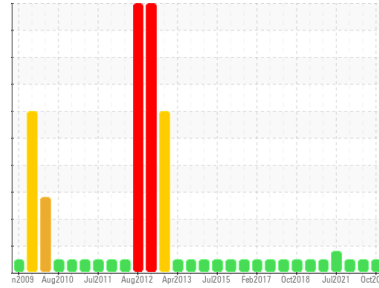


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / RIVER VALLEY BACKBONE**  
Machine Id  
**WL035**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: You're on machine are 44859 )

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0084887</b>	PCA0084875	PCA0037167
Sample Date	Client Info	<b>25 Oct 2023</b>	26 Sep 2023	13 Jan 2023
Machine Age	hrs	<b>44859</b>	44539	43576
Oil Age	hrs	<b>317</b>	300	300
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>33</b>	38	28
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >25	<b>2</b>	2	6
Lead	ppm ASTM D5185m >40	<b>3</b>	3	0
Copper	ppm ASTM D5185m >330	<b>4</b>	5	3
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	18
Barium	ppm ASTM D5185m 0	<b>5</b>	0	0
Molybdenum	ppm ASTM D5185m 0	<b>60</b>	60	43
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 0	<b>899</b>	871	510
Calcium	ppm ASTM D5185m	<b>1065</b>	1136	1563
Phosphorus	ppm ASTM D5185m	<b>1079</b>	1014	714
Zinc	ppm ASTM D5185m	<b>1201</b>	1218	881
Sulfur	ppm ASTM D5185m	<b>3328</b>	3270	2069

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	4	6
Sodium	ppm ASTM D5185m	<b>0</b>	1	<1
Potassium	ppm ASTM D5185m >20	<b>2</b>	<1	19

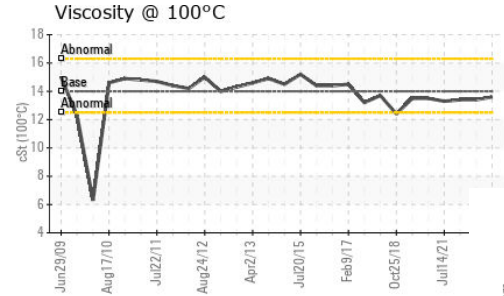
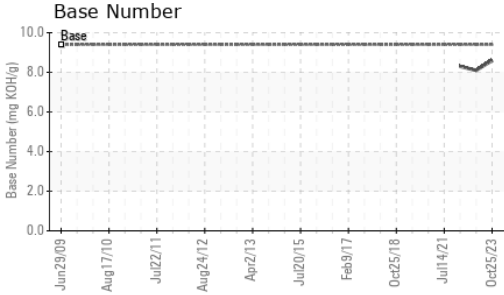
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.5</b>	0.7	0.5
Nitration	Abs/cm *ASTM D7624 >20	<b>7.2</b>	7.2	8.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.5</b>	18.8	20.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>15.6</b>	14.3	16.6
Base Number (BN)	mg KOH/g ASTM D2896 9.4	<b>8.6</b>	8.1	8.3

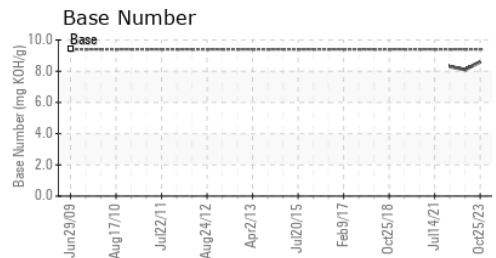
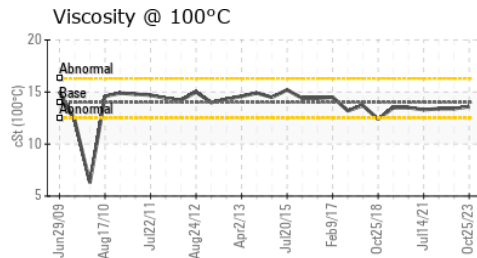
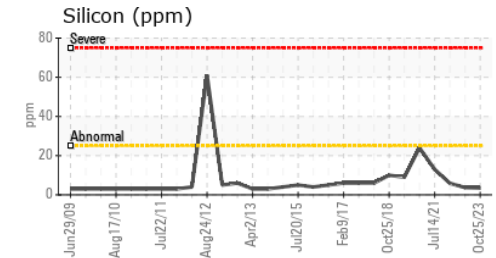
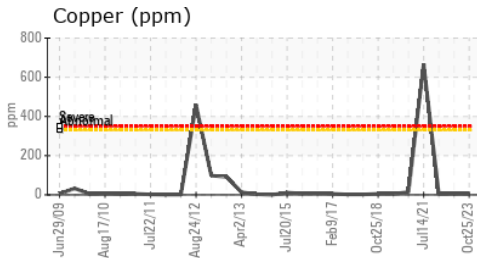
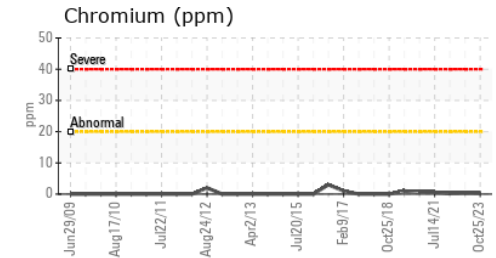
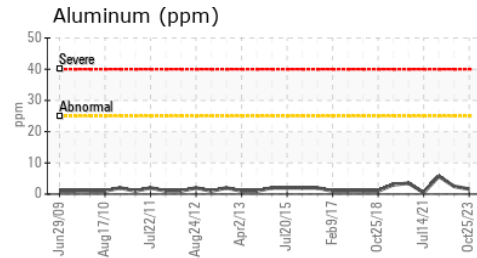
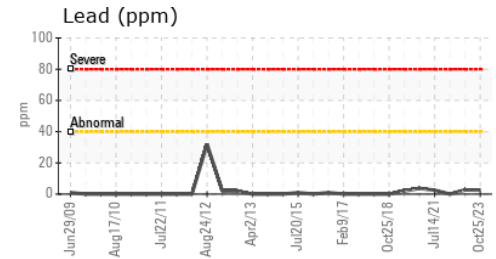
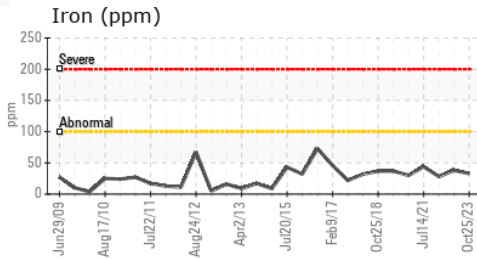
# OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14	<b>13.6</b>	13.4	13.4

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0084887  
**Lab Number** : 05999775  
**Unique Number** : 10728135  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Kemp Quarries - River Valley - Backbone**  
 5600 S Hwy 253  
 Huntington, AR  
 US 72940

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)

backbone@rivervalleyquarries.com

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F: