

OIL ANALYSIS REPORT

Area Beton Lagace - 888079 Machine Id XB124

Component Heat Transfer Fluid Fluid

PETRO CANADA PETRO-THERM (--- GAL)

DIAGNOSIS

A Recommendation

The sample submitted is 4 times dirtier than the ISO dirt count recommendation of 19/16/14.

Contamination

Particles >4µm and oil cleanliness are notably high.

| | | | | Mar2024 | | |
|------------------|---------------|---------------|------------|-------------|----------|----------|
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
| Department | | Client Info | | Sales | | |
| Sample From | | Client Info | | Machine | | |
| Production Stage | | Client Info | | Initial | | |
| Sent to WC | | Client Info | | 03/27/2024 | | |
| Sample Number | | Client Info | | E30001761 | | |
| Sample Date | | Client Info | | 20 Mar 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | ABNORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >200 | 0 | | |
| Chromium | ppm | ASTM D5185(m) | >21 | 0 | | |
| Nickel | ppm | ASTM D5185(m) | >21 | 0 | | |
| Titanium | ppm | ASTM D5185(m) | >21 | 0 | | |
| Silver | ppm | ASTM D5185(m) | >21 | 0 | | |
| Aluminum | ppm | ASTM D5185(m) | >21 | 0 | | |
| Lead | ppm | ASTM D5185(m) | >21 | 0 | | |
| Copper | ppm | ASTM D5185(m) | >21 | 0 | | |
| Tin | ppm | ASTM D5185(m) | >21 | 0 | | |
| Antimony | ppm | ASTM D5185(m) | >21 | 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) | | 0 | | |
| Barium | ppm | ASTM D5185(m) | | 0 | | |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | | |
| Manganese | ppm | ASTM D5185(m) | | 0 | | |
| Magnesium | ppm | ASTM D5185(m) | | 0 | | |
| Calcium | ppm | ASTM D5185(m) | | 0 | | |
| Phosphorus | ppm | ASTM D5185(m) | 0 | 0 | | |
| Zinc | ppm | ASTM D5185(m) | 0 | <1 | | |
| Sulfur | ppm | ASTM D5185(m) | 326 | 6 | | |
| Lithium | ppm | ASTM D5185(m) | | <1 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >25 | 0 | | |
| Sodium | ppm | ASTM D5185(m) | >21 | 0 | | |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | | |
| Water | % | ASTM D6304* | >0.0601 | 0.001 | | |
| ppm Water | ppm | ASTM D6304* | >601 | 9 | | |

