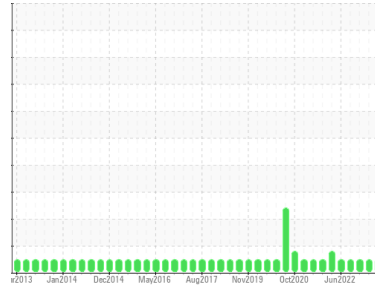


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / HULBERT**  
Machine Id  
**OHT047**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>PCA0109294</b>	PCA0086853	PCA0086138
Sample Date	Client Info		<b>06 Jan 2024</b>	15 Sep 2023	08 Apr 2023
Machine Age	hrs	Client Info	<b>37484</b>	37028	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
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
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>15</b>	33	22
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	4	1
Lead	ppm	ASTM D5185m >40	<b>4</b>	16	4
Copper	ppm	ASTM D5185m >330	<b>2</b>	4	4
Tin	ppm	ASTM D5185m >15	<b>1</b>	2	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>51</b>	54	55
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 0	<b>868</b>	846	907
Calcium	ppm	ASTM D5185m	<b>979</b>	959	1022
Phosphorus	ppm	ASTM D5185m	<b>975</b>	918	1006
Zinc	ppm	ASTM D5185m	<b>1118</b>	1118	1240
Sulfur	ppm	ASTM D5185m	<b>2830</b>	2696	3551

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	9	3
Sodium	ppm	ASTM D5185m	<b>8</b>	9	13
Potassium	ppm	ASTM D5185m >20	<b>2</b>	3	<1

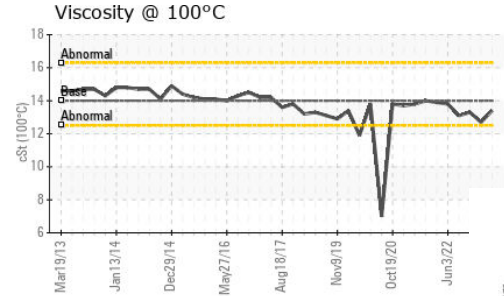
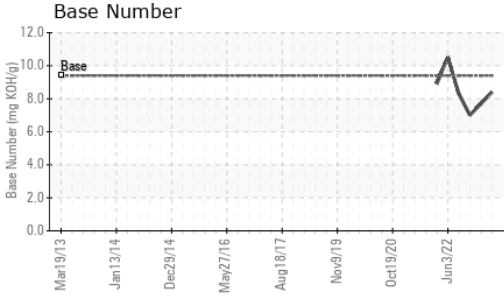
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.1</b>	8.4	8.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.7</b>	19.6	17.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.8</b>	16.2	15.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	<b>8.4</b>	7.7	7.0

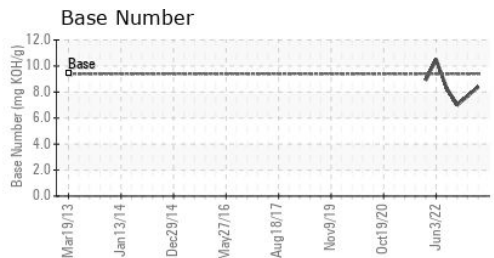
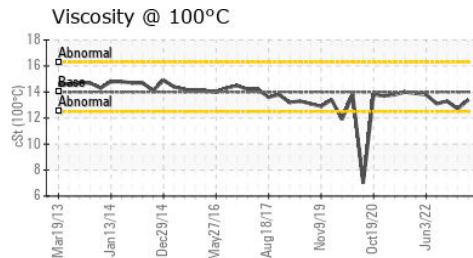
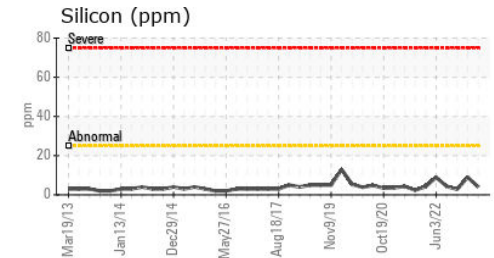
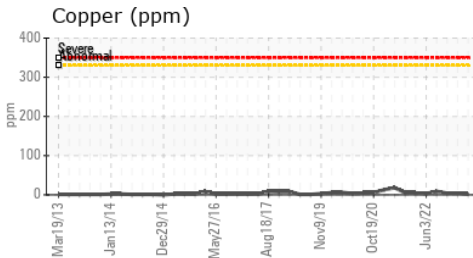
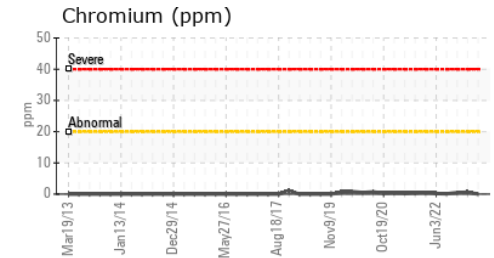
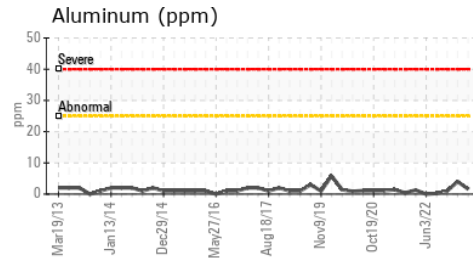
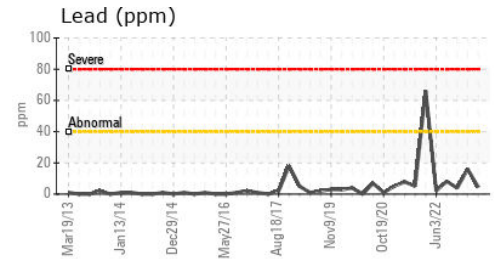
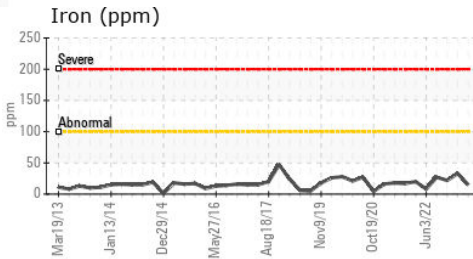
# OIL ANALYSIS REPORT



VISUAL	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	13.4	12.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : PCA0109294 Recieved : 24 Jan 2024  
 Lab Number : 06069842 Diagnosed : 26 Jan 2024  
 Unique Number : 10846519 Diagnostician : Don Baldrige  
 Test Package : MOB 1 ( Additional Tests: TBN )

Kemp Quarries - Kemp Stone - Hulbert  
 17801 Hwy 80  
 Hulbert, OK  
 US 74441  
 Contact:  
 hulbert@kempstone.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)

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F: