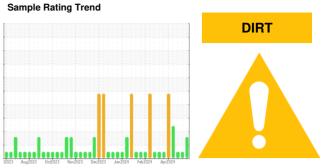


OIL ANALYSIS REPORT





DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Top Up Amount: 30 GAL)

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal.

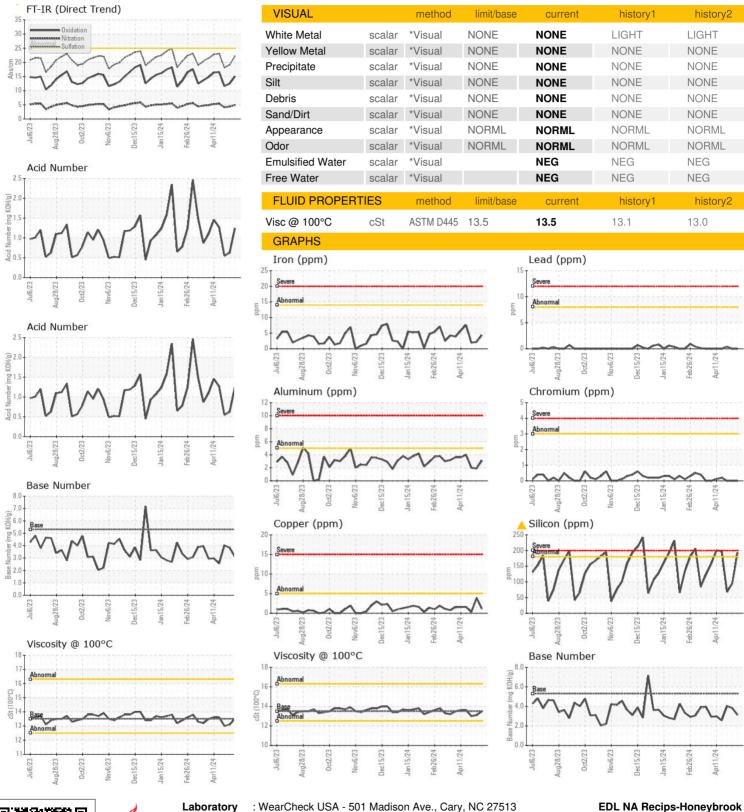
Fluid Condition

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

SAMPLE INFORMATION method limit/base current Sample Number Client Info WC0775172 Sample Date Client Info 10 May 2024 Machine Age hrs Client Info 106573 Oil Age hrs Client Info 500 Oil Added ABNORMAL ABNORMAL CONTAMINATION method limit/base current Fuel WC Method >4.0 <1.0 Water WC Method NEG Glycol WC Method NEG WEAR METALS method limit/base current Iron ppm ASTM D5185m >14 4 Chromium ppm ASTM D5185m >3 0 Nickel ppm ASTM D5185m 0 0 Silver ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >5 1 Tin <th>history1 WC0775164 29 Apr 2024 106324 251 Oil Added NORMAL history1 <1.0 NEG NEG history1 2 0 0 0 0 0 2</th> <th>history2 WC0775179 25 Apr 2024 106228 155 Oil Added NORMAL history2 <1.0 NEG NEG history2 2 0 0 0</th>	history1 WC0775164 29 Apr 2024 106324 251 Oil Added NORMAL history1 <1.0 NEG NEG history1 2 0 0 0 0 0 2	history2 WC0775179 25 Apr 2024 106228 155 Oil Added NORMAL history2 <1.0 NEG NEG history2 2 0 0 0
Sample Date Client Info 10 May 2024 Machine Age hrs Client Info 106573 Oil Age hrs Client Info 500 Oil Changed Client Info Oil Added ABNORMAL CONTAMINATION method limit/base current Fuel WC Method NEG Water WC Method NEG Glycol WC Method NEG WEAR METALS method limit/base current Iron ppm ASTM D5185m >14 4 Chromium ppm ASTM D5185m >3 0 Nickel ppm ASTM D5185m 0 0 Chromium ppm ASTM D5185m 0 0 Silver ppm ASTM D5185m 0 0 Chromium ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m 5 1 <t< th=""><th>29 Apr 2024 106324 251 Oil Added NORMAL history1 <1.0 NEG NEG history1 2 0 0 0</th><th>25 Apr 2024 106228 155 Oil Added NORMAL history2 <1.0 NEG NEG history2 2 0 0</th></t<>	29 Apr 2024 106324 251 Oil Added NORMAL history1 <1.0 NEG NEG history1 2 0 0 0	25 Apr 2024 106228 155 Oil Added NORMAL history2 <1.0 NEG NEG history2 2 0 0
Machine Age hrs Client Info 106573 Oil Age hrs Client Info 500 Oil Changed Client Info Oil Added Sample Status Mathod ABNORMAL CONTAMINATION method limit/base current Fuel WC Method NEG Water WC Method NEG Glycol WC Method NEG WEAR METALS method limit/base current Iron ppm ASTM D5185m >14 4 Chromium ppm ASTM D5185m >3 0 Nickel ppm ASTM D5185m 0 0 Silver ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >5 1 Copper ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m 3 2 Vanadium	106324 251 Oil Added NORMAL history1 <1.0 NEG NEG 0 0 0 0	106228 155 Oil Added NORMAL history2 <1.0 NEG NEG history2 2 0 0 0
Oil Age hrs Client Info 500 Oil Changed Client Info Oil Added Sample Status ABNORMAL CONTAMINATION method limit/base current Fuel WC Method >4.0 <1.0	251 Oil Added NORMAL history1 <1.0 NEG NEG 0 0 0 0	oil Added NORMAL history2 <1.0 NEG NEG history2 2 0 0 0
Oil Changed Sample Status Client Info Oil Added ABNORMAL CONTAMINATION method limit/base current Fuel WC Method >4.0 <1.0	Oil Added NORMAL history1 <1.0 NEG NEG history1 2 0 0 0 0	Oil Added NORMAL history2 <1.0 NEG NEG history2 2 0 0 0
CONTAMINATION method limit/base current	NORMAL history1 <1.0 NEG NEG history1 2 0 0 0 0	NORMAL history2 <1.0 NEG NEG history2 2 0 0 0
CONTAMINATION method limit/base current Fuel WC Method >4.0 <1.0	history1 <1.0 NEG NEG history1 2 0 0 0 0	history2 <1.0 NEG NEG history2 2 0 0 0
Water	<1.0 NEG NEG history1 2 0 0 0	<1.0 NEG NEG history2 2 0 0 0
Water WC Method NEG Glycol WC Method NEG WEAR METALS method limit/base current Iron ppm ASTM D5185m >14 4 Chromium ppm ASTM D5185m >3 0 Nickel ppm ASTM D5185m 0 0 Silver ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM	NEG NEG history1 2 0 0 0 0	NEG NEG history2 2 0 0
Glycol WC Method NEG WEAR METALS method limit/base current dron ppm ASTM D5185m >14 4 Chromium ppm ASTM D5185m 3 0 Nickel ppm ASTM D5185m 0 0 Titanium ppm ASTM D5185m 0 0 Silver ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >8 0 Copper ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 0 <td>NEG history1 2 0 0 0 0</td> <td>NEG history2 2 0 0 0</td>	NEG history1 2 0 0 0 0	NEG history2 2 0 0 0
WEAR METALS method limit/base current dron ppm ASTM D5185m >14 4 Chromium ppm ASTM D5185m >3 0 Nickel ppm ASTM D5185m 0 0 Titanium ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >5 1 Lead ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 0 ADDITIVES method limit/base current 0 Barium ppm ASTM D5185m	history1 2 0 0 0 0	history2 2 0 0 0
Pron	2 0 0 0	2 0 0 0
