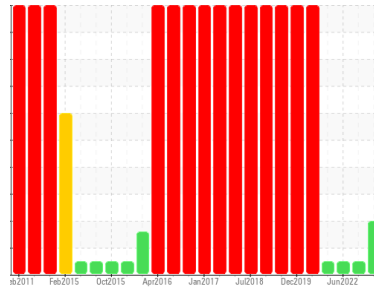


OIL ANALYSIS REPORT



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

Sample Rating Trend



VISCOSITY



DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0087104	PCA0070530	PCA0070509
Sample Date	Client Info		23 May 2023	29 Dec 2022	21 Jun 2022
Machine Age	hrs	Client Info	31670	31010	30470
Oil Age	hrs	Client Info	1720	1060	520
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			ATTENTION	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	84	36	35
Chromium	ppm	ASTM D5185m >3	<1	<1	<1
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >2	<1	0	<1
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >30	4	1	3
Lead	ppm	ASTM D5185m >13	<1	<1	<1
Copper	ppm	ASTM D5185m >103	5	3	4
Tin	ppm	ASTM D5185m >5	<1	0	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	2
Barium	ppm	ASTM D5185m	0	0	2
Molybdenum	ppm	ASTM D5185m	14	16	6
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	▲ 197	213	74
Calcium	ppm	ASTM D5185m	▲ 1649	2642	3038
Phosphorus	ppm	ASTM D5185m	▲ 707	883	882
Zinc	ppm	ASTM D5185m	867	1072	1063
Sulfur	ppm	ASTM D5185m	▲ 4738	6712	7344

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	45	16	22
Sodium	ppm	ASTM D5185m	0	0	0
Potassium	ppm	ASTM D5185m >20	2	1	1

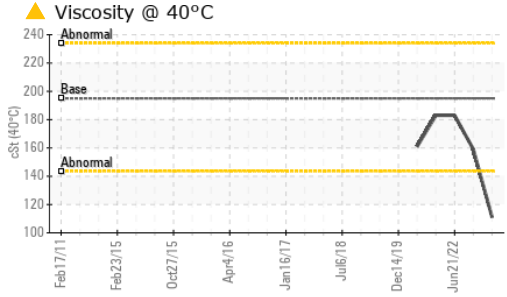
VISUAL

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

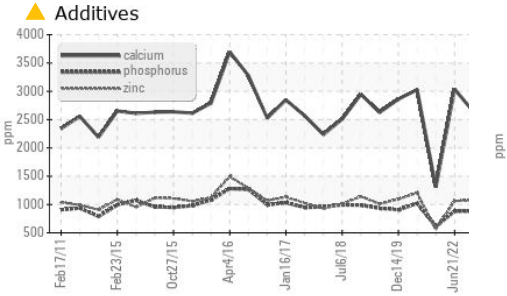
FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 195	▲ 111	159	183

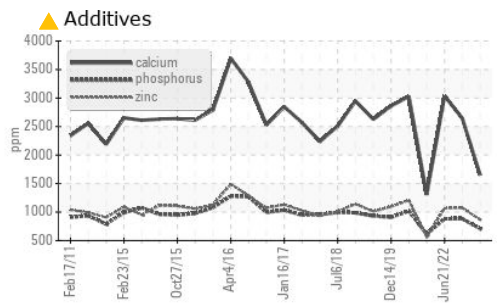
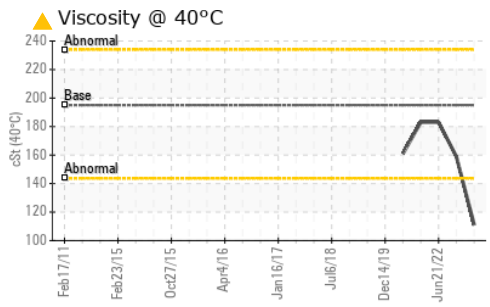
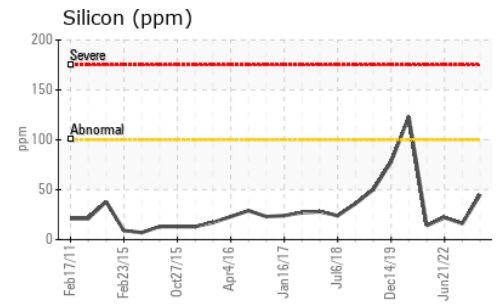
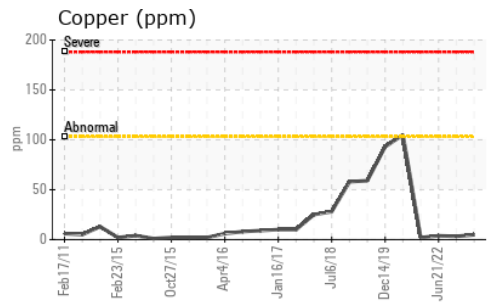
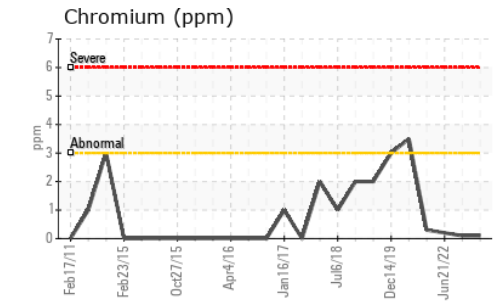
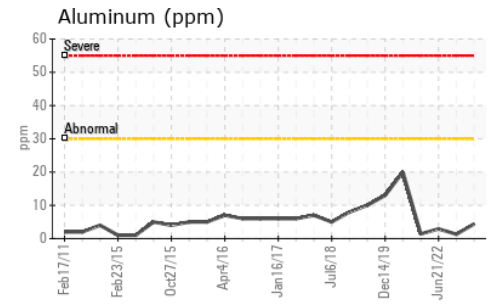
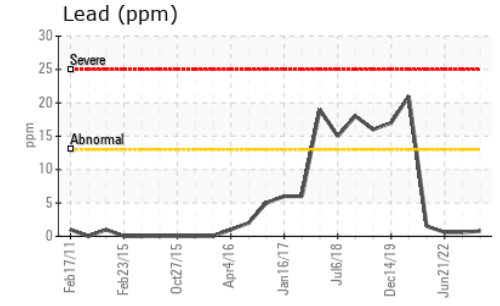
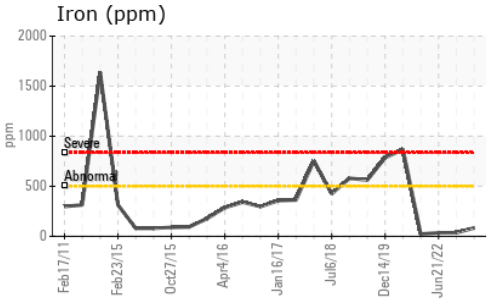
OIL ANALYSIS REPORT



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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0087104 **Received** : 17 Jul 2023
Lab Number : 05900849 **Diagnosed** : 20 Jul 2023
Unique Number : 10562205 **Diagnostician** : Jonathan Hester
Test Package : MOB 1

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

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)