-						
Zinc     ppm     ASTM D5185m     900     1110     822        Sulfur     ppm     ASTM D5185m     1500     3109     1530        Acid Number (AN)     mg KOH/g     ASTM D8045     1.0     1.10     0.69							
Sulfur     ppm     ASTM D5185m     1500     3109     1530        Acid Number (AN)     mg KOH/g     ASTM D8045     1.0     1.10     0.69		ppm					
Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.10 0.69							
Visc @ 40°C cSt ASTM D445 65 45.8 61.1							
	Visc @ 40°C	cSt	ASTM D445	65	45.8	61.1	



