WEAR CONTAMINATION **FLUID CONDITION**

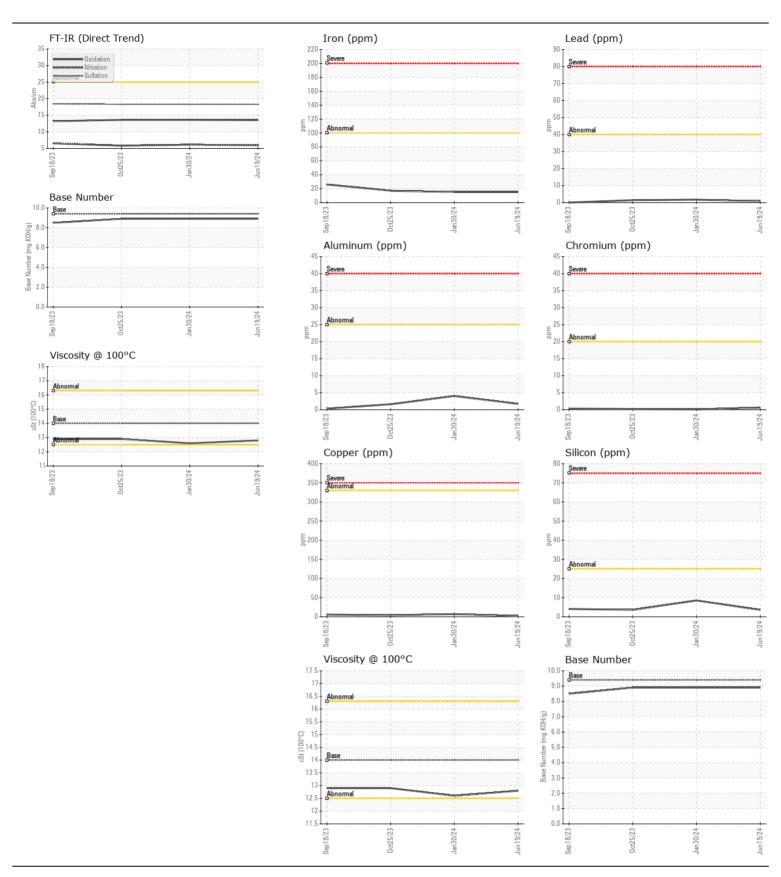
NORMAL NORMAL NORMAL

KEMP QUARRIES / RIVER VALLEY BACKBONE

OHT124

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PCA0108487	GFL0103897	PCA008484
	Sample Date		Client Info		19 Jun 2024	30 Jan 2024	25 Oct 202
	Machine Age	hrs	Client Info		31138	30546	30229
	Oil Age	hrs	Client Info		592	317	217
	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
VEAR	Iron	ppm	ASTM D5185m	>100	15	15	17
	Chromium	ppm	ASTM D5185m		<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	2	<1
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m		<1	<1	0
	Aluminum	ppm	ASTM D5185m		2	4	2
	Lead	ppm	ASTM D5185m	>40	<1	2	1
	Copper	ppm	ASTM D5185m		2	7	4
	Tin	ppm	ASTM D5185m		- <1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	8	4
	Potassium	ppm	ASTM D5185m		1	4	2
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	>0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	. 2	0.4	0.4	0.5
	Nitration	Abs/cm	*ASTM D7624	>20	5.9	6.1	5.8
	Sulfation	Abs/.1mm	*ASTM D7024		18.3	18.3	18.3
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water		*Visual	>0.2	NEG	NEG	NEG
LUID CONDITION	O a di		ACTM DE10E				
FLUID CONDITION	Sodium	ppm	ASTM D5185m	0	<1	2	0
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		4	3	4
	Barium	ppm	ASTM D5185m		<1 62	0	5
	Molybdenum	ppm	ASTM D5185m	U	63	58	58
	Manganese	ppm	ASTM D5185m	0	0	<1	<1
	Magnesium	ppm	ASTM D5185m ASTM D5185m	U	1032	892	902
	Calcium	ppm	ASTM D5185m		1186	1050 1026	1096 1088
	Phosphorus	ppm			1160		
	Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m		1323	1223	1185 3552
	Oxidation	ppm Abs/1mm	*ASTM D5185ffi	> 2F	3199 12.5	3117	
	Base Number (BN)	Abs/.1mm			13.5 8.9	13.6 8.9	13.6 8.9
	Bace millipar (BM)	IIIII NUM/O	HOLIVI DZ896	9.4	0.9	0.9	0.9





Certificate L2367

Laboratory Sample No.

Lab Number : 06224150 Unique Number : 11102347

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0108487 Received : 28 Jun 2024

Tested : 01 Jul 2024 Diagnosed : 01 Jul 2024 - Angela Borella

Kemp Quarries - River Valley - Backbone

5600 S Hwy 253 Huntington, AR US 72940 Contact:

Test Package : MOB 1 (Additional Tests: TBN) backbone@rivervalleyquarries.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)

T: F: