

OIL ANALYSIS REPORT

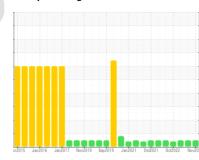
Sample Rating Trend



Area KEMP QUARRIES / KEMP STONE - FAIRLAND [66903] WL094 Component

Transmission (Manual)

PETRO CANADA PRODURO TO-4 SAE 30 (--- GAL)





NORMAL

| | SAMPLE INFOR | RMATION | method | limit/base | current | history1 | history2 |
|-------------|------------------|---------|-------------|------------|-------------|-------------|-------------|
| | Sample Number | | Client Info | | PCA0087029 | PCA0086465 | PCA0062031 |
| nonitor. (| Sample Date | | Client Info | | 02 Nov 2023 | 08 Aug 2023 | 11 Jan 2023 |
| ed filters) | Machine Age | hrs | Client Info | | 32210 | 31910 | 31363 |
| | Oil Age | hrs | Client Info | | 32210 | 31910 | 31363 |
| | Oil Changed | | Client Info | | N/A | Changed | N/A |
| | Sample Status | | | | NORMAL | NORMAL | NORMAL |
| in the | WEAR METAI | _S | method | limit/base | current | history1 | history2 |
| | Iron | ppm | ASTM D5185m | >200 | 4 | 5 | 7 |
| e time in | Chromium | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| | Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| | Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Silver | ppm | ASTM D5185m | >7 | 0 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | >25 | 0 | <1 | <1 |
| | Lead | ppm | ASTM D5185m | | 1 | 0 | <1 |
| | Copper | ppm | ASTM D5185m | | 5 | 7 | 5 |
| | Tin | ppm | ASTM D5185m | | 0 | 0 | <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 | | 1 | <1 | 4 |
| | Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Molybdenum | ppm | ASTM D5185m | | ۰ <1 | 2 | 2 |
| | - | | ASTM D5185m | | 0 | <1 | <1 |
| | Manganese | ppm | | | | 18 | 22 |
| | Magnesium | ppm | | 1 | 18 | | |
| | Calcium | ppm | ASTM D5185m | | 2770 | 2995 | 2664 |
| | Phosphorus | ppm | ASTM D5185m | 1194 | 985 | 990 | 871 |
| | Zinc | ppm | ASTM D5185m | | 1173 | 1185 | 1145 |
| | Sulfur | ppm | ASTM D5185m | 3811 | 3950 | 4638 | 4964 |
| | CONTAMINA | NTS | method | limit/base | current | history1 | history2 |
| | Silicon | ppm | ASTM D5185m | >125 | 3 | 3 | 6 |
| | Sodium | ppm | ASTM D5185m | | 1 | 2 | <1 |
| | Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| | VISUAL | | method | limit/base | current | history1 | history2 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| | Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| | Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | NEG |
| | Free Water | scalar | *Visual | | NEG | NEG | NEG |
| | FLUID PROPE | ERTIES | method | limit/base | current | history1 | history2 |
| | Visc @ 40°C | cSt | ASTM D445 | 88.5 | 86.4 | 88.1 | 88.0 |
| | | | | | | | 0.1 |

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-3 changed filters)

Fluic

Wear

All component wear rates are normal.

Contamination

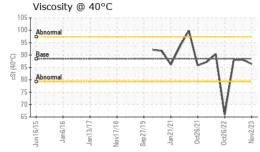
There is no indication of any contamination in the oil.

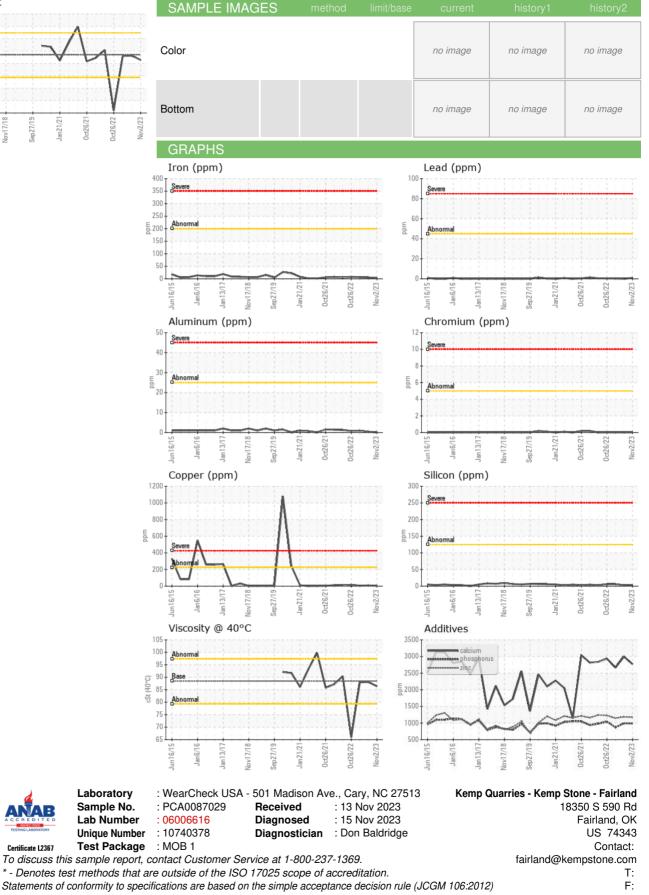
Fluid Condition

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



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Certificate L2367