

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

KEMP QUARRIES / RIVER VALLEY OZARK

TTH017 Component

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

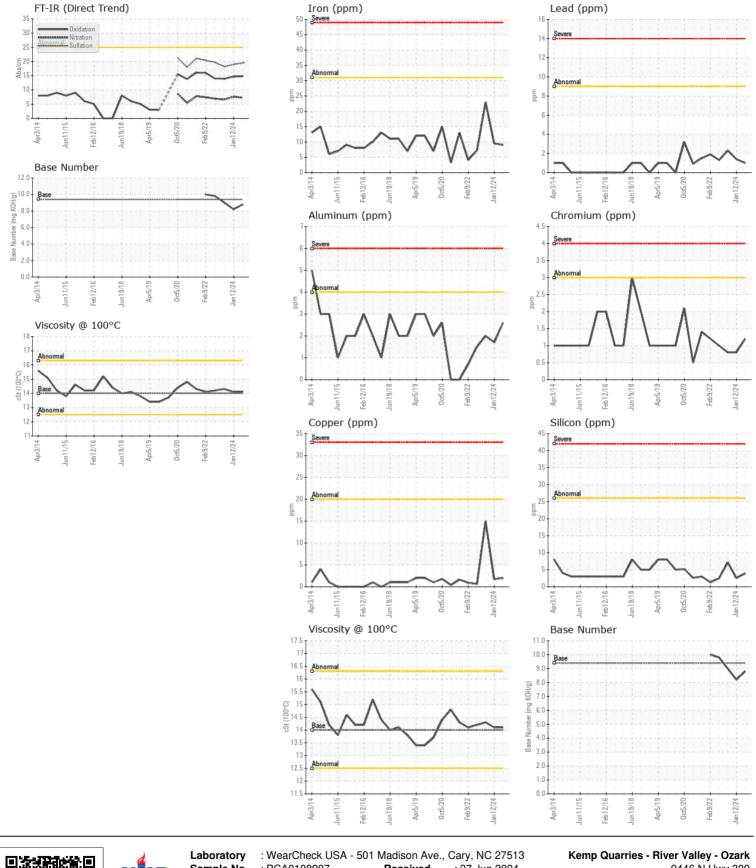
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PCA0108997	PCA0084493	PCA0037184
	Sample Date		Client Info		19 Jun 2024	12 Jan 2024	13 Jan 2023
	Machine Age	hrs	Client Info		5494	5255	18563
	Oil Age	hrs	Client Info		5494	5255	300
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>31	9	10	23
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		1	<1	<1
	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		<1	<1	1
	Silver	ppm	ASTM D5185m	>3	<1	0	0
	Aluminum	ppm	ASTM D5185m		3	2	2
	Lead	ppm	ASTM D5185m		1	1	2
	Copper	ppm	ASTM D5185m		2	2	15
	Tin	ppm	ASTM D5185m		0	<1	<1
	Vanadium	ppm	ASTM D5185m	20	<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	0''''''''''						~
CONTAMINATION	Silicon Potassium	ppm	ASTM D5185m ASTM D5185m		4	3	7
There is no indication of any contamination in the oil.		ppm					
	Fuel Water		WC Method		<1.0 NEG	<1.0 NEG	<1.0
			WC Method	>0.2			NEG
	Glycol	0/	WC Method	0	NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.6	0.5	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	7.3	7.6	6.6
	Sulfation	Abs/.1mm	*ASTM D7415		19.5	19.0	18.2
	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 Emulsified Water	scalar scalar	*Visual *Visual	NORML >0.2	NORML NEG	NORML NEG	NORML NEG
				20.2		NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	0	3
The DN requit indicates that there is suitable effective remaining in the	Boron	ppm	ASTM D5185m	0	5	0	1
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	0	60	56	54
	Manganese	ppm	ASTM D5185m		<1	0	<1
	Magnesium	ppm	ASTM D5185m	0	1011	866	791
	Calcium	ppm	ASTM D5185m		1215	1047	1245
	Phosphorus	ppm	ASTM D5185m		1061	888	1000
	Zinc	ppm	ASTM D5185m		1367	1117	1182
	Sulfur	ppm	ASTM D5185m		3708	3748	2867
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	14.7	13.9
	Base Number (BN)	mg KOH/g	ASTM D2896	9.4	8.8	8.2	9.0
		0					110

Visc @ 100°C cSt ASTM D445 14

14.3

14.1

14.1



Sample No. : PCA0108997 Received : 27 Jun 2024 9446 N Hwy 309 Lab Number : 06223021 Tested Ozark, AR : 28 Jun 2024 Unique Number : 11101218 : 30 Jun 2024 - Don Baldridge US 72949 Diagnosed Test Package : MOB 1 (Additional Tests: TBN) Contact: Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. ozark@rivervalleyquarries.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)