

# WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION NORMAL

#### Machine Id 1FFDC571JMF340898

# Hydraulic System

{not provided} (--- GAL)

### RECOMMENDATION

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

W	EAR	

All component wear rates are normal.

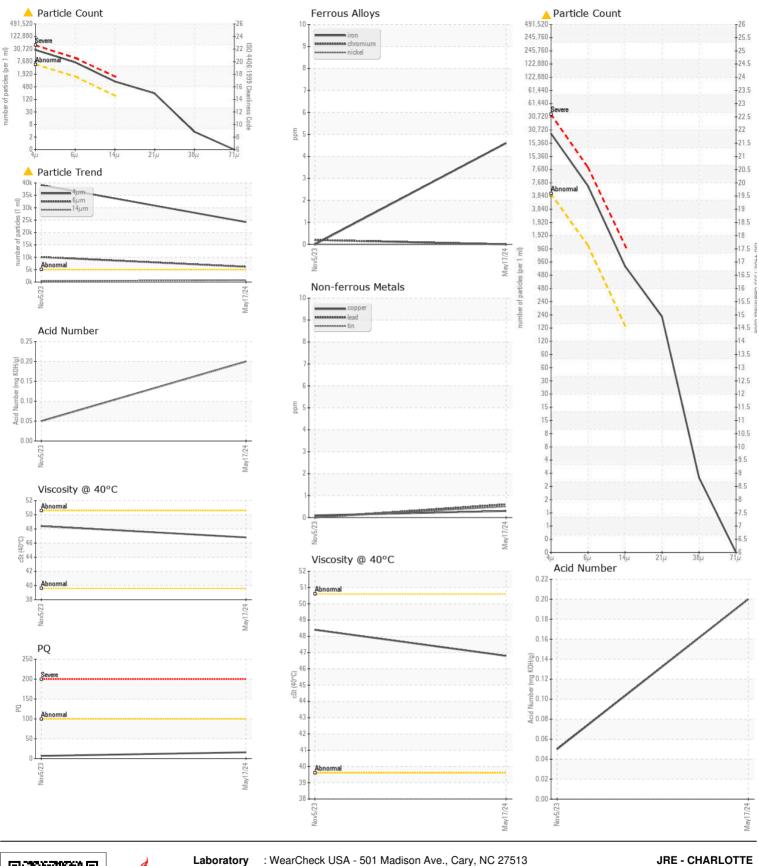
### CONTAMINATION

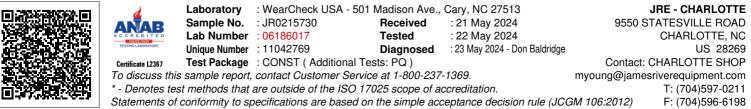
There is a high amount of particulates present in the oil.

