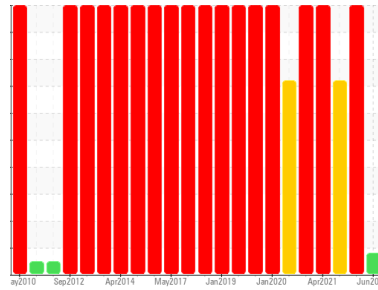


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / MUSKOGEE SAND
Machine Id
WL015
Component
Front Left Final Drive
Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



WEAR



DIAGNOSIS

▲ Recommendation

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

▲ Wear

Gear 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		PCA0087114	PCA0070543	PCA0034573
Sample Date	Client Info		03 Jun 2023	16 Feb 2023	22 Sep 2021
Machine Age	hrs	Client Info	1895	1210	760
Oil Age	hrs	Client Info	685	2000	2990
Oil Changed	Client Info		Not Chngd	Changed	Not Chngd
Sample Status			ABNORMAL	SEVERE	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	▲ 1011	1526	▲ 1390
Chromium	ppm	ASTM D5185m >10	3	7	6
Nickel	ppm	ASTM D5185m >5	1	3	2
Titanium	ppm	ASTM D5185m >15	<1	4	6
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >75	14	▲ 68	▲ 100
Lead	ppm	ASTM D5185m >10	2	6	6
Copper	ppm	ASTM D5185m >75	27	▲ 108	▲ 94
Tin	ppm	ASTM D5185m >8	0	5	0
Antimony	ppm	ASTM D5185m >50	---	---	<1
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	5	12
Barium	ppm	ASTM D5185m	0	0	<1
Molybdenum	ppm	ASTM D5185m	1	4	0
Manganese	ppm	ASTM D5185m	8	17	17
Magnesium	ppm	ASTM D5185m	15	30	30
Calcium	ppm	ASTM D5185m	2751	2504	2768
Phosphorus	ppm	ASTM D5185m	924	1001	923
Zinc	ppm	ASTM D5185m	1059	1129	1035
Sulfur	ppm	ASTM D5185m	4810	8016	12635

CONTAMINANTS

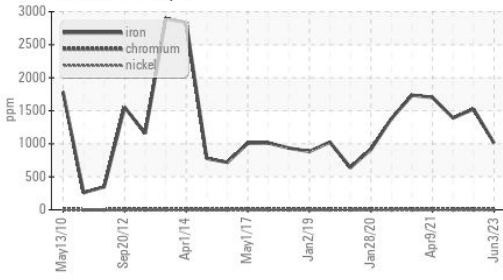
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	123	558	650
Sodium	ppm	ASTM D5185m	0	15	15
Potassium	ppm	ASTM D5185m >20	5	26	27

VISUAL

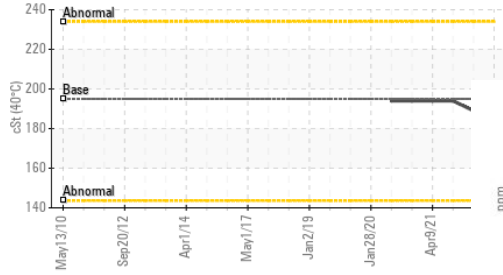
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE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

OIL ANALYSIS REPORT

▲ Ferrous Alloys



Viscosity @ 40°C



FLUID PROPERTIES method limit/base current history1 history2

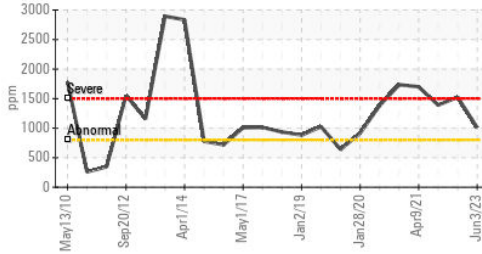
Visc @ 40°C cSt ASTM D445 195 **190** 189 194

SAMPLE IMAGES method limit/base current history1 history2

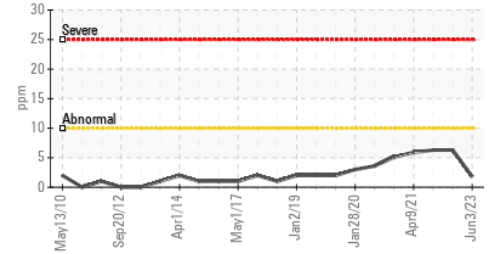
Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS

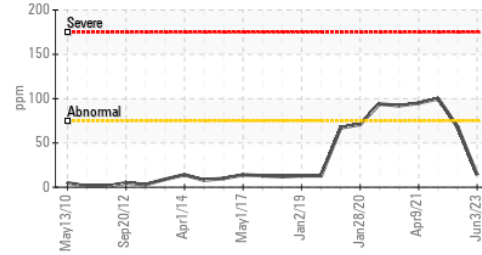
▲ Iron (ppm)



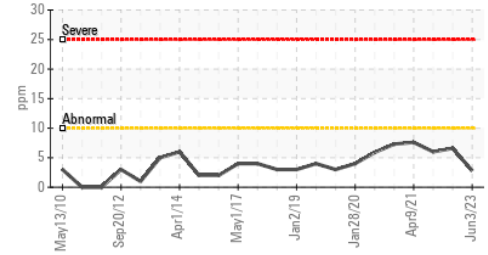
Lead (ppm)



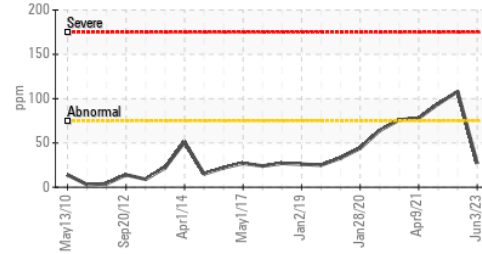
Aluminum (ppm)



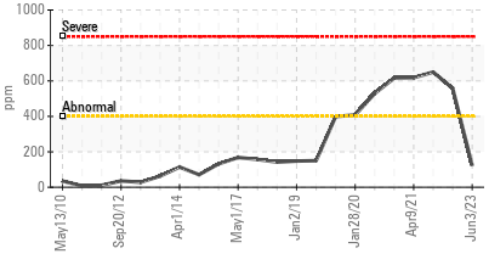
Chromium (ppm)



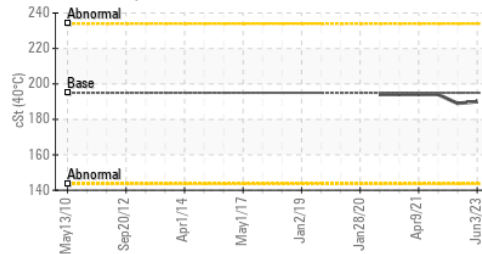
Copper (ppm)



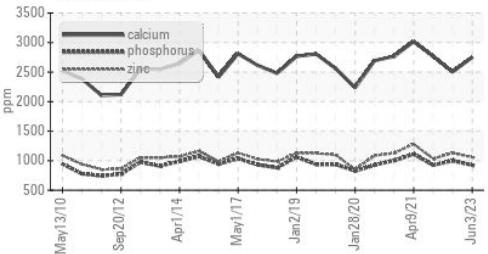
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0087114 **Received** : 17 Jul 2023
Lab Number : 05900858 **Diagnosed** : 19 Jul 2023
Unique Number : 10562214 **Diagnostician** : Sean Felton
Test Package : MOB 1

Kemp Quarries - Muskogee Sand
 3395 W 50th St N
 Porter, OK
 US 74454
 Contact:

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)

muskogee@muskogeessand.com

T:

F: