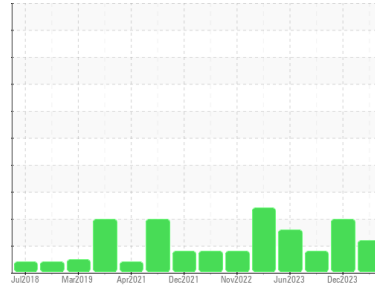




# OIL ANALYSIS REPORT

Sample Rating Trend



## ADDITIVES



Machine Id  
**AIR 1 (S/N 503287)**

Component  
**Air Compressor**

Fluid  
**USPI AIR 46 (--- 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

Additive levels indicate the addition of a different brand or type of oil. Confirmed. The AN level is acceptable for this fluid.

### SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>USPM36529</b>   | USPM31792   | USPM29567   |
| Sample Date   | Client Info |             | <b>25 Mar 2024</b> | 18 Dec 2023 | 10 Sep 2023 |
| Machine Age   | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             |             | <b>ATTENTION</b>   | ATTENTION   | ABNORMAL    |

### WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >50 | <b>1</b>     | 7        | 5        |
| Chromium | ppm    | ASTM D5185m >4  | <b>&lt;1</b> | <1       | 0        |
| Nickel   | ppm    | ASTM D5185m >4  | <b>0</b>     | 0        | 0        |
| Titanium | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Silver   | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >10 | <b>0</b>     | 0        | <1       |
| Lead     | ppm    | ASTM D5185m >20 | <b>0</b>     | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >40 | <b>22</b>    | 21       | 1        |
| Tin      | ppm    | ASTM D5185m >5  | <b>&lt;1</b> | 1        | 0        |
| Vanadium | ppm    | ASTM D5185m     | <b>0</b>     | <1       | 0        |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>     | <1       | 0        |

### ADDITIVES

|            | method | limit/base    | current      | history1 | history2 |
|------------|--------|---------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 0 | <b>0</b>     | 3        | 0        |
| Barium     | ppm    | ASTM D5185m 0 | <b>550</b>   | 677      | 0        |
| Molybdenum | ppm    | ASTM D5185m 0 | <b>0</b>     | 0        | 0        |
| Manganese  | ppm    | ASTM D5185m   | <b>&lt;1</b> | <1       | 0        |
| Magnesium  | ppm    | ASTM D5185m 0 | <b>1</b>     | 0        | 0        |
| Calcium    | ppm    | ASTM D5185m 0 | <b>5</b>     | 4        | 0        |
| Phosphorus | ppm    | ASTM D5185m 1 | <b>13</b>    | 16       | 0        |
| Zinc       | ppm    | ASTM D5185m 0 | <b>61</b>    | 55       | 0        |
| Sulfur     | ppm    | ASTM D5185m 0 | <b>450</b>   | 904      | 0        |

### CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25  | <b>&lt;1</b> | 1        | <1       |
| Sodium    | ppm    | ASTM D5185m      | <b>44</b>    | 49       | 2        |
| Potassium | ppm    | ASTM D5185m >20  | <b>5</b>     | 7        | <1       |
| Water     | %      | ASTM D6304 >0.2  | <b>0.011</b> | 0.188    | 0.086    |
| ppm Water | ppm    | ASTM D6304 >2000 | <b>118</b>   | 1881     | 869.9    |

### FLUID CLEANLINESS

|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >10000     | <b>1078</b>     | 17380    | ---      |
| Particles >6µm  | ASTM D7647   | >2500      | <b>172</b>      | 1137     | ---      |
| Particles >14µm | ASTM D7647   | >320       | <b>17</b>       | 50       | ---      |
| Particles >21µm | ASTM D7647   | >80        | <b>5</b>        | 17       | ---      |
| Particles >38µm | ASTM D7647   | >20        | <b>0</b>        | 1        | ---      |
| Particles >71µm | ASTM D7647   | >4         | <b>0</b>        | 0        | ---      |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15  | <b>17/15/11</b> | 21/17/13 | ---      |

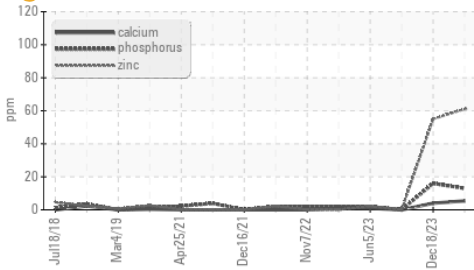
### FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.05 | <b>0.39</b> | 0.32     | 0.33     |

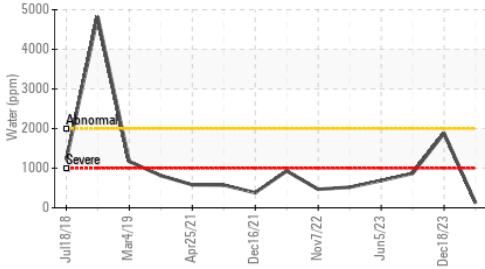


# OIL ANALYSIS REPORT

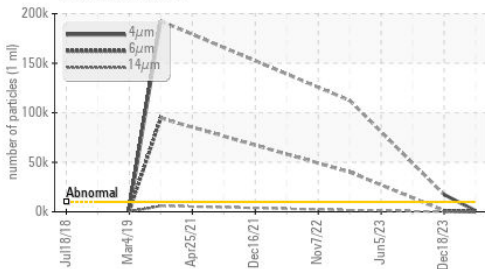
## Additives



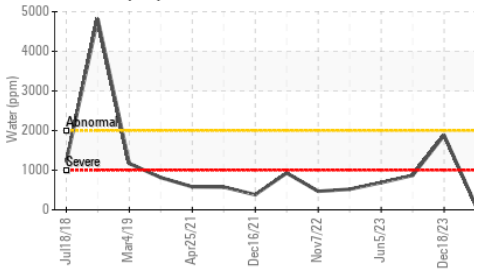
## Water (KF)



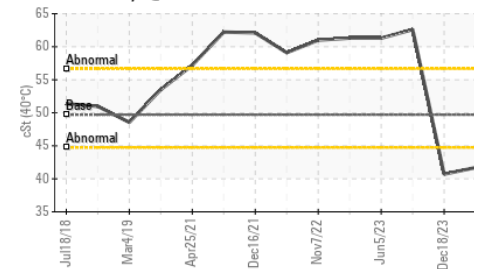
## Particle Trend



## Water (KF)



## Viscosity @ 40°C

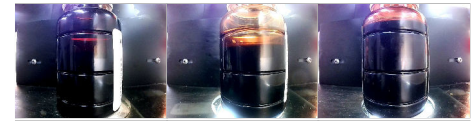


| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | ▲ MODER  |
| 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 @ 40°C      | cSt    | ASTM D445  | 49.7    | 41.7     | 40.7     |

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

Color

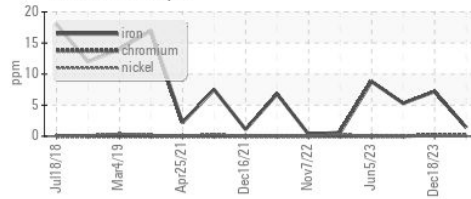


Bottom

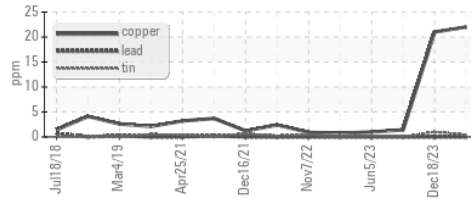


## GRAPHS

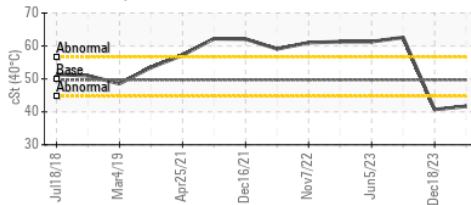
### Ferrous Alloys



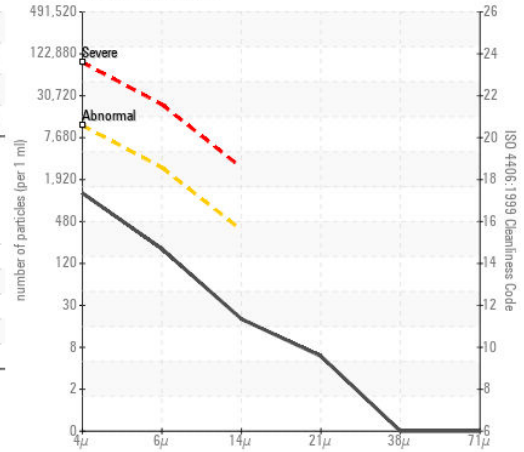
### Non-ferrous Metals



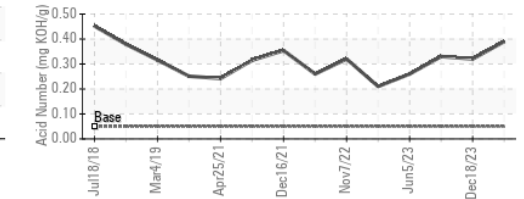
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : USPM36529

Lab Number : 06134988

Unique Number : 10954453

Test Package : IND 2

Received : 01 Apr 2024

Tested : 03 Apr 2024

Diagnosed : 03 Apr 2024 - Doug Bogart

JBS/SWIFT - GREELEY BEEF

800 N 8TH ST

GREELEY, CO

US 80631

Contact:

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)

T:

F: