

OIL ANALYSIS REPORT

Sample Rating Trend



Area Cranes 15050-HTC 50

Diesel Engine Fluid MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

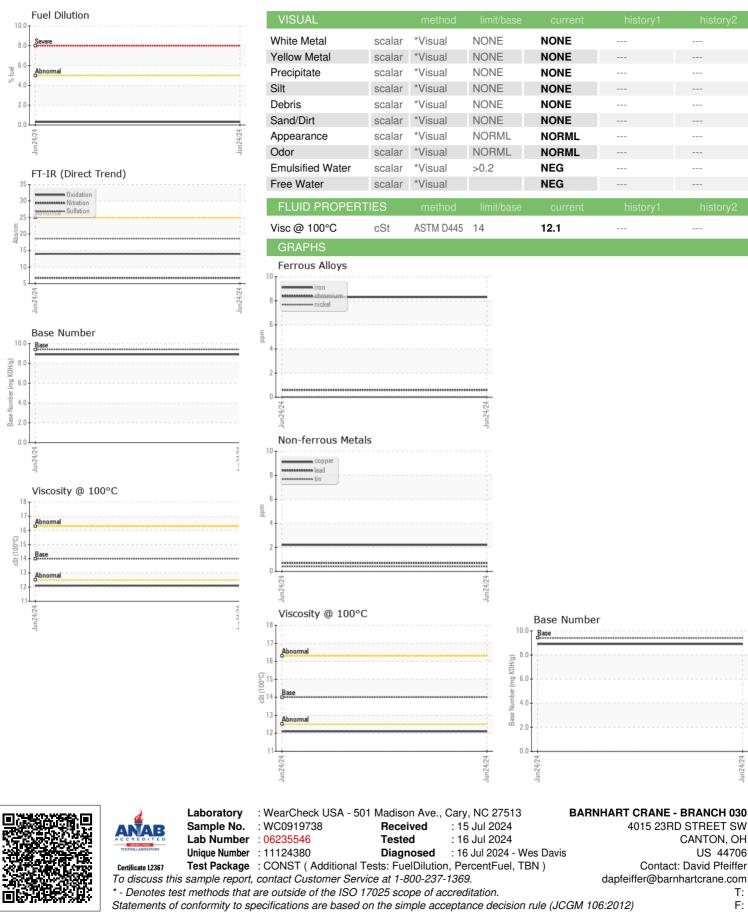
Fluid Condition

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

Sample Number Client Info 24 Jun 2024 Sample Date Client Info 7499 Oil Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info 0 ContrAMINATION Client Info NCRMAL CONTAMINATION WC Method >0.2 NEG GontrAMINATION WC Method >0.2 NEG Water WC Method >0.2 NEG Water WC Method >0.2 NEG Normium ppm ASTM D5185 >20 <1 Nickel ppm ASTM D5185 >33 <1 Aluminum ppm ASTM D5185 >330 21 Aluminum ppm ASTM D5185 >330	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 7499 Oil Age hrs Client Info 0 Oil Changed Client Info Changed Sample Status Imit/base current History1 History2 Water WC Method >0.2 NEG WATM METALS method Imit/base current History1 History2 Iron ppm ASTM D5185m >40 0 Silver ppm ASTM D5185m >41 Copper ppm ASTM D5185m >41 Cadmium ppm ASTM D5185m 0	Sample Number		Client Info		WC0919738		
Oil Age Inrs Client Info 0 Oil Changed Client Info Changed Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG Glycol WC Method >0.2 NEG Mater WC Method >0.2 NEG Glycol WC Method >0.2 NEG Kikel ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >3 <1 Aluminum ppm ASTM D5185m >3 <1 Aluminum ppm ASTM D5185m >3 <1 Lead ppm ASTM D5185m >30	Sample Date		Client Info		24 Jun 2024		
Oil Changed Sample Status Client Info Changed NORMAL CONTAMINATION method limit/base current History1 History2 Water WC Method >0.2 NEG Glycol WC Method >0.2 NEG WEAR METALS method limit/base current History1 History2 Iron ppm ASTM D5185m >100 8 Othornium ppm ASTM D5185m >40 0 Nickel ppm ASTM D5185m >40 -11 Auminum ppm ASTM D5185m >20 4 Auminum ppm ASTM D5185m >330 2 Auminum ppm ASTM D5185m >15 -1 Auminum ppm ASTM D5185m 0 -1 <t< th=""><th>Machine Age</th><th>hrs</th><th>Client Info</th><th></th><th>7499</th><th></th><th></th></t<>	Machine Age	hrs	Client Info		7499		
Sample Status Imit base current Inistory1 Inistory2 CONTAMINATION method limit/base current history1 inistory2 Water WC Method >0.2 NEG Glycol WC Method NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5165m >100 8 Nickel ppm ASTM D5165m >20 <1 Silver ppm ASTM D5165m >3 <1 Copper ppm ASTM D5165m >30 2 Cadmium ppm ASTM D5165m >30 2 Cadmium ppm ASTM D5165m 0 <1 Cadmium ppm ASTM D5165m 0 G0 <	Oil Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG Wear WC Method NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5165m >100 8 Nickel ppm ASTM D5165m >4 0 Silver ppm ASTM D5165m >3 <1 Aluminum ppm ASTM D5165m >20 4 Copper ppm ASTM D5165m >20 4 Aluminum ppm ASTM D5165m >20 4 Aluminum ppm ASTM D5165m >20 4 Aluminum ppm ASTM D5165m >15 <1 </th <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th>Changed</th> <th></th> <th></th>	Oil Changed		Client Info		Changed		
Water WC Method >0.2 NEG Glycol WC Method NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 8 Nickel ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >3 <1 Aluminum ppm ASTM D5185m >20 4 Copper ppm ASTM D5185m >30 2 Vanadium ppm ASTM D5185m >15 <1 Vanadium ppm ASTM D5185m 0 <1 ADDITIVES method imit/base current history1 history2 Boron ppm ASTM D5185m 0 60	Sample Status				NORMAL		
Glycol WC Method NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 8 Chromium ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >4 0 Aluminum ppm ASTM D5185m >4 0 Lead ppm ASTM D5185m >20 4 Copper ppm ASTM D5185m >20 4 Vanadium ppm ASTM D5185m >20 4 Cadmium ppm ASTM D5185m >20 4 Vanadium ppm ASTM D5185m 0 <1 Cadmium ppm ASTM D5185m 0 <1 <td< th=""><th>CONTAMINATION</th><th>٧</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td<>	CONTAMINATION	٧	method	limit/base	current	history1	history2
Glycol WC Method NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 8 Chromium ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >4 0 Aluminum ppm ASTM D5185m >4 0 Lead ppm ASTM D5185m >20 4 Copper ppm ASTM D5185m >20 4 Cadmium ppm ASTM D5185m >20 4 Cadmium ppm ASTM D5185m >40 <1 ADDITIVES method limit/base current history1 history2 Barium ppm ASTM D5185m 0 <1 <t< th=""><th>Water</th><th></th><th>WC Method</th><th>>0.2</th><th>NEG</th><th></th><th></th></t<>	Water		WC Method	>0.2	NEG		
Iron ppm ASTM D5185m >100 8 Chromium ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >4 0 Silver ppm ASTM D5185m >3 <1 Aluminum ppm ASTM D5185m >3 <1 Lead ppm ASTM D5185m >3 <1 Copper ppm ASTM D5185m >15 <1 Vanadium ppm ASTM D5185m >15 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 41 Malybdenum ppm ASTM D5185m 0 60 Magnanese ppm ASTM D5185m	Glycol						
Iron ppm ASTM D5185m >100 8 Chromium ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >4 0 Silver ppm ASTM D5185m >3 <1 Aluminum ppm ASTM D5185m >3 <1 Lead ppm ASTM D5185m >3 <1 Copper ppm ASTM D5185m >40 <1 Vanadium ppm ASTM D5185m >15 <1 Vanadium ppm ASTM D5185m 0 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 60 Magnasese ppm ASTM D5185m	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >20 <1		nnm	ASTM D5185m	>100	0		
Nickel ppm ASTM D5185m >4 0 Titanium ppm ASTM D5185m >3 <1	-				-		
Titanium ppm ASTM D5185m <1 Silver ppm ASTM D5185m >3 <1							
Silver ppm ASTM D5185m >3 <1 Aluminum ppm ASTM D5185m >20 4 Lead ppm ASTM D5185m >40 <1				~7	-		
Aluminum ppm ASTM D5185m >20 4 Lead ppm ASTM D5185m >40 <1				23			
Lead ppm ASTM D5185m >40 <1 Copper ppm ASTM D5185m >330 2 Tin ppm ASTM D5185m >15 <1							
Copper ppm ASTM D5185m >330 2 Tin ppm ASTM D5185m >15 <1					-		
Tin ppm ASTM D5185m >15 <1							
Vanadium ppm ASTM D5185m <1							
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 9 Barium ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 0 60 Maganese ppm ASTM D5185m 0 840 Magnesium ppm ASTM D5185m 0 840 Magnesium ppm ASTM D5185m 0 840 Calcium ppm ASTM D5185m 0 840 Sulfur ppm ASTM D5185m 1190 Sulfur ppm ASTM D5185m 2955 Sulfur ppm ASTM D5185m 20 2				>15			
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 9 Barium ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 0 60 Magnesium ppm ASTM D5185m 0 840 Calcium ppm ASTM D5185m 0 840 Calcium ppm ASTM D5185m 0 840 Calcium ppm ASTM D5185m 0 840 Zinc ppm ASTM D5185m 949 Sulfur ppm ASTM D5185m 2955 Solicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20							
