

OIL ANALYSIS REPORT

Area ORIN CONTRACTORS Machine Id 146

Component Swing Drive

PETRO CANADA TRAXON 80W90 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

Sample Rating Trend

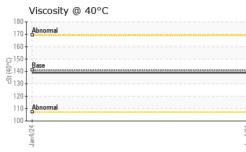


NORMAL

| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|---------------|---------------|---------------|------------|-------------|----------|----------|
| Sample Number | | Client Info | | WC0888514 | | |
| Sample Date | | Client Info | | 04 Jan 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | Changed | | |
| Sample Status | | | | NORMAL | | |
| CONTAMINATIO | N | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.1 | NEG | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >151 | 147 | | |
| Chromium | ppm | ASTM D5185(m) | >11 | 2 | | |
| Nickel | ppm | ASTM D5185(m) | >10 | 0 | | |
| Titanium | ppm | ASTM D5185(m) | | 0 | | |
| Silver | ppm | ASTM D5185(m) | | 0 | | |
| Aluminum | ppm | ASTM D5185(m) | >21 | 2 | | |
| Lead | ppm | ASTM D5185(m) | >51 | 0 | | |
| Copper | ppm | ASTM D5185(m) | >51 | <1 | | |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | | |
| Antimony | ppm | ASTM D5185(m) | >5 | 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) | 243 | 122 | | |
| Barium | ppm | ASTM D5185(m) | 1 | 3 | | |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | | |
| Manganese | ppm | ASTM D5185(m) | | 1 | | |
| Magnesium | ppm | ASTM D5185(m) | 2 | <1 | | |
| Calcium | ppm | ASTM D5185(m) | 6 | 8 | | |
| Phosphorus | ppm | ASTM D5185(m) | 987 | 886 | | |
| Zinc | ppm | ASTM D5185(m) | 1 | 12 | | |
| Sulfur | ppm | ASTM D5185(m) | 21530 | 17497 | | |
| Lithium | ppm | ASTM D5185(m) | | 1 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >31 | 24 | | |
| Sodium | ppm | ASTM D5185(m) | >51 | <1 | | |
| Potassium | ppm | ASTM D5185(m) | >20 | 2 | | |



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| | VISUAL | | method | | | | history2 |
|--------------------------|--|---|---|---|--------------|--------------------------|----------|
| | White Metal | scalar | Visual* | NONE | NONE | | |
| | Yellow Metal | scalar | Visual* | NONE | 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 | | |
| | Emulsified Water | scalar | Visual* | >0.1 | NEG | | |
| | Free Water | scalar | Visual* | 20.1 | NEG | | |
| | FLUID PROPER | | method | limit/base | current | history1 | history2 |
| | Visc @ 40°C | cSt | ASTM D7279(m) | 141.0 | 139 | | |
| | SAMPLE IMAG | ES | method | limit/base | current | history1 | history2 |
| | Color | | | | | no image | no image |
| | Bottom | | | | | no image | no image |
| | GRAPHS | | | | | | 1 |
| | Iron (ppm) | | | | Lead (ppm) | | |
| | 400 Severe | | | 100 | Severe | | |
| mdo | 200 - Abnormal | | | Ē 50 | Abnormal | | |
| | | | | | | | |
| | 0 | | | 0 | | | |
| | 04/24 | | | n4/24 | n4/24 | | |
| | Jan4/24 | 、 | | Jan4/24 | Jan4/24 | | |
| | Aluminum (ppm |) | | Jan4/24 | Chromium (p | pm) | |
| | Aluminum (ppm |) | | 1904-1904 1904-1904 20 | Chromium (p | pm) | |
| man | Aluminum (ppm |) | | Jan4/24 | Chromium (p | pm) | |
| nnm | Aluminum (ppm |) | | +2/ψμεr 20 u 10 | Chromium (p | pm) | |
| nnm | Aluminum (ppm |) | | +2/ψμεr 20 u 10 | Chromium (p | pm) | |
| maa | Aluminum (ppm |) | | 20 mdd | Chromium (p) | pm) | |
| | Aluminum (ppm 40 20 Abnomal 40 40 40 40 40 40 40 40 40 40 |) | | Jan4/24 | Chromium (p | pm) | |
| | Aluminum (ppm Aluminum (ppm Abnomal Abnomal Copper (ppm) Bevere |) | | +2/ψuer 42/ψuer 42/ψuer 100 | Chromium (p) | pm) | |
| | Aluminum (ppm 40 20 Abnomal 40 40 40 40 40 40 40 40 40 40 |) | | Jan4/24 | Chromium (p) | pm) | |
| | Aluminum (ppm |) | | +27+puer 427+puer 100 427+puer 100 0 | Chromium (p) | pm) | |
| | Aluminum (ppm |) | | +27+puer 427+puer 100 427+puer 100 0 | Chromium (p) | pm) | |
| | Aluminum (ppm | | | 42/huer 100 mdd 50 | Chromium (p) | pm) | |
| bpm | Aluminum (ppm 40 20 40 40 40 40 40 40 40 40 40 4 | | | +27+puer 427+puer 100 427+puer 100 0 | Chromium (p) | pm) | |
| bhm | Aluminum (ppm 40 20 40 40 40 40 40 40 40 40 40 4 | | | +27+puer 20 40 40 40 40 40 40 40 40 40 4 | Chromium (p) | | |
| cort to c) bhill | Aluminum (ppm 40 20 Abnomal 20 Copper (ppm) 100 Severe 50 Abnomal Abnomal Ab | | | 42/huer 100 42/huer 100 42/huer 1000 1000 1000 1000 | Chromium (p) | | |
| cSt (40°C) ppm | Aluminum (ppm 40 20 40 50 40 50 40 50 40 50 40 50 50 50 50 50 50 50 50 50 5 | | | +27+pmer 100 +27+pmer 100 477+pmer 1000 mdd 500 0 | Chromium (p) | | |
| cSt (40°C) ppm | Aluminum (ppm 40 20 Abnomal 20 Copper (ppm) 100 Severe 50 Abnomal Abnomal Ab | | | 42/huer 100 42/huer 100 42/huer 1000 1000 1000 1000 | Chromium (p) | | |
| udd (0=0+) 153 er e c | Aluminum (ppm 40 20 40 50 40 50 40 50 40 50 40 50 50 50 50 50 50 50 50 50 5 | 1175 Apple Recieve Diagnos Diagnos nal Tests: \ rvice at 1-8 | d : 17 . ed : 17 . tician : We /isual) 800-268-213 | 20 40 40 40 40 40 40 40 40 40 4 | Chromium (p) | SON SHORE EXC 100 MAC | |

To discuss this sample 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.

CALA

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