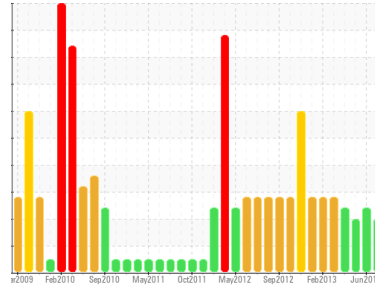


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / PRYOR STONE [14272216018]
Machine Id
WLO49
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

Sample Rating Trend



SOOT



DIAGNOSIS

Recommendation

We advise that you check for faulty combustion, plugged air filters, or aftercoolers. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is an abnormal amount of solids and carbon present in the oil. The water content is negligible.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | PCA72216018 | PCA88472064 | PCA01657037 |
| Sample Date | Client Info | | 06 Sep 2014 | 26 Jun 2014 | 03 Apr 2014 |
| Machine Age | hrs | Client Info | 30554 | 300460 | 29616 |
| Oil Age | hrs | Client Info | --- | 430 | 445 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | SEVERE | SEVERE | SEVERE |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|------|-----------|------------|----------------|----------|----------|
| Fuel | WC Method | | <1.0 | <1.0 | <1.0 |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|---------------|-----------|----------|----------|
| Iron | ppm | ASTM D5185(m) | 33 | 40 | 36 |
| Chromium | ppm | ASTM D5185(m) | 0 | 0 | 1 |
| Nickel | ppm | ASTM D5185(m) | 0 | 0 | 1 |
| Titanium | ppm | ASTM D5185(m) | 0 | 0 | --- |
| Silver | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | 1 | 2 | 2 |
| Lead | ppm | ASTM D5185(m) | 0 | 0 | 3 |
| Copper | ppm | ASTM D5185(m) | 4 | 5 | 6 |
| Tin | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|---------------|-------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | 33 | 26 | 24 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 45 | 37 | 30 |
| Magnesium | ppm | ASTM D5185(m) | 462 | 432 | 366 |
| Calcium | ppm | ASTM D5185(m) | 2319 | 2205 | 2429 |
| Phosphorus | ppm | ASTM D5185(m) | 1118 | 1056 | 1108 |
| Zinc | ppm | ASTM D5185(m) | 1295 | 1172 | 1264 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|---------------|------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | 5 | 5 | 5 |
| Sodium | ppm | ASTM D5185(m) | 1 | 0 | 9 |
| Potassium | ppm | ASTM D5185(m) | 1 | 0 | 0 |
| Water | % | ASTM D6304* | 0 | 0 | 0 |
| Glycol | % | ASTM D7922* | 0.0 | 0.0 | 0.0 |

INFRA-RED

| | method | limit/base | current | history1 | history2 |
|--------|--------|-------------|-------------|----------|----------|
| Soot % | % | ASTM D7844* | 2.71 | 3.08 | 2.6 |

FLUID DEGRADATION

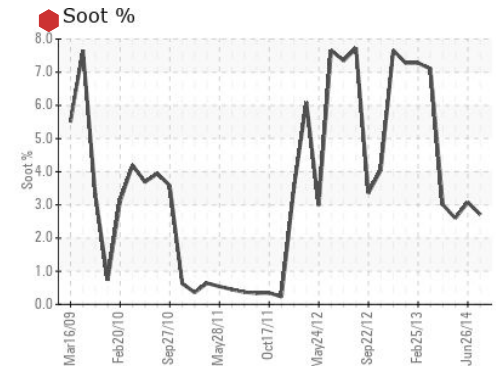
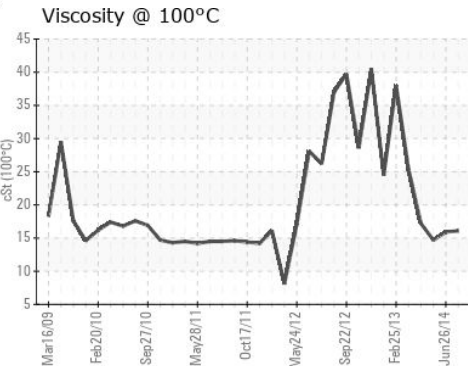
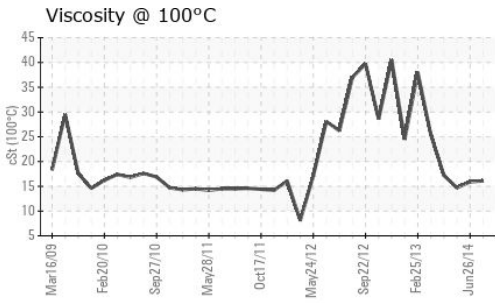
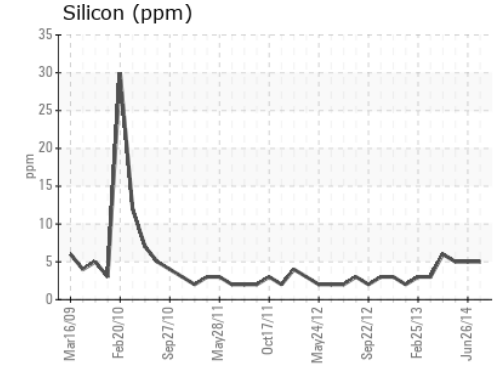
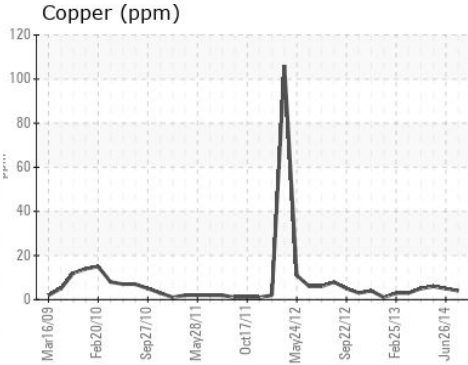
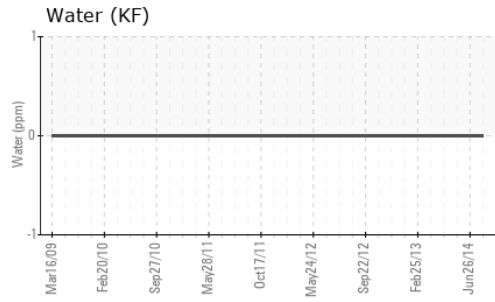
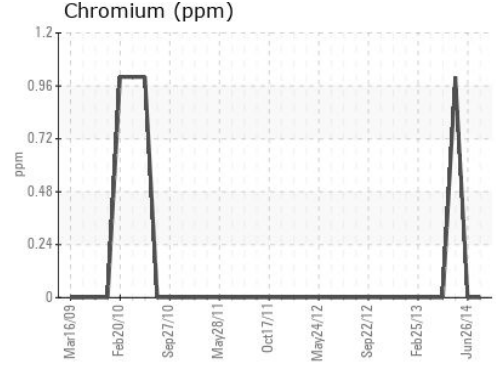
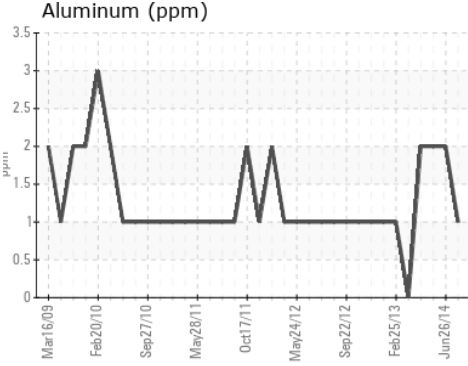
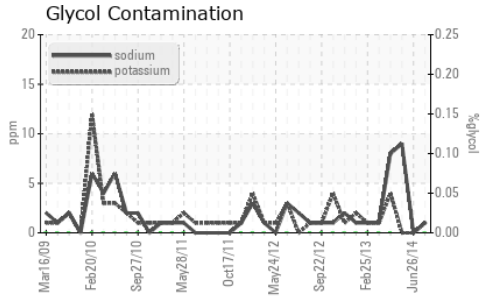
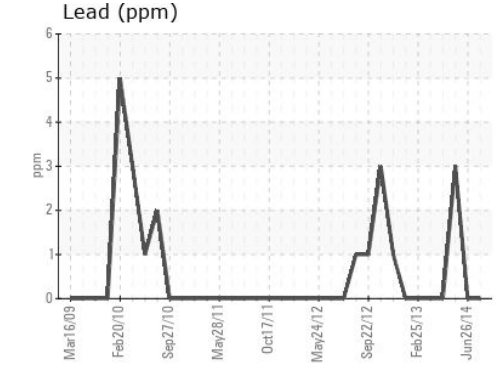
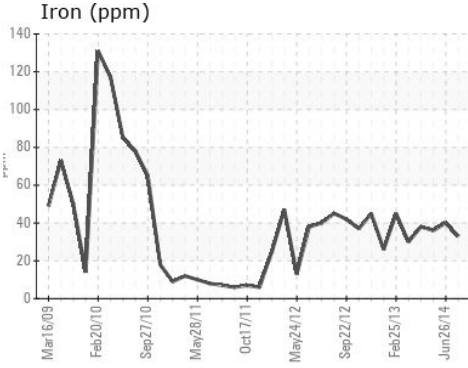
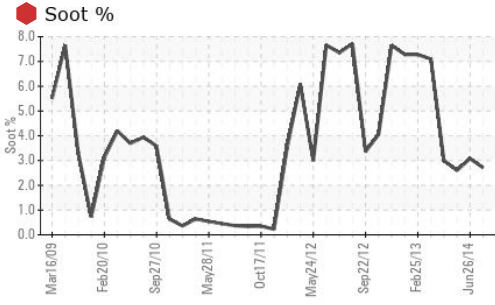
| | method | limit/base | current | history1 | history2 |
|-----------|----------|-------------|----------|----------|----------|
| Oxidation | Abs./1mm | ASTM D7414* | 4 | 3 | 1 |

FLUID PROPERTIES

| | method | limit/base | current | history1 | history2 |
|--------------|--------|---------------|-------------|----------|----------|
| Visc @ 100°C | cSt | ASTM D7279(m) | 16.1 | 15.9 | 14.7 |

OIL ANALYSIS REPORT

GRAPHS



Laboratory : WearCheck -
Sample No. : PCA72216018
Lab Number : 72216018
Unique Number : 12895026
Test Package : MOB1+ (Additional Tests: FT-IR, Glycol, ICP, KF, KV100)
To discuss this sample report, contact Customer Service at 1-800-268-2131.
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.

Received : 29 Sep 2014
Diagnosed : 05 Jun 2019
Diagnostician : Wes Davis

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