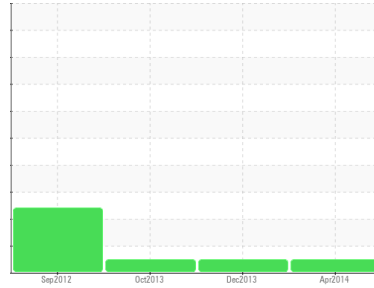




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
UN050547
 Component
Compressor
 Fluid
VACDEL MF 20 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal. The wear metal levels do not reflect the reported failure.

Contamination

There is no indication of any contamination in the component.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WCI2236532 | WCI2238810 | WC03430314 |
| Sample Date | Client Info | | 18 Apr 2014 | 19 Dec 2013 | 24 Oct 2013 |
| Machine Age | hrs | Client Info | 26294 | 0 | 25328 |
| Oil Age | hrs | Client Info | 165 | 0 | 1944 |
| Oil Changed | | Client Info | N/A | N/A | N/A |
| Sample Status | | | NORMAL | NORMAL | NORMAL |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.1 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 2 | 8 | 2 |
| Chromium | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >25 | 0 | <1 | <1 |
| Lead | ppm | ASTM D5185m >25 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m >50 | 1 | 6 | 8 |
| Tin | ppm | ASTM D5185m >15 | 0 | 0 | 3 |
| Antimony | 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 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | <1 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 80 | 20 | <1 |
| Phosphorus | ppm | ASTM D5185m | 347 | 244 | 240 |
| Zinc | ppm | ASTM D5185m | 414 | 226 | 156 |
| Sulfur | ppm | ASTM D5185m | 1492 | 3727 | 3786 |

CONTAMINANTS

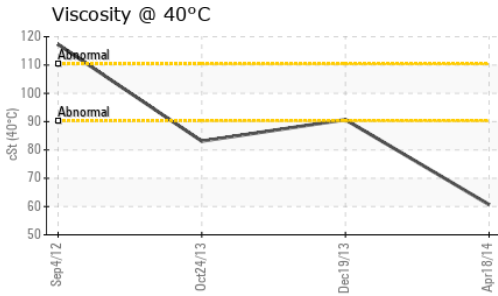
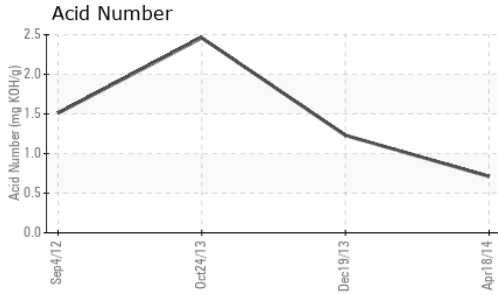
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 7 | 17 | 25 |
| Sodium | ppm | ASTM D5185m | 1 | 6 | 8 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 4 | 4 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.711 | 1.23 | 2.46 |



OIL ANALYSIS REPORT



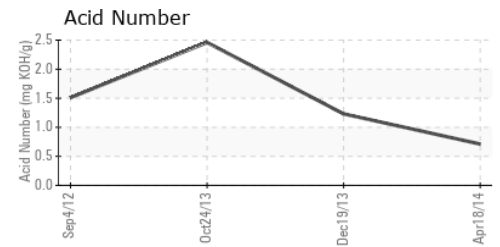
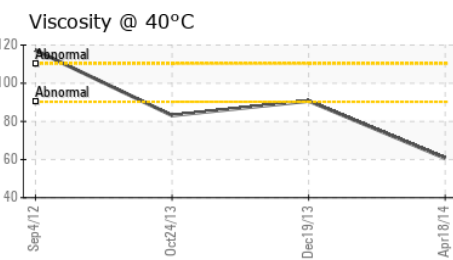
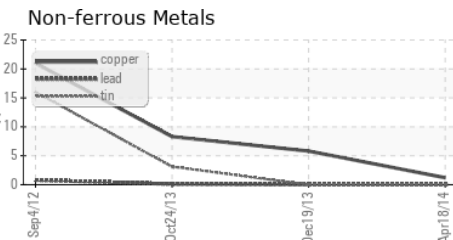
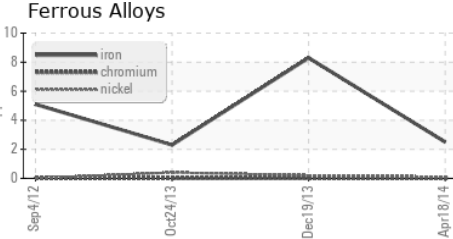
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|--------------|----------|-------|
| White Metal | scalar | *Visual | NONE | NONE | LIGHT | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT | LIGHT |
| 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 PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|--------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 60.67 | 90.69 | 83.1 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

| | | | | | | |
|--------|--|--|--|----------|----------|----------|
| Color | | | | no image | no image | no image |
| Bottom | | | | no image | no image | no image |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC12236532 **Received** : 21 Apr 2014
Lab Number : 03489522 **Diagnosed** : 22 Apr 2014
Unique Number : 6597383 **Diagnostician** : Doug Bogart
Test Package : IND 2

PRINSCO - FARGO
 4141 37TH ST N
 FARGO, ND
 US 58102

Contact: DAVID JENSEN
 davidj@prinsco.com
 T: (701)293-2071
 F: (701)293-2052

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

* - 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)