## FLUID CONDITION

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

Test     UOM     Method     Limit/A     Current     History1     History2       Sample Dumber     Client Info     JR015730     JR018005        Machine Age     hrs     Client Info     STM2     2537        Oil Age     hrs     Client Info     S127     2537        Oil Age     hrs     Client Info     Not Changed        Gli Age     hrs     Client Info     Not Changed        Sample Data     Client Info     Not Changed         Grinom     pm     ASTM D8185     >10     0        Chromium     pm     ASTM D8185     >10     0        Nickel     ppm     ASTM D8185     >10         Nickel     ppm     ASTM D8185     >10         Nickel     ppm     ASTM D5185     >10         Nickel     ppm     ASTM D5185     >10							
Sample Date     Client Info     17 May 2024     05 Nov 2023        Machine Age     hrs     Client Info     3127     2537        Oil Age     hrs     Client Info     0     0        Oil Changed     Client Info     0     0        Oil Changed     Client Info     Not Changd     Not Changd        Sample Status      MSNDMML     ABNORMAL     ABNORMAL        PQ     ASTM D5185m     >20     5     0        Chromium     ppm     ASTM D5185m     >10     0        Nickel     ppm     ASTM D5185m     10     <-1        Silver     ppm     ASTM D5185m     >10     <-1        Silver     ppm     ASTM D5185m     >10     <-1        Vanadium     ppm     ASTM D5185m     >20     <1     <-1        Visual     NONE     NONE     NONE     NONE <th>Test</th> <th>UOM</th> <th>Method</th> <th>Limit/Abn</th> <th>Current</th> <th>History1</th> <th>History2</th>	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age Oil Age Filter Age Filter Age Nrs     Irs     Client Info     3127     2537        Filter Age Filter Age Oil Changed     Client Info     0     0      0       Filter Age Filter Changed     Client Info     Not Changed ABNORMAL     Not Changed Not Changed Filter Changed     Client Info     Not Changed ABNORMAL      ABNORMAL        Filter Changed     Client Info     Not Changed ABNORMAL      ABNORMAL        Filter Changed     Client Info     Not Changed ABNORMAL          Silver     ppm     ASTM D5185m     >10     0         Silver     ppm     ASTM D5185m     >10     <1     2        Lead     ppm     ASTM D5185m     >10     <1     0        Vanadum     ppm     ASTM D5185m     >20     <1     <1        Vanadum     ppm     ASTM D5185m     >20     <1     <1        Velaed     ppm	Sample Number		Client Info		JR0215730	JR0189005	
Machine Age Oil Age Filter Age     hrs     Client Info     3127     2537        Filter Age Oil Changed     NS     Client Info     0     0        Gil Age Filter Changed     Client Info     Not Changd      Not Changd        Sample Status     Client Info     Not Changd     Not Changd        PQ     ASTM D5185m     20     5     0        Chromium     ppm     ASTM D5185m     20     0        Nickel     ppm     ASTM D5185m     0         Nickel     ppm     ASTM D5185m     10     <1     2        Lead     ppm     ASTM D5185m     >10     <1     0        Vanadum     ppm     ASTM D5185m     >10     <1     0        Vanadum     ppm     ASTM D5185m     >10     <1     0        Vanadum     ppm     ASTM D5185m     >20     <1     <1        Vana	Sample Date		Client Info		17 May 2024	05 Nov 2023	
Oil Age     hrs     Client Info     3127     2537        Filter Age     hrs     Client Info     0     0        Oil Changed     Client Info     Not Changed     Not Changed        Sample Status     Client Info     Changed     Not Changed        PQ     ASTM D5185m     >20     5     0        Iron     ppm     ASTM D5185m     >10     0     <1        Nickel     ppm     ASTM D5185m     >10     0     <1        Silver     ppm     ASTM D5185m     >10     <1     2        Lead     ppm     ASTM D5185m     >10     <1     0        Vanadum     ppm     ASTM D5185m     >10     <1     0        Visual     NONE     NONE     NONE     NONE         Silicon     ppm     ASTM D5185m     >20     <1     <1        Yellow Metal     sca		hrs	Client Info			2537	