Chromium ppm ASTM D5185m >3 0 Nickel ppm ASTM D5185m 0 Fitanium ppm ASTM D5185m 0 Soliver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >5 1 Lead ppm ASTM D5185m >5 1 Fin ppm ASTM D5185m >5 1 Fin ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 0 ADDITIVES method limit/base current 0 Boron ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 </td <td>0 0 0</td> <td>0 0 0</td>	0 0 0	0 0 0
Nickel	0 0 0	0
Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >8 0 Copper ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 5 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 20 0 Calcium ppm ASTM D5185m 370 371 Zinc ppm ASTM D5185m 3741	0	0
Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >8 0 Copper ppm ASTM D5185m >5 1 Fin ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 5 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 20 0 Calcium ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 3741 CONTAMINANTS method limit/base curre	0	
Aluminum ppm ASTM D5185m >5 3 Lead ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 1821 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0		0
Lead ppm ASTM D5185m >8 0 Copper ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 5 0 Magnesium ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 20 0 Calcium ppm ASTM D5185m 300 371 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m	2	0
Copper ppm ASTM D5185m >5 1 Tin ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 300 371 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2		2
Tin ppm ASTM D5185m >3 2 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 300 371 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2	0	<1
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 462 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	4	<1
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 462 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2	2	<1
ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 300 371 Phosphorus ppm ASTM D5185m 362 3741 Zinc ppm ASTM D5185m 3741 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	0	0
Soron ppm ASTM D5185m 0	0	0
Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 1821 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 462 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	history1	history2
Molybdenum ppm ASTM D5185m 5 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 1821 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 462 Sulfur ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	5	4
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 1821 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 462 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	<1	0
Magnesium ppm ASTM D5185m 20 Calcium ppm ASTM D5185m 1821 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 462 Sulfur ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	5	5
Calcium ppm ASTM D5185m 1821 Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 462 Sulfur ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	1	0
Phosphorus ppm ASTM D5185m 300 371 Zinc ppm ASTM D5185m 462 Sulfur ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 ▲ 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	19	18
Zinc ppm ASTM D5185m 462 Sulfur ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 ▲ 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	1592	1533
Sulfur ppm ASTM D5185m 3741 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 ▲ 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	350	341
CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >180 ▲ 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	414	414
Silicon ppm ASTM D5185m >180 ▲ 193 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	3341	3373
Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 0	history1	history2
Potassium ppm ASTM D5185m >20 0	95	68
	1	1
	0	0
INFRA-RED method limit/base current		history2
Soot %	history1	0
Nitration Abs/cm *ASTM D7624 4.9	history1	4.1
Sulfation Abs/.1mm *ASTM D7415 22.2		18.1
FLUID DEGRADATION method limit/base current	0.1	10.1
Oxidation Abs/.1mm *ASTM D7414 15.0	0.1 4.4	history2
Acid Number (AN) mg KOH/g ASTM D8045 1.24	0.1 4.4 19.1	
Base Number (BN) mg KOH/g ASTM D2896 5.3 3.12	0.1 4.4 19.1 history1	history2



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: WC0775172 Lab Number : 06178992 Unique Number : 11030318 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 14 May 2024

Tested : 15 May 2024 Diagnosed : 16 May 2024 - Don Baldridge

Honey Brook Powerstation, 481 S. Churchtown Road Narvon, PA US 17555-9574

> Contact: Christian Adames Christian.Adames@edlenergy.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

 st - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: EDLNAR [WUSCAR] 06178992 (Generated: 05/16/2024 17:49:31) Rev: 1

Submitted By: Samantha Gauger

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