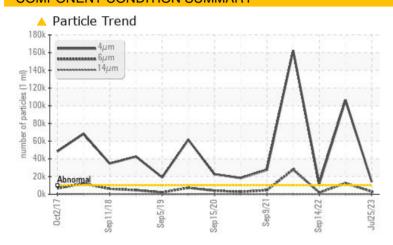


ISO

COMPONENT CONDITION SUMMARY

IRVING STAR C 4G ISO 68 (110 GAL)



RECOMMENDATION

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

| PROBLEMATIC TEST RESULTS | | | | | | | | | |
|--------------------------|--------------|-----------|---------------|------------|-----------------|--|--|--|--|
| Sample Status | | | ATTENTION | ABNORMAL | ATTENTION | | | | |
| Particles >4µm | ASTM D7647 | >10000 | <u> </u> | 106320 | 🔺 11882 | | | | |
| Particles >6µm | ASTM D7647 | >2500 | A 3086 | 12476 | 1935 | | | | |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | <u> </u> | ▲ 24/21/14 | 1 /18/13 | | | | |

Customer Id: MCCEASPCA Sample No.: PCA0079288 Lab Number: 05919338 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

09 Feb 2023 Diag: Don Baldridge



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



14 Sep 2022 Diag: Don Baldridge

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





01 Mar 2022 Diag: Don Baldridge

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend

ا **و و و چ** چ چ چ و و د

ISO

Area **PLANT** 1 [906948196] Machine Id **RC-9 PLANT** 1 (S/N 3251611) Component

Refrigeration Compressor

IRVING STAR C 4G ISO 68 (110 GAL)

DIAGNOSIS

A 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

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.

| Sample Date Client Info 25 Jul 2023 09 Feb 2023 14 Sep 2022 Machine Age hrs Client Info 41609 37874 34878 Oil Age hrs Client Info 0 0 0 0 Oil Changed Client Info Not Changd Not Changd Not Changd ATTENTION ABNORMAL ATTENTION WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM 05185m >8 5 9 6 Ohromium ppm ASTM 05185m >2 0 0 0 Nickel ppm ASTM 05185m >2 <1 0 0 Aluminum ppm ASTM 05185m >2 <1 <1 0 Copper ppm ASTM 05185m >2 <1 <1 0 Vanadium ppm ASTM 05185m 0 0 0 0 Cadmium ppm ASTM 05185m 0 | SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|---|------------------|---------------|--------------|------------|-------------------|-----------------|-------------------|
| Machine Age hrs Client Info 41609 37874 34878 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info Not Changd Not Changd Not Changd ATTENTION Sample Status Imutbase current history1 history2 Iron ppm ASTM 05185m >8 5 9 6 Chromium ppm ASTM 05185m >2 0 0 0 Tataium ppm ASTM 05185m >2 <1 0 0 Silver ppm ASTM 05185m >2 <1 1 0 Cadmium ppm ASTM 05185m >2 <1 1 0 Cadmium ppm ASTM 05185m 2 <1 0 0 0 AstM 05185m 0 0 0 0 0 0 0 Cadmium ppm ASTM 05185m 0 0 0 0 <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>PCA0079288</th> <th>PCA0071488</th> <th>PCA0056209</th> | Sample Number | | Client Info | | PCA0079288 | PCA0071488 | PCA0056209 |
| Machine Age hrs Client Info 41609 37874 34878 Oil Age hrs Client Info Not Changd Not Changd Not Changd Sample Status I Not Changd ARTENTION ARTENTION ARTENTION WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM 05185m >8 5 9 6 Chromium ppm ASTM 05185m >2 0 0 0 Nickel ppm ASTM 05185m >2 <1 0 0 Silver ppm ASTM 05185m >2 <1 0 0 Cadmium ppm ASTM 05185m >2 <1 0 0 Cadmium ppm ASTM 05185m >4 <1 0 0 Cadmium ppm ASTM 05185m 0 0 0 0 Manganese ppm ASTM 05185m 0 0 0 | | | Client Info | | 25 Jul 2023 | 09 Feb 2023 | 14 Sep 2022 |
| Oil Age Inrs Client Info Not Changd ATTENTION Method Imitibase current Inistory1 Inistory2 Iron ppm ASTM D5185m >2 0 0 0 0 Nickel ppm ASTM D5185m >2 1 0 0 0 Aluminum ppm ASTM D5185m >2 1 0 0 0 Auminum ppm ASTM D5185m >2 1 0 0 0 Copper ppm ASTM D5185m >2 1 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 0 0 <td< th=""><th></th><th>hrs</th><th>Client Info</th><th></th><th>41609</th><th>37874</th><th></th></td<> | | hrs | Client Info | | 41609 | 37874 | |
| Oil Changed Sample Status Client Info Not Changd ATTENTION Not Changd ABNORMAL Not Changd ATTENTION WEAR METALS method limit/base current history1 ATTENTION WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185n >8 5 9 6 Chromium ppm ASTM D5185n >2 0 0 0 Nickel ppm ASTM D5185n >2 1 0 0 Aluminum ppm ASTM D5185n >2 1 1 0 Cadmium ppm ASTM D5185n >2 1 0 0 Cadmium ppm ASTM D5185n >4 1 0 0 Cadmium ppm ASTM D5185n 0 0 0 0 Cadmium ppm ASTM D5185n 0 0 0 0 Baron ppm ASTM D5185n 0 0 | U | hrs | Client Info | | 0 | 0 | 0 |
| Sample Status ATTENTION ABNORMAL ATTENTION WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >3 0 <1 <1 Lead ppm ASTM D5185m >3 0 0 0 Copper ppm ASTM D5185m >3 0 0 0 Cadmium ppm ASTM D5185m >4 <1 0 0 ADDTTVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 0 Barin | - | | Client Info | | Not Changd | Not Changd | Not Changd |
| Iron ppm ASTM D5185m >8 5 9 6 Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >2 -1 0 0 Aluminum ppm ASTM D5185m >2 -1 0 0 Aluminum ppm ASTM D5185m >3 0 -1 -1 Lead ppm ASTM D5185m >8 0 0 0 0 Copper ppm ASTM D5185m >8 0 0 0 0 Additium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Magaese ppm ASTM D5185m 0 0 0 0 Magaese ppm ASTM D5185m 0 0 < | - | | | | - | | |
| Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >2 <1 0 0 Aluminum ppm ASTM D5185m >2 <1 0 0 Lead ppm ASTM D5185m >2 <1 <1 <1 Lead ppm ASTM D5185m >2 <1 <1 0 0 Vanadium ppm ASTM D5185m >4 <1 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 0 Coloum ppm ASTM D5185m 0 0 | WEAR METALS | S | method | limit/base | current | history1 | history2 |
| Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >2 <1 0 0 0 Aluminum ppm ASTM D5185m >2 <1 0 0 Lead ppm ASTM D5185m >2 <1 <1 <1 Lead ppm ASTM D5185m >2 <1 <1 0 0 Vanadium ppm ASTM D5185m >4 <1 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 0 Addmium ppm ASTM D5185m 0 | Iron | ppm | ASTM D5185m | >8 | 5 | 9 | 6 |
| Nickel ppm ASTM D5185m 0 0 0 Titanium ppm ASTM D5185m >2 <1 0 0 Silver ppm ASTM D5185m >2 <1 0 0 Aluminum ppm ASTM D5185m >2 <1 <1 0 Lead ppm ASTM D5185m >2 <1 <1 0 Copper ppm ASTM D5185m >8 0 0 0 Vanadium ppm ASTM D5185m >4 <1 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 | Chromium | | ASTM D5185m | >2 | | 0 | 0 |
| Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m >2 <1 0 0 Aluminum ppm ASTM D5185m >2 <1 0 0 Lead ppm ASTM D5185m >2 <1 0 0 Copper ppm ASTM D5185m >2 <1 0 0 Tin ppm ASTM D5185m >2 <1 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Maganese ppm ASTM D5185m 0 0 0 0 Maganese ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 0 | | | | | | | |
| Silver ppm ASTM D5185m >2 <1 | | | | | | | |
| Aluminum ppm ASTM D5185m >3 0 <1 | | | | >2 | - | | |
| Lead ppm ASTM D5185m >2 <1 | | | | | | | |
| Copper ppm ASTM D5185m >8 0 0 0 Tin ppm ASTM D5185m >4 <1 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Maganese ppm ASTM D5185m 0 0 0 0 Maganese ppm ASTM D5185m 0 0 0 0 Phosphorus ppm ASTM D5185m 0 3 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 | | | | | | | |
| Tin ppm ASTM D5185m >4 <1 | | | | | | | |
| Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Marganese ppm ASTM D5185m 0 0 0 0 Calcium ppm ASTM D5185m 0 0 0 0 Calcium ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 2 <1 2 <1 Sodium | •• | | | | | | |
| Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 0 0 0 0 Calcium ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m >15<<<1 | | | | ~7 | | | |
| ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Magnese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 5 <1 2 <1 Sodium ppm ASTM D5185m >15 <1 2 <1 Sodium ppm ASTM D5185m >0 0 0 0 Potassium ppm ASTM D6304 >0.01 0.003 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<> | | | | | | | |
| Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 0 0 Zinc ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15<<<1 2 <1 Sodium ppm ASTM D5185m >20 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 0.002 ppm Water % ASTM D6304 >0.01 | ADDITIVES | | method | limit/base | current | history1 | history2 |
| Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Marganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 0 0 Zinc ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15<<<1 2 <1 Sodium ppm ASTM D5185m >20 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 0.002 ppm Water % ASTM D6304 >0.01 | Boron | nnm | ASTM D5185m | | 0 | | |
| Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m 20 <1 0 0 0 Water % ASTM D6304 >0.01 0.003 0.004 0.002 1 particles >4µm ASTM D7647 <td< th=""><th></th><td></td><td></td><td></td><th></th><td></td><td></td></td<> | | | | | | | |
| Marganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 3 0 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15<<<1 2 <1 Sodium ppm ASTM D5185m >0 0 0 0 Potassium ppm ASTM D5185m >20 <1 0 0 0 Water % ASTM D6304 >0.01 0.003 0.004 0.002 1 11882 Particles >4µm AS | | | | | | | |
| Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 3 0 Phosphorus ppm ASTM D5185m 0 3 0 Zinc ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 | • | | | | | | |
