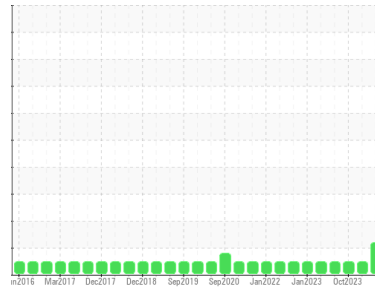




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
ADVANCE MIXER 243
 Component
Diesel Engine
 Fluid
 DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | LP0001456 | LP0000941 | LP0000509 |
| Sample Date | Client Info | | 18 Jun 2024 | 23 Jan 2024 | 17 Oct 2023 |
| Machine Age | hrs | Client Info | 40000 | 40000 | 40000 |
| Oil Age | hrs | Client Info | 500 | 500 | 500 |
| Oil Changed | Client Info | | Changed | Changed | Changed |
| Sample Status | | | ABNORMAL | NORMAL | NORMAL |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|--------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | WC Method | | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 | |
|----------|--------|-------------|---------|--------------|----------|----|
| Iron | ppm | ASTM D5185m | >90 | 10 | 10 | 7 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >2 | 1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 3 | 2 | 1 |
| Lead | ppm | ASTM D5185m | >40 | 1 | 2 | 1 |
| Copper | ppm | ASTM D5185m | >330 | 3 | 3 | <1 |
| Tin | ppm | ASTM D5185m | >15 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 | |
|------------|--------|-------------|---------|--------------|----------|------|
| Boron | ppm | ASTM D5185m | 250 | 14 | 32 | 15 |
| Barium | ppm | ASTM D5185m | 10 | 1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 100 | 13 | 41 | 52 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 450 | 75 | 114 | 582 |
| Calcium | ppm | ASTM D5185m | 3000 | 2115 | 1995 | 1406 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 949 | 923 | 987 |
| Zinc | ppm | ASTM D5185m | 1350 | 1003 | 1075 | 1184 |
| Sulfur | ppm | ASTM D5185m | 4250 | 3537 | 3267 | 3227 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|-------------|---------|--------------|----------|------|
| Silicon | ppm | ASTM D5185m | >25 | 3 | 4 | 4 |
| Sodium | ppm | ASTM D5185m | >158 | 0 | <1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 2 | 1 |
| Fuel | % | ASTM D3524 | >3.0 | ▲ 5.1 | <1.0 | <1.0 |

INFRA-RED

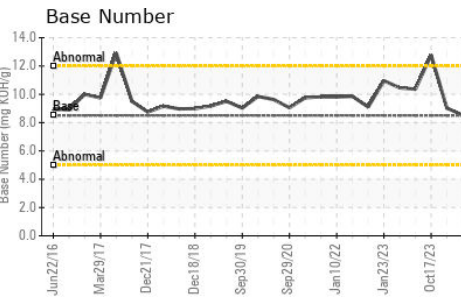
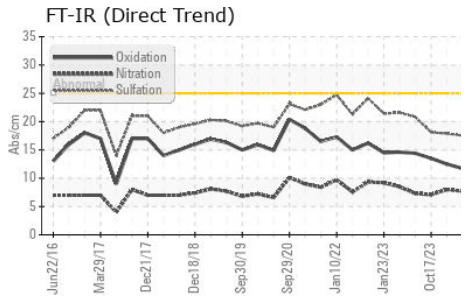
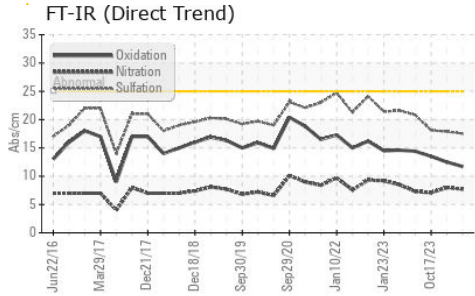
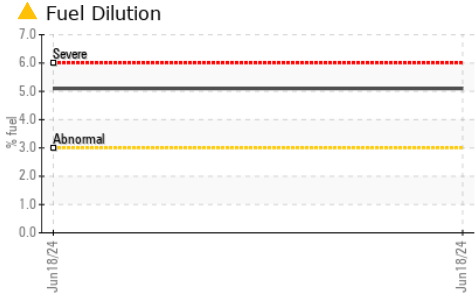
| | method | limit/base | current | history1 | history2 | |
|-----------|----------|-------------|---------|-------------|----------|------|
| Soot % | % | *ASTM D7844 | >6 | 0.4 | 0.4 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.7 | 8.0 | 7.1 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 17.5 | 17.9 | 18.1 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 | |
|------------------|----------|-------------|---------|-------------|----------|-------|
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 11.7 | 12.5 | 13.5 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 8.5 | 8.52 | 9.03 | 12.78 |



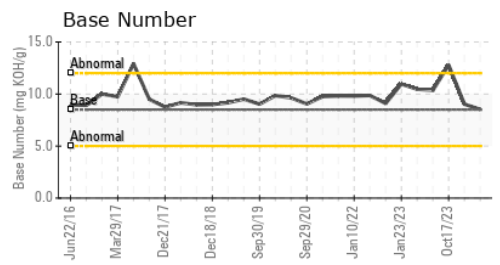
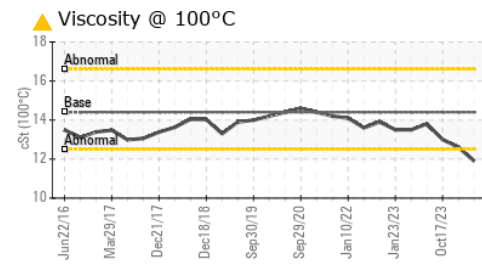
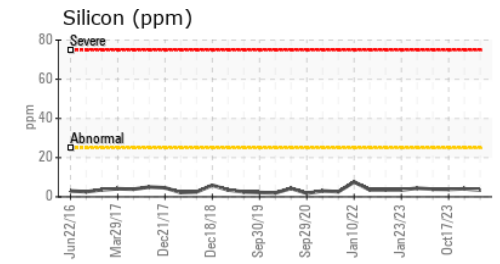
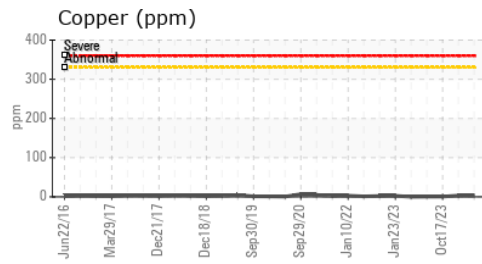
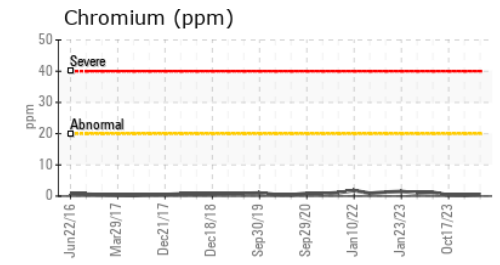
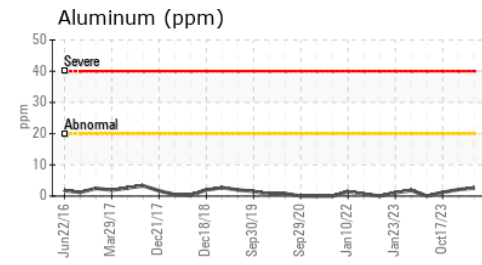
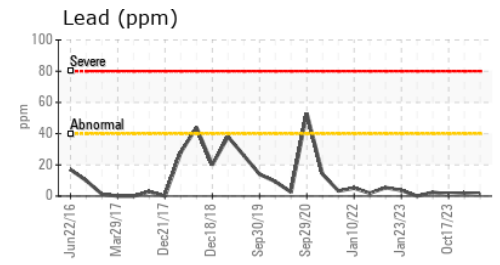
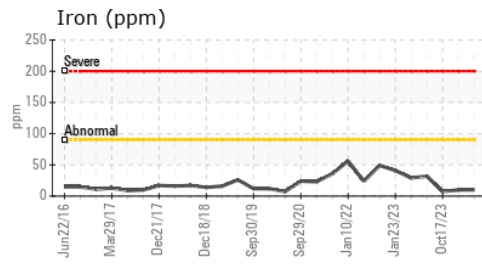
OIL ANALYSIS REPORT



| 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 | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 100°C | cSt | ASTM D445 | ▲ 11.9 | 12.6 | 13.0 |

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0001456 **Received** : 24 Jun 2024
Lab Number : 06218907 **Tested** : 27 Jun 2024
Unique Number : 11097104 **Diagnosed** : 27 Jun 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

TRESCA BROS SAND & GRAVEL INC
 66 MAIN ST
 MILLIS, MA
 US 02054
 Contact: JACK GALIANO
 jgaliano@trescaconcrete.com
 T: (508)376-2957
 F: (508)376-4333

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)