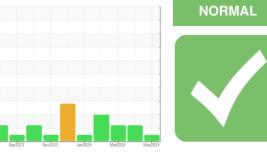


## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id MRC-323 Component Compressor Fluid TULCO LUBSOIL LPG WS 150 (--- 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

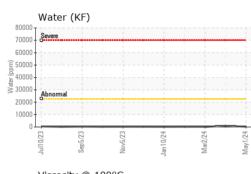
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

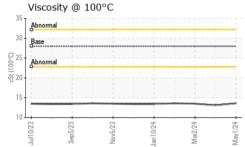
| SAMPLE INFORM    | IATION   | method       | limit/base | current     | history1         | history2     |
|------------------|----------|--------------|------------|-------------|------------------|--------------|
| Sample Number    |          | Client Info  |            | TO60001153  | TO60002289       | TO60002128   |
| Sample Date      |          | Client Info  |            | 01 May 2024 | 01 Apr 2024      | 02 Mar 2024  |
| Machine Age      | hrs      | Client Info  |            | 5855        | 5453             | 5108         |
| Oil Age          | hrs      | Client Info  |            | 0           | 0                | 0            |
| Oil Changed      |          | Client Info  |            | N/A         | N/A              | N/A          |
| Sample Status    |          |              |            | NORMAL      | ABNORMAL         | ABNORMAL     |
| WEAR METALS      |          | method       | limit/base | current     | history1         | history2     |
| Iron             | ppm      | ASTM D5185m  | >50        | 1           | 0                | 0            |
| Chromium         | ppm      | ASTM D5185m  | >10        | <1          | 0                | 0            |
| Nickel           | ppm      | ASTM D5185m  |            | <1          | 0                | 0            |
| Titanium         | ppm      | ASTM D5185m  |            | <1          | 0                | 0            |
| Silver           | ppm      | ASTM D5185m  |            | <1          | 0                | 0            |
| Aluminum         | ppm      | ASTM D5185m  | >25        | 2           | 0                | <1           |
| Lead             | ppm      | ASTM D5185m  | >25        | -<br><1     | 0                | <1           |
| Copper           | ppm      |              | >50        | 1           | 0                | 0            |
| Tin              | ppm      | ASTM D5185m  | >15        | -<br><1     | <1               | <1           |
| Vanadium         | ppm      | ASTM D5185m  | 210        | <1          | 0                | 0            |
| Cadmium          | ppm      | ASTM D5185m  |            | <1          | 0                | 0            |
| ADDITIVES        |          | method       | limit/base | current     | history1         | history2     |
| Boron            | ppm      | ASTM D5185m  | 0          | 46          | 45               | 57           |
| Barium           | ppm      | ASTM D5185m  | 0          | 0           | 0                | 0            |
| Molybdenum       | ppm      | ASTM D5185m  | 0          | <1          | 0                | 0            |
| Manganese        | ppm      | ASTM D5185m  |            | 0           | 0                | <1           |
| Magnesium        | ppm      | ASTM D5185m  | 0          | 5           | 3                | 6            |
| Calcium          | ppm      | ASTM D5185m  | 0          | 1275        | 1227             | 1241         |
| Phosphorus       | ppm      | ASTM D5185m  | 0          | 339         | 283              | 278          |
| Zinc             | ppm      | ASTM D5185m  | 0          | 339         | 300              | 307          |
| Sulfur           | ppm      | ASTM D5185m  | 0          | 4527        | 4083             | 3854         |
| CONTAMINANTS     |          | method       | limit/base | current     | history1         | history2     |
| Silicon          | ppm      | ASTM D5185m  | >25        | 4           | 4                | 4            |
| Sodium           | ppm      | ASTM D5185m  |            | 4           | 4                | 3            |
| Potassium        | ppm      | ASTM D5185m  | >20        | 4           | 1                | <1           |
| Water            | %        | ASTM D6304   | >2.26      | 0.024       | 0.096            | 0.006        |
| ppm Water        | ppm      | ASTM D6304   | >22600     | 240         | 960              | 62           |
| FLUID CLEANLIN   | ESS      | method       | limit/base | current     | history1         | history2     |
| Particles >4µm   |          | ASTM D7647   | >10000     | 7103        | 18872            | 6355         |
| Particles >6µm   |          | ASTM D7647   | >1300      | 875         | <b>4</b> 719     | <b>4</b> 127 |
| Particles >14µm  |          | ASTM D7647   | >320       | 16          | 111              | 111          |
| Particles >21µm  |          | ASTM D7647   | >80        | 2           | 10               | 15           |
| Particles >38µm  |          | ASTM D7647   | >20        | 0           | 0                | 0            |
| Particles >71µm  |          | ASTM D7647   | >4         | 0           | 0                | 0            |
| Oil Cleanliness  |          | ISO 4406 (c) | >20/17/15  | 20/17/11    | <b>2</b> 1/19/14 | ▲ 21/19/14   |
| FLUID DEGRADA    | TION     | method       | limit/base | current     | history1         | history2     |
| Acid Number (AN) | mg KOH/g | ASTM D8045   |            | 0.874       | 0.779            | 0.832        |

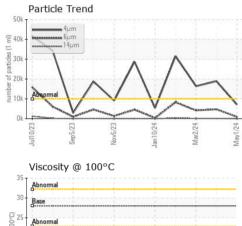
Contact/Location: HERMAN GARZA - EOGMID Page 1 of 2

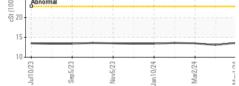


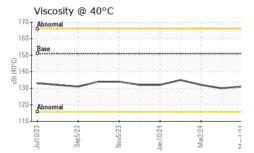
# **OIL ANALYSIS REPORT**











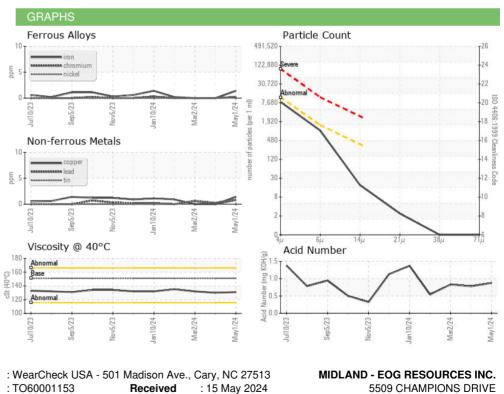
Certificate 12367

| VISUAL               |        | method     | limit/base | current | history1 | history2 |
|----------------------|--------|------------|------------|---------|----------|----------|
| White Metal          | scalar | *Visual    | NONE       | NONE    | NONE     | 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    | NONE     | NONE     |
| 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    | >2.26      | NEG     | NEG      | NEG      |
| Free Water           | scalar | *Visual    |            | NEG     | NEG      | NEG      |
| FLUID PROPERT        | IES    | method     | limit/base | current | history1 | history2 |
| Visc @ 40°C          | cSt    | ASTM D445  | 151        | 131     | 130      | 132      |
| Visc @ 100°C         | cSt    | ASTM D445  | 28         | 13.6    | 13.1     | 13.5     |
| Viscosity Index (VI) | Scale  | ASTM D2270 | 224        | 98      | 93       | 96       |
| SAMPLE IMAGES        |        | method     | limit/base | current | history1 | history2 |
|                      |        |            |            |         |          |          |



Bottom

Color



: 23 May 2024

Tested

Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

Diagnosed

5509 CHAMPIONS DRIVE MIDLAND, TX : 23 May 2024 - Jonathan Hester US 79706 Contact: HERMAN GARZA herman\_garza@eogresources.com T: (432)686-3600 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Report Id: EOGMID [WUSCAR] 06180231 (Generated: 05/23/2024 12:12:37) Rev: 1

Laboratory

Sample No.

Lab Number : 06180231

Unique Number : 11031557

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.

Contact/Location: HERMAN GARZA - EOGMID

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