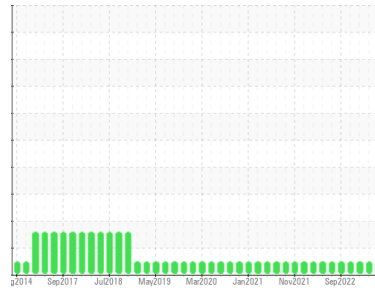




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**ROOTS-3**

Component  
**Compressor**

Fluid  
**MOBIL SHC 629 (20 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### 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 |             | <b>WC0745748</b>   | WC0745742   | WC0745736   |
| Sample Date   | Client Info |             | <b>18 May 2023</b> | 02 Mar 2023 | 05 Jan 2023 |
| Machine Age   | hrs         | Client Info | <b>58439</b>       | 56608       | 55274       |
| Oil Age       | hrs         | Client Info | <b>58439</b>       | 56608       | 55274       |
| Oil Changed   | Client Info |             | <b>Not Changed</b> | Not Changed | Not Changed |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

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

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >50 | <b>1</b>     | 1        | 2        |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | 0        | 0        |
| Nickel   | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Titanium | ppm    | ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Silver   | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >25 | <b>2</b>     | <1       | 0        |
| Lead     | ppm    | ASTM D5185m >25 | <b>&lt;1</b> | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >50 | <b>&lt;1</b> | 0        | 0        |
| Tin      | ppm    | ASTM D5185m >15 | <b>&lt;1</b> | 0        | <1       |
| Vanadium | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | 0        |
| Manganese  | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Magnesium  | ppm    | ASTM D5185m | <b>0</b>     | <1       | 0        |
| Calcium    | ppm    | ASTM D5185m | <b>0</b>     | 1        | <1       |
| Phosphorus | ppm    | ASTM D5185m | <b>532</b>   | 503      | 555      |
| Zinc       | ppm    | ASTM D5185m | <b>0</b>     | 5        | 1        |
| Sulfur     | ppm    | ASTM D5185m | <b>0</b>     | 17       | 289      |

## CONTAMINANTS

|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25 | <b>19</b> | 19       | 20       |
| Sodium    | ppm    | ASTM D5185m     | <b>0</b>  | 0        | <1       |
| Potassium | ppm    | ASTM D5185m >20 | <b>1</b>  | 0        | 0        |

## FLUID CLEANLINESS

|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >20000     | <b>168</b>      | 142      | 170      |
| Particles >6µm  | ASTM D7647   | >2500      | <b>71</b>       | 47       | 49       |
| Particles >14µm | ASTM D7647   | >320       | <b>12</b>       | 7        | 5        |
| Particles >21µm | ASTM D7647   | >80        | <b>3</b>        | 2        | 1        |
| Particles >38µm | ASTM D7647   | >20        | <b>0</b>        | 0        | 0        |
| Particles >71µm | ASTM D7647   | >4         | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) | >21/18/15  | <b>15/13/11</b> | 14/13/10 | 15/13/10 |

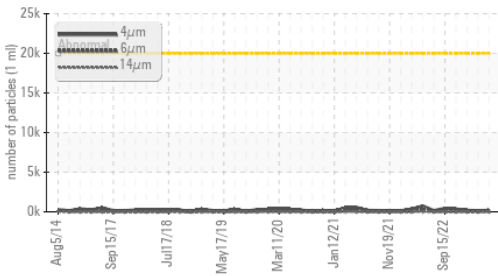
## FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.53</b> | 0.55     | 0.46     |

