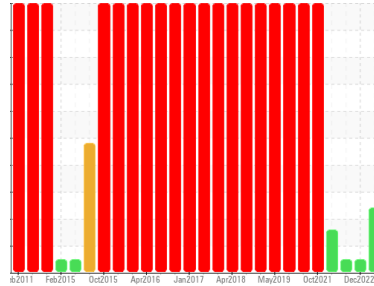


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / MUSKOGEE SAND**  
Machine Id  
**WL042**  
Component  
**Front Differential**  
Fluid  
**MOBIL MOBILTRANS HD 50 (--- GAL)**

Sample Rating Trend



## DIAGNOSIS

**Recommendation**  
We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

**Wear**  
All component wear rates are normal.

**Contamination**  
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

**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>PCA0087103</b>	PCA0070529	PCA0070508
Sample Date	Client Info	<b>23 May 2023</b>	29 Dec 2022	21 Jun 2022
Machine Age	hrs	<b>31670</b>	31010	30470
Oil Age	hrs	<b>1720</b>	1060	520
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >500	<b>133</b>	75	350
Chromium	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>2</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >30	<b>▲ 23</b>	2	8
Lead	ppm	ASTM D5185m >13	<b>2</b>	<1	5
Copper	ppm	ASTM D5185m >103	<b>21</b>	4	24
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>&lt;1</b>	0	9
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>2</b>	1	1
Manganese	ppm	ASTM D5185m	<b>2</b>	<1	3
Magnesium	ppm	ASTM D5185m	<b>18</b>	16	24
Calcium	ppm	ASTM D5185m	<b>2573</b>	2631	2768
Phosphorus	ppm	ASTM D5185m	<b>960</b>	940	933
Zinc	ppm	ASTM D5185m	<b>1168</b>	1149	1094
Sulfur	ppm	ASTM D5185m	<b>4656</b>	4218	5782

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >100	<b>▲ 115</b>	20	71
Sodium	ppm	ASTM D5185m	<b>0</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>9</b>	2	<1

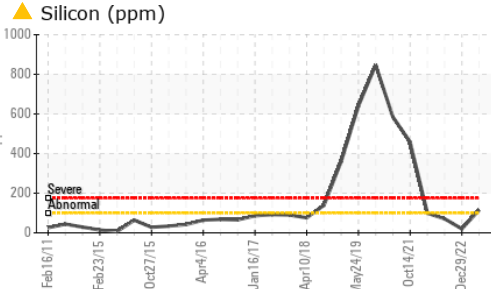
## VISUAL

method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	<b>NONE</b>	VLITE	NONE
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	NONE
Debris	scalar	*Visual NONE	<b>NONE</b>	VLITE	NONE
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual >.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

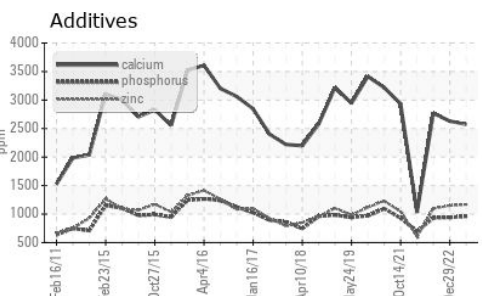
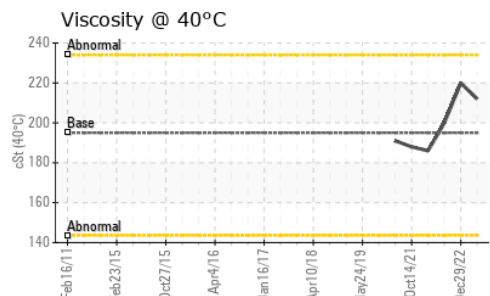
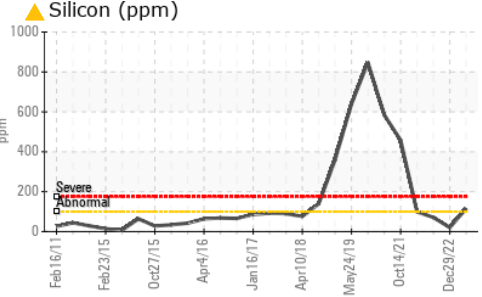
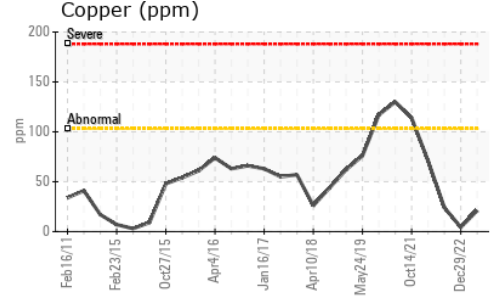
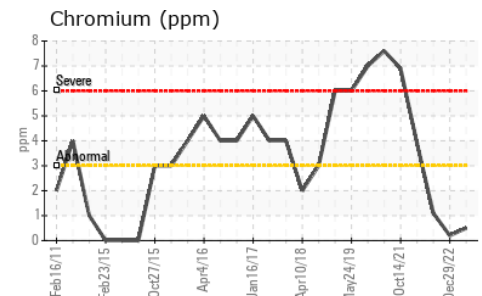
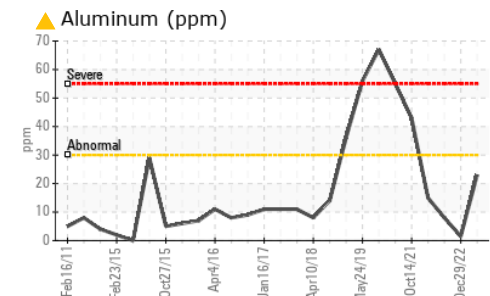
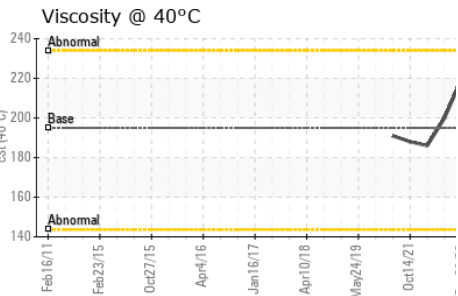
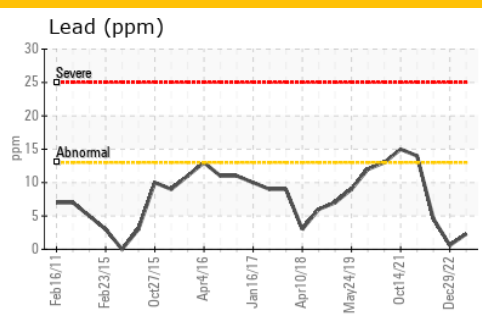
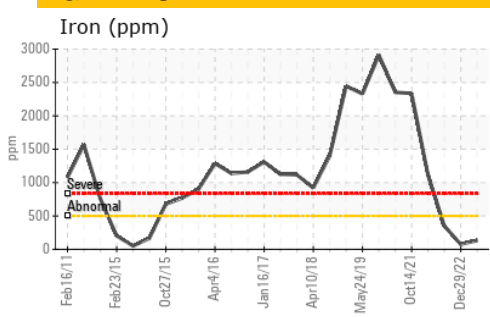
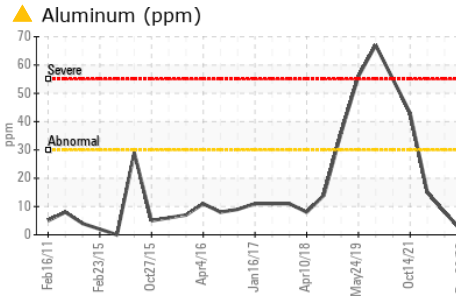
## FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445 195	<b>212</b>	220	200

# OIL ANALYSIS REPORT



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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0087103  
**Lab Number** : 05900848  
**Unique Number** : 10562204  
**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)