



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**KEMP QUARRIES / RIVER VALLEY BACKBONE**

Machine Id  
**WL079**

Component  
**Front Right Final Drive**

Fluid  
**MOBIL MOBILTRANS HD 50 (--- GAL)**

## RECOMMENDATION

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0084792</b>	PCA0085848	PCA0085856
Sample Date		Client Info		<b>28 Dec 2023</b>	13 Oct 2023	09 Aug 2023
Machine Age	hrs	Client Info		<b>48609</b>	48226	47885
Oil Age	hrs	Client Info		<b>383</b>	1200	900
Filter Age	hrs	Client Info		<b>0</b>	0	900
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	SEVERE	SEVERE

## WEAR

High concentration of visible metal present. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>800	<b>33</b>	48	48
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	2	2
Titanium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>75	<b>2</b>	2	4
Lead	ppm	ASTM D5185m	>10	<b>▲ 33</b>	● 84	● 70
Copper	ppm	ASTM D5185m	>75	<b>▲ 159</b>	● 431	● 315
Tin	ppm	ASTM D5185m	>8	<b>▲ 11</b>	● 27	● 23
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	▲ HEAVY	NONE
Yellow Metal	scalar	*Visual	NONE	<b>▲ HEAVY</b>	NONE	▲ HEAVY

## CONTAMINATION

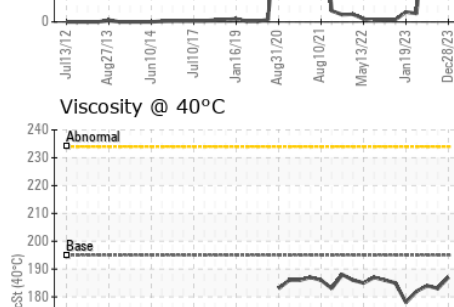
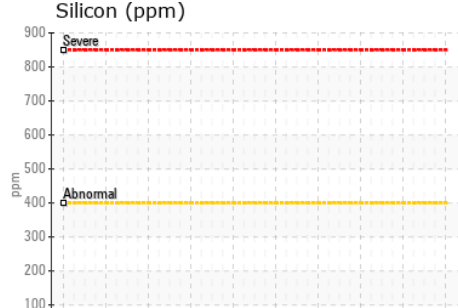
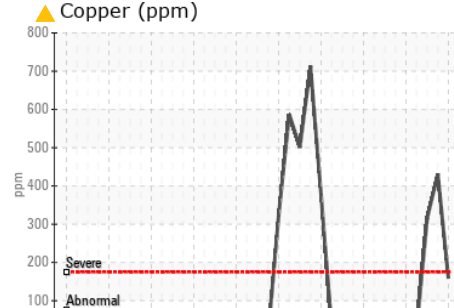
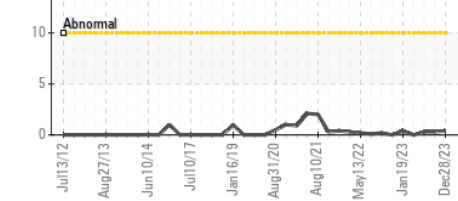
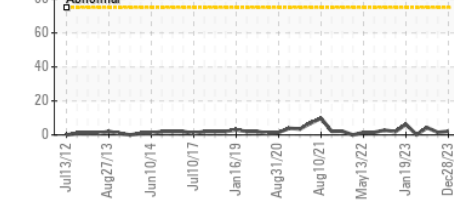
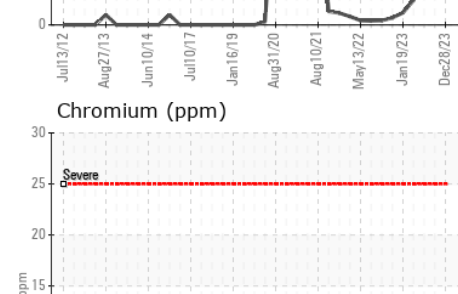
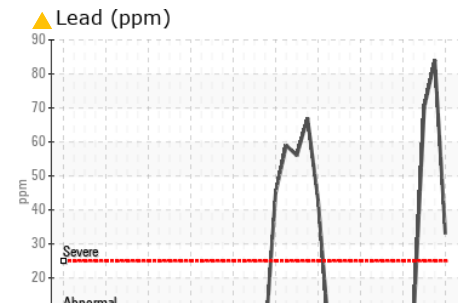
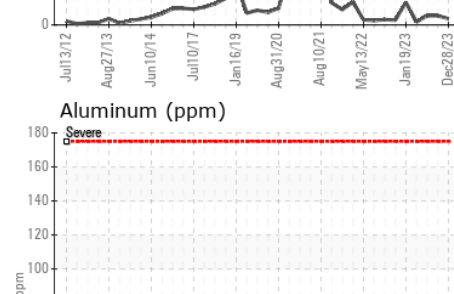
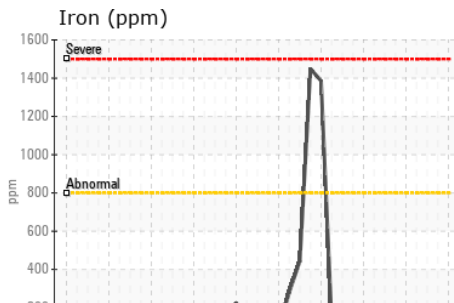
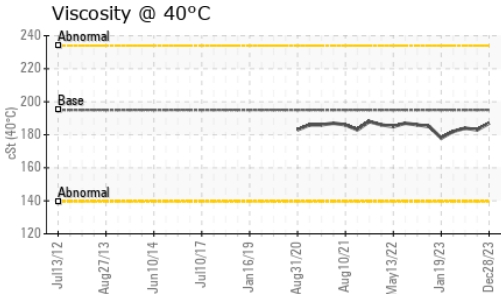
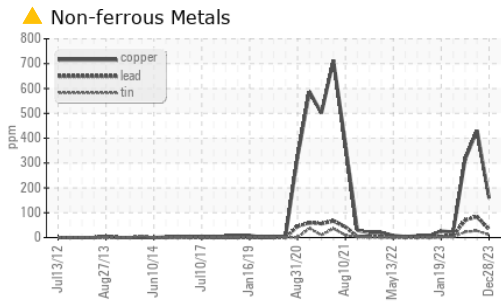
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	<b>13</b>	18	22
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Barium	ppm	ASTM D5185m		<b>0</b>	9	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	2	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>19</b>	23	35
Calcium	ppm	ASTM D5185m		<b>3306</b>	2987	4348
Phosphorus	ppm	ASTM D5185m		<b>984</b>	989	1412
Zinc	ppm	ASTM D5185m		<b>1171</b>	1192	1683
Sulfur	ppm	ASTM D5185m		<b>7273</b>	7501	9652
Visc @ 40°C	cSt	ASTM D445	195	<b>187</b>	183	184



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0084792 **Received** : 08 Jan 2024  
**Lab Number** : 06054426 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10820375 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 1

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

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)