



# CONSTRUCTION EQUIPMENT

## CATERPILLAR M-2 - FRONT AXLE



**Sample No:** VCP442902  
**Oil Type:** MOBIL MOBILTRANS HD 30  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP442902</b>	VCP404392	VCP416559	VCP390148
Sample Date	<b>25 Jan 2024</b>	21 Nov 2023	25 Oct 2023	07 Mar 2023
Machine Hours	<b>6256</b>	5984	5892	5507
Oil Hours	<b>272</b>	1991	1899	1500
Oil Changed	<b>Not Chngd</b>	Changed	Not Chngd	Not Chngd
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**MARYLAND ENVIRONMENTAL SERVICES**  
 21210 MARTINSBURG RD  
 DICKERSON, MD  
 US 20842  
 Contact: ALAN PARRISH  
 aparr@menv.com  
 T: (301)428-8185  
 F: (301)428-8311



### OIL CONDITION

Visc @ 40°C	cSt	<b>90.5</b>	95.9	96.3	96.6
-------------	-----	-------------	------	------	------



### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	<b>7</b>	7	7	7
Sodium	ppm	<b>0</b>	2	<1	1
Potassium	ppm	<b>0</b>	0	0	<1

### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



### WEAR METALS

Iron	ppm	<b>16</b>	42	35	26
Copper	ppm	<b>&lt;1</b>	5	5	4
Lead	ppm	<b>0</b>	0	<1	0
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>1</b>	1	2	2
Chromium	ppm	<b>0</b>	<1	<1	<1
Molybdenum	ppm	<b>6</b>	<1	<1	1
Nickel	ppm	<b>0</b>	0	<1	0
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>3167</b>	3730	3866	3647
Magnesium	ppm	<b>59</b>	22	20	22
Zinc	ppm	<b>1055</b>	1012	1146	1026
Phosphorus	ppm	<b>847</b>	904	848	800
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>13</b>	2	11	6

**Depot:** MARDIC  
**Unique No:** 10857296  
**Signed:** Wes Davis  
**Report Date:** 01 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS

