

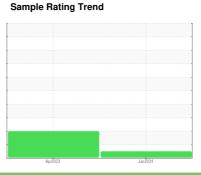
OIL ANALYSIS REPORT

KEMP QUARRIES / BCS - GRAVETTE [67476] **OHT121**

Component

Rear Differential

PETRO CANADA PRODURO TO-4 SAE 50 (





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Pm-1)

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

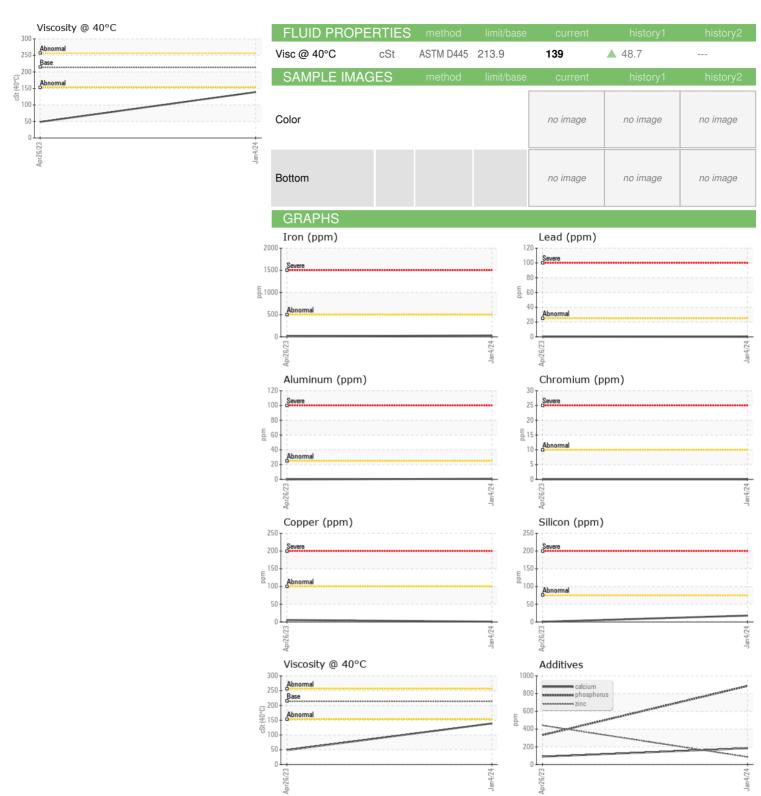
Fluid Condition

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

| Sample Number Client Info PCA0069777 PCA0086008 Sample Date Client Info 04 Jan 2024 28 Apr 2023 Machine Age hrs Client Info 59923 59361 Oil Age hrs Client Info N/A N/A Oil Changed Client Info N/A N/A Sample Status Immit Info N/A N/A CONTAMINATION method Immit Im | GAL) | | | Apr2023 | Jan 2024 | | |
|--|------------------|--------|-------------|------------|------------|------------|----------|
| Sample Date Client Info O4 Jan 2024 26 Apr 2023 | SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Date Client Info O4 Jan 2024 26 Apr 2023 | Sample Number | | Client Info | | PCA0069777 | PCA0086008 | |
| Machine Age hrs Client Info 59923 59361 | • | | | | | | |
| Oil Age hrs Client Info 59923 59361 | • | hrs | | | | | |
| Oil Changed Sample Status Client Info N/A N/A | | | | | | 59361 | |
| NORMAL | • | | | | | | |
| Water WC Method J.2 NEG NEG | Sample Status | | | | | | |
| WEAR METALS | CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Irron | Water | | WC Method | >.2 | NEG | NEG | |
| Chromium | WEAR METAL | .S | method | limit/base | current | history1 | history2 |
| Chromium ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 <1 | Iron | ppm | ASTM D5185m | >500 | 31 | 12 | |
| Nickel | Chromium | | ASTM D5185m | >10 | 0 | 0 | |
| Titanium | Nickel | | ASTM D5185m | >10 | 0 | <1 | |
| Silver | Titanium | | ASTM D5185m | | <1 | 0 | |
| Aluminum | Silver | | ASTM D5185m | | 0 | | |
| Lead ppm ASTM D5185m >25 0 <1 Copper ppm ASTM D5185m >100 <1 | Aluminum | | ASTM D5185m | >25 | <1 | | |
| Copper ppm ASTM D5185m >100 <1 6 Tin ppm ASTM D5185m >10 0 0 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 0 0 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 1 Manganese ppm ASTM D5185m 0 <1 | | | | | | | |
| Tin | | | | | | | |
| Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 0 1 Manganese ppm ASTM D5185m 0 <1 < Magnesium ppm ASTM D5185m 0 <1 < Magnesium ppm ASTM D5185m 9 5 5 Calcium ppm ASTM D5185m 1099 886 4 332 Phosphorus ppm ASTM D5185m 1099 886 4 332 Zinc ppm ASTM D5185m 1099 886 441 Sulfur ppm ASTM D5185m 7086 16292 918 | | | | | | | |
| Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 233 1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 1 Manganese ppm ASTM D5185m 0 <1 | | | | | | | |
| ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 233 1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 1 Magnesium ppm ASTM D5185m 9 5 5 Calcium ppm ASTM D5185m 99 5 5 Phosphorus ppm ASTM D5185m 1099 886 332 Zinc ppm ASTM D5185m 1245 85 441 Sulfur ppm ASTM D5185m 1245 85 441 Sulfur ppm ASTM D5185m 7086 16292 918 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 | | | | | | | |
| Boron | | PP | | limit/hase | | | history2 |
| Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 1 Manganese ppm ASTM D5185m 0 <1 | | nnm | | | | | |
| Molybdenum ppm ASTM D5185m 0 0 1 Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 9 5 5 Calcium ppm ASTM D5185m 3114 183 ▲ 89 Phosphorus ppm ASTM D5185m 1099 386 ▲ 332 Zinc ppm ASTM D5185m 1245 85 ▲ 441 Sulfur ppm ASTM D5185m 7086 16292 ♠ 918 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 18 <1 Sodium ppm ASTM D5185m >75 18 <1 Sodium ppm ASTM D5185m >75 18 <1 | | | | | | | |
| Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 9 5 5 Calcium ppm ASTM D5185m 3114 183 ▲ 89 Phosphorus ppm ASTM D5185m 1099 886 ▲ 332 Zinc ppm ASTM D5185m 1245 85 ▲ 441 Sulfur ppm ASTM D5185m 7086 16292 ▲ 918 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 18 <1 | | | | | | | |
| Magnesium ppm ASTM D5185m 9 5 5 Calcium ppm ASTM D5185m 3114 183 ▲ 89 Phosphorus ppm ASTM D5185m 1099 886 ▲ 332 Zinc ppm ASTM D5185m 1245 85 ▲ 441 Sulfur ppm ASTM D5185m 7086 16292 ▲ 918 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 18 <1 | • | | | | - | | |
| Calcium ppm ASTM D5185m 3114 183 ▲ 89 Phosphorus ppm ASTM D5185m 1099 886 ▲ 332 Zinc ppm ASTM D5185m 1245 85 ▲ 441 Sulfur ppm ASTM D5185m 7086 16292 ▲ 918 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 18 <1 | • | | | | | | |
| Phosphorus ppm ASTM D5185m 1099 886 ▲ 332 Zinc ppm ASTM D5185m 1245 85 ▲ 441 Sulfur ppm ASTM D5185m 7086 16292 ▲ 918 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 18 <1 | | | | | - | | |
| Zinc ppm ASTM D5185m 1245 85 ▲ 441 Sulfur ppm ASTM D5185m 7086 16292 ▲ 918 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 18 <1 | | | | | | | |
| Sulfur ppm ASTM D5185m 7086 16292 ▲ 918 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 18 <1 | | | | | | | |
| Silicon ppm ASTM D5185m >75 18 <1 Sodium ppm ASTM D5185m 1 0 Potassium ppm ASTM D5185m >20 0 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML NORML Appearance scalar *Visual NORML NORML NORML Codor scalar *Visu | Sulfur | | | | | | |
| Sodium ppm ASTM D5185m 1 0 Potassium ppm ASTM D5185m >20 0 <1 | CONTAMINAN | ITS | method | limit/base | current | history1 | history2 |
| Sodium ppm ASTM D5185m 1 0 Potassium ppm ASTM D5185m >20 0 <1 | Silicon | ppm | ASTM D5185m | >75 | 18 | <1 | |
| VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE LIGHT NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG | Sodium | ppm | ASTM D5185m | | 1 | 0 | |
| White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE LIGHT NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG | Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | |
| Yellow Metalscalar*VisualNONENONENONEPrecipitatescalar*VisualNONENONENONESiltscalar*VisualNONENONENONEDebrisscalar*VisualNONELIGHTNONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEG | VISUAL | | method | limit/base | current | history1 | history2 |
| Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE LIGHT NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE LIGHT NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| Debris scalar *Visual NONE LIGHT NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG | Precipitate | scalar | *Visual | NONE | NONE | NONE | |
| Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEG | Silt | scalar | *Visual | NONE | NONE | NONE | |
| Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG | Debris | scalar | *Visual | NONE | LIGHT | NONE | |
| Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG | Appearance | scalar | *Visual | NORML | NORML | NORML | |
| Emulsified Water scalar *Visual >.2 NEG NEG | Odor | scalar | | NORML | NORML | NORML | |
| | Emulsified Water | | | >.2 | | NEG | |
| | Free Water | scalar | *Visual | | NEG | NEG | |



OIL ANALYSIS REPORT







Certificate L2367

Report Id: KEMSUL [WUSCAR] 06070123 (Generated: 01/26/2024 13:30:32) Rev: 1

Laboratory Sample No. Lab Number **Unique Number**

Test Package : MOB 1

: PCA0069777 : 06070123 : 10846800

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 24 Jan 2024 : 26 Jan 2024 Diagnosed : Sean Felton Diagnostician

Kemp Quarries - Benton County Stone - Gravette 15100 N Hwy 59

Sulphur Springs, AR US 72768

Contact:

gravette@bentoncountystone.com

T:

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

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