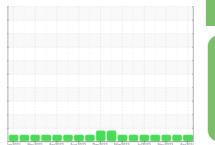


# **OIL ANALYSIS REPORT**

Sample Rating Trend



**NORMAL** 



Machine Id

# **SCHLUMBERGER SITE 1 HP PUMP C**

Component **Pump** 

**ROYAL PURPLE SYNFILM GT 46 (--- QTS)** 

| 401 |  |
|-----|--|
|     |  |

### Recommendation

Resample at the next service interval to monitor.

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.

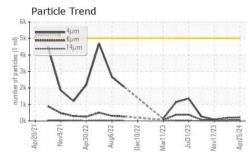
### **Fluid Condition**

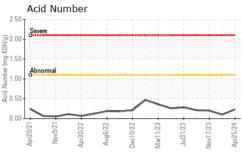
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

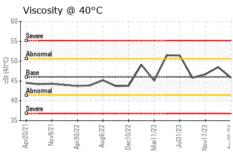
| SAMPLE INFORMATION         method         limit/base         current         history1         history2           Sample Number         Client Info         WC0837924         WC0837890         WC0837906           Sample Date         Client Info         25 Apr 2024         01 Jan 2024         17 Nov 2023           Machine Age         hrs         Client Info         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A           Sample Status         NCG         NEG         NEG           Weater         WC Method         -1         NEG         NEG           Weater         WC Method         -1         NEG         NEG           WEAR METALS         method         Imit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >9         0         0         0           Chromium         ppm <td< th=""><th>Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status  CONTAMINATION Water  WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium  ADDITIVES Boron Barium</th><th>hrs<br/>hrs</th><th>Client Info Client Info Client Info Client Info Client Info Would Info Method Would Method ASTM D5185m ASTM D5185m</th><th>limit/base &gt;.1 limit/base</th><th>WC0837924<br/>25 Apr 2024<br/>0<br/>0<br/>N/A<br/>NORMAL</th><th>WC0837890<br/>01 Jan 2024<br/>0<br/>0<br/>N/A<br/>NORMAL</th><th>WC0837906<br/>17 Nov 2023<br/>0<br/>0<br/>N/A<br/>NORMAL</th></td<> | Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status  CONTAMINATION Water  WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium  ADDITIVES Boron Barium | hrs<br>hrs                      | Client Info Client Info Client Info Client Info Client Info Would Info Method Would Method ASTM D5185m ASTM D5185m | limit/base >.1 limit/base | WC0837924<br>25 Apr 2024<br>0<br>0<br>N/A<br>NORMAL | WC0837890<br>01 Jan 2024<br>0<br>0<br>N/A<br>NORMAL | WC0837906<br>17 Nov 2023<br>0<br>0<br>N/A<br>NORMAL |
|--|--|---------------------------------|--|---------------------------|---|---|---|
| Sample Date  | Sample Date Machine Age Oil Age Oil Changed Sample Status  CONTAMINATION Water  WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium  ADDITIVES Boron Barium               | ppm<br>ppm<br>ppm<br>ppm<br>ppm | Client Info Client Info Client Info Client Info Method WC Method Method ASTM D5185m ASTM D5185m                    | >.1<br>limit/base         | 25 Apr 2024<br>0<br>0<br>N/A<br>NORMAL              | 01 Jan 2024<br>0<br>0<br>N/A<br>NORMAL<br>history1  | 17 Nov 2023<br>0<br>0<br>N/A<br>NORMAL              |
| Machine Age Oil Age         hrs Oilent Info         0         0         0         0           Oil Age         hrs Oilent Info         0         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A         N/A           Sample Status         Normal         Normal         Normal         Normal         Normal           CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >90         0         0         0           Uchard         ppm         ASTM D5185m         >5         0         0         0           Gliver         ppm         ASTM D5185m         >3         0         <1   | Machine Age Oil Age Oil Changed Sample Status  CONTAMINATION Water  WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium  ADDITIVES Boron Barium                           | ppm<br>ppm<br>ppm<br>ppm<br>ppm | Client Info Client Info Client Info Method WC Method Method ASTM D5185m ASTM D5185m                                | >.1<br>limit/base         | 0<br>0<br>N/A<br>NORMAL                             | 0<br>0<br>N/A<br>NORMAL<br>history1                 | 0<br>0<br>N/A<br>NORMAL                             |
| Oil Age         hrs         Client Info         0         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A         N/A           Sample Status         Client Info         N/A         N/A         N/A         N/A           CONTAMINATION         method         limit/base         current         history1         history2           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >90         0         0         0           Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >3         0         <1         0           Silver         ppm         ASTM D5185m         >3         0         <1         0           Aluminum         ppm         ASTM D5185m         >7         0         0         <1           Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >9         0         0   | Oil Age Oil Changed Sample Status  CONTAMINATION Water  WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium  | ppm<br>ppm<br>ppm<br>ppm<br>ppm | Client Info Client Info  method WC Method method ASTM D5185m ASTM D5185m   | >.1<br>limit/base         | 0<br>N/A<br>NORMAL                                  | 0<br>N/A<br>NORMAL<br>history1                      | 0<br>N/A<br>NORMAL                                  |
| Oil Changed Sample Status         Client Info         N/A NORMAL         N/A NORMAL         N/A NORMAL         N/A NORMAL         N/A NORMAL   | Oil Changed Sample Status  CONTAMINATION Water  WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium  | ppm<br>ppm<br>ppm<br>ppm        | method WC Method method ASTM D5185m ASTM D5185m  | >.1<br>limit/base         | N/A<br>NORMAL<br>current                            | N/A<br>NORMAL<br>history1                           | N/A<br>NORMAL                                       |
| NORMAL   NORMAL   NORMAL   CONTAMINATION   method   limit/base   current   history1   history2   | Sample Status  CONTAMINATION  Water  WEAR METALS  Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium  ADDITIVES  Boron Barium  | ppm<br>ppm<br>ppm<br>ppm        | method<br>WC Method<br>method<br>ASTM D5185m<br>ASTM D5185m  | >.1<br>limit/base         | NORMAL current                                      | NORMAL<br>history1                                  | NORMAL  |
| CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         x1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >90         0         0         0           Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >5         0         0         0           Silver         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >7         0         0         <1   | CONTAMINATION Water  WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium   | ppm<br>ppm<br>ppm<br>ppm        | WC Method<br>method<br>ASTM D5185m<br>ASTM D5185m  | >.1<br>limit/base         | current   | history1  |   |
| Water         WC Method         >.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >90         0         0         0           Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >5         0         0         <1           Titanium         ppm         ASTM D5185m         >3         0         <1         0           Silver         ppm         ASTM D5185m         >3         0         <1         0           Aluminum         ppm         ASTM D5185m         >3         0         <1         0           Lead         ppm         ASTM D5185m         >12         0         0         <0           Copper         ppm         ASTM D5185m         >9         0         0         <0           Vanadium         ppm         ASTM D5185m         0         0         0         <0           Vanadium         ppm         ASTM D5185m         0         0         0         <0  | Water  WEAR METALS  Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium  | ppm<br>ppm<br>ppm<br>ppm        | WC Method<br>method<br>ASTM D5185m<br>ASTM D5185m  | >.1<br>limit/base         |   | •   | history2  |
| WEAR METALS  | WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium  | ppm<br>ppm<br>ppm               | method ASTM D5185m ASTM D5185m   | limit/base                | NEG   | NEG   |   |
| Iron   | Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium  | ppm<br>ppm<br>ppm               | ASTM D5185m<br>ASTM D5185m   |                           |   | 0   | NEG   |
| Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >5         0         0         <1           Titanium         ppm         ASTM D5185m         >3         0         <1         0           Silver         ppm         ASTM D5185m         >3         0         0         0           Aluminum         ppm         ASTM D5185m         >7         0         0         <1           Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >30         8         8         6           Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0   | Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium   | ppm<br>ppm<br>ppm               | ASTM D5185m  | >90                       | current   | history1  | history2  |
| Nickel         ppm         ASTM D5185m         >5         0         0         <1   | Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium  ADDITIVES Boron Barium   | ppm<br>ppm                      |  |                           | 0   | 0   | 0   |
| Titanium         ppm         ASTM D5185m         >3         0         <1   | Titanium Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium   | ppm<br>ppm                      | ASTM D5185m  | >5                        | 0   | 0   | 0   |
| Silver         ppm         ASTM D5185m         >3         0         0         0           Aluminum         ppm         ASTM D5185m         >7         0         0         <1   | Silver Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium  | ppm                             |  | >5                        | 0   | 0   | <1  |
| Aluminum         ppm         ASTM D5185m         >7         0         0         <1   | Aluminum Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium   |                                 | ASTM D5185m  | >3                        | 0   | <1  | 0   |
| Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >30         8         8         6           Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         0         0   | Lead Copper Tin Vanadium Cadmium ADDITIVES Boron Barium  |                                 | ASTM D5185m  | >3                        | 0   | 0   | 0   |
| Copper         ppm         ASTM D5185m         >30         8         8         6           Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         0         0   | Copper Tin Vanadium Cadmium ADDITIVES Boron Barium   | ppm                             | ASTM D5185m  | >7                        | 0   | 0   | <1  |
| Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         <   | Tin Vanadium Cadmium ADDITIVES Boron Barium  | ppm                             | ASTM D5185m  | >12                       | 0   | 0   | 0   |
| Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466  | Tin Vanadium Cadmium ADDITIVES Boron Barium  | ppm                             | ASTM D5185m  | >30                       | 8   | 8   | 6   |
| Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history   | Vanadium Cadmium ADDITIVES Boron Barium  | ppm                             | ASTM D5185m  | >9                        | 0   | 0   | 0   |
| Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         <1         <   | Cadmium  ADDITIVES  Boron  Barium  |                                 | ASTM D5185m  |                           | 0   | 0   | 0   |
| Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         6         18           Zinc         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1   | Boron<br>Barium  |                                 | ASTM D5185m  |                           | 0   | 0   | 0   |
| Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         6         18           Zinc         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         <1         <1           Sodium         ppm         ASTM D5185m         <1         <1         <1         <1   | Barium   |                                 | method   | limit/base                | current   | history1  | history2  |
| Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         6         18           Zinc         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1   |  | ppm                             | ASTM D5185m  | 0                         | 0   | 0   | 0   |
| Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         6         18           Zinc         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         <1         1           Sodium         ppm         ASTM D5185m         <1         <1         <1         <1  | Malubdanum   | ppm                             | ASTM D5185m  | 0                         | 0   | 0   | 0   |
| Magnesium         ppm         ASTM D5185m         95         15         15         21           Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         6         18           Zinc         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1  | Molybaenum   | ppm                             | ASTM D5185m  | 0                         | 0   | 0   | 0   |
| Calcium         ppm         ASTM D5185m         0         0         0         2           Phosphorus         ppm         ASTM D5185m         0         0         6         18           Zinc         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1  | Manganese  | ppm                             | ASTM D5185m  |                           | 0   | 0   | 0   |
| Phosphorus         ppm         ASTM D5185m         0         0         6         18           Zinc         ppm         ASTM D5185m         0         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1  | Magnesium  | ppm                             | ASTM D5185m  | 95                        | 15  | 15  | 21  |
| Zinc         ppm         ASTM D5185m         0         0         0         0         0           Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1  | Calcium  | ppm                             | ASTM D5185m  | 0                         | 0   | 0   | 2   |
| Sulfur         ppm         ASTM D5185m         15000         19224         16173         16466           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1   | Phosphorus   | ppm                             | ASTM D5185m  | 0                         | 0   | 6   | 18  |
| CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         <1         1           Sodium         ppm         ASTM D5185m         <1         <1         <1   | Zinc   | ppm                             | ASTM D5185m  | 0                         | 0   | 0   | 0   |
| Silicon         ppm         ASTM D5185m         >60         <1   | Sulfur   | ppm                             | ASTM D5185m  | 15000                     | 19224   | 16173   | 16466   |
| Sodium         ppm         ASTM D5185m         <1  | CONTAMINANTS   |                                 | method   | limit/base                | current   | history1  | history2  |
|  | Silicon  | ppm                             | ASTM D5185m  | >60                       | <1  | <1  | 1   |
| Potassium         ppm         ASTM D5185m         >20         0         0         1  | Sodium   | ppm                             | ASTM D5185m  |                           | <1  | <1  | <1  |
|  | Potassium  | ppm                             | ASTM D5185m  | >20                       | 0   | 0   | 1   |
| FLUID CLEANLINESS method limit/base current history1 history2  | FLUID CLEANLINE  | ESS                             | method   | limit/base                | current   | history1  | history2  |
| Particles >4μm ASTM D7647 >5000 <b>216</b> 180 80  | Particles >4µm   |                                 | ASTM D7647   | >5000                     | 216   | 180   | 80  |
| Particles >6μm ASTM D7647 >1300 <b>68</b> 33 29  | Particles >6µm   |                                 | ASTM D7647   | >1300                     | 68  | 33  | 29  |
| Particles >14μm ASTM D7647 >160 <b>6</b> 5 5   | Particles >14µm  |                                 | ASTM D7647   | >160                      | 6   | 5   | 5   |
| Particles >21μm  | Particles >21µm  |                                 | ASTM D7647   | >40                       | 2   | 3   | 2   |
| Particles >38μm ASTM D7647 >10 <b>0</b> 0 0  | Particles >38µm  |                                 |  | >10                       | 0   |   | _   |
| Particles >71μm ASTM D7647 >3 <b>0</b> 0   | Particles >71µm  |                                 |  |                           | U   | 0   |   |
|  | Oil Cleanliness  |                                 | ASTM D7647   | >3                        |   |   | 0   |
| Oil Clearinitiess 150 4400 (c) >19/11/14 15/15/10 15/12/10 15/12/10  | FLUID DEGRADAT   |                                 | ASTM D7647   | >3<br>>19/17/14           |   |   | 0   |

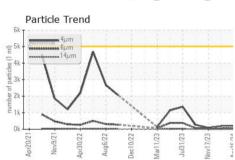


## **OIL ANALYSIS REPORT**









| 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     |
| <b>Emulsified Water</b> | scalar | *Visual     | >.1             | NEG     | NEG       | NEG       |
| Free Water              | scalar | *Visual     |                 | NEG     | NEG       | NEG       |
|                         | TEC.   | ام مالم مما | limait/la a a a |         | المستعددة | histom (O |

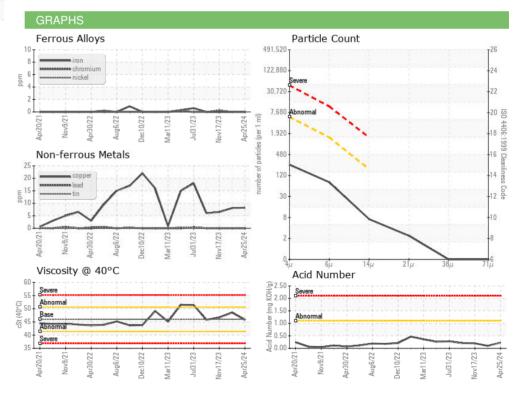
| FLUID PROPERI | IES | method    |      |      | history1 | history2 |
|---------------|-----|-----------|------|------|----------|----------|
| Visc @ 40°C   | cSt | ASTM D445 | 46.0 | 45.8 | 48.5     | 46.7     |

| SAMPLE IMAGES | method |  |  |  | history2 |
|---------------|--------|--|--|--|----------|
|---------------|--------|--|--|--|----------|

Color











Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0837924 Lab Number : 06161410

Unique Number : 10996833 Test Package : IND 2 ( Additional Tests: PrtCount )

Received **Tested** Diagnosed

: 26 Apr 2024 : 29 Apr 2024

: 30 Apr 2024 - Don Baldridge

1421 MOBIL OIL ROAD

Contact/Location: DEREK HARGRAVE - HILVANWC

US 77991 Contact: DEREK HARGRAVE dhargrave@hilcorp.com T: (361)284-7406

**HILCORP ENERGY - VANDERBILT** 

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)

VANDERBILT, TX