

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

INDIANA CROSSROADS II [200008339] T01 (S/N W-124650)

Hydraulic System

HYDRAULIC OIL FG ISO 32 (--- LTR)

DIAGNOSIS Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

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

| | | <u>, </u> | | Mar2024 | , | |
|--|---|--|--|---|------------------------------|--------------------------|
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | NX06151093 | | |
| Sample Date | | Client Info | | 15 Mar 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184 | | 20 | | |
| Iron | ppm | ASTM D5185m | >20 | 0 | | |
| Chromium | ppm | ASTM D5185m | >20 | <1 | | |
| Nickel | ppm | ASTM D5185m | >20 | <1 | | |
| Titanium | ppm | ASTM D5185m | | 0 | | |
| Silver | ppm | ASTM D5185m | | 0 | | |
| Aluminum | ppm | ASTM D5185m | >20 | <1 | | |
| Lead | ppm | ASTM D5185m | >20 | <1 | | |
| Copper | ppm | ASTM D5185m | >20 | 2 | | |
| Tin | ppm | ASTM D5185m | >20 | <1 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| ADDITIVES Boron | ppm | method ASTM D5185m | limit/base | current 0 | history1 | history2 |
| | ppm | | | | | |
| Boron | | ASTM D5185m | 5 | 0 | | |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | 5 5 | 0 | | |
| Boron Barium Molybdenum | ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 5 5 | 0 0 0 | | |
| Boron Barium Molybdenum Manganese | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 5 5 5 | 0 0 0 1 | | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 5 5 5 | 0 0 0 1 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 5 5 5 12 | 0 0 0 1 1 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 5 5 5 12 400 | 0 0 0 1 1 4 606 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 5 5 5 12 400 12 | 0 0 0 1 1 4 606 22 | | |
| 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 ASTM D5185m ASTM D5185m | 5 5 5 12 400 12 650 | 0 0 0 1 1 4 606 22 769 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m | 5 5 5 12 400 12 650 | 0 0 0 1 1 4 606 22 769 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m | 5 5 5 12 400 12 650 | 0 0 0 1 1 4 606 22 769 current | history1 | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m | 5 5 5 12 400 12 650 limit/base >15 | 0 0 0 1 1 4 606 22 769 current | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium | ppm | ASTM D5185m | 5 5 5 12 400 12 650 limit/base >15 | 0 0 0 1 1 4 606 22 769 current <1 2 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Water | ppm | ASTM D5185m | 5 5 5 12 400 12 650 limit/base >15 >20 >0.05 | 0 0 0 1 1 4 606 22 769 current <1 2 2 | history1 | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Water ppm Water | ppm | ASTM D5185m ASTM D6304 | 5 5 5 12 400 12 650 limit/base >15 >20 >0.05 >500 | 0 0 0 1 1 4 606 22 769 current <1 2 2 0.006 61 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Water ppm Water FLUID CLEANLI | ppm | ASTM D5185m ASTM D6304 ASTM D6304 | 5 5 5 12 400 12 650 limit/base >15 >20 >0.05 >500 limit/base | 0 0 0 1 1 4 606 22 769 current <1 2 2 0.006 61 | history1 history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Water ppm Water FLUID CLEANLI Particles >4µm | ppm | ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 | 5 5 5 12 400 12 650 limit/base >15 >20 >0.05 >500 limit/base >5000 | 0 0 0 1 1 4 606 22 769 current <1 2 2 0.006 61 current | history1 history1 history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Water ppm Water FLUID CLEANLI Particles >4µm Particles >6µm | ppm | ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 | 5 5 5 12 400 12 650 limit/base >15 >20 >0.05 >500 limit/base >5000 >1300 >160 | 0 0 0 1 1 4 606 22 769 current <1 2 2 0.006 61 current | history1 history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium Water ppm Water FLUID CLEANLI Particles >4µm Particles >14µm | ppm | ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 | 5 5 5 12 400 12 650 limit/base >15 >20 >0.05 >500 limit/base >5000 >1300 >160 | 0 0 0 1 1 4 606 22 769 current <1 2 2 0.006 61 current | history1 history1 | history2 history2 |

Acid Number (AN)

FLUID DEGRADATION

Particles >71µm

Oil Cleanliness

mg KOH/g ASTM D8045 0.50

ASTM D7647 >3

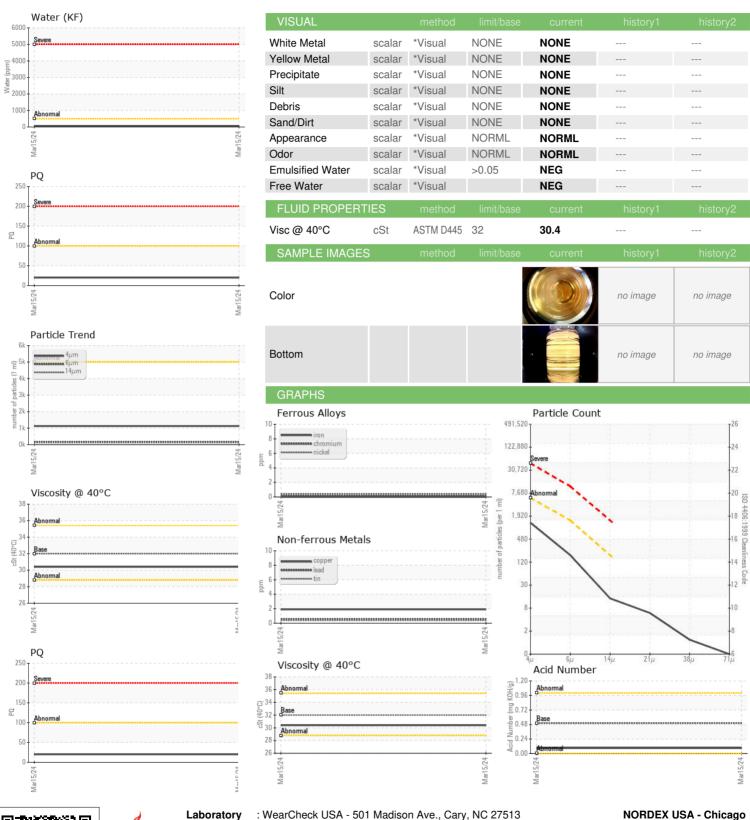
ISO 4406 (c) >19/17/14

Contact/Location: DEVIN LINEHAN - NORDEX

17/15/11



OIL ANALYSIS REPORT





Certificate 12367

Laboratory Sample No.

: NX06151093 Lab Number : 06151093 Unique Number: 10981171

Received **Tested** Diagnosed

: 16 Apr 2024 : 17 Apr 2024 : 19 Apr 2024 - Don Baldridge

300 SOUTH WACKER DRIVE, SUITE 1500 CHICAGO, IL US 60606

Test Package : IND 2 (Additional Tests: KF, PQ) 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.

DLinehan@nordex-online.com T: (312)386-4124 F: (312)386-7102

Contact: DEVIN LINEHAN

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) Report Id: NORDEX [WUSCAR] 06151093 (Generated: 04/19/2024 23:05:25) Rev: 1

Contact/Location: DEVIN LINEHAN - NORDEX