| Calcium ppm ASTM D5185m 0 0 0 0 Phosphorus ppm ASTM D5185m 0 3 0 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 2 <1 Sodium ppm ASTM D5185m >20 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D504 >0.01 0.003 0.004 0.002 ppm ASTM D7647 >10000 ▲ 14070 ▲ 106320 ▲ 11882 Particles >4µm ASTM D7647 >2500 ▲ 3086 ▲ 12476 1935 Particles >6µm ASTM D7647 >2500 ▲ 3086 ▲ 12476 1935 P | 0 | | | | | | |
| Phosphorus ppm ASTM D5185m 0 3 0 Zinc ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 | - | | | | | | |
| Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 2 <1 Sodium ppm ASTM D5185m >15 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 0 Vater % ASTM D6304 >0.01 0.003 0.004 0.002 ppm Water ppm ASTM D6304 >100 34.7 44.6 21.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 14070 106320 11882 Particles >6µm ASTM D7647 >2500 3086 12476 1935 Particles >21µm ASTM D7647 >20 0 0 0 | | | | | | | |
| Sulfur ppm ASTM D5185m 606 508 544 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 2 <1 Sodium ppm ASTM D5185m >15 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D6304 >0.01 0.003 0.004 0.002 ppm Water ppm ASTM D6304 >100 34.7 44.6 21.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 14070 106320 11882 Particles >6µm ASTM D7647 >2500 3086 12476 1935 Particles >1µm ASTM D7647 >20 68 90 41 Particles >38µm ASTM D7647 >20 0 0 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<> | | | | | | | |
| CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 2 <1 Sodium ppm ASTM D5185m >15 <1 2 <1 Sodium ppm ASTM D5185m >0 0 0 0 Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D5034 >0.01 0.003 0.004 0.002 ppm Water ppm ASTM D6304 >100 34.7 44.6 21.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 14070 106320 11882 Particles >6µm ASTM D7647 >2500 3086 12476 1935 Particles >14µm ASTM D7647 >20 0 0 0 Particles >38µm ASTM D7647 >20 0 0 <th>-</th> <th></th> <th></th> <th></th> <th>-</th> <th>÷</th> <th>0</th> | - | | | | - | ÷ | 0 |
| Silicon ppm ASTM D5185m >15 <1 | | | ASTM D5185m | | 606 | | 544 |
| Sodium ppm ASTM D5185m 0 0 0 Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D6304 >0.01 0.003 0.004 0.002 ppm Water ppm ASTM D6304 >100 34.7 44.6 21.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 ▲ 14070 ▲ 106320 ▲ 11882 Particles >6µm ASTM D7647 >2500 ▲ 3086 ▲ 12476 1935 Particles >6µm ASTM D7647 >320 68 90 41 Particles >14µm ASTM D7647 >80 7 11 4 Particles >38µm ASTM D7647 >20 0 0 0 Particles >71µm ASTM D7647 >4 0 0 0 21/18/13 FLUID DEGRADATION method limit/base current history1 <td< th=""><th></th><th>TS</th><th></th><th></th><th></th><th></th><th></th></td<> | | TS | | | | | |
| Potassium ppm ASTM D5185m >20 <1 | | ppm | | >15 | | | |
| Water % ASTM D6304 >0.01 0.003 0.004 0.002 ppm Water ppm ASTM D6304 >100 34.7 44.6 21.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 14070 106320 11882 Particles >6µm ASTM D7647 >2500 3086 12476 1935 Particles >14µm ASTM D7647 >320 68 90 41 Particles >21µm ASTM D7647 >80 7 11 4 Particles >38µm ASTM D7647 >20 0 0 0 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 21/19/13 24/21/14 21/18/13 FLUID DEGRADATION method limit/base current history1 history2 | Sodium | ppm | ASTM D5185m | | - | | 0 |
| ppm Water ppm ASTM D6304 >100 34.7 44.6 21.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 14070 106320 11882 Particles >6µm ASTM D7647 >2500 3086 12476 1935 Particles >14µm ASTM D7647 >320 68 90 41 Particles >21µm ASTM D7647 >80 7 11 4 Particles >38µm ASTM D7647 >20 0 0 0 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 21/19/13 24/21/14 21/18/13 FLUID DEGRADATION method limit/base current history1 history2 | | | ASTM D5185m | >20 | | | |
| FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 ▲ 14070 ▲ 106320 ▲ 11882 Particles >6µm ASTM D7647 >2500 ▲ 3086 ▲ 12476 1935 Particles >6µm ASTM D7647 >320 68 90 41 Particles >14µm ASTM D7647 >80 7 11 4 Particles >21µm ASTM D7647 >20 0 0 0 Particles >38µm ASTM D7647 >20 0 0 0 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 21/19/13 24/21/14 21/18/13 | Water | % | ASTM D6304 | >0.01 | | 0.004 | |
| Particles >4μm ASTM D7647 >10000 14070 106320 11882 Particles >6μm ASTM D7647 >2500 3086 12476 1935 Particles >14μm ASTM D7647 >320 68 90 41 Particles >21μm ASTM D7647 >80 7 11 4 Particles >38μm ASTM D7647 >20 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 21/19/13 24/21/14 21/18/13 | ppm Water | ppm | ASTM D6304 | >100 | 34.7 | 44.6 | 21.5 |
| Particles >6μm ASTM D7647 >2500 ▲ 3086 ▲ 12476 1935 Particles >14μm ASTM D7647 >320 68 90 41 Particles >21μm ASTM D7647 >80 7 11 4 Particles >38μm ASTM D7647 >20 0 0 0 Particles >38μm ASTM D7647 >20 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 21/19/13 ≥24/21/14 ≥1/18/13 | FLUID CLEANL | INESS | | limit/base | current | history1 | history2 |
| Particles >14µm ASTM D7647 >320 68 90 41 Particles >21µm ASTM D7647 >80 7 11 4 Particles >38µm ASTM D7647 >20 0 0 0 Particles >38µm ASTM D7647 >20 0 0 0 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 21/19/13 24/21/14 21/18/13 FLUID DEGRADATION method limit/base current history1 history2 | Particles >4µm | | ASTM D7647 | >10000 | | | ▲ 11882 |
| Particles >21μm ASTM D7647 >80 7 11 4 Particles >38μm ASTM D7647 >20 0 0 0 Particles >38μm ASTM D7647 >20 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 21/19/13 24/21/14 21/18/13 FLUID DEGRADATION method limit/base current history1 history2 | Particles >6µm | | ASTM D7647 | >2500 | <u> </u> | 12476 | 1935 |
| Particles >38μm ASTM D7647 >20 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 ▲ 21/19/13 ▲ 24/21/14 ▲ 21/18/13 FLUID DEGRADATION method limit/base current history1 history2 | Particles >14µm | | ASTM D7647 | >320 | 68 | 90 | 41 |
| Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 21/19/13 4 24/21/14 4 21/18/13 FLUID DEGRADATION method limit/base current history1 history2 | Particles >21µm | | ASTM D7647 | >80 | 7 | 11 | 4 |
| Oil Cleanliness ISO 4406 (c) >20/18/15 	 21/19/13 24/21/14 21/18/13 FLUID DEGRADATION method limit/base current history1 history2 | Particles >38µm | | ASTM D7647 | >20 | 0 | 0 | 0 |
| FLUID DEGRADATION method limit/base current history1 history2 | Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| | | | ISO 4406 (c) | >20/18/15 | 1 21/19/13 | 4 /21/14 | 1 21/18/13 |
| | FLUID DEGRAD | ATION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) mg KOH/g ASTM D974 0.01 0.014 0.015 0.043 | Acid Number (AN) | mg KOH/g | ASTM D974 | 0.01 | 0.014 | 0.015 | 0.043 |



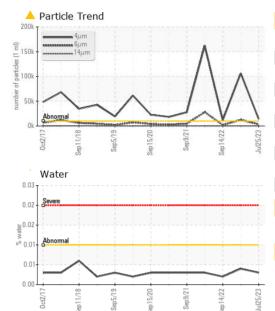
-Lua

Acid Number

0.05

(B/H0)

OIL ANALYSIS REPORT



VISUAL method limit/base history1 history2 current NONE NONE White Metal *Visual NONE NONE scalar Yellow Metal NONE NONE NONE NONE scalar *Visual Precipitate *Visual NONE NONE NONE NONE scalar Silt scalar *Visual NONE NONE NONE NONE Debris *Visual NONE NONE NONE LIGHT scalar NONE Sand/Dirt *Visual NONE NONE NONE scalar NORML Appearance NORML NORML NORML scalar *Visua NORML NORML Odor scalar *Visual NORML NORML *Visual Emulsified Water scalar >0.01 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG **FLUID PROPERTIES** method limit/base current history history2 Visc @ 40°C cSt ASTM D445 62.0 98.4 99.9 101 limit/base SAMPLE IMAGES method history1 history2 current Color

Bottom