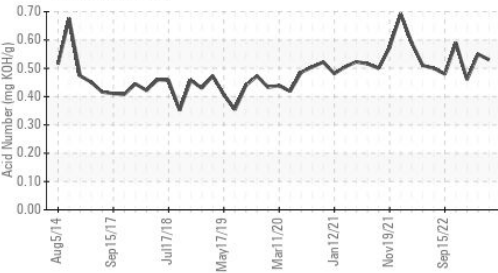


# OIL ANALYSIS REPORT

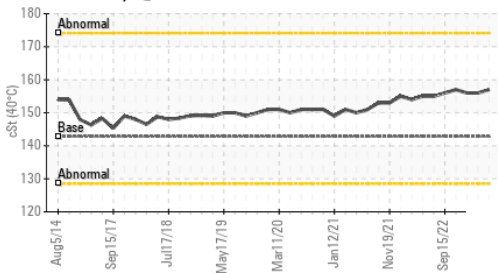
### Particle Trend



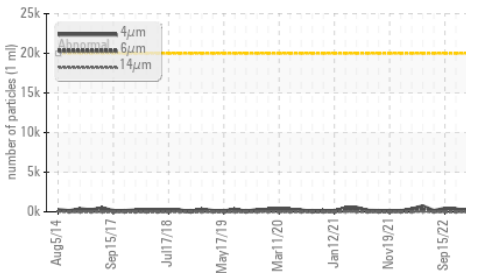
### Acid Number



### Viscosity @ 40°C



### Particle Trend

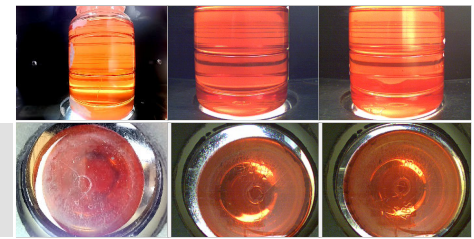


| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | >0.1    | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 142.8   | 157      | 156      |

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

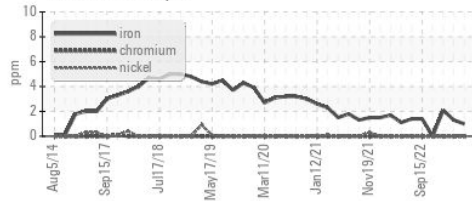
### Color



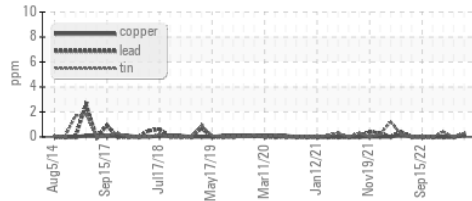
### Bottom

## GRAPHS

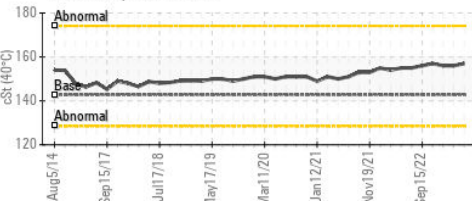
### Ferrous Alloys



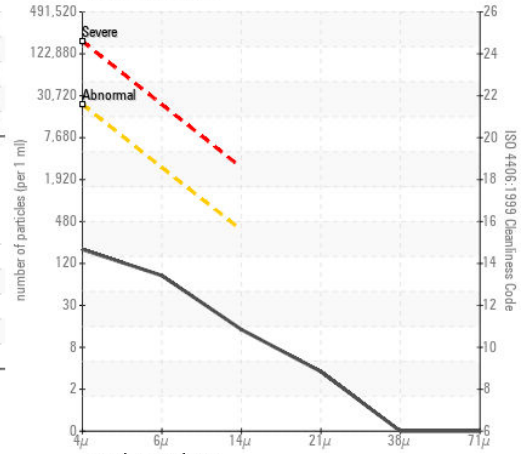
### Non-ferrous Metals



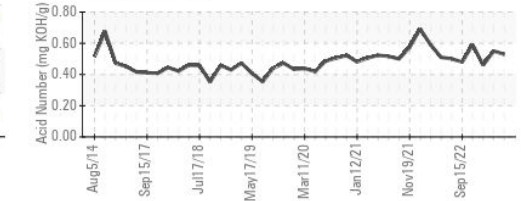
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0745748      Recieved : 11 Jan 2024  
 Lab Number : 06058077      Diagnosed : 12 Jan 2024  
 Unique Number : 10829459      Diagnostician : Don Baldrige  
 Test Package : IND 2 ( Additional Tests: PrtCount )

**GREENE VALLEY LANDFILL**  
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 F: (630)983-1535

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)