Boron ppm ASTM D5185m 0 9 Barium ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 0 60 Manganese ppm ASTM D5185m 0 840 Magnesium ppm ASTM D5185m 0 840 Calcium ppm ASTM D5185m 0 840 Phosphorus ppm ASTM D5185m 1255 Sulfur ppm ASTM D5185m 949 Sulfur ppm ASTM D5185m 2955 Sulfur ppm ASTM D5185m >25 3 Sulfur ppm ASTM D5185m >20 2 Fuel % ASTM D5185m >20		ррпп			U		
Barium ppm ASTM D5185m 0 <1							
Molybdenum ppm ASTM D5185m 0 60 Manganese ppm ASTM D5185m 0 840 Magnesium ppm ASTM D5185m 0 840 Calcium ppm ASTM D5185m 0 840 Phosphorus ppm ASTM D5185m 0 840 Zinc ppm ASTM D5185m 949 Sulfur ppm ASTM D5185m 2955 Sulfur ppm ASTM D5185m 2955 Sulfur ppm ASTM D5185m >20 2 Sodium ppm ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Soot % % *ASTM D5185						history1	history2
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 840 Calcium ppm ASTM D5185m 0 840 Phosphorus ppm ASTM D5185m 949 Zinc ppm ASTM D5185m 949 Sulfur ppm ASTM D5185m 949 Sulfur ppm ASTM D5185m 2955 Sulfur ppm ASTM D5185m 2955 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Soot % % *ASTM D7844 >3 0.3 <th>Boron</th> <th></th> <th>ASTM D5185m</th> <th>0</th> <th></th> <th></th> <th></th>	Boron		ASTM D5185m	0			
Magnesium ppm ASTM D5185m 0 840 Calcium ppm ASTM D5185m 0 840 Phosphorus ppm ASTM D5185m 949 Zinc ppm ASTM D5185m 949 Sulfur ppm ASTM D5185m 2955 Sulfur ppm ASTM D5185m 2955 Sulfur ppm ASTM D5185m >25 3 Solicon ppm ASTM D5185m >20 2 Sodium ppm ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Fuel % ASTM D5185m >20 0.3	Boron Barium		ASTM D5185m ASTM D5185m	0	9 <1		
Calcium ppm ASTM D5185m 1255 Phosphorus ppm ASTM D5185m 949 Zinc ppm ASTM D5185m 949 Sulfur ppm ASTM D5185m 1190 Sulfur ppm ASTM D5185m 2955 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Soot % % *ASTM D7844 >3 0.3 Nitration	Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	9 <1 60		
Phosphorus ppm ASTM D5185m 949 Zinc ppm ASTM D5185m 1190 Sulfur ppm ASTM D5185m 2955 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Fuel % ASTM D5185m >20 2 Soot % % ASTM D7844 >3 0.3 Soot % % *ASTM D7624 >20 6.7	Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	9 <1 60 0		
Zinc ppm ASTM D5185m 1190 Sulfur ppm ASTM D5185m 2955 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Fuel % ASTM D5185m >20 3 Soot % % *ASTM D7844 >3 0.3 Soot % % *ASTM D7624 >20 6.7	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	9 <1 60 0 840		
SulfurppmASTM D5185m2955CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>253SodiumppmASTM D5185m0PotassiumppmASTM D5185m>202Fuel%ASTM D3524>50.3INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D7844>30.3NitrationAbs/cm*ASTM D7844>206.7SulfationAbs/.1mm*ASTM D7415>3018.6FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.1mm*ASTM D7414>2514.0	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	9 <1 60 0 840 1255		
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>253SodiumppmASTM D5185m0PotassiumppmASTM D5185m>202Fuel%ASTM D3524>50.3INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D7844>30.3NitrationAbs/cm*ASTM D7624>206.7SulfationAbs/.1mm*ASTM D7415>3018.6FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.1mm*ASTM D7414>2514.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	9 <1 60 0 840 1255 949	 	
Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 Fuel % ASTM D3524 >5 0.3 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.7 Sulfation Abs/.1mm *ASTM D7624 >20 6.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	9 <1 60 0 840 1255 949 1190	 	
Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 Fuel % ASTM D3524 >5 0.3 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.7 Sulfation Abs/.1mm *ASTM D7615 >30 18.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7614 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0	9 <1 60 0 840 1255 949 1190	 	
Potassium ppm ASTM D5185m >20 2 Fuel % ASTM D3524 >5 0.3 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.7 Sulfation Abs/rm *ASTM D7415 >30 18.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 Iimit/base	9 <1 60 0 840 1255 949 1190 2955 current		
Fuel % ASTM D3524 >5 0.3 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.7 Sulfation Abs/.1mm *ASTM D7415 >30 18.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 0 0 0 Iimit/base	9 <1 60 0 840 1255 949 1190 2955 current		
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.7 Sulfation Abs/.1mm *ASTM D7615 >30 18.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 0 0 Iimit/base	9 <1 60 0 840 1255 949 1190 2955 current 3	 history1 	 history2
Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.7 Sulfation Abs/.1mm *ASTM D7415 >30 18.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 <1 60 0 840 1255 949 1190 2955 <u>current</u> 3 0 2	 history1	 history2
Nitration Abs/cm *ASTM D7624 >20 6.7 Sulfation Abs/.1mm *ASTM D7415 >30 18.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 <1 60 0 840 1255 949 1190 2955 <u>current</u> 3 0 2	 history1	 history2
Sulfation Abs/.1mm *ASTM D7415 >30 18.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 0 <u>limit/base</u> >25 >20 >5	9 <1 60 0 840 1255 949 1190 2955 current 3 0 2 2 0.3	 history1 	 history2
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 <1 60 0 840 1255 949 1190 2955 current 3 0 2 0.3 current	 history1 history1	 history2 history2 history2
Oxidation Abs/.1mm *ASTM D7414 >25 14.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 <1 60 0 840 1255 949 1190 2955 current 3 0 2 0.3 current 0.3	 history1 history1 	 history2 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 method *ASTM D7844	0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 <1 60 0 840 1255 949 1190 2955 current 3 0 2 0.3 current 0.3 6.7	 history1 history1	 history2 history2
Base Number (BN) mg KOH/g ASTM D2896 9.4 8.9	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 <1 60 0 840 1255 949 1190 2955 <i>current</i> 3 0 2 0.3 <i>current</i> 0.3 6.7 18.6	 history1 history1 history1	 history2 history2 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Solicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 <1 60 0 840 1255 949 1190 2955 Current 3 0 2 0.3 Current 0.3 6.7 18.6	 history1 history1 history1	 history2 history2 history2 history2



OIL ANALYSIS REPORT



Report Id: BCBR030 [WUSCAR] 06235546 (Generated: 07/16/2024 09:57:56) Rev: 1

Submitted By: Neil Heisroth Page 2 of 2

US 44706

T:

F: