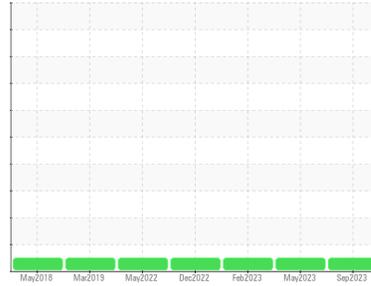


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area
KEMP QUARRIES / RIVER VALLEY OZARK
 Machine Id
OHT082
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)


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			PCA0069817	PCA0084642	PCA0084672
Sample Date	Client Info			05 Sep 2023	23 May 2023	15 Feb 2023
Machine Age	hrs	Client Info		2841	2462	2172
Oil Age	hrs	Client Info		1881	1881	2172
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	30	21	32
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	0	2	<1
Lead	ppm	ASTM D5185m	>40	4	0	2
Copper	ppm	ASTM D5185m	>330	222	5	12
Tin	ppm	ASTM D5185m	>15	2	<1	2
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

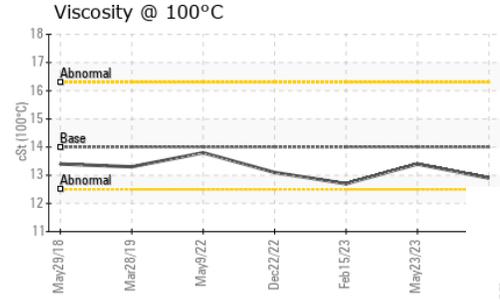
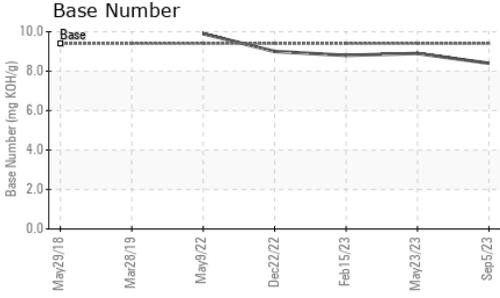
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	4	4	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	62	62	57
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	0	979	940	938
Calcium	ppm	ASTM D5185m		1102	1092	1134
Phosphorus	ppm	ASTM D5185m		1092	1060	954
Zinc	ppm	ASTM D5185m		1301	1277	1233
Sulfur	ppm	ASTM D5185m		3757	3682	3292

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	7	4
Sodium	ppm	ASTM D5185m		3	13	4
Potassium	ppm	ASTM D5185m	>20	2	2	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.8	0.9	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.9	8.9	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	20.9	20.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	16.3	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	8.4	8.9	8.8

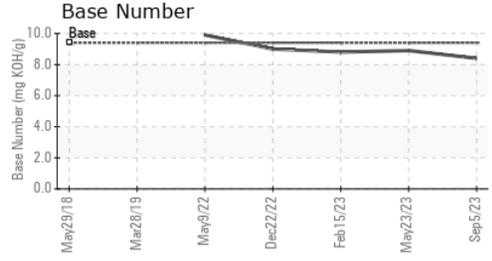
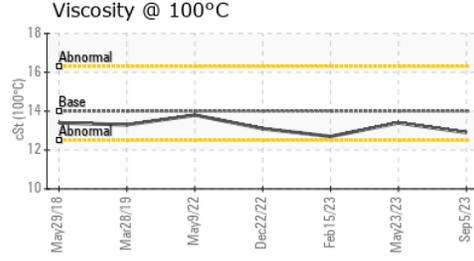
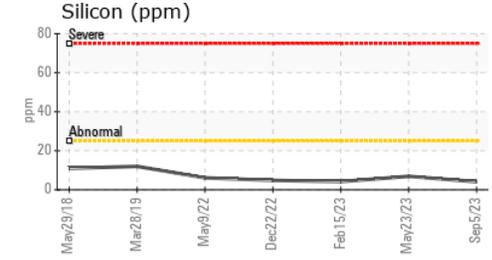
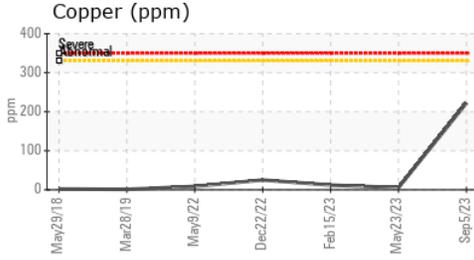
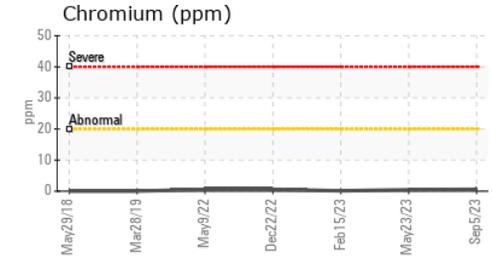
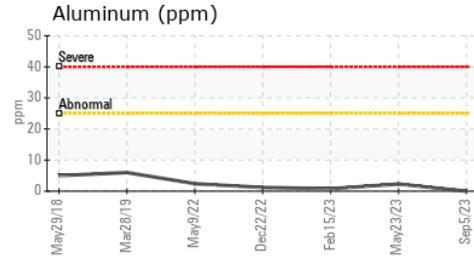
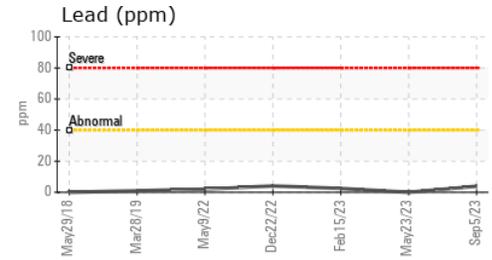
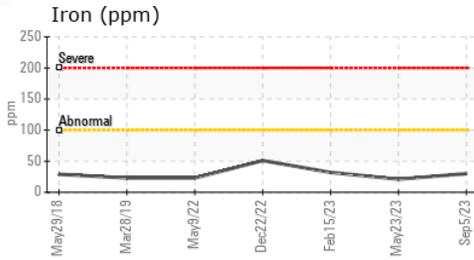
OIL ANALYSIS REPORT



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	12.9	13.4	12.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0069817 **Received** : 13 Sep 2023
Lab Number : 05950654 **Diagnosed** : 18 Sep 2023
Unique Number : 10646613 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: TBN)

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

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)

ozark@rivervalleyquarries.com
 T:
 F: