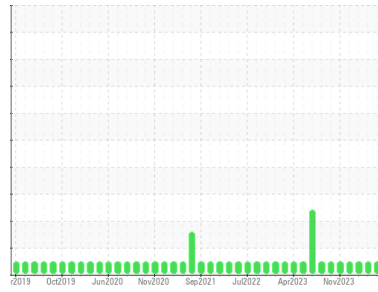




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**IWAG #1**  
 Machine Id  
**C 2605 C 2605**  
 Component  
**Reciprocating Compressor**  
 Fluid  
**MOBIL PEGASUS 89 (--- 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>HLC0002910</b>  | HLC0002923  | HLC0003006  |
| Sample Date        | Client Info |             |            | <b>04 Jun 2024</b> | 02 Apr 2024 | 02 Mar 2024 |
| 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      |

| 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>     | 2        | 0        |
| Chromium    | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | <1       | 0        |
| Nickel      | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >25        | <b>3</b>     | 1        | 1        |
| Lead        | ppm | ASTM D5185m | >25        | <b>1</b>     | 2        | <1       |
| Copper      | ppm | ASTM D5185m | >50        | <b>1</b>     | 2        | <1       |
| Tin         | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | 2        | <1       |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | 0        |

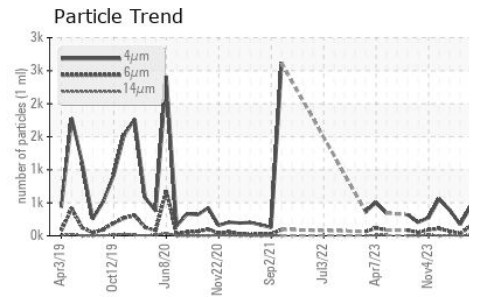
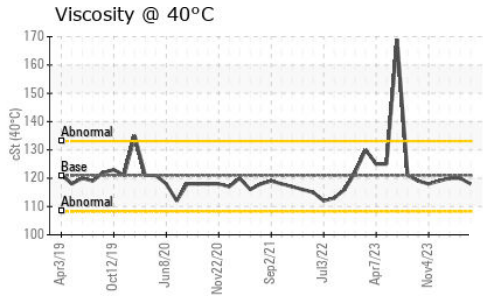
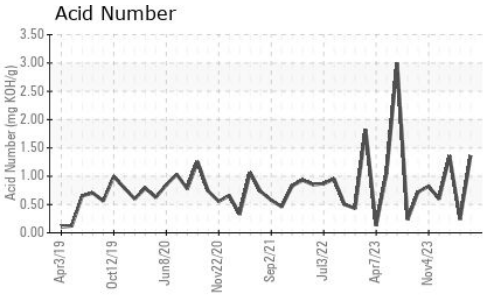
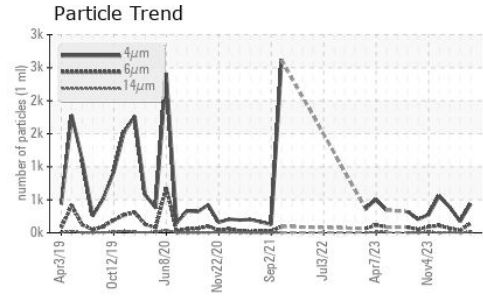
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Barium     | ppm | ASTM D5185m |            | <b>1</b>     | <1       | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>&lt;1</b> | 1        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm | ASTM D5185m |            | <b>9</b>     | 7        | 10       |
| Calcium    | ppm | ASTM D5185m |            | <b>2563</b>  | 2556     | 2477     |
| Phosphorus | ppm | ASTM D5185m |            | <b>262</b>   | 246      | 212      |
| Zinc       | ppm | ASTM D5185m |            | <b>256</b>   | 244      | 235      |
| Sulfur     | ppm | ASTM D5185m |            | <b>4733</b>  | 4603     | 4753     |

| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>6</b> | 6        | 6        |
| Sodium       | ppm | ASTM D5185m |            | <b>0</b> | 0        | <1       |
| Potassium    | ppm | ASTM D5185m | >20        | <b>2</b> | 2        | 0        |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>437</b>      | 173      | 392      |
| Particles >6µm    |  | ASTM D7647   | >2500      | <b>138</b>      | 35       | 68       |
| Particles >14µm   |  | ASTM D7647   | >320       | <b>13</b>       | 4        | 9        |
| Particles >21µm   |  | ASTM D7647   | >80        | <b>2</b>        | 1        | 5        |
| Particles >38µm   |  | ASTM D7647   | >20        | <b>0</b>        | 0        | 1        |
| Particles >71µm   |  | ASTM D7647   | >4         | <b>0</b>        | 0        | 1        |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/18/15  | <b>16/14/11</b> | 15/12/9  | 16/13/10 |

| FLUID DEGRADATION |          | method     | limit/base | current      | history1 | history2 |
|-------------------|----------|------------|------------|--------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 |            | <b>1.362</b> | 0.24     | 1.359    |

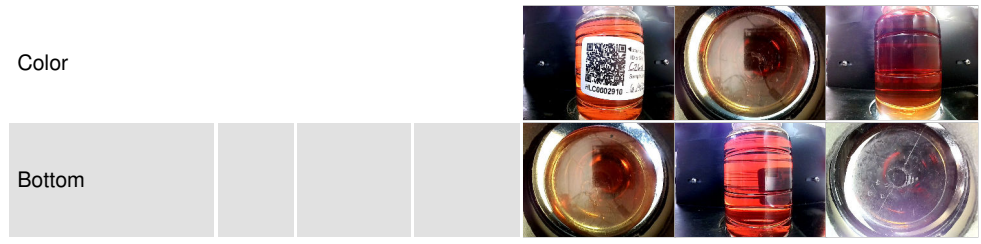
# OIL ANALYSIS REPORT



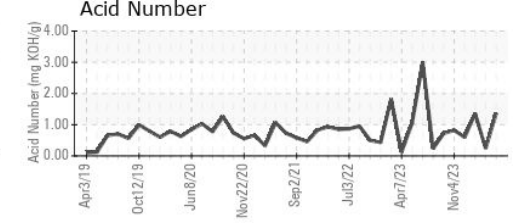
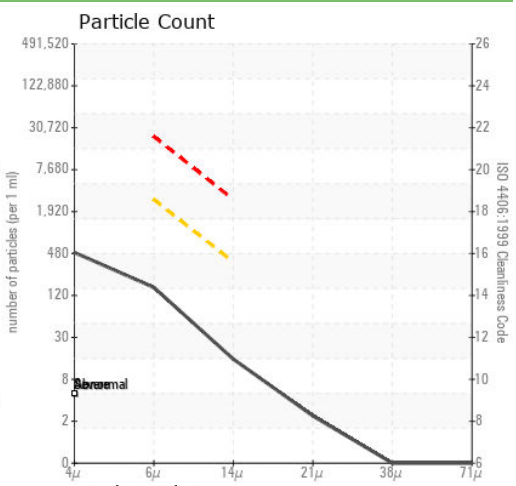
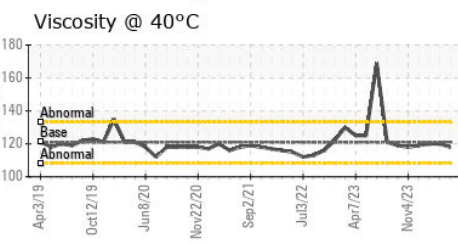
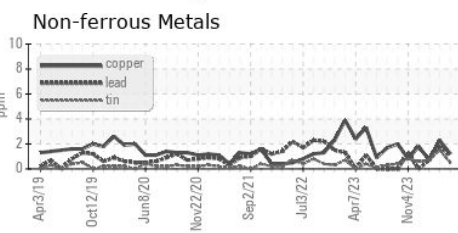
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
|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

| FLUID PROPERTIES | method | limit/base    | current    | history1 | history2 |
|------------------|--------|---------------|------------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 121 | <b>118</b> | 120      | 120      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HLC0002910  
**Lab Number** : 06218830  
**Unique Number** : 11097027  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**Received** : 24 Jun 2024  
**Tested** : 27 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Jonathan Hester

**HILCORP EXPLORATION ALASKA - MILNE POINT**  
 1000 MILNE POINT RD  
 PRUDOE BAY, AK  
 US 99734

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)

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 F: x: