



Area
KEMP QUARRIES / RIVER VALLEY BACKBONE
Machine Id
WL100
Component
Front Differential
Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

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.

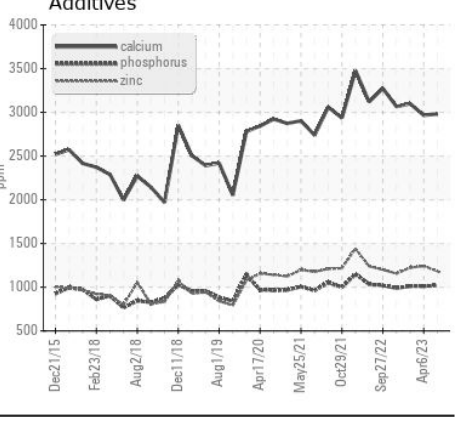
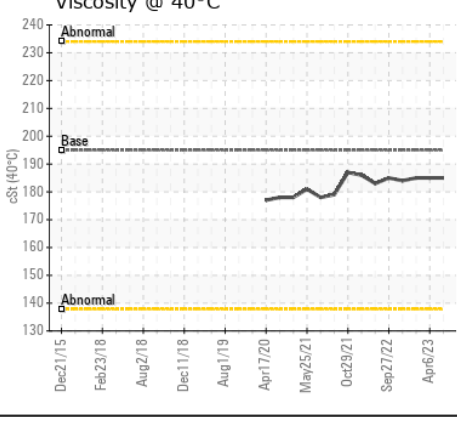
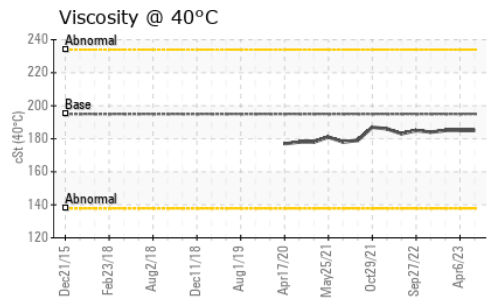
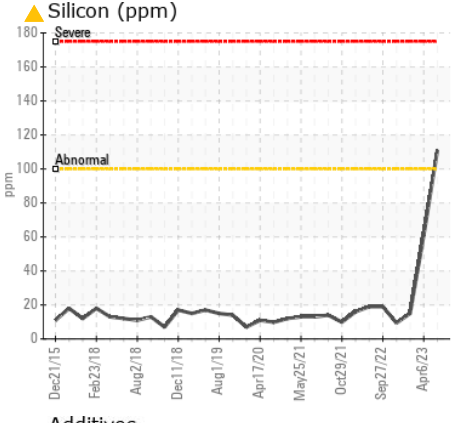
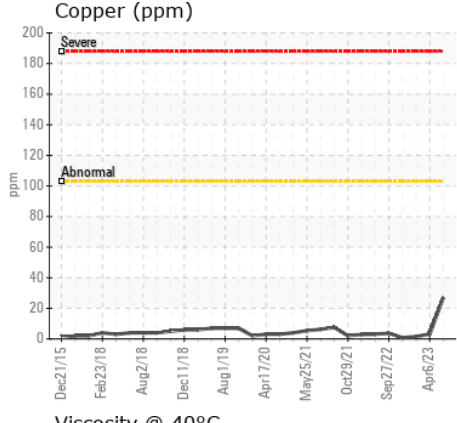
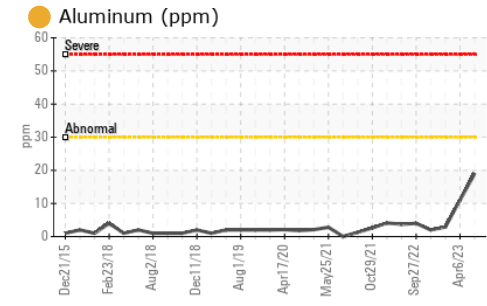
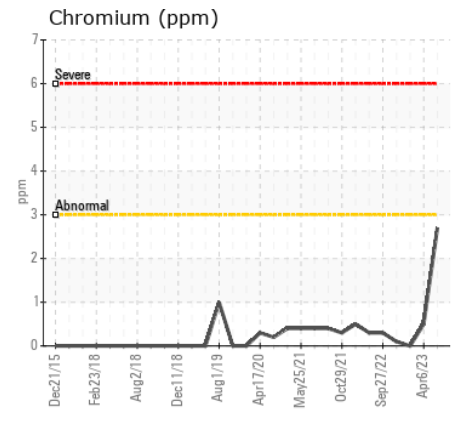
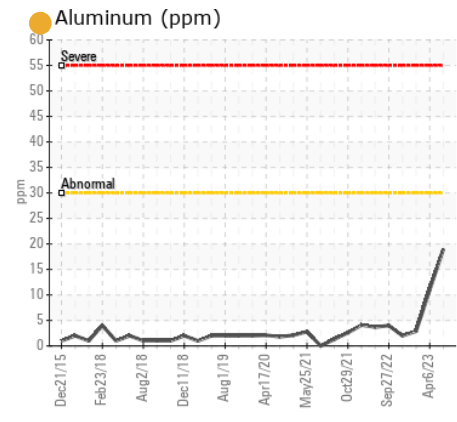
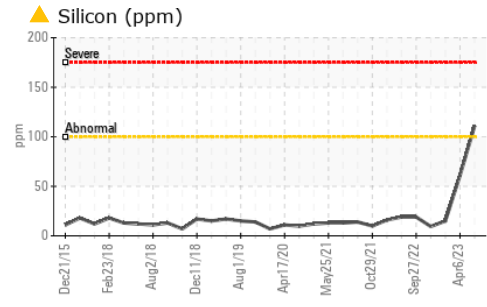
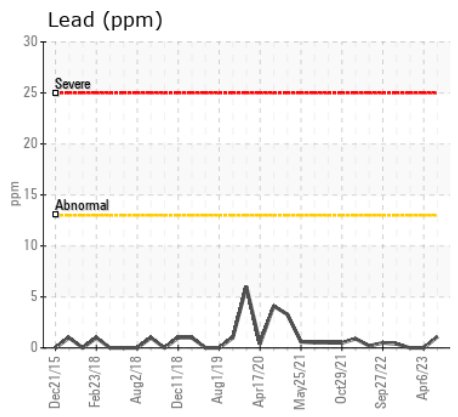
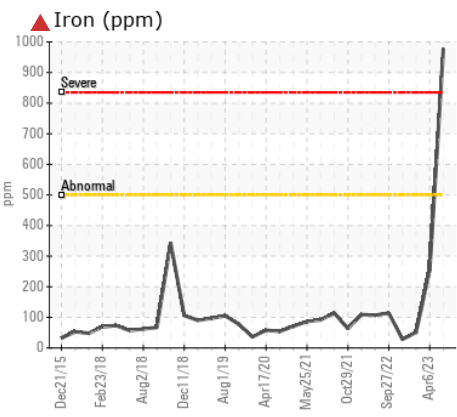
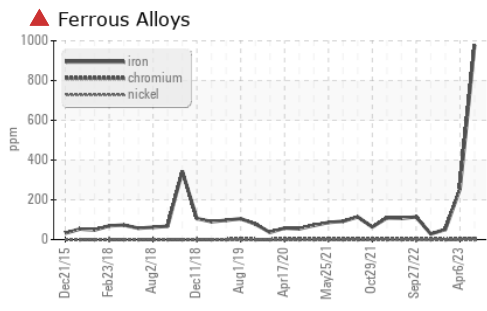
CONTAMINATION

