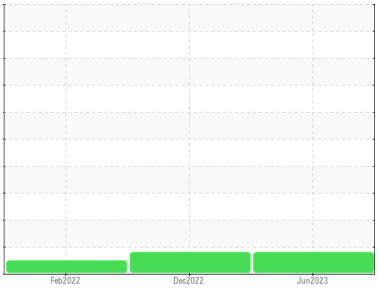
OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
KEMP QUARRIES / BCS - STILLWELL
Machine Id
WL090
Component
Front Differential
Fluid
TDTO FLUID SAE 50 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: PM-2 sampled fluid)

Wear

Gear wear is indicated. All other 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	history 1	history 2
Sample Number		Client Info		**PCA0086384**	PCA0061843	PCA0048896
Sample Date		Client Info		**30 Jun 2023**	02 Dec 2022	19 Feb 2022
Machine Age	hrs	Client Info		**22640**	22251	21599
Oil Age	hrs	Client Info		**22640**	0	0
Oil Changed		Client Info		**N/A**	Not Changd	N/A
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>500	▲ **907**	▲ 518	236
Chromium	ppm	ASTM D5185m	>10	**2**	<1	<1
Nickel	ppm	ASTM D5185m	>10	**<1**	0	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**5**	3	2
Lead	ppm	ASTM D5185m	>25	**1**	<1	0
Copper	ppm	ASTM D5185m	>100	**10**	5	2
Tin	ppm	ASTM D5185m	>10	**1**	0	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	37	**0**	2	3
Barium	ppm	ASTM D5185m	7	**0**	0	0
Molybdenum	ppm	ASTM D5185m	5	**1**	1	<1
Manganese	ppm	ASTM D5185m		**7**	4	<1
Magnesium	ppm	ASTM D5185m	40	**24**	21	0
Calcium	ppm	ASTM D5185m	2650	**3156**	3065	2928
Phosphorus	ppm	ASTM D5185m	1050	**997**	957	919
Zinc	ppm	ASTM D5185m	1075	**1121**	1124	1230
Sulfur	ppm	ASTM D5185m	5750	**5997**	5321	3693

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>75	**37**	21	17
Sodium	ppm	ASTM D5185m		**2**	<1	1
Potassium	ppm	ASTM D5185m	>20	**1**	<1	0

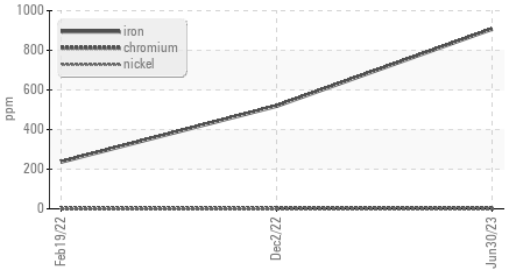
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	VLITE
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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	194	**182**	181	187

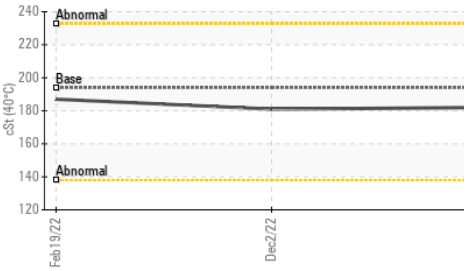
OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Ferrous Alloys



Viscosity @ 40°C

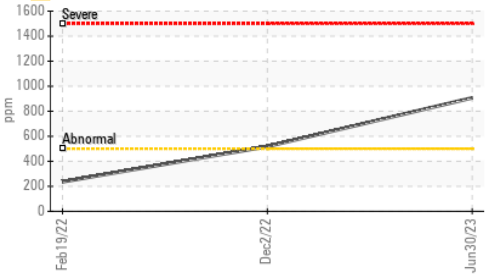


SAMPLE IMAGES

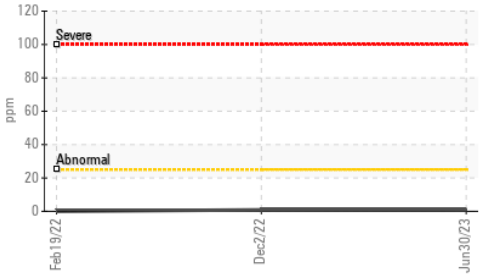
	method	limit/base	current	history 1	history 2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

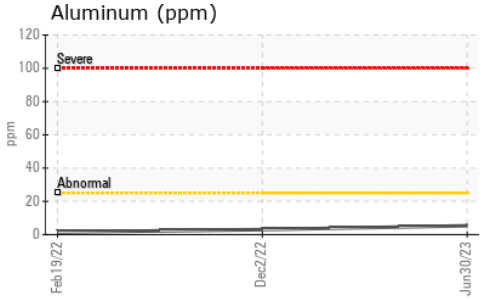
Iron (ppm)



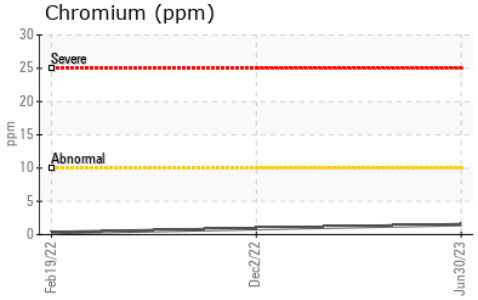
Lead (ppm)



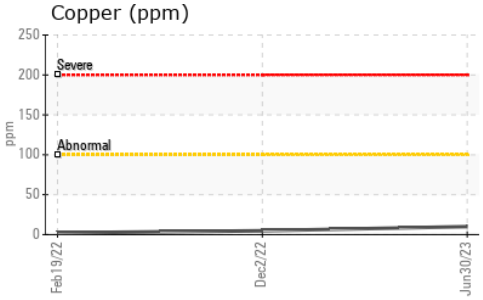
Aluminum (ppm)



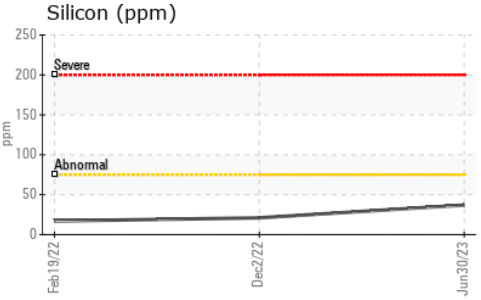
Chromium (ppm)



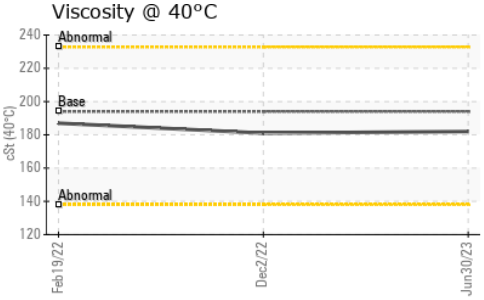
Copper (ppm)



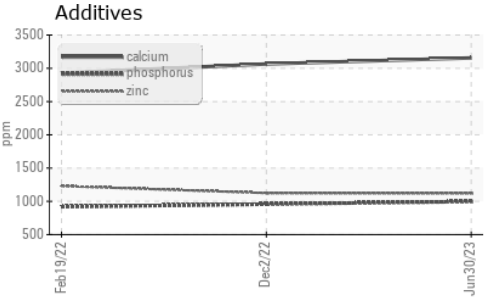
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086384
Lab Number : 05894707
Unique Number : 10550517
Test Package : MOB 1

Received : 10 Jul 2023
Diagnosed : 12 Jul 2023
Diagnostician : Sean Felton

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)

Kemp Quarries - Benton County Stone - Stillwell
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Bunch, OK
US 74931
Contact:
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T:
F:

Report Id: KEMBUN [WUSCAR] 05894707 (Generated: 07/12/2023 12:20:37) Rev: 1

Submitted By: