



# CONSTRUCTION EQUIPMENT

9877 RITCHIE LAND ALJON 30116 - HYDRAULIC SYSTEM



**Sample No:** VCP412677  
**Oil Type:** DURALENE ZD MV 32  
**Job No:** 9877 RITCHIE LAND



## SAMPLE INFORMATION

|               |                    |             |             |             |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | <b>VCP412677</b>   | VCP395163   | VCP371312   | VCP386430   |
| Sample Date   | <b>22 Nov 2023</b> | 28 Feb 2023 | 14 Dec 2022 | 12 Oct 2022 |
| Machine Hours | <b>5376</b>        | 4662        | 4234        | 3922        |
| Oil Hours     | <b>0</b>           | 0           | 0           | 0           |
| Oil Changed   | <b>Not Chngd</b>   | Changed     | Not Chngd   | Not Chngd   |
| Sample Status | <b>NORMAL</b>      | NORMAL      | NORMAL      | ABNORMAL    |

**PLEASANT EXCAVATING COMPANY INC**  
 24024 FREDERICK ROAD  
 CLARKSBURG, MD  
 US 20871  
 Contact: H TRENT  
 HTRENT@PLEASANTS.ORG  
 T: (301)252-5635  
 F:

## OIL CONDITION

|                  |          |             |      |      |      |
|------------------|----------|-------------|------|------|------|
| Visc @ 40°C      | cSt      | <b>30.4</b> | 32.2 | 32.0 | 32.0 |
| Acid Number (AN) | mg KOH/g | <b>0.51</b> | 0.51 | 0.50 | 0.42 |

## CONTAMINATION

|                   |     |                 |          |          |          |
|-------------------|-----|-----------------|----------|----------|----------|
| Water             | %   | <b>NEG</b>      | NEG      | NEG      | NEG      |
| Particles >4µm    |     | <b>1278</b>     | 2686     | 2116     | 12831    |
| Particles >6µm    |     | <b>112</b>      | 576      | 455      | 4551     |
| Particles >14µm   |     | <b>6</b>        | 53       | 36       | 825      |
| ISO 4406:1999 (c) |     | <b>17/14/10</b> | 19/16/13 | 18/16/12 | 21/19/17 |
| Silicon           | ppm | <b>&lt;1</b>    | <1       | <1       | 0        |
| Sodium            | ppm | <b>0</b>        | <1       | <1       | 0        |
| Potassium         | ppm | <b>1</b>        | 0        | 0        | 0        |

## Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## WEAR METALS

|            |     |              |    |    |   |
|------------|-----|--------------|----|----|---|
| Iron       | ppm | <b>0</b>     | <1 | 5  | 4 |
| Copper     | ppm | <b>&lt;1</b> | 2  | 3  | 3 |
| Lead       | ppm | <b>0</b>     | 0  | <1 | 0 |
| Tin        | ppm | <b>&lt;1</b> | 0  | <1 | 0 |
| Aluminum   | ppm | <b>0</b>     | <1 | <1 | 0 |
| Chromium   | ppm | <b>0</b>     | 0  | 0  | 0 |
| Molybdenum | ppm | <b>0</b>     | 0  | 0  | 0 |
| Nickel     | ppm | <b>&lt;1</b> | 0  | 0  | 0 |
| Titanium   | ppm | <b>0</b>     | <1 | 0  | 0 |
| Silver     | ppm | <b>0</b>     | 0  | 0  | 0 |
| Manganese  | ppm | <b>0</b>     | <1 | <1 | 0 |
| Vanadium   | ppm | <b>0</b>     | 0  | 0  | 0 |

## ADDITIVES

|            |     |            |     |     |     |
|------------|-----|------------|-----|-----|-----|
| Calcium    | ppm | <b>124</b> | 76  | 77  | 78  |
| Magnesium  | ppm | <b>2</b>   | 3   | 2   | 0   |
| Zinc       | ppm | <b>582</b> | 350 | 378 | 378 |
| Phosphorus | ppm | <b>446</b> | 279 | 296 | 308 |
| Barium     | ppm | <b>0</b>   | 0   | <1  | 0   |
| Boron      | ppm | <b>0</b>   | 0   | 0   | 0   |

**Depot:** PLECLA  
**Unique No:** 10762508  
**Signed:** Wes Davis  
**Report Date:** 28 Nov 2023

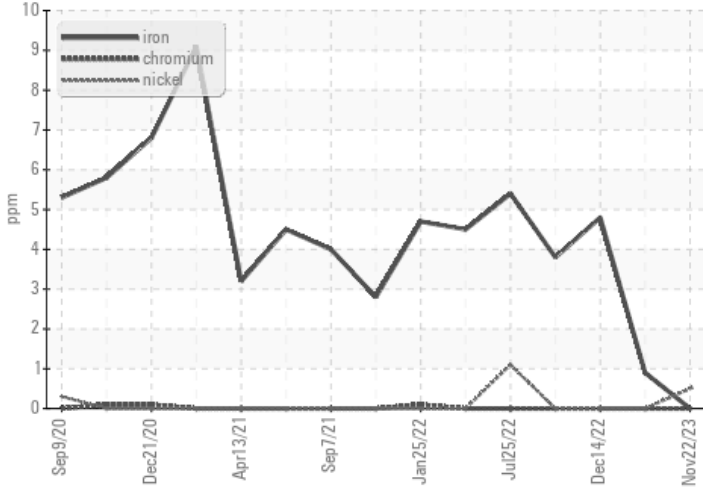


# CONSTRUCTION EQUIPMENT

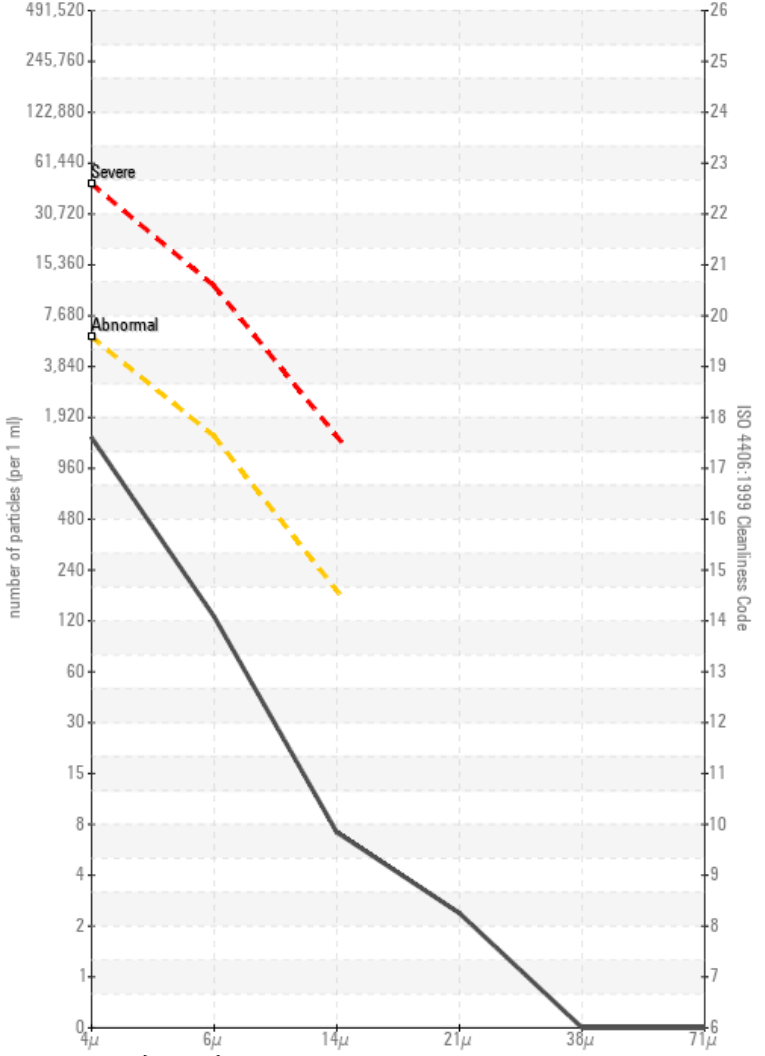


## VOLVO GRAPHS

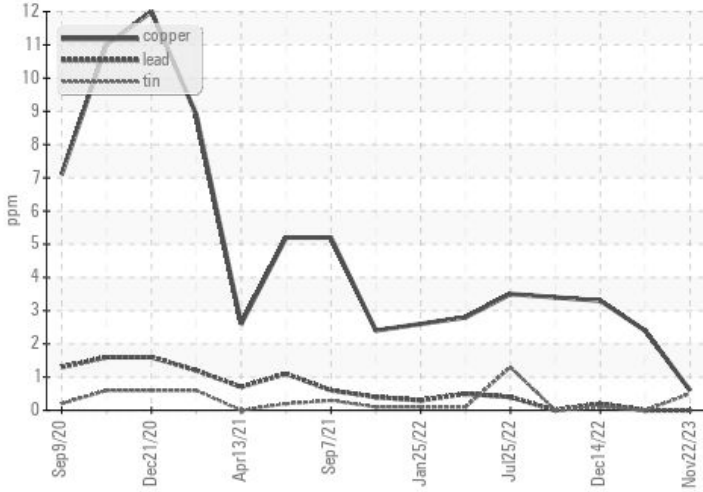
Ferrous Alloys



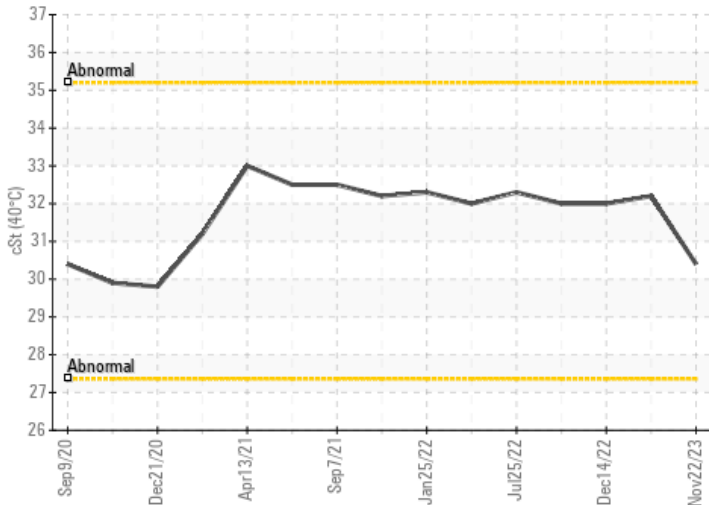
Particle Count



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

