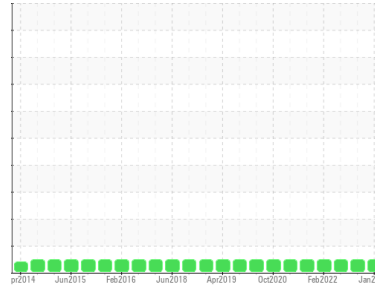


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**KEMP QUARRIES / RIVER VALLEY OZARK**  
 Machine Id  
**TTH017**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Performed pm-4 on 1/10/24 )

### 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>PCA0084493</b>	PCA0037184	PCA0048245
Sample Date	Client Info		<b>12 Jan 2024</b>	13 Jan 2023	05 Apr 2022
Machine Age	hrs	Client Info	<b>5255</b>	18563	4336
Oil Age	hrs	Client Info	<b>5255</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
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 >279	<b>10</b>	23	7
Chromium	ppm	ASTM D5185m >21	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >21	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >10	<b>1</b>	2	1
Copper	ppm	ASTM D5185m >18	<b>2</b>	15	<1
Tin	ppm	ASTM D5185m >9	<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>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	1	6
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>56</b>	54	51
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>866</b>	791	908
Calcium	ppm	ASTM D5185m	<b>1047</b>	1245	1401
Phosphorus	ppm	ASTM D5185m	<b>888</b>	1000	1076
Zinc	ppm	ASTM D5185m	<b>1117</b>	1182	1247
Sulfur	ppm	ASTM D5185m	<b>3748</b>	2867	2979

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >49	<b>3</b>	7	2
Sodium	ppm	ASTM D5185m	<b>0</b>	3	1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	<1

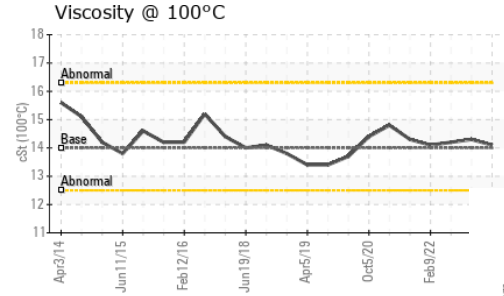
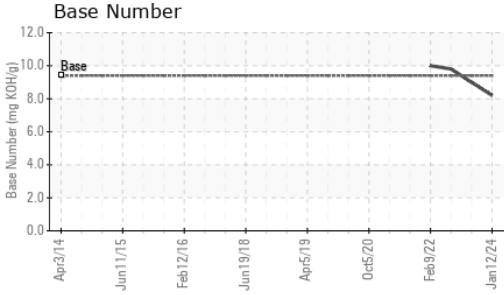
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	6.6	6.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.0</b>	18.2	19.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.7</b>	13.9	14.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	<b>8.2</b>	9.0	9.8

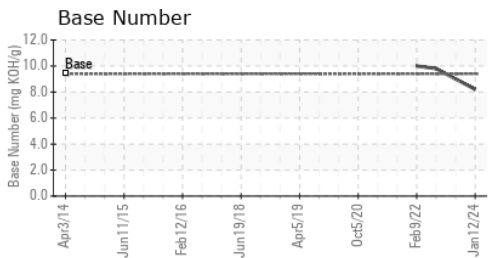
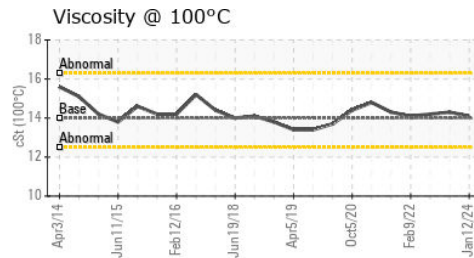
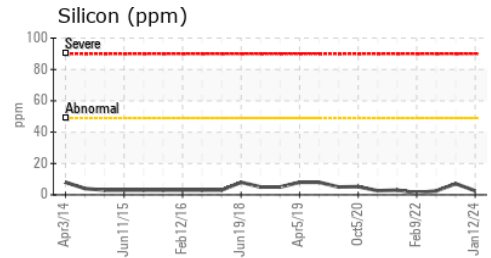
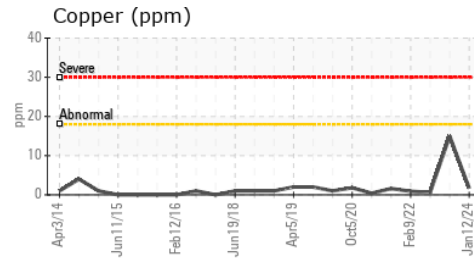
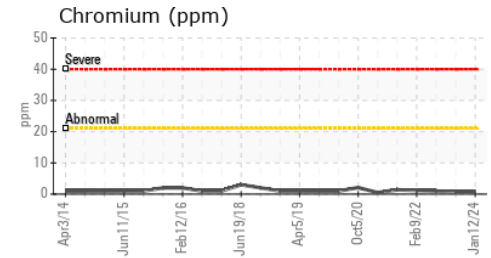
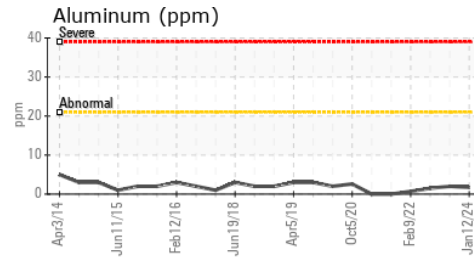
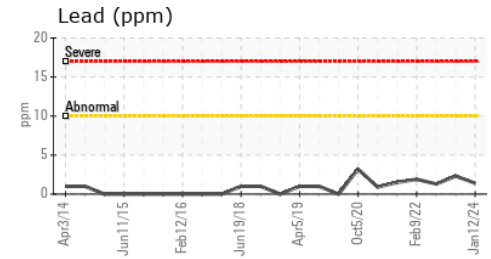
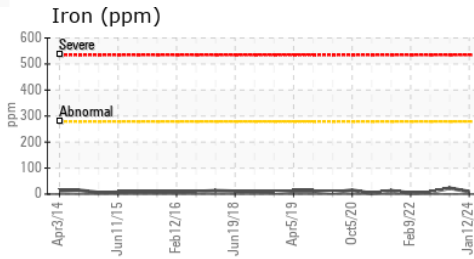
# OIL ANALYSIS REPORT



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	14.1	14.3	14.2

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0084493 **Recieved** : 30 Jan 2024  
**Lab Number** : 06073804 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10855895 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Kemp Quarries - River Valley - Ozark**  
 9446 N Hwy 309  
 Ozark, AR  
 US 72949  
 Contact:  
 ozark@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)

T:  
F: