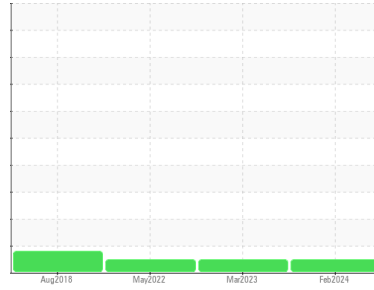


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
KEMP QUARRIES / RIVER VALLEY MATERIALS - FT. SMITH TRANS LOAD 01
 Machine Id
WL096
 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		PCA0084218	PCA0070413	PCA0062685
Sample Date	Client Info		22 Feb 2024	23 Mar 2023	13 May 2022
Machine Age	hrs	Client Info	3351	3133	2877
Oil Age	hrs	Client Info	3133	3133	1782
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	15	18	20
Chromium	ppm	ASTM D5185m >20	2	3	3
Nickel	ppm	ASTM D5185m >2	<1	<1	0
Titanium	ppm	ASTM D5185m >2	0	<1	<1
Silver	ppm	ASTM D5185m >2	0	<1	<1
Aluminum	ppm	ASTM D5185m >25	3	5	5
Lead	ppm	ASTM D5185m >40	<1	<1	1
Copper	ppm	ASTM D5185m >330	2	3	3
Tin	ppm	ASTM D5185m >15	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	2	3	6
Barium	ppm	ASTM D5185m 0	0	2	0
Molybdenum	ppm	ASTM D5185m 0	67	60	61
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	1123	929	1055
Calcium	ppm	ASTM D5185m	1139	1067	1162
Phosphorus	ppm	ASTM D5185m	1181	1034	1080
Zinc	ppm	ASTM D5185m	1527	1216	1323
Sulfur	ppm	ASTM D5185m	3686	3138	2929

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	9	9	7
Sodium	ppm	ASTM D5185m	<1	1	<1
Potassium	ppm	ASTM D5185m >20	<1	2	3

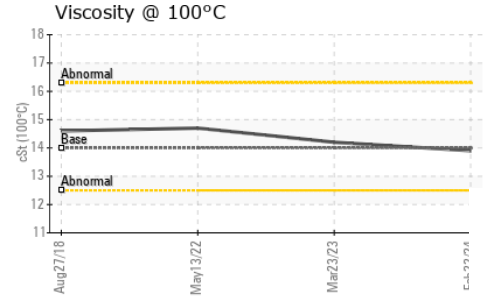
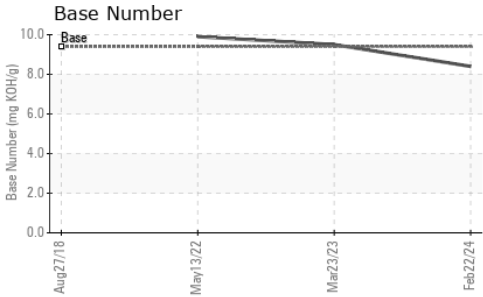
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	0.1	0.2
Nitration	Abs/cm	*ASTM D7624 >20	5.2	5.6	7.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.1	17.5	19.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	12.7	13.0	15.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	8.4	9.5	9.9

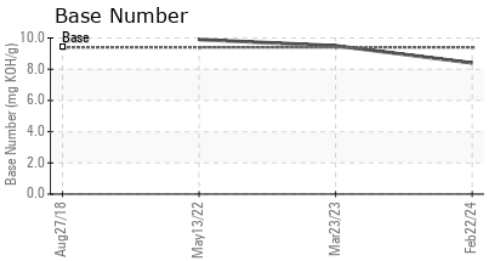
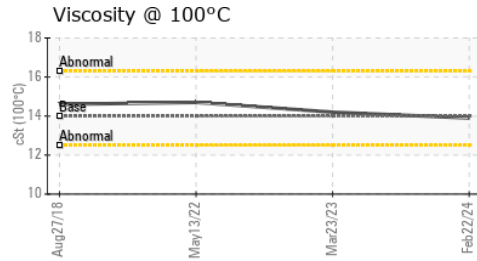
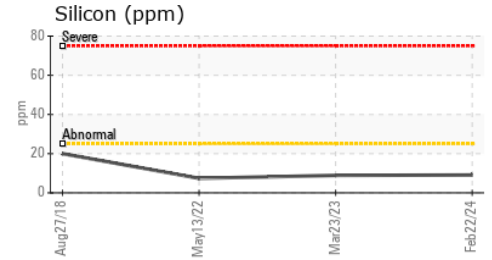
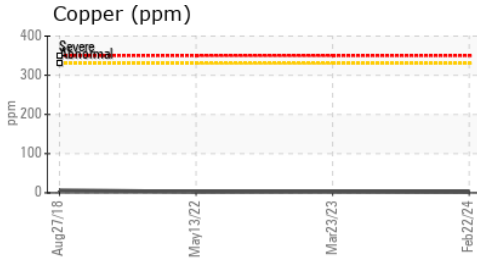
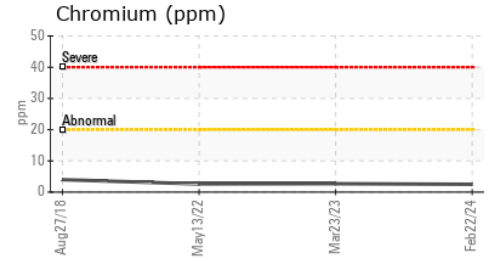
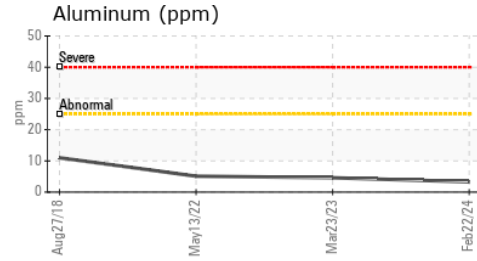
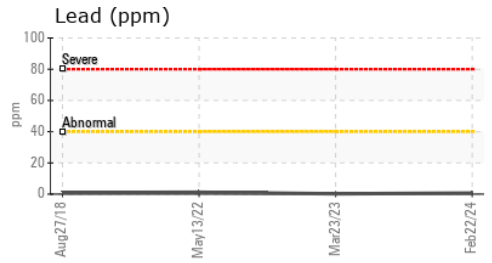
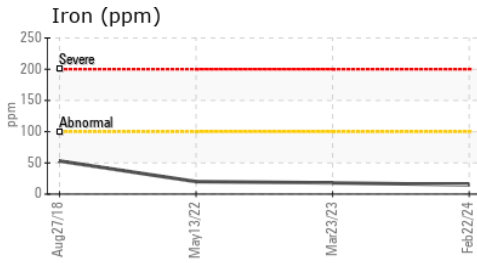
OIL ANALYSIS REPORT



PARAMETER	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	13.9	14.2	14.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084218 **Received** : 01 Mar 2024
Lab Number : 06106615 **Tested** : 05 Mar 2024
Unique Number : 10910112 **Diagnosed** : 05 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

Kemp Quarries - River Valley - Ft. Smith Trans Load 01
 3801 State Line Road
 Fort Smith, AR
 US 72916

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: arkomashop@kempquarries.net

* - 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)

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F: