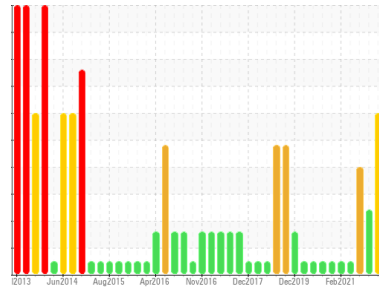


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / HULBERT
 Machine Id
WL067
 Component
Rear Differential
 Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



WATER



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

High concentration of visible metal present. Gear wear is indicated.

Contamination

There is a moderate concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0085903	PCA0086822	PCA0048715
Sample Date	Client Info		05 Apr 2024	28 Jul 2023	24 Sep 2021
Machine Age	hrs	Client Info	32148	32149	29147
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Not Changd	Not Changd
Sample Status			ABNORMAL	ABNORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	▲ 652	390	50
Chromium	ppm	ASTM D5185m >3	2	<1	<1
Nickel	ppm	ASTM D5185m >3	1	<1	<1
Titanium	ppm	ASTM D5185m >2	2	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >30	● 25	● 20	2
Lead	ppm	ASTM D5185m >13	1	1	0
Copper	ppm	ASTM D5185m >103	109	100	14
Tin	ppm	ASTM D5185m >5	1	<1	0
Antimony	ppm	ASTM D5185m >5	---	---	3
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	2	18
Barium	ppm	ASTM D5185m	1	0	0
Molybdenum	ppm	ASTM D5185m	4	3	2
Manganese	ppm	ASTM D5185m	6	4	<1
Magnesium	ppm	ASTM D5185m	57	58	25
Calcium	ppm	ASTM D5185m	2969	2705	2508
Phosphorus	ppm	ASTM D5185m	990	993	808
Zinc	ppm	ASTM D5185m	1236	1218	926
Sulfur	ppm	ASTM D5185m	5492	5368	2897

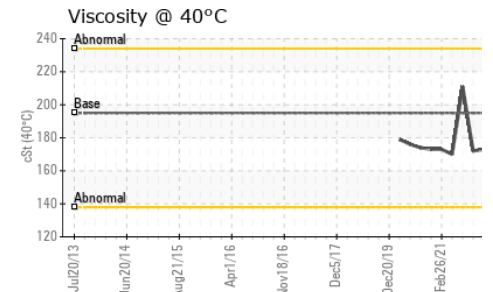
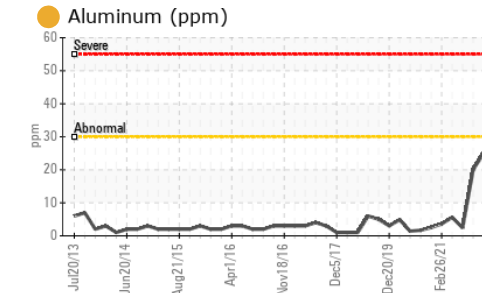
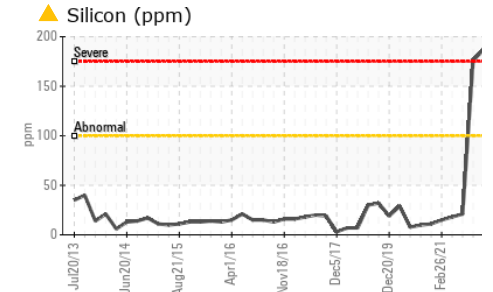
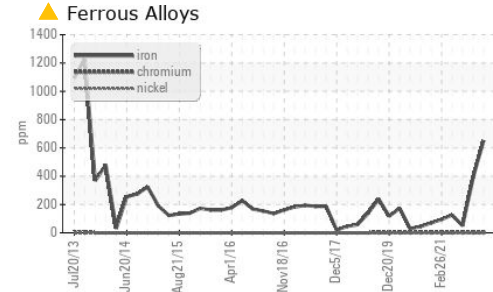
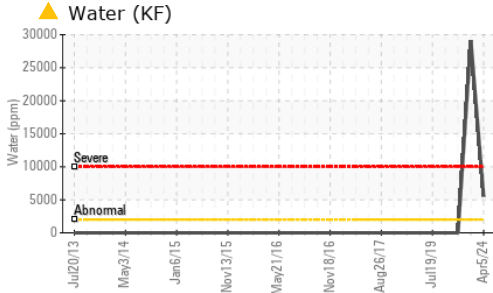
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	▲ 187	▲ 176	21
Sodium	ppm	ASTM D5185m	6	4	2
Potassium	ppm	ASTM D5185m >20	5	<1	0
Water	%	ASTM D6304 >.2	▲ 0.553	---	▲ 2.91
ppm Water	ppm	ASTM D6304 >2000	▲ 5530	---	▲ 29100

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	▲ HEAVY	NONE	VLITE
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	VLITE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	● HAZY
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >.2	0.2%	NEG	▲ 0.2%
Free Water	scalar	*Visual	NEG	NEG	NEG

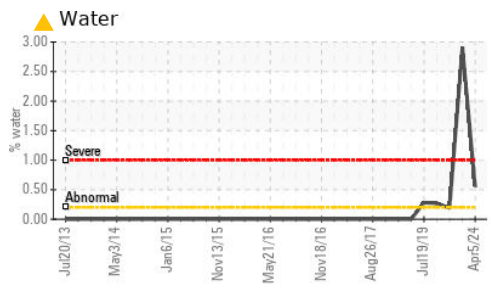
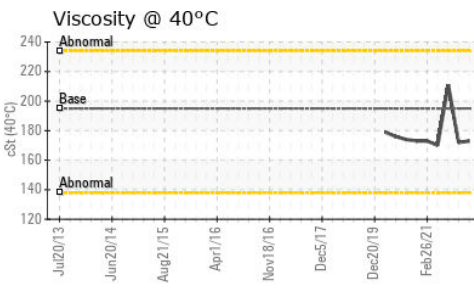
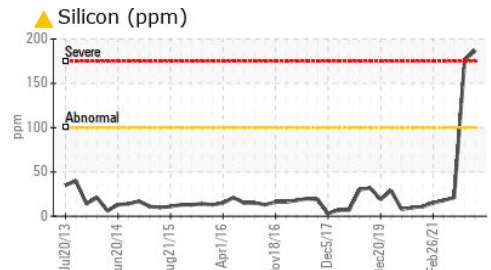
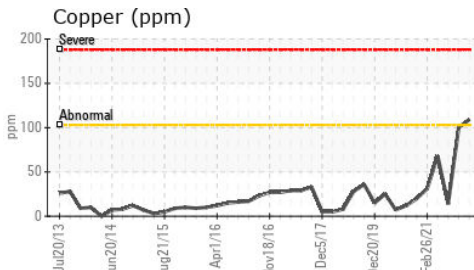
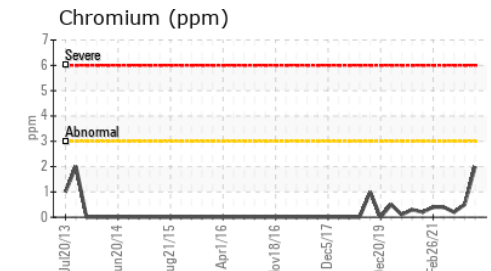
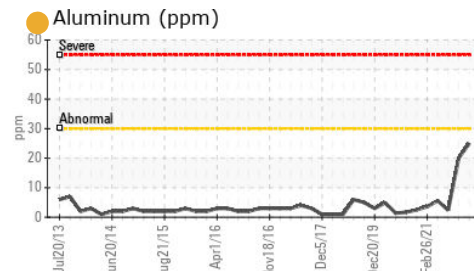
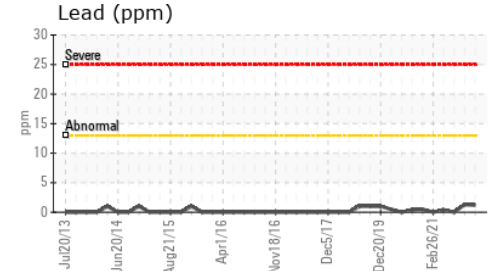
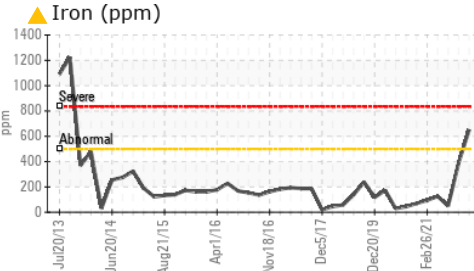
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	195	173	172	211

SAMPLE IMAGES		method	limit/base	current	history1	history2
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. : PCA0085903

Lab Number : 06149729

Unique Number : 10979807

Test Package : MOB 1 (Additional Tests: KF)

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)

Received : 15 Apr 2024

Tested : 18 Apr 2024

Diagnosed : 18 Apr 2024 - Don Baldrige

Kemp Quarries - Kemp Stone - Hulbert

17801 Hwy 80

Hulbert, OK

US 74441

Contact:

hulbert@kempstone.com

T:

F: