



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
KEMP QUARRIES / BCS - GRAVETTE [69378]

Machine Id
OHT119

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: Pm4)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0108521	PCA0084768	PCA0085729
Sample Date		Client Info		22 Apr 2024	30 Nov 2023	11 May 2023
Machine Age	hrs	Client Info		26752	26752	26286
Oil Age	hrs	Client Info		26752	466	26286
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	55	37	55
Chromium	ppm	ASTM D5185m	>20	1	<1	1
Nickel	ppm	ASTM D5185m	>4	1	<1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	3
Lead	ppm	ASTM D5185m	>40	13	6	9
Copper	ppm	ASTM D5185m	>330	63	9	10
Tin	ppm	ASTM D5185m	>15	2	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

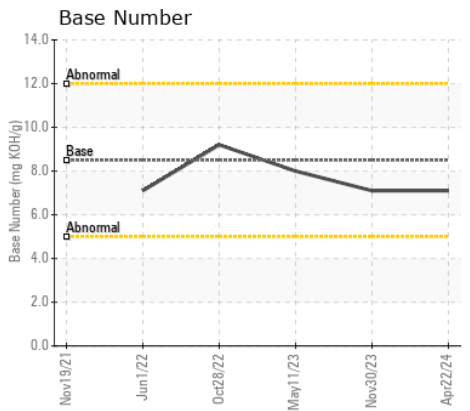
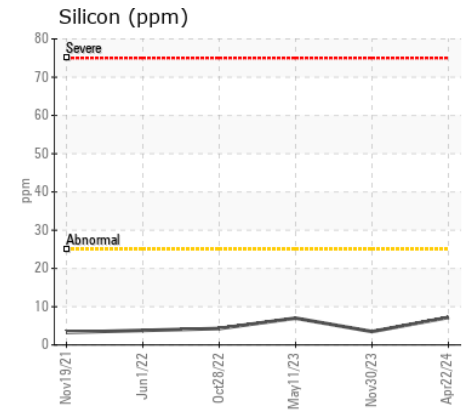
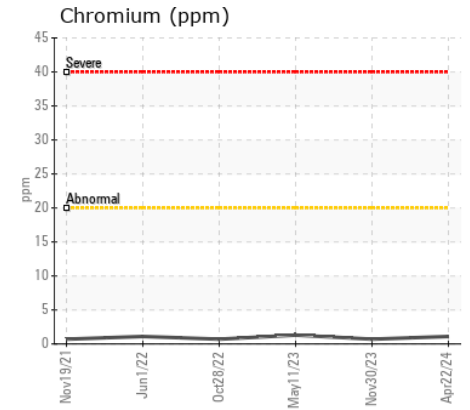
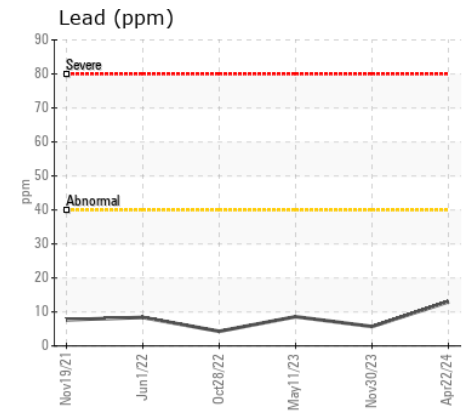
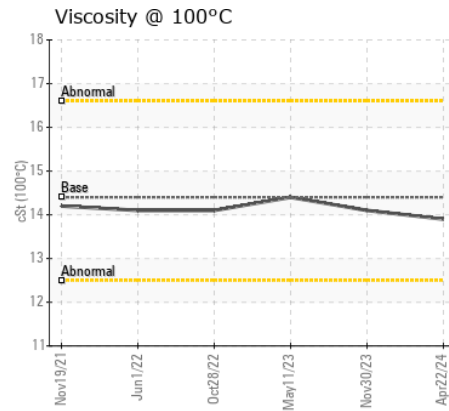
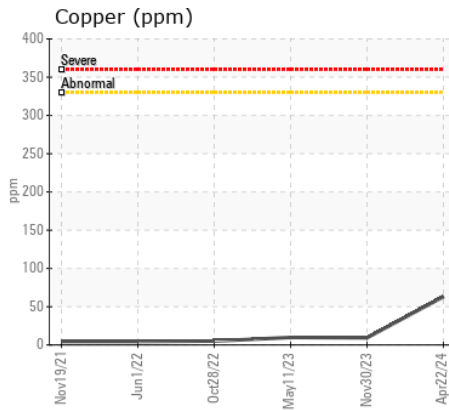
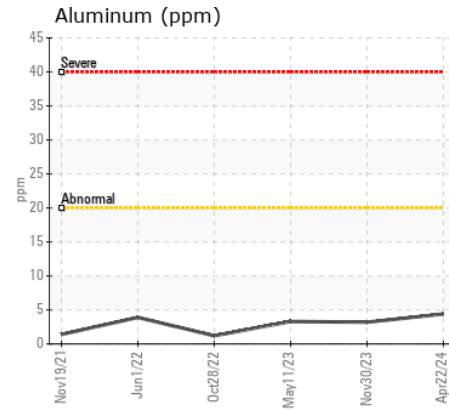
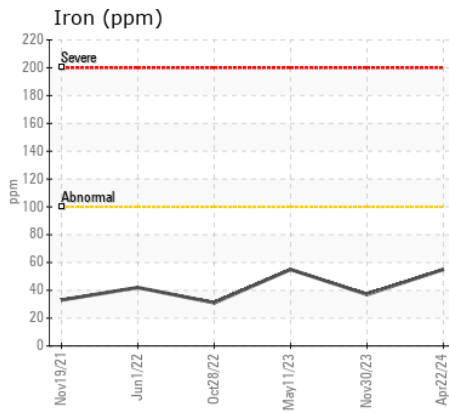
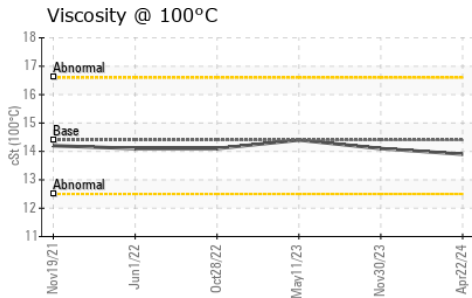
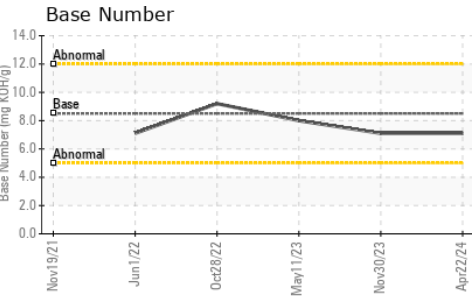
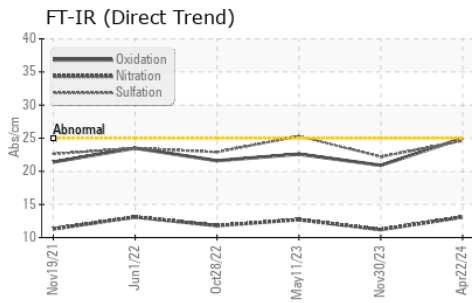
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	4	7
Potassium	ppm	ASTM D5185m	>20	6	1	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.4	1.2	1.8
Nitration	Abs/cm	*ASTM D7624	>20	13.1	11.2	12.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	22.2	25.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

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	>216	52	5	17
Boron	ppm	ASTM D5185m	250	5	2	3
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	61	58	62
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	851	907	1007
Calcium	ppm	ASTM D5185m	3000	1047	1008	1162
Phosphorus	ppm	ASTM D5185m	1150	854	987	998
Zinc	ppm	ASTM D5185m	1350	1124	1189	1306
Sulfur	ppm	ASTM D5185m	4250	2766	3115	3441
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.0	20.9	22.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.1	7.1	8.0
Visc @ 100°C	cSt	ASTM D445	14.4	13.9	14.1	14.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0108521
Lab Number : 06178051
Unique Number : 11029377
Test Package : MOB 1 (Additional Tests: TBN)

Kemp Quarries - Benton County Stone - Gravette
 15100 N Hwy 59
 Sulphur Springs, AR
 US 72768
 Contact:
 gravette@bentoncountystone.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)

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F: