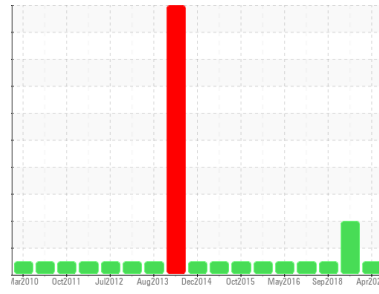


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / KEMP STONE - FAIRLAND**  
Machine Id  
**OHT042**  
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: PM-3 changed fluid and filters )

### 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>PCA0037559</b>	PCA0025433	PCA92317009
Sample Date	Client Info		<b>21 Apr 2022</b>	24 Jan 2022	28 Sep 2018
Machine Age	hrs	Client Info	<b>26463</b>	26022	25066
Oil Age	hrs	Client Info	<b>26463</b>	26022	372
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	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	0.0

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>69</b>	65	51
Chromium	ppm	ASTM D5185m >20	<b>1</b>	1	1
Nickel	ppm	ASTM D5185m >2	<b>1</b>	<1	1
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>5</b>	12	0
Copper	ppm	ASTM D5185m >330	<b>171</b>	▲ 647	2
Tin	ppm	ASTM D5185m >15	<b>3</b>	3	0
Antimony	ppm	ASTM D5185m	<b>---</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>3</b>	5	28
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>70</b>	73	45
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m 0	<b>1078</b>	1021	789
Calcium	ppm	ASTM D5185m	<b>1193</b>	1157	1203
Phosphorus	ppm	ASTM D5185m	<b>1161</b>	1070	779
Zinc	ppm	ASTM D5185m	<b>1488</b>	1332	1057
Sulfur	ppm	ASTM D5185m	<b>2530</b>	2529	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	10	8
Sodium	ppm	ASTM D5185m	<b>26</b>	● 87	46
Potassium	ppm	ASTM D5185m >20	<b>1</b>	<1	5

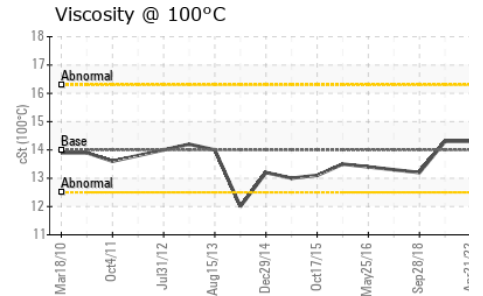
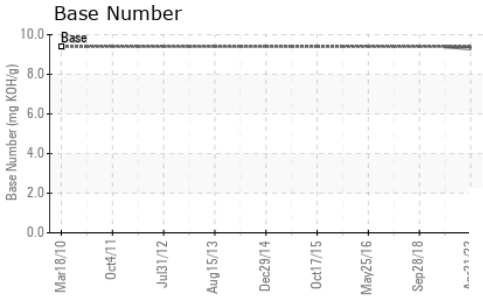
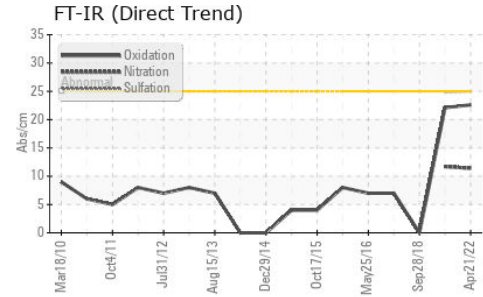
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.1</b>	1.3	1.28
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.4</b>	11.7	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25</b>	24.9	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>22.6</b>	22.1	0
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	<b>9.3</b>	9.4	---

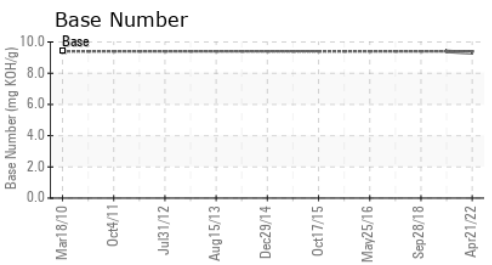
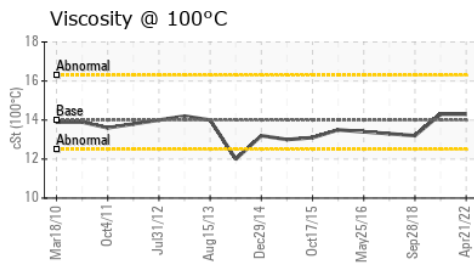
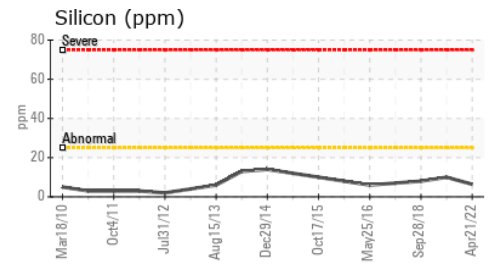
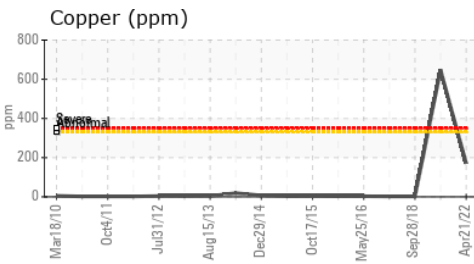
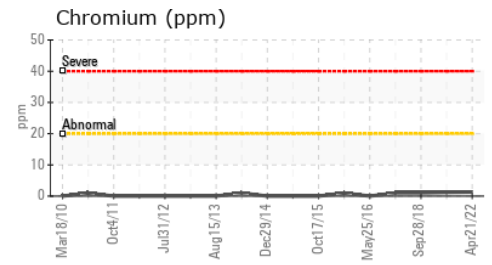
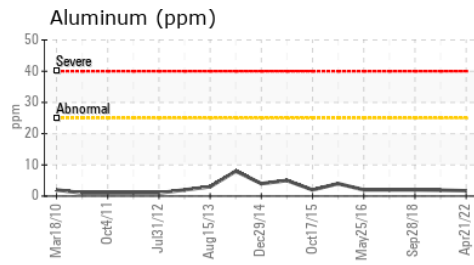
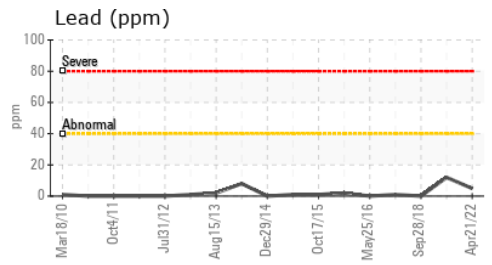
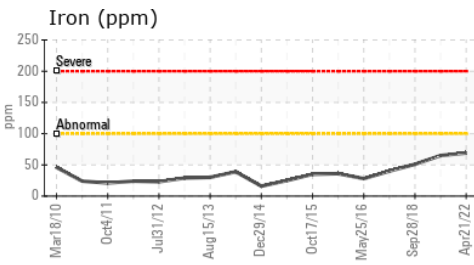
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	<b>14.3</b>	14.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0037559  
**Lab Number** : 05532339  
**Unique Number** : 9956628  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 29 Apr 2022  
**Tested** : 01 May 2022  
**Diagnosed** : 02 May 2022 - Jonathan Hester

**Kemp Quarries - Kemp Stone - Fairland**  
 18350 S 590 Rd  
 Fairland, OK  
 US 74343  
 Contact:  
 fairland@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)