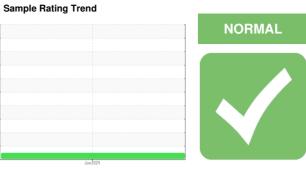


OIL ANALYSIS REPORT

Redpath Sugar - T02900 A2406182

Turbine Turbine

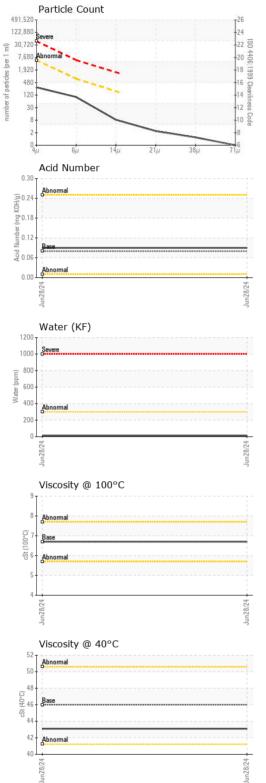
R&O OIL ISO 46 (--- GAL)



| SAMPLE INFORM | /ATION | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|------------|-------------|----------|----------|
| Batch # | | Client Info | | Mobile | | |
| Department | | Client Info | | Production | | |
| Sample From | | Client Info | | Machine | | |
| Production Stage | | Client Info | | Final | | |
| Sent to WC | | Client Info | | 06/28/2024 | | |
| Sample Number | | Client Info | | E30002532 | | |
| Sample Date | | Client Info | | 28 Jun 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 |
| Iron | ppm | ASTM D5185(m) | >15 | 0 | | |
| Chromium | ppm | ASTM D5185(m) | >4 | 0 | | |
| Nickel | ppm | ASTM D5185(m) | >2 | <1 | | |
| Titanium | ppm | ASTM D5185(m) | | 0 | | |
| Silver | ppm | ASTM D5185(m) | | 0 | | |
| Aluminum | ppm | ASTM D5185(m) | >10 | <1 | | |
| Lead | ppm | ASTM D5185(m) | | 0 | | |
| Copper | ppm | ASTM D5185(m) | >5 | <1 | | |
| Tin | ppm | ASTM D5185(m) | >5 | 0 | | |
| Antimony | ppm | ASTM D5185(m) | | 0 | | |
| Vanadium | ppm | ASTM D5185(m) | | 0 | | |
| Beryllium | ppm | ASTM D5185(m) | | 0 | | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | 5 | 0 | | |
| Barium | ppm | ASTM D5185(m) | 5 | 0 | | |
| Molybdenum | ppm | ASTM D5185(m) | 5 | 0 | | |
| Manganese | ppm | ASTM D5185(m) | | 0 | | |
| Magnesium | ppm | ASTM D5185(m) | 5 | 0 | | |
| Calcium | ppm | ASTM D5185(m) | 5 | <1 | | |
| Phosphorus | ppm | ASTM D5185(m) | 100 | 26 | | |
| Zinc | ppm | ASTM D5185(m) | | 1 | | |
| Sulfur | ppm | ASTM D5185(m) | 1500 | 92 | | |
| Lithium | ppm | ASTM D5185(m) | | <1 | | |
| CONTAMINANTS | ; | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >15 | 0 | | |
| Sodium | ppm | ASTM D5185(m) | | 0 | | |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | | |
| Water | % | ASTM D6304* | >0.03 | 0.001 | | |
| ppm Water | ppm | ASTM D6304* | >300 | 13 | | |



OIL ANALYSIS REPORT



| Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness FLUID DEGRADATION Acid Number (AN) mg KO | | >10 | 248 86 7 2 1 0 | | |
|---|--|---------------------------------------|-------------------------------|----------|----------|
| Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness FLUID DEGRADATION Acid Number (AN) mg KO | ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) | >160 >40 >10 >3 >19/16/14 | 7 2 1 0 | | |
| Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness FLUID DEGRADATION Acid Number (AN) mg KO | ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) | >40 >10 >3 >19/16/14 | 2 1 0 | | |
| Particles >38µm Particles >71µm Oil Cleanliness FLUID DEGRADATION Acid Number (AN) mg KO | ASTM D7647 ASTM D7647 ISO 4406 (c) | >10 >3 >19/16/14 | 1 | | |
| Particles >71µm Oil Cleanliness FLUID DEGRADATION Acid Number (AN) mg KOI VISUAL | ASTM D7647 ISO 4406 (c) method | >3 >19/16/14 | 0 | | |
| Oil Cleanliness FLUID DEGRADATION Acid Number (AN) mg KOI VISUAL | ISO 4406 (c) Method | >19/16/14 | - | | |
| FLUID DEGRADATION Acid Number (AN) mg KOI VISUAL | l method | | 15/14/10 | | |
| Acid Number (AN) mg KO | | limit/bass | 10/11/10 | | |
| VISUAL | II/a ACTM DOZ4* | - IIIIII/base | current | history1 | history2 |
| | H/g ASTM D974* | 0.08 | 0.09 | | |
| 140 1. 14 . 1 | method | limit/base | current | history1 | history2 |
| White Metal scala | ar Visual* | NONE | NONE | | |
| Yellow Metal scala | ar Visual* | NONE | NONE | | |
| Precipitate scala | ar Visual* | NONE | NONE | | |
| Silt scala | ar Visual* | NONE | NONE | | |
| Debris scala | ar Visual* | NONE | NONE | | |
| Sand/Dirt scala | ar Visual* | NONE | NONE | | |
| Appearance scala | ar Visual* | NORML | NORML | | |
| Odor scala | ar Visual* | NORML | NORML | | |
| Emulsified Water scala | ar Visual* | >0.03 | NEG | | |
| Free Water scala | ar Visual* | | NEG | | |
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C cSt | ASTM D7279(m) | 46 | 43.1 | | |
| Visc @ 100°C cSt | ASTM D7279(m) | 6.7 | 6.7 | | |
| Viscosity Index (VI) Scal | e ASTM D2270* | 97 | 108 | | |
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
| Color | | | 23000253 | no image | no image |
| Bottom | | | | no image | no image |



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02645478 Unique Number : 5803017

: E30002532

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Received **Tested** Diagnosed

: 04 Jul 2024 : 05 Jul 2024

: 08 Jul 2024 - Tatiana Sorkina

Test Package : IND 2 (Additional Tests: KV100, TAN Auto, VI) To discuss this sample report, contact Customer Service at 1-905-372-2251. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Environmental 360 Solutions Ltd.

640 Victoria Street Cobourg, ON CA K9A 5H5

Contact: Tatiana Sorkina tsorkina@e360s.ca T: (800)263-3939

F: (905)373-4950

Validity of results and interpretation are based on the sample and information as supplied. Report Id: CHECOB [WCAMIS] 02645478 (Generated: 07/08/2024 10:15:53) Rev: 1

Contact/Location: Tatiana Sorkina - CHECOB