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0108637	PCA0037179	PCA0037142
Sample Date		Client Info		28 Jun 2024	06 Apr 2023	13 Jan 2023
Machine Age	hrs	Client Info		37291	36257	35941
Oil Age	hrs	Client Info		900	945	600
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>500	▲ 978	255	51
Chromium	ppm	ASTM D5185m	>3	3	<1	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>2	2	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	● 19	11	3
Lead	ppm	ASTM D5185m	>13	1	0	0
Copper	ppm	ASTM D5185m	>103	27	3	2
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>100	▲ 111	61	15
Potassium	ppm	ASTM D5185m	>20	5	1	2
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	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
Sodium	ppm	ASTM D5185m		4	<1	0
Boron	ppm	ASTM D5185m		2	7	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	2	2
Manganese	ppm	ASTM D5185m		8	2	<1
Magnesium	ppm	ASTM D5185m		30	37	28
Calcium	ppm	ASTM D5185m		2982	2966	3099
Phosphorus	ppm	ASTM D5185m		1020	1011	1012
Zinc	ppm	ASTM D5185m		1183	1242	1224
Sulfur	ppm	ASTM D5185m		8488	9476	8662
Visc @ 40°C	cSt	ASTM D445	195	185	185	185



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0108637
Lab Number : 06230935
Unique Number : 11114428
Test Package : MOB 1

Kemp Quarries - River Valley - Backbone
 5600 S Hwy 253
 Huntington, AR
 US 72940
 Contact: backbone@rivervalleyquarries.com

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)