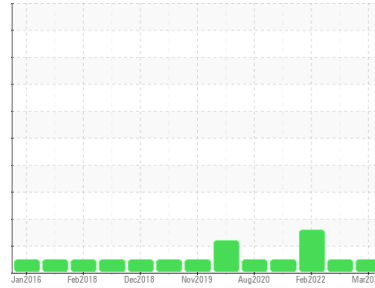


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
KEMP QUARRIES / MUSKOGEE SAND
Machine Id
OHT086
Component
Middle Differential
Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

DIAGNOSIS

Recommendation

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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0087141	PCA0062252	PCA0061799
Sample Date	Client Info		23 Mar 2023	23 Jun 2022	09 Feb 2022
Machine Age	hrs	Client Info	19795	19380	19025
Oil Age	hrs	Client Info	770	355	2210
Oil Changed	Client Info		Not Chngd	Not Chngd	Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >900	40	16	91
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	0	<1	<1
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >30	2	1	6
Lead	ppm	ASTM D5185m >50	0	1	0
Copper	ppm	ASTM D5185m >150	8	4	13
Tin	ppm	ASTM D5185m >20	0	<1	0
Antimony	ppm	ASTM D5185m >5	---	---	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	7	4	4
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	1	1	<1
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	22	15	20
Calcium	ppm	ASTM D5185m	3213	1518	3201
Phosphorus	ppm	ASTM D5185m	903	635	1089
Zinc	ppm	ASTM D5185m	1097	628	1223
Sulfur	ppm	ASTM D5185m	7516	5023	4336

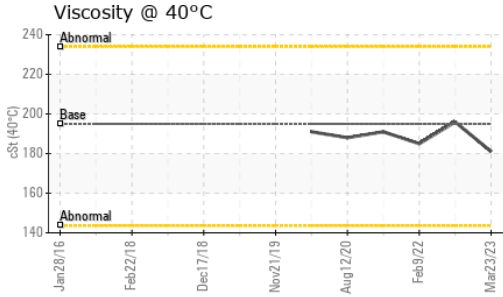
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	27	17	▲ 56
Sodium	ppm	ASTM D5185m	0	3	2
Potassium	ppm	ASTM D5185m >20	2	9	2

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	MODER	MODER
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

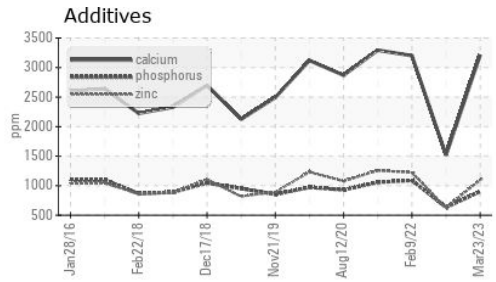
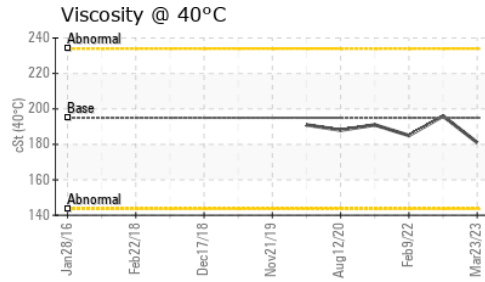
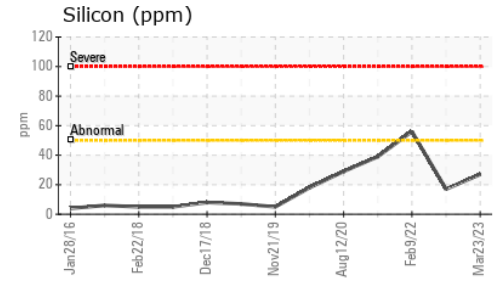
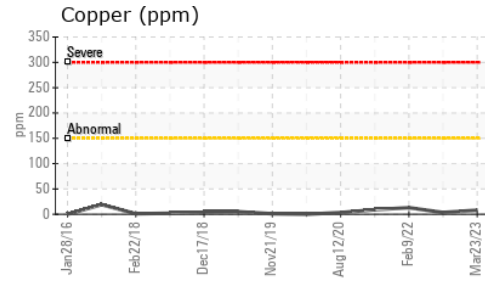
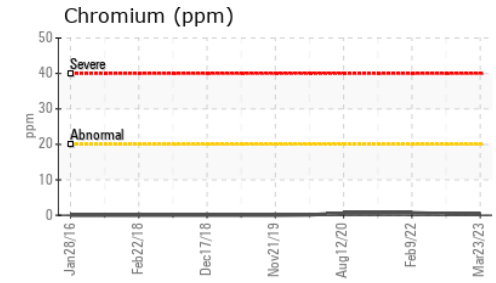
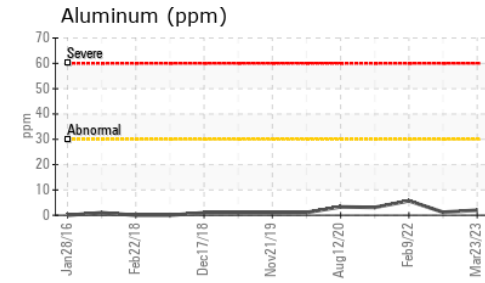
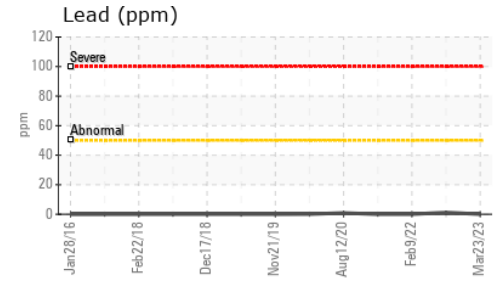
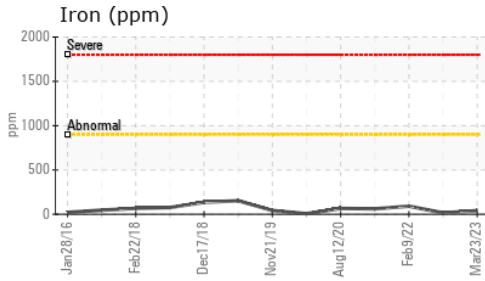


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	195	181	196	185

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0087141 **Received** : 17 Jul 2023
Lab Number : 05900839 **Diagnosed** : 19 Jul 2023
Unique Number : 10562195 **Diagnostician** : Wes Davis
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: