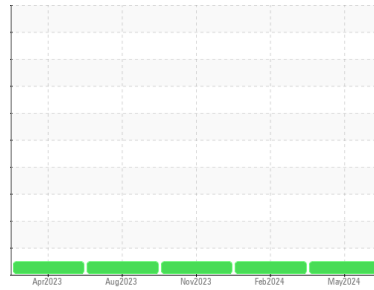




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**MLU-1**  
 Component  
**Inboard Lube System**  
 Fluid  
**CHEVRON REGAL OIL R&O 32 (--- 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.

#### 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>RP0036040</b>   | RP0036128   | RP0036173   |
| Sample Date        | Client Info |             |            | <b>23 May 2024</b> | 19 Feb 2024 | 17 Nov 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>NORMAL</b>      | NORMAL      | NORMAL      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | 0        |
| Chromium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | <1       | 0        |
| Nickel      | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | <1       |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>1</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>1</b>     | 0        | 0        |
| Lead        | ppm | ASTM D5185m | >20        | <b>2</b>     | 0        | 1        |
| Copper      | ppm | ASTM D5185m | >20        | <b>1</b>     | 0        | 0        |
| Tin         | ppm | ASTM D5185m | >20        | <b>3</b>     | 2        | 4        |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |

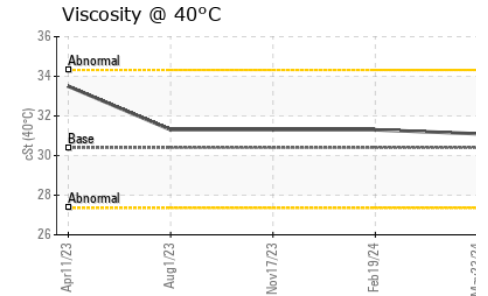
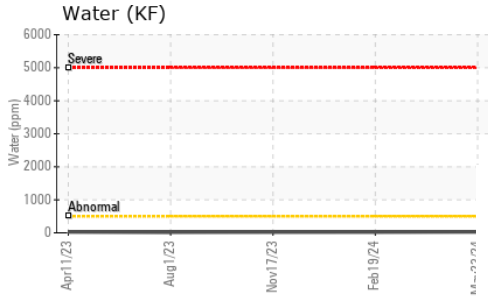
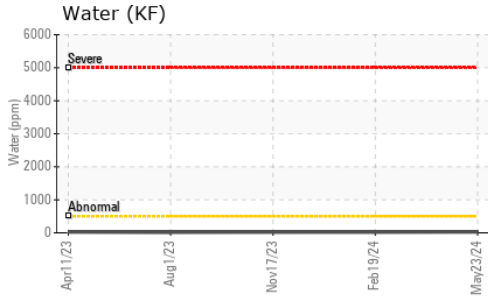
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Magnesium  | ppm | ASTM D5185m |            | <b>3</b>     | 0        | <1       |
| Calcium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 1        |
| Phosphorus | ppm | ASTM D5185m |            | <b>5</b>     | 0        | 4        |
| Zinc       | ppm | ASTM D5185m |            | <b>2</b>     | 0        | 0        |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >15        | <b>10</b>    | 9        | 11       |
| Sodium       | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 2        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | <1       |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.002</b> | 0.002    | 0.002    |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>25</b>    | 19       | 18       |

| FLUID DEGRADATION |          | method     | limit/base | current      | history1 | history2 |
|-------------------|----------|------------|------------|--------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 |            | <b>0.083</b> | 0.064    | 0.103    |

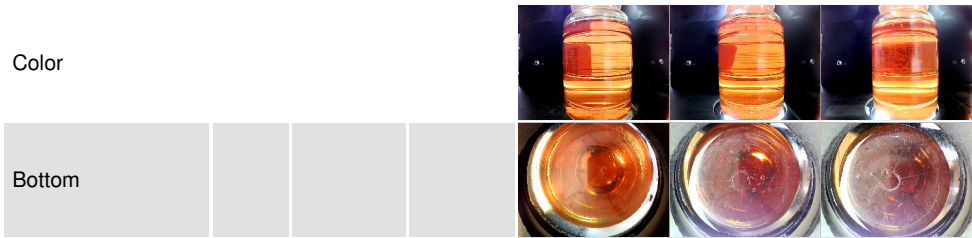
| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Precipitate      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Silt             | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Debris           | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | LIGHT    |
| Sand/Dirt        | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Appearance       | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Odor             | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | *Visual | >0.05      | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | *Visual |            | <b>NEG</b>   | NEG      | NEG      |

# OIL ANALYSIS REPORT

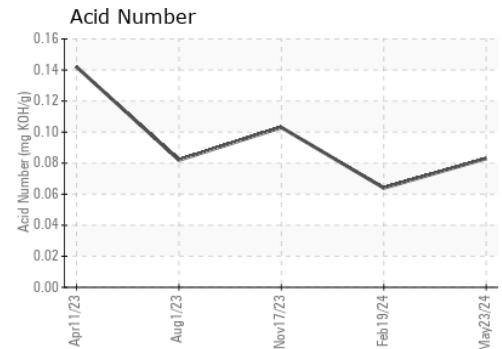
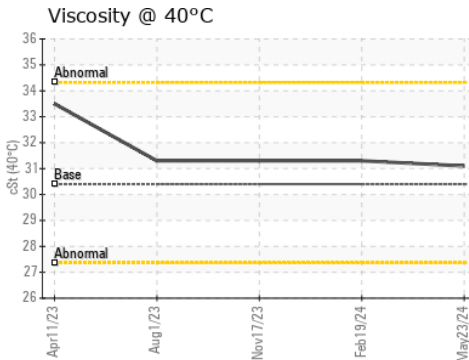
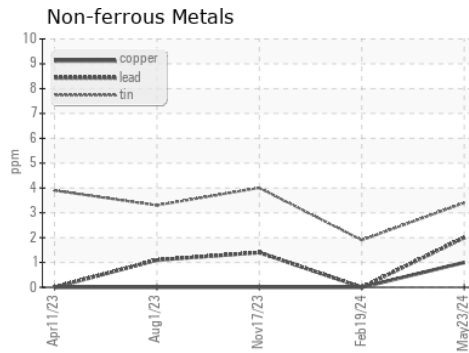
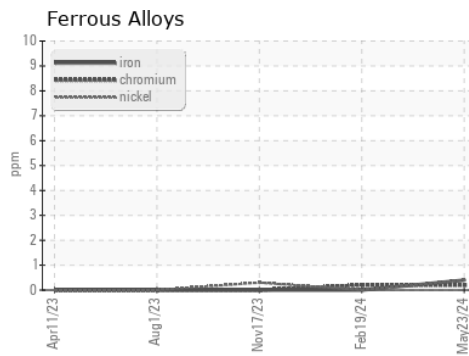


| FLUID PROPERTIES |     | method    | limit/base | current     | history1 | history2 |
|------------------|-----|-----------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D445 | 30.4       | <b>31.1</b> | 31.3     | 31.3     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0036040  
**Lab Number** : 06194089  
**Unique Number** : 11056212  
**Test Package** : IND 2  
**Received** : 29 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 31 May 2024 - Angela Borella

**ENERGY TRANSFER - COTTON VALLEY**  
 22394 HWY 371  
 COTTON VALLEY, LA  
 US 71018  
 Contact: Service Manager  
 Zach.Tinkle@energytransfer.com

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)