Filter Åge Oli Changed     hrs     Client Info     Not Changed Not Changed     Not Changed Not Changed	0	hrs	Client Info		3127	2537	
Oil Changed Filter Changed Sample Status     Client Info     Not Changed Changed ABNORMAL     Not Changed ABNORMAL	0	hrs	Client Info		0	0	
Filter Changed Sample Status     Client Info     Changed ABNORMAL     Not Changed ABNORMAL	Ũ				-	-	
Sample StatusABNORMALABNORMALABNORMALPQASTM D8185>2050IronppmASTM D5185>2050NickelppmASTM D5185>100<1NickelppmASTM D5185>100<1SilverppmASTM D5185>10C10AluminumppmASTM D5185>10<10AluminumppmASTM D5185>10<10CopperppmASTM D5185>10<10VanadiumppmASTM D5185>10<10VanadiumppmASTM D5185>20<1<1Vellow Metalscalar*VisualNONENONENONEVellow Metalscalar*VisualNONENONESiliconppmASTM D5185>2022Particles >4µmASTM D7647>5000A430102Particles >4µmASTM D7647>100A41083Particles >4µmASTM D7647>10A0Particles >5µmASTM D7647>10A41083Particles >6µmASTM D7647>10A0Siltscalar*VisualNONENONENONEParticles >6µm	<u> </u>				v	0	
PQ     ASTM D8184     16     7	-		0.101.11.110		Ū.	0	
Iron     ppm     ASTM D5185m     >20     5     0        Chromium     ppm     ASTM D5185m     >10     0     <1        Nickel     ppm     ASTM D5185m     >10     0     0        Titanium     ppm     ASTM D5185m     >10     <1     2        Aluminum     ppm     ASTM D5185m     >10     <1     0        Aluminum     ppm     ASTM D5185m     >10     <1     0        Lead     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >0     0      0        Vallow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D7647     >100     6     6161     10083        Particles >4µm     AS							
Chromium     ppm     ASTM D5185m     >10     0     <1	PQ		ASTM D8184		16	7	
Nickel     ppm     ASTM D5185m     >10     0     0        Titanium     ppm     ASTM D5185m     0     <1        Silver     ppm     ASTM D5185m     >10     <1     2        Aluminum     ppm     ASTM D5185m     >10     <1     0        Lead     ppm     ASTM D5185m     >10     <1     0        Copper     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >20     <2     2        Vellow Metal     scalar     "Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     2     2        Particles >4µm     ASTM D7647     >100     A 10083         Particles >4µm     ASTM D7647     >30     0 </th <th>Iron</th> <th>ppm</th> <th>ASTM D5185m</th> <th>&gt;20</th> <th>5</th> <th>0</th> <th></th>	Iron	ppm	ASTM D5185m	>20	5	0	
Titanium     ppm     ASTM D5185m     0     <1	Chromium	ppm	ASTM D5185m	>10	0	<1	
Silver     ppm     ASTM D5185m     0        Aluminum     ppm     ASTM D5185m     >10     <1     2        Lead     ppm     ASTM D5185m     >10     <1     0        Copper     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >20     <1     <1        Vanadium     ppm     ASTM D5185m     >20     2     2        Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Paticles >4µm     ASTM D7647     >5000     24207     39102        Paticles >4µm     ASTM D7647     >10     3     5        Paticles >4µm     ASTM D7647     >40     202     99	Nickel	ppm	ASTM D5185m	>10	0	0	
Aluminum     ppm     ASTM D5185m     >10     <1	Titanium	ppm	ASTM D5185m		0	<1	
Lead     ppm     ASTM D5185m     >10     <1	Silver	ppm	ASTM D5185m		0	0	
Lead     ppm     ASTM D5185m     >10     <1	Aluminum			>10	<1	2	
Copper     ppm     ASTM D5185m     >75     <1							
Tin     ppm     ASTM D5185m     >10     <1	Copper			>75	<1	<1	
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     2     2        Potassium     ppm     ASTM D5185m     >20     <1     <1        Paticles >4µm     ASTM D7647     >5000 <b>A 24207 A</b> 39102        Particles >6µm     ASTM D7647     >100 <b>A</b> 6161     A 10083        Particles >6µm     ASTM D7647     >10 <b>3</b> 5        Particles >38µm     ASTM D7647     >10 <b>3</b> 5        Oil Cleanliness     ISO 4406 (c)     >191714 <b>A 22/2017</b> A 22/21/16        Silt     scalar     *Visual     NONE     NONE     NONE        Appearance     scalar     *Visual     NORL     NORL							
White Metal     scalar     *Visual     NONE     NONE     NONE        Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     <1     <1        Potassium     ppm     ASTM D5185m     >20     <1     <1        Water     WC Method     >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >1000     24207     39102        Particles >50µm     ASTM D7647     >100     4     202     99        Particles >21µm     ASTM D7647     >10     3     5        Particles >21µm     ASTM D7647     >3     0     0        Particles >21µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >1917/14     22/20/17     22/21/16        Sit     scalar     *Visual     NONE     NONE							
Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     <1     <1        Potassium     ppm     ASTM D5185m     >20     <1     <1        Water     WC Method     >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >5000     4 24207     39102        Particles >6µm     ASTM D7647     >100     4 6161     10083        Particles >21µm     ASTM D7647     >10     3     5        Particles >38µm     ASTM D7647     >10     3     5        Particles >71µm     ASTM D7647     >10     3     5        Oil Cleanliness     Scalar     *Visual     NONE     NONE        Silt     scalar     *Visual     NOR     NORE     NORE        Debris     scalar     *Visual     NOR     NORE     NORM				NONE	NONE	NONE	
Silicon     ppm     ASTM D5185m     >20     2     2        Potassium     ppm     ASTM D5185m     >20     <1     <1        Water     WC Method     >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >5000     A 24207     A 39102        Particles >6µm     ASTM D7647     >100     A 6161     A 10083        Particles >6µm     ASTM D7647     >100     A 756     A 435        Particles >1µm     ASTM D7647     >10     3     5        Particles >71µm     ASTM D7647     >10     3     0     0        Particles >71µm     ASTM D7647     >10     3     2/2/2/176         Solar Scalar     *Visual     NONE     NONE     NONE         Sard/Dirt     scalar     *Visual     NONE     NORML     NORML        Appearance     scalar     *Visual     NORML     <	Yellow Metal			-	-		
Potassium     ppm     ASTM D5185m     >20     <1							
Water     WC Method     >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >5000     A 24207     A 39102        Particles >6µm     ASTM D7647     >1300     A 6161     A 10083        Particles >14µm     ASTM D7647     >160     A 756     A 435        Particles >21µm     ASTM D7647     >40     A 202     99        Particles >38µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19171/4     A 22/2017     2/2/21/16        Silt     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NORM     NORML     NORML        Appearance     scalar     *Visual     NORM     NORML     NORML	Silicon	ppm	ASTM D5185m	>20	2	2	
Particles >4µm     ASTM D7647     >5000     A 24207     A 39102        Particles >6µm     ASTM D7647     >1300     A 6161     10083        Particles >14µm     ASTM D7647     >160     A 756     A 435        Particles >21µm     ASTM D7647     >40     A 202     A 99        Particles >38µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >191714     A 22/20171     A 22/21/16        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NORM     NORM        Appearance     scalar     *Visual     NORM     NORM     NORML        Gdor     scalar     *Visual     NORM     NORM     NORM	Potassium	ppm	ASTM D5185m	>20	<1	<1	
Particles >6µm     ASTM D7647     >1300     ▲ 6161     ▲ 10083        Particles >14µm     ASTM D7647     >160     ~ 756     ▲ 435        Particles >21µm     ASTM D7647     >40     ▲ 202     ④ 99        Particles >38µm     ASTM D7647     >10     3     5        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     ▲ 22/20/17     ▲ 22/21/16        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NORM     NORML         Appearance     scalar     *Visual     NORM     NORML         Gdor     scalar     *Visual     NORM     NORML         Baron     ppm     ASTM D5185m     0	Water		WC Method	>0.1	NEG	NEG	
Particles >14µm     ASTM D7647     >160 <b>756</b> ▲ 435        Particles >21µm     ASTM D7647     >40 <b>202</b> ● 99        Particles >38µm     ASTM D7647     >10 <b>3</b> 5        Particles >71µm     ASTM D7647     >3 <b>0</b> 0        Oil Cleanliness     ISO 4406 (c)     >19/17/14 <b>22/20/17 22/21/16</b> Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Appearance     scalar     *Visual     NORM     NORML     NORML        Odor     scalar     *Visual     NORM     NORML     NORML        Boron     ppm     ASTM D5185m     <1     0        Barium     ppm     ASTM D5185m     <1     0        Magnese     ppm     ASTM D5185m     <1     0 <tr< th=""><th>Particles &gt;4µm</th><th></th><th>ASTM D7647</th><th>&gt;5000</th><th><b>A</b> 24207</th><th><b>A</b> 39102</th><th></th></tr<>	Particles >4µm		ASTM D7647	>5000	<b>A</b> 24207	<b>A</b> 39102	
Particles >21µm   ASTM D7647   >40   ▲ 202   ▲ 99      Particles >38µm   ASTM D7647   >10   3   5      Particles >71µm   ASTM D7647   >3   0   0      Oil Cleanliness   ISO 4406 (c)   >19/17/14   ▲ 22/20/17   ▲ 22/21/16      Silt   scalar   *Visual   NONE   NONE   NONE      Debris   scalar   *Visual   NONE   IGHT   LIGHT      Sand/Dirt   scalar   *Visual   NONE   NONE   NORE      Appearance   scalar   *Visual   NORML   NORML   NORML      Odor   scalar   *Visual   NORML   NORML   NORML      Boron   ppm   ASTM D5185m     0      Barium   ppm   ASTM D5185m    <1   0      Magnese   ppm   ASTM D5185m    <1   0      Magnesium   ppm   ASTM D5185m <th>Particles &gt;6µm</th> <th></th> <th>ASTM D7647</th> <th>&gt;1300</th> <th>🔺 6161</th> <th>🔺 10083</th> <th></th>	Particles >6µm		ASTM D7647	>1300	🔺 6161	🔺 10083	
Particles >38µm     ASTM D7647     >10     3     5        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     22/20/17     22/21/16        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     LIGHT     LIGHT        Sand/Dirt     scalar     *Visual     NONE     NONE     NONE        Appearance     scalar     *Visual     NORM     NORML     NORML        Odor     scalar     *Visual     NORM     NORML     NORML        Boron     scalar     *Visual     >0.1     NEG         Boron     ppm     ASTM D5185m      <1     0        Barium     ppm     ASTM D5185m      <1     0        Manganese     ppm     ASTM D5185m	Particles >14µm		ASTM D7647	>160	<b>A</b> 756	<b>4</b> 35	
Particles >71µmASTM D7647 >300Oil CleanlinessISO 4406 (c) >19/17/14▲ 22/20/17▲ 22/21/16Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONELIGHTLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m<10BoronppmASTM D5185m0<1MolybdenumppmASTM D5185m<110MagneseppmASTM D5185m<110MagnesiumppmASTM D5185m<417PhosphorusppmASTM D5185m417ZincppmASTM D5185m<84ZincppmASTM D5185m84SulfurppmASTM D5185m1410Acid Number (AN)mg KOHgASTM D5185m0.200.05	Particles >21µm		ASTM D7647	>40	<b>A</b> 202	<b>4</b> 99	
Oil CleanlinessISO 4406 (c)>19/17/14▲ 22/20/17▲ 22/21/16Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONELIGHTLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185mo<1oBoronppmASTM D5185m0<1MolybdenumppmASTM D5185mo0<MagneseppmASTM D5185m<10MagnesiumppmASTM D5185m417PhosphorusppmASTM D5185m417ZincppmASTM D5185m84SulfurppmASTM D5185m84Acid Number (AN)mg KOHgASTM D5185m1410	Particles >38µm		ASTM D7647	>10	3	5	
Siltscalar*VisualNONENONEDebrisscalar*VisualNONELIGHTLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185mBoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MagneseppmASTM D5185m0MagnesiumppmASTM D5185m<	Particles >71µm		ASTM D7647	>3	0	0	
Debrisscalar*VisualNONELIGHTLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185mo<1oBoronppmASTM D5185m0<1BariumppmASTM D5185mo0MolybdenumppmASTM D5185m<10MagneseppmASTM D5185m<10MagnesiumppmASTM D5185m<417PhosphorusppmASTM D5185m<417ZincppmASTM D5185m84SulfurppmASTM D5185m<140Acid Number (AN)mg KOHgASTM D50450.200.05	Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>A</b> 22/20/17	<b>22/21/16</b>	
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m<	Silt	scalar	*Visual	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m<	Debris	scalar	*Visual	NONE	LIGHT	LIGHT	
Odor     scalar     *Visual     NORML     NORML     NORML     NORML        Emulsified Water     scalar     *Visual     >0.1     NEG     NEG        Sodium     ppm     ASTM D5185m     <1     0        Boron     ppm     ASTM D5185m     0     <1        Barium     ppm     ASTM D5185m     0     0        Molybdenum     ppm     ASTM D5185m     0     0        Magnese     ppm     ASTM D5185m     <1     0        Magnesium     ppm     ASTM D5185m     <1     0        Phosphorus     ppm     ASTM D5185m     4     17        Phosphorus     ppm     ASTM D5185m     4     17        Zinc     ppm     ASTM D5185m     8     4        Sulfur     ppm     ASTM D5185m     0.20     0.05	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     0     <1        Barium     ppm     ASTM D5185m     0     0        Molybdenum     ppm     ASTM D5185m     0     0        Magnese     ppm     ASTM D5185m     <1     3        Magnesium     ppm     ASTM D5185m     <1     0        Phosphorus     ppm     ASTM D5185m     <1     0        Phosphorus     ppm     ASTM D5185m     <1     0        Phosphorus     ppm     ASTM D5185m     <1     17        Phosphorus     ppm     ASTM D5185m     <4     17        Zinc     ppm     ASTM D5185m     <8     <4        Sulfur     ppm     ASTM D5185m     <141     0	Appearance	scalar	*Visual	NORML	NORML	NORML	
Sodium     ppm     ASTM D5185m     <1	Odor	scalar	*Visual	NORML	NORML	NORML	
Boron     ppm     ASTM D5185m     0     <1	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Boron     ppm     ASTM D5185m     0     <1	••••					<u>_</u>	
Barium     ppm     ASTM D5185m     0     0        Molybdenum     ppm     ASTM D5185m     <1     3        Manganese     ppm     ASTM D5185m     <1     0        Magnesium     ppm     ASTM D5185m     <1     0        Magnesium     ppm     ASTM D5185m     0     8        Calcium     ppm     ASTM D5185m     4     17        Phosphorus     ppm     ASTM D5185m     495     667        Zinc     ppm     ASTM D5185m     8     4        Sulfur     ppm     ASTM D5185m     141     0        Acid Number (AN)     mg KOH/g     ASTM D8045     0.20     0.05							
Molybdenum     ppm     ASTM D5185m     <1							
Manganese     ppm     ASTM D5185m     <1							
Magnesium     ppm     ASTM D5185m     0     8        Calcium     ppm     ASTM D5185m     4     17        Phosphorus     ppm     ASTM D5185m     495     667        Zinc     ppm     ASTM D5185m     8     4        Sulfur     ppm     ASTM D5185m     141     0        Acid Number (AN)     mg KOH/g     ASTM D8045     0.20     0.05							
Calcium     ppm     ASTM D5185m     4     17        Phosphorus     ppm     ASTM D5185m     495     667        Zinc     ppm     ASTM D5185m     8     4        Sulfur     ppm     ASTM D5185m     141     0        Acid Number (AN)     mg KOH/g     ASTM D8045     0.20     0.05	-						
Phosphorus     ppm     ASTM D5185m     495     667        Zinc     ppm     ASTM D5185m     8     4        Sulfur     ppm     ASTM D5185m     141     0        Acid Number (AN)     mg KOH/g     ASTM D8045     0.20     0.05	0	ppm					
Zinc     ppm     ASTM D5185m     8     4        Sulfur     ppm     ASTM D5185m     141     0        Acid Number (AN)     mg KOH/g     ASTM D8045     0.20     0.05		ppm					
Sulfur     ppm     ASTM D5185m     141     0        Acid Number (AN)     mg KOH/g     ASTM D8045     0.20     0.05		ppm					
Acid Number (AN) mg KOH/g ASTM D8045 0.20 0.05							
					141		
Visc @ 40°C cSt ASTM D445 48.4	. ,						
	Visc @ 40°C	cSt	ASTM D445		46.8	48.4	





Submitted By: Ray Benson Page 2 of 2