



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



Area  
**KEMP QUARRIES / RIVER VALLEY OZARK**  
Machine Id  
**WL033**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0109131</b>	PCA0069709	PCA0069758
Sample Date		Client Info		<b>13 Jun 2024</b>	15 Mar 2024	10 Oct 2023
Machine Age	hrs	Client Info		<b>43181</b>	42691	42265
Oil Age	hrs	Client Info		<b>40191</b>	40191	40191
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>MARGINAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>37</b>	▲ 133	29
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	2	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>7</b>	6	4
Lead	ppm	ASTM D5185m	>40	<b>1</b>	4	1
Copper	ppm	ASTM D5185m	>330	<b>27</b>	27	7
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

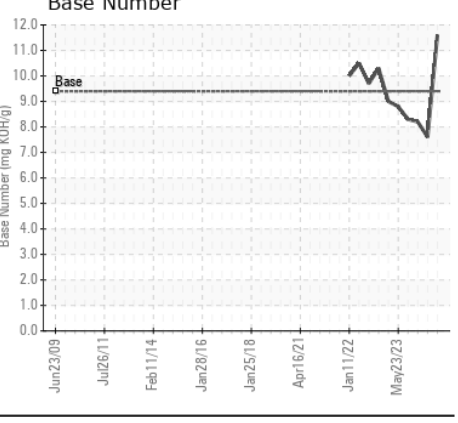
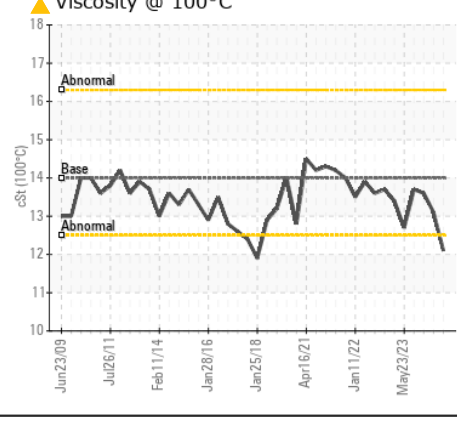
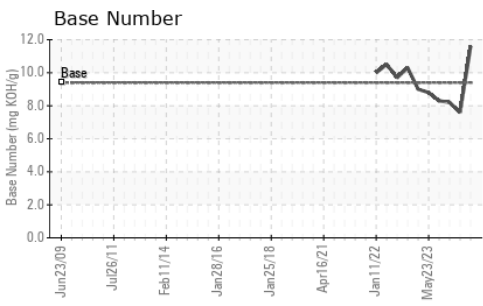
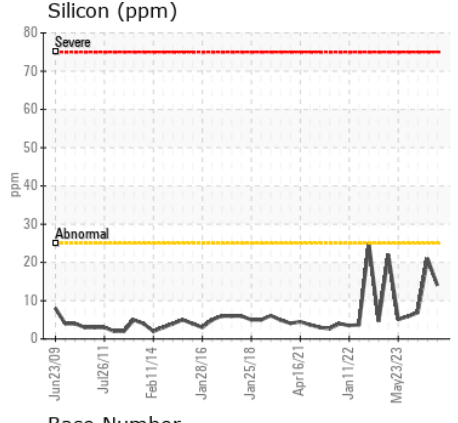
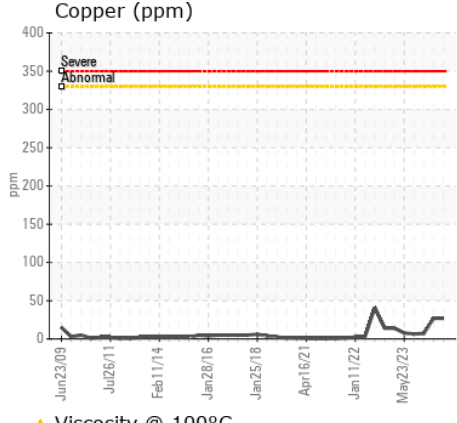
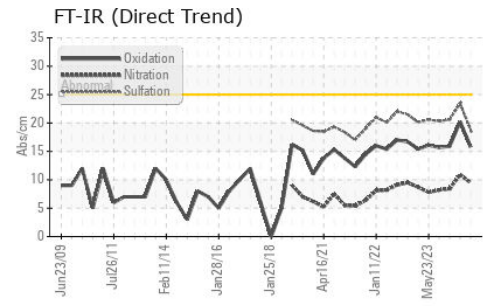
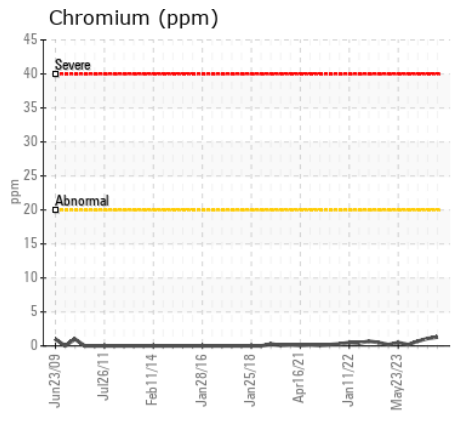
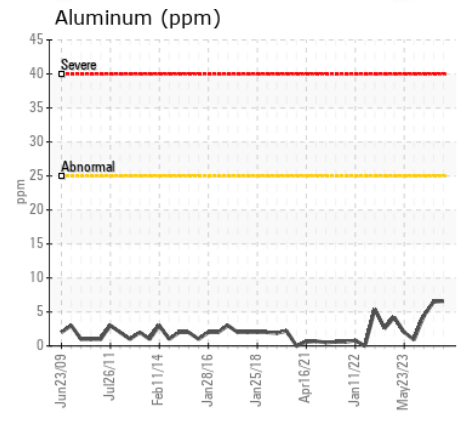
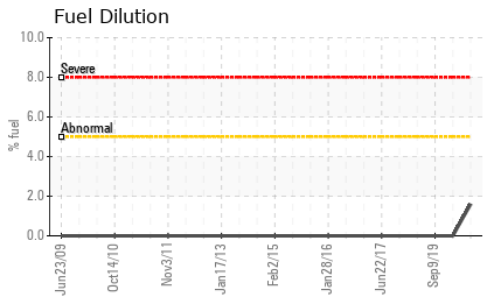
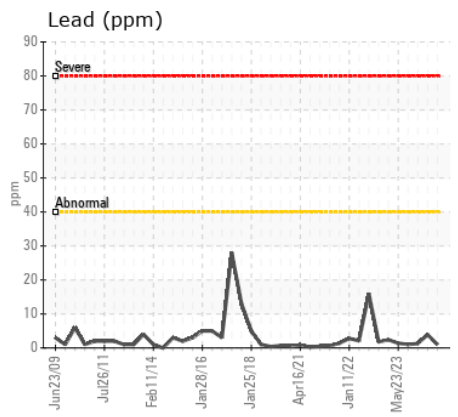
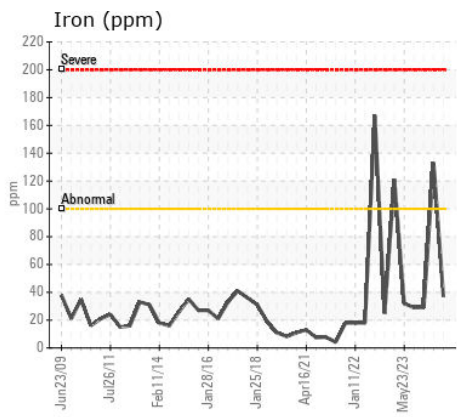
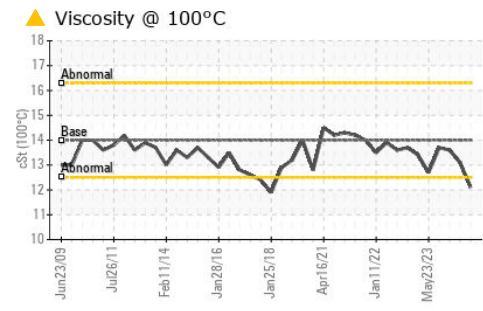
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>14</b>	21	7
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	6	3
Fuel	%	ASTM D3524	>5	<b>1.6</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.2</b>	1.7	1.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	10.9	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.8</b>	23.4	20.6
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		<b>3</b>	8	3
Boron	ppm	ASTM D5185m	0	<b>5</b>	12	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m	0	<b>71</b>	68	60
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	0	<b>1100</b>	934	970
Calcium	ppm	ASTM D5185m		<b>1273</b>	1198	1130
Phosphorus	ppm	ASTM D5185m		<b>1223</b>	1130	1058
Zinc	ppm	ASTM D5185m		<b>1516</b>	1278	1307
Sulfur	ppm	ASTM D5185m		<b>3613</b>	3268	3106
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.8</b>	20.2	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>11.6</b>	7.6	8.2
Visc @ 100°C	cSt	ASTM D445	14	▲ <b>12.1</b>	13.1	13.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0109131 **Received** : 20 Jun 2024  
**Lab Number** : 06216445 **Tested** : 25 Jun 2024  
**Unique Number** : 11089309 **Diagnosed** : 25 Jun 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

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