Report Id: CHECOB [WCAMIS] 02625704 (Generated: 04/03/2024 13:23:36) Rev: 1

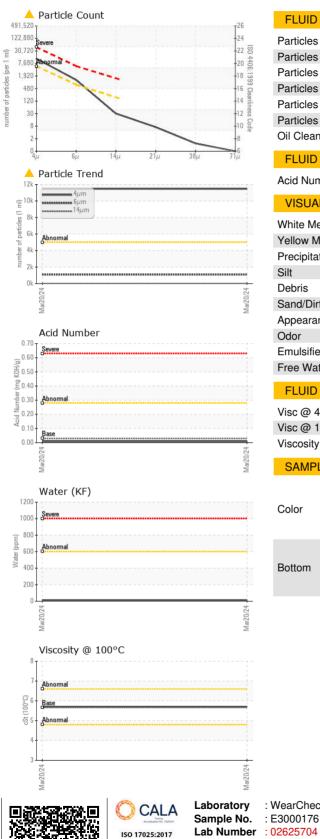






number of particles (per 1

OIL ANALYSIS REPORT



| Particles >4µm ASTM D7647 >5000 ▲ 11469 Particles >6µm ASTM D7647 >640 1091 Particles >14µm ASTM D7647 >160 27 Particles >21µm ASTM D7647 >10 1 Particles >21µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >3 0 Patricles >71µm ASTM D7647 >3 0 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg K0Hg ASTM D724* 0.03 0.01 VISUAL method limit/base current history1 history2 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<> | | | | | | | |
|---|---|----------------|----------------------|--------------------------------------|-------------------|---------------------|--|
| Particles >6µm ASTM D7647 >640 1091 Particles >14µm ASTM D7647 >160 27 Particles >21µm ASTM D7647 >40 6 Particles >38µm ASTM D7647 >10 1 Particles >38µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 FLUID DEGRADATION method limit/base current history1 history1 Acid Number (AN) mg KOHig ASTM D974* 0.03 0.01 VISUAL method limit/base current history1 history1 Acid Number (AN) mg KOHig ASTM D974* 0.03 0.01 VISUAL method limit/base current history1 history1 Acid Number (AN) mg KOHig ASTM D974* 0.03 0.01 VISUAL method limit/base current history1 history1 Acid Number (AN) mg KOHig ASTM D974* 0.03 0.01 VISUAL method limit/base current history1 history1 Acid Number (AN) mg KOHig ASTM D974* 0.03 0.01 VISUAL NoNE NONE VISUAL Metal scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Appearance scalar Visual* NONE NONE Appearance scalar Visual* NONE NONE Fue Water scalar Visual* NORML NORML FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 34.2 35.1 SAMPLE IMAGES method limit/base current history1 history2 SAMPLE IMAGES method limit/base current history1 history2 | FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >14µm ASTM D7647 >160 27 Particles >21µm ASTM D7647 >40 6 Particles >38µm ASTM D7647 >10 1 Particles >38µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 Dil Cleanliness ISO 4406 (c) >19/16/14 21/17/12 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg K0Hg ASTM D974* 0.03 0.01 VISUAL method limit/base current history1 history2 White Metal scalar Visual* NONE NONE VISUAL method limit/base current history1 history2 Visual* NONE NONE Soldar visual* NONE NONE | Particles >4µm | | ASTM D7647 | >5000 | 🔺 11469 | | |
| Particles >21µm ASTM D7647 >40 6 | Particles >6µm | | ASTM D7647 | >640 | <u> </u> | | |
| Particles >38µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >3 0 Dil Cleanliness ISO 4406 (c) >19/16/14 21/17/12 FLUID DEGRADATION method limit/base current history1 history1 Acid Number (AN) mg KOH/g ASTM D774* 0.03 0.01 VISUAL method limit/base current history1 history1 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Sitt scalar Visual* NONE NONE Odor scalar Visual* NORML NORML Sand/Dirt scalar Visual* NORML NORML Tree Water scalar | Particles >14µm | | ASTM D7647 | >160 | 27 | | |
| Particles >71µm ASTM D7647 >3 0 Dil Cleanliness ISO 4406 (c) >19/16/14 21/17/12 FLUID DEGRADATION method limit/base current history1 history1 Acid Number (AN) mg KOHlg ASTM D974* 0.03 0.01 VISUAL method limit/base current history1 history1 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Odor scalar Visual* NORE Sand/Dirt scalar Visual* NORML NORML Odor scalar Visual* >0.0601 NEG FLUID PROPERTIES | Particles >21µm | | ASTM D7647 | >40 | 6 | | |
| Dil Cleanliness ISO 4406 (c) >19/16/14 21/17/12 FLUID DEGRADATION method limit/base current history1 history1 Acid Number (AN) mg KOHg ASTM D974* 0.03 0.01 VISUAL method limit/base current history1 history1 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Soldor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML <th< td=""><td>Particles >38µm</td><td></td><td>ASTM D7647</td><td>>10</td><td>1</td><td></td><td></td></th<> | Particles >38µm | | ASTM D7647 | >10 | 1 | | |
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| Acid Number (AN) mg KOHg ASTM D974* 0.03 0.01 VISUAL method limit/base current history1 history2 Mhite Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Obbris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Fuel PROPERTIES method limit/base current history1 history2 Visco@ 100°C <th>FLUID DEGRADA</th> <th></th> <th>method</th> <th>limit/base</th> <th>e current</th> <th>history1</th> <th>history2</th> | FLUID DEGRADA | | method | limit/base | e current | history1 | history2 |
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| Yellow Metal scalar Visual* NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Dodor scalar Visual* >0.0601 NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 34.2 35.1 Visc @ 100°C | VISUAL | | method | limit/base | current | history1 | history2 |
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| Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* >0.0601 NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 34.2 35.1 Visc @ 100°C cSt ASTM D7279(m) 5.66 5.7 Viscosity Index (| Yellow Metal | scalar | Visual* | NONE | NONE | | |
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| Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* >0.0601 NEG Free Water scalar Visual* >0.0601 NEG FLUID PROPERTIES method limit/base current history1 history2 /isc @ 40°C cSt ASTM D7279(m) 34.2 35.1 /isc @ 100°C cSt ASTM D7279(m) 5.66 5.7 /iscosity Index (VI) Scale ASTM D2270* 95 100 SAMPLE IMAGES method limit/base current history1 history2 | | | | | | | |
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| Emulsified Water scalar Visual* >0.0601 NEG Free Water scalar Visual* Imit/base current history1 history2 FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 34.2 35.1 Visc @ 100°C cSt ASTM D7279(m) 5.66 5.7 Viscosity Index (VI) Scale ASTM D2270* 95 100 SAMPLE IMAGES method limit/base current history1 history2 | | | | | - | | |
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| Viscosity Index (VI) Scale ASTM D2270* 95 100 SAMPLE IMAGES method limit/base current history1 history2 | - | | . , | | | | |
| SAMPLE IMAGES method limit/base current history1 history2 | | cSt | ASTM D7279(m) | 5.66 | 5.7 | | |
| | /iscosity Index (VI) | Scale | ASTM D2270* | 95 | 100 | | |
| Color no image no image | SAMPLE IMAGES | \$ | method | limit/base | current | history1 | history2 |
| | Color | | | | | no image | no image |
| Bottom no image no image | Bottom | | | | | no image | no image |
| | earCheck - C8-1175 30001761 2625704 250823 | Recei Teste | ived : 01 ed : 02 | gton, ON L Apr 2024 2 Apr 2024 | | onmental 360 640 | Solutions Lto) Victoria Stree Cobourg, Ol |

: 03 Apr 2024 - Tatiana Sorkina

Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, TAN Man, VI)

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.

Diagnosed

Unique Number : 5750823

To discuss this sample report, contact Customer Service at 1-905-372-2251.

Accredited Laboratory

Contact/Location: Tatiana Sorkina - CHECOB

CA K9A 5H5

Contact: Tatiana Sorkina

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