



# OIL ANALYSIS REPORT

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

Area  
**KEMP QUARRIES / BCS - MILL CREEK [69957]**

Machine Id  
**54**  
Component  
**Diesel Engine**

Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: Pm )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0108508</b>	PCA37273037	---
Sample Date		Client Info		<b>29 Apr 2024</b>	19 Nov 2018	---
Machine Age	hrs	Client Info		<b>2249</b>	2249	---
Oil Age	hrs	Client Info		<b>2249</b>	1000	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>NORMAL</b>	SEVERE	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>8</b>	17	---
Chromium	ppm	ASTM D5185m	>20	<b>3</b>	6	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	3	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	▲ 57	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	▲ 75	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

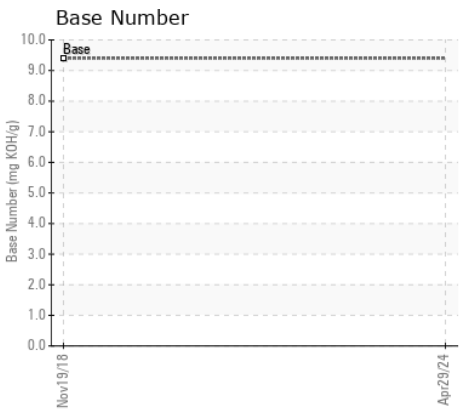
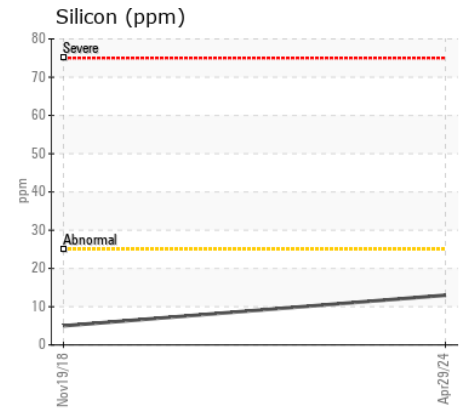
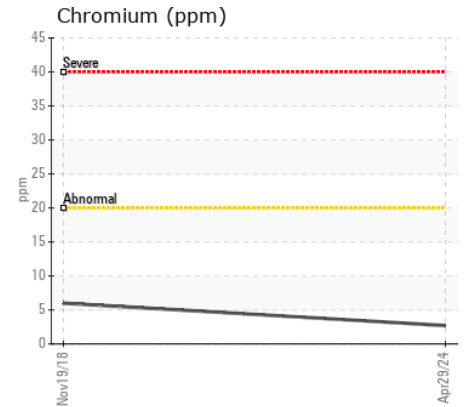
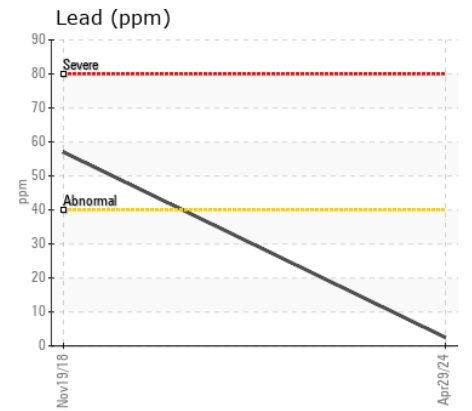
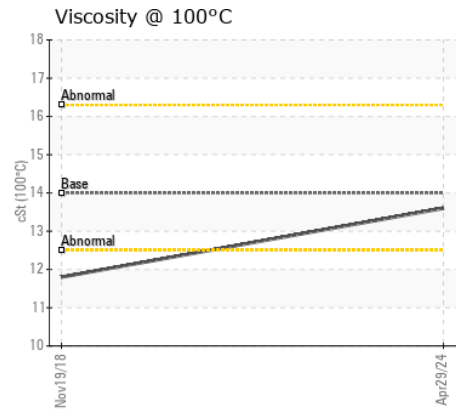
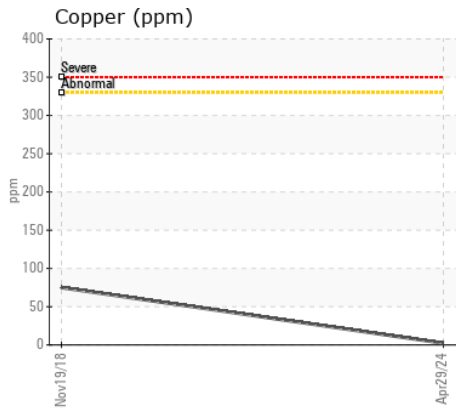
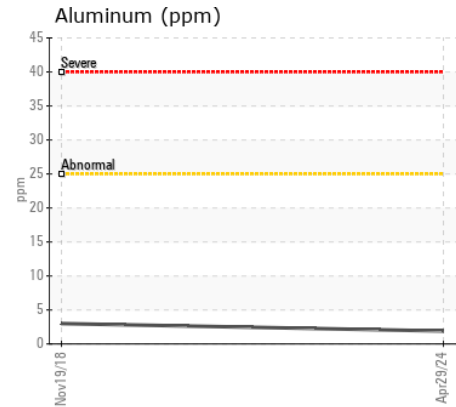
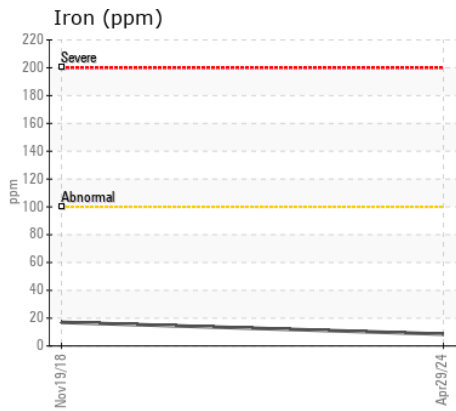
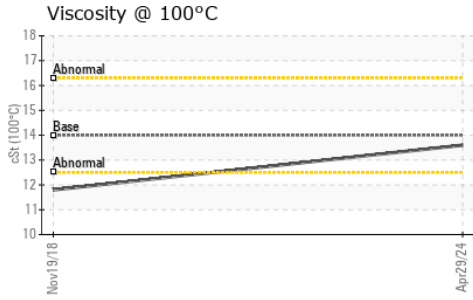
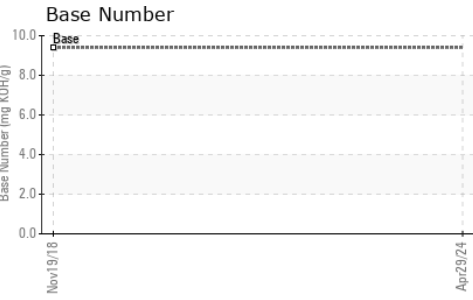
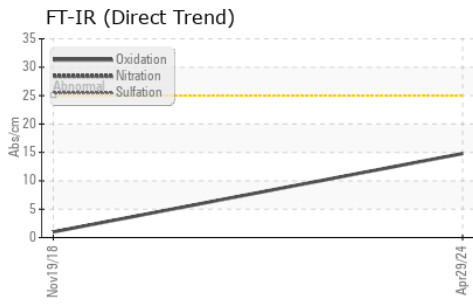
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>13</b>	5	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	0.0	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.45	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.1</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

## 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.

Sodium	ppm	ASTM D5185m		<b>29</b>	5	---
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	88	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>64</b>	76	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	0	<b>915</b>	70	---
Calcium	ppm	ASTM D5185m		<b>1061</b>	2915	---
Phosphorus	ppm	ASTM D5185m		<b>1021</b>	1033	---
Zinc	ppm	ASTM D5185m		<b>1211</b>	1173	---
Sulfur	ppm	ASTM D5185m		<b>3470</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	1	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>9.1</b>	---	---
Visc @ 100°C	cSt	ASTM D445	14	<b>13.6</b>	11.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : PCA0108508 Received : 13 May 2024  
 Lab Number : 06178048 Tested : 14 May 2024  
 Unique Number : 11029374 Diagnosed : 15 May 2024 - Sean Felton  
 Test Package : MOB 1 ( Additional Tests: TBN )

**Kemp Quarries - BCS-Mill Creek**  
 609 Lazy E Rd  
 Noel, MO  
 US 64854  
 Contact: TRAVIS ELLIS  
 tellis@kempquarries.com  
 T:  
 F:

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)