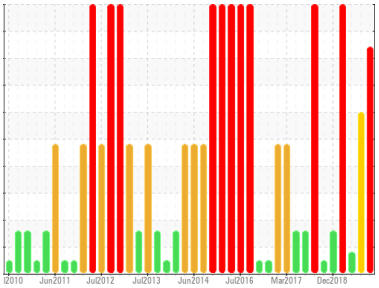
OIL ANALYSIS REPORT

Area
KEMP QUARRIES / HULBERT
Machine Id
WL030
Component
Rear Differential
Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear
Gear wear is indicated.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0086838**	PCA0025308	PCA0017240
Sample Date		Client Info		**26 Jul 2023**	16 Jul 2020	02 Apr 2020
Machine Age	hrs	Client Info		**6169**	5097	4617
Oil Age	hrs	Client Info		**0**	3250	3250
Oil Changed		Client Info		**Not Changd**	N/A	N/A
Sample Status				**SEVERE**	SEVERE	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	**951**	952	804
Chromium	ppm	ASTM D5185m	>3	**2**	3	3
Nickel	ppm	ASTM D5185m	>3	**<1**	<1	<1
Titanium	ppm	ASTM D5185m	>2	**1**	1	1
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>30	**13**	7	11
Lead	ppm	ASTM D5185m	>13	**3**	1	2
Copper	ppm	ASTM D5185m	>103	**24**	17	32
Tin	ppm	ASTM D5185m	>5	**1**	1	1
Antimony	ppm	ASTM D5185m	>5	**---**	0	0
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**4**	8	7
Barium	ppm	ASTM D5185m		**0**	<1	<1
Molybdenum	ppm	ASTM D5185m		**2**	2	2
Manganese	ppm	ASTM D5185m		**8**	10	8
Magnesium	ppm	ASTM D5185m		**48**	51	38
Calcium	ppm	ASTM D5185m		**2991**	3290	2768
Phosphorus	ppm	ASTM D5185m		**1011**	1024	963
Zinc	ppm	ASTM D5185m		**1233**	1311	1121
Sulfur	ppm	ASTM D5185m		**9026**	12197	9966

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>100	**135**	62	89
Sodium	ppm	ASTM D5185m		**4**	4	2
Potassium	ppm	ASTM D5185m	>20	**1**	3	3

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

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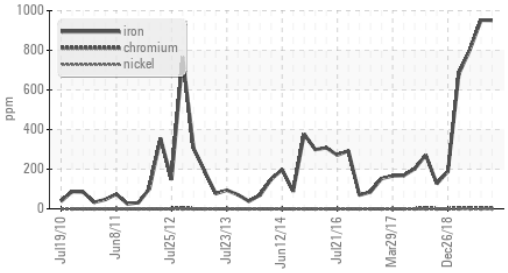
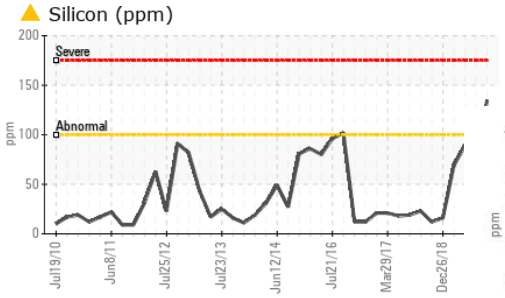
OIL DIAGNOSTICS

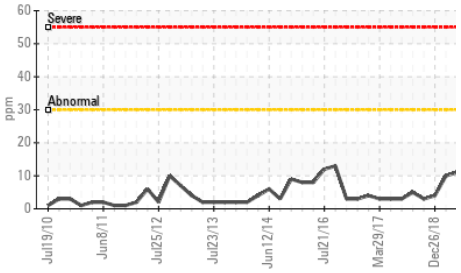
Ferrous Alloys



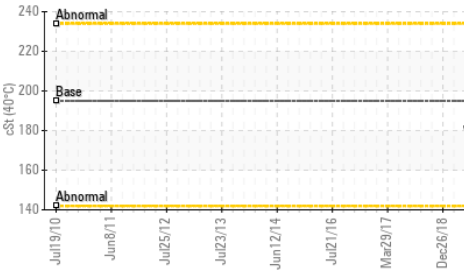
Silicon (ppm)



Aluminum (ppm)



Viscosity @ 40°C

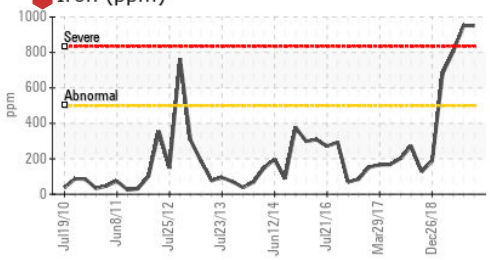


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	195	**175**	165	182

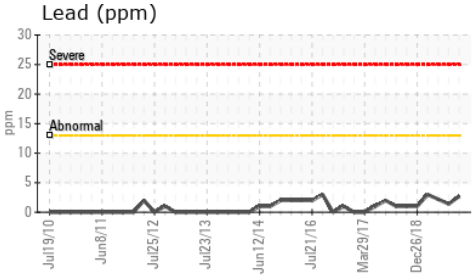
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

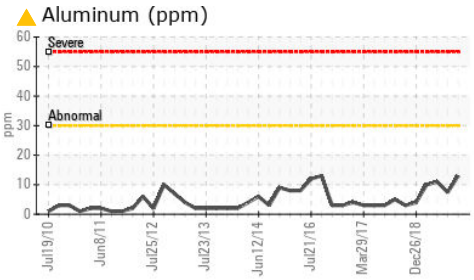
Iron (ppm)



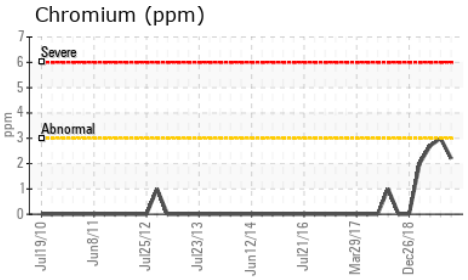
Lead (ppm)



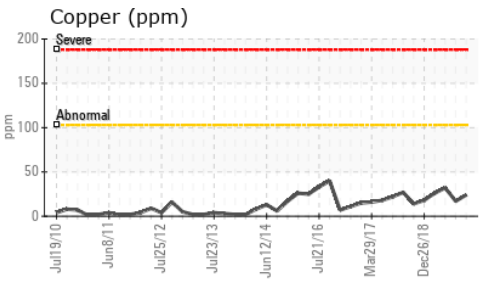
Aluminum (ppm)



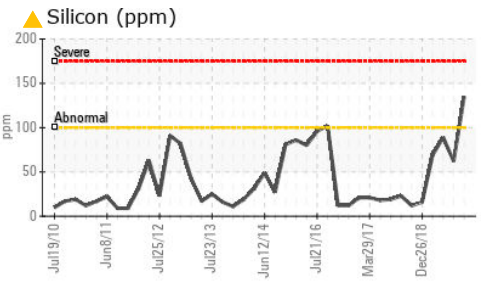
Chromium (ppm)



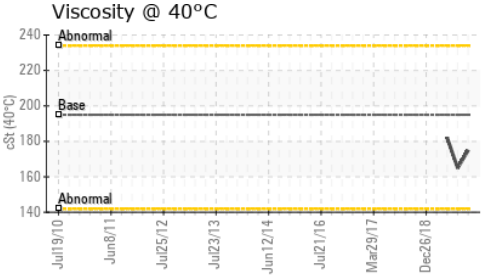
Copper (ppm)



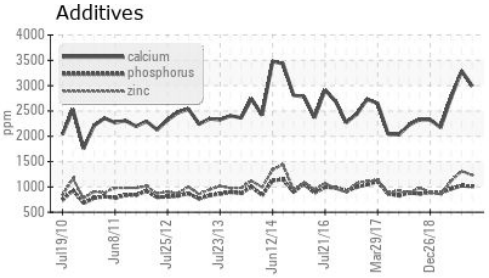
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086838
Lab Number : 05969922
Unique Number : 10681872
Test Package : MOB 1

Received : 04 Oct 2023
Diagnosed : 09 Oct 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)

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F:

Report Id: KEMHUL [WUSCAR] 05969922 (Generated: 10/12/2023 20:13:28) Rev: 1

Submitted By: