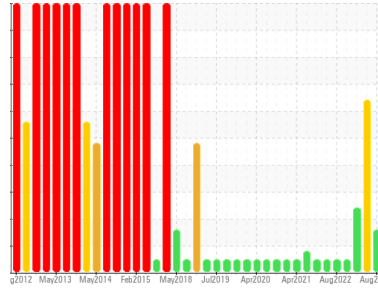


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / MUSKOGEE SAND**  
Machine Id  
**WL056**  
Component  
**Front Left Final Drive**  
Fluid  
**MOBIL MOBILTRANS HD 50 (--- GAL)**

Sample Rating Trend



## DIAGNOSIS

- Recommendation**  
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**  
Bearing and/or bushing wear is indicated.
- Contamination**  
There is no indication of any contamination in the oil.
- Fluid Condition**  
The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0070431</b>	PCA0087149	PCA0087177
Sample Date	Client Info	<b>10 Aug 2023</b>	06 Jun 2023	28 Feb 2023
Machine Age	hrs	<b>33775</b>	33310	32585
Oil Age	hrs	<b>1190</b>	725	1760
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Changed
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >800	<b>290</b>	▲ 525	48
Chromium	ppm	ASTM D5185m >10	<b>1</b>	2	<1
Nickel	ppm	ASTM D5185m >5	<b>1</b>	1	0
Titanium	ppm	ASTM D5185m >15	<b>2</b>	2	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >75	<b>30</b>	▲ 40	5
Lead	ppm	ASTM D5185m >10	▲ <b>12</b>	10	7
Copper	ppm	ASTM D5185m >75	▲ <b>130</b>	▲ 114	38
Tin	ppm	ASTM D5185m >8	<b>6</b>	▲ 9	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>&lt;1</b>	4	<1
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Manganese	ppm	ASTM D5185m	<b>4</b>	6	<1
Magnesium	ppm	ASTM D5185m	<b>19</b>	31	13
Calcium	ppm	ASTM D5185m	<b>2794</b>	3539	2261
Phosphorus	ppm	ASTM D5185m	<b>911</b>	979	966
Zinc	ppm	ASTM D5185m	<b>1087</b>	1278	1160
Sulfur	ppm	ASTM D5185m	<b>4422</b>	6261	6337

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >400	<b>124</b>	▲ 159	15
Sodium	ppm	ASTM D5185m	<b>6</b>	9	2
Potassium	ppm	ASTM D5185m >20	<b>6</b>	11	4

## VISUAL

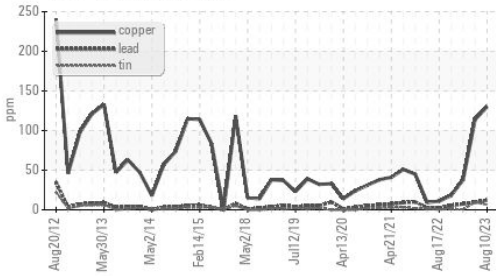
method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	<b>NONE</b>	MODER	MODER
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	MODER
Debris	scalar	*Visual NONE	<b>NONE</b>	LIGHT	NONE
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual NORML	<b>NORML</b>	NORML	▲ LAYRD
Odor	scalar	*Visual NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual >0.2	<b>NEG</b>	NEG	▲ 0.2%
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

## FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445 195	<b>193</b>	200	199

# OIL ANALYSIS REPORT

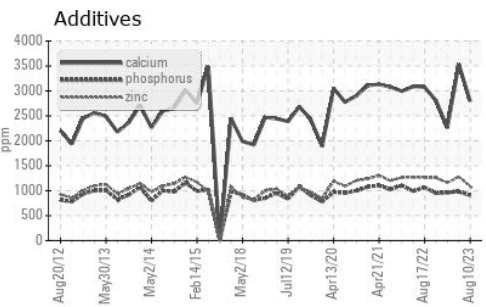
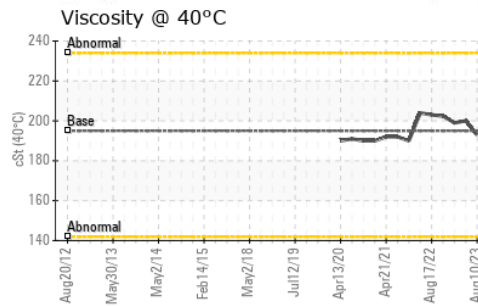
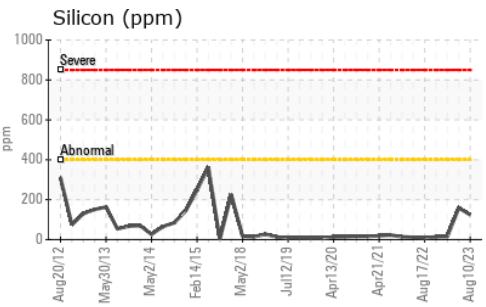
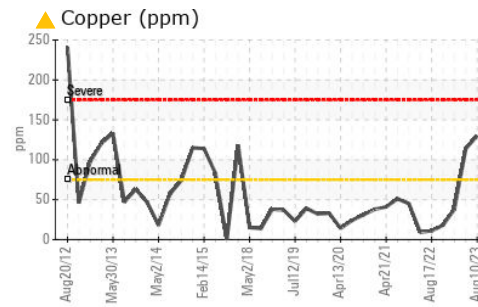
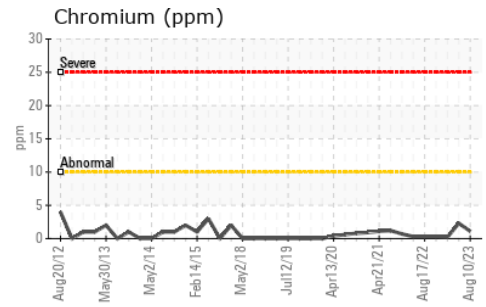
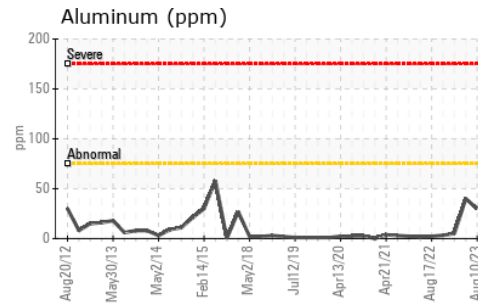
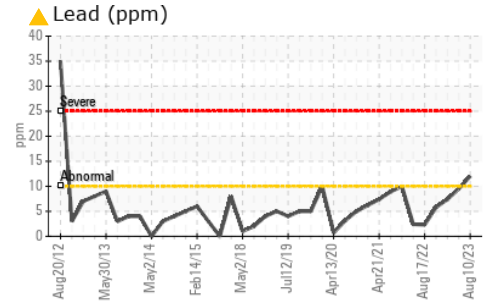
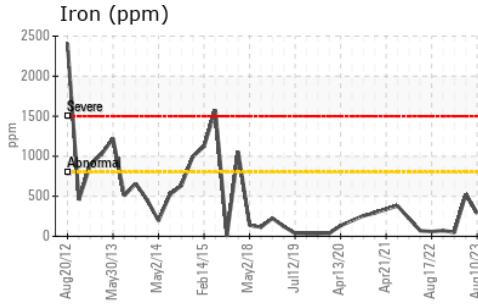
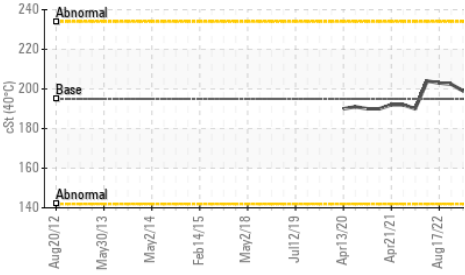
▲ **Non-ferrous Metals**



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

**GRAPHS**

**Viscosity @ 40°C**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0070431 **Received** : 04 Oct 2023  
**Lab Number** : 05969910 **Diagnosed** : 09 Oct 2023  
**Unique Number** : 10681860 **Diagnostician** : Sean Felton  
**Test Package** : MOB 1

**Kemp Quarries - Muskogee Sand**  
 3395 W 50th St N  
 Porter, OK  
 US 74454  
 Contact: MUSCOGEE NOTIFICATIONS  
 muskogee@muskogeessand.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)