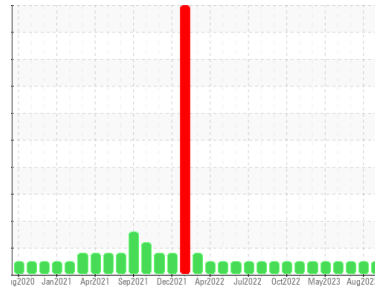




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**HUSKY 4**

Component  
**Hydraulic System**

Fluid  
**FIRE-RESISTANT FLUID ISO 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. 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>PTK0004762</b>  | PTK0004744  | PTK0004114  |
| Sample Date        | Client Info |             |            | <b>04 Sep 2023</b> | 20 Aug 2023 | 14 Jun 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>20</b>    | 22       | 17       |
| Chromium    | ppm | ASTM D5185m | >20        | <b>2</b>     | 2        | 2        |
| Nickel      | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | <1       | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | 0        |
| Lead        | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | <1       | <1       |
| Tin         | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | <1       | <1       |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

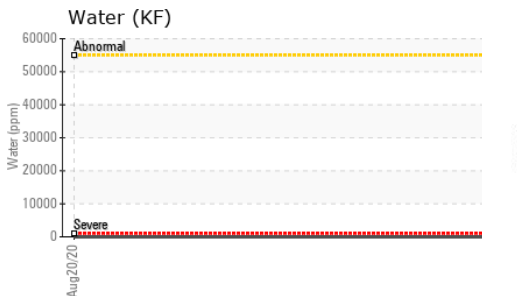
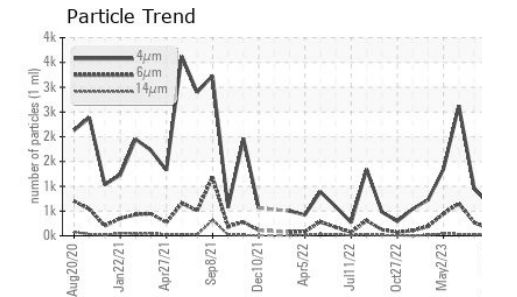
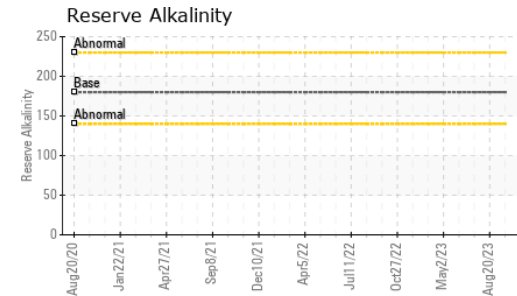
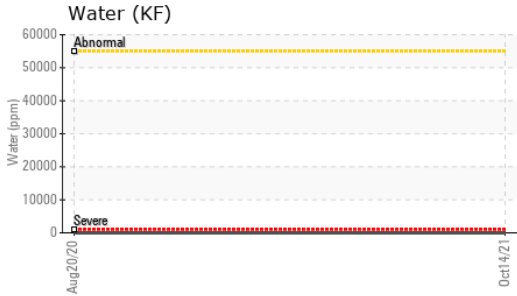
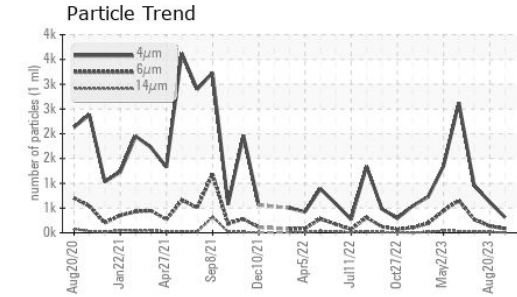
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 5          | <b>0</b>     | 0        | 0        |
| Barium     | ppm | ASTM D5185m | 5          | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 5          | <b>0</b>     | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm | ASTM D5185m | 5          | <b>0</b>     | 0        | 0        |
| Calcium    | ppm | ASTM D5185m | 50         | <b>4</b>     | 0        | 0        |
| Phosphorus | ppm | ASTM D5185m | 175        | <b>55</b>    | 60       | 49       |
| Zinc       | ppm | ASTM D5185m | 62         | <b>0</b>     | 14       | 18       |
| Sulfur     | ppm | ASTM D5185m | 500        | <b>52</b>    | 38       | 0        |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >15        | <b>2</b>     | 2        | 3        |
| Sodium       | ppm | ASTM D5185m |            | <b>3</b>     | 2        | 2        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | 0        |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>312</b>      | 620      | 956      |
| Particles >6µm    |  | ASTM D7647   | >2500      | <b>83</b>       | 137      | 270      |
| Particles >14µm   |  | ASTM D7647   | >320       | <b>9</b>        | 13       | 25       |
| Particles >21µm   |  | ASTM D7647   | >80        | <b>3</b>        | 3        | 7        |
| Particles >38µm   |  | ASTM D7647   | >20        | <b>0</b>        | 0        | 0        |
| Particles >71µm   |  | ASTM D7647   | >4         | <b>0</b>        | 0        | 0        |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/18/15  | <b>15/14/10</b> | 16/14/11 | 17/15/12 |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 3.63       | <b>0.39</b> | 0.38     | 0.35     |

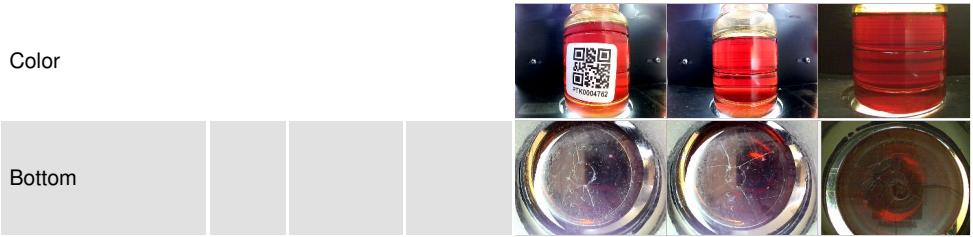
# OIL ANALYSIS REPORT



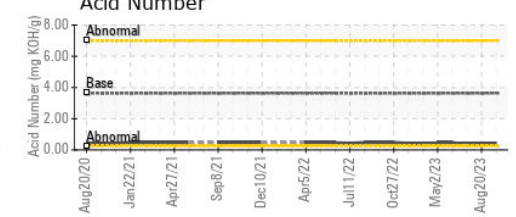
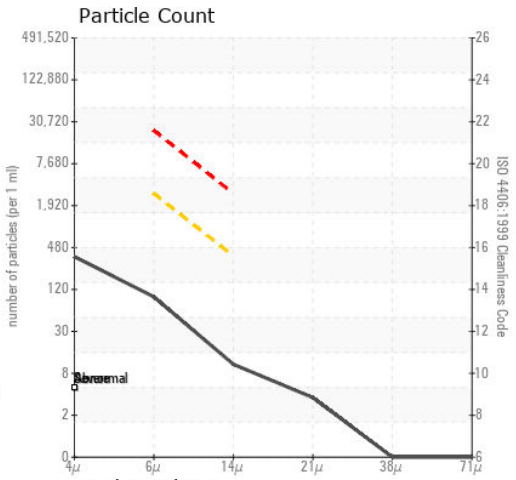
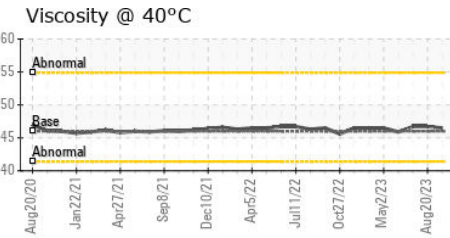
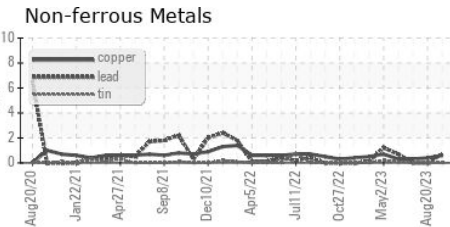
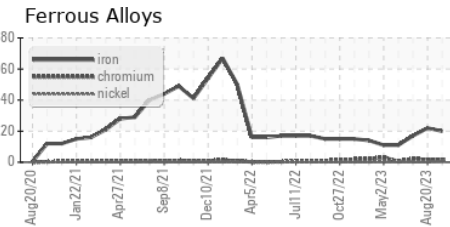
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | >55     | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base   | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 46 | 46.5    | 46.7     | 46.7     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PTK0004762  
**Lab Number** : 06000468  
**Unique Number** : 10728828  
**Test Package** : MOB 2 ( Additional Tests: KF, pH, ReserveAlk )

**NIAGARA WATER BOTTLING - MISSOURI CITY**  
 14810 FAIRWAY PINES DR  
 MISSOURI CITY, TX  
 US 77489  
 Contact: MIKE CONLEE  
 mconlee@niagarawater.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)