

OIL ANALYSIS REPORT

Sample Rating Trend





Area KEMP QUARRIES / RIVER VALLEY BACKBONE Machine Id VVL147 Component

Transmission (Auto)

Transmission (Auto) Oil (--- 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

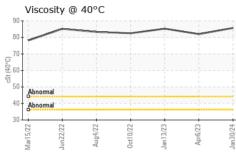
The condition of the oil is acceptable for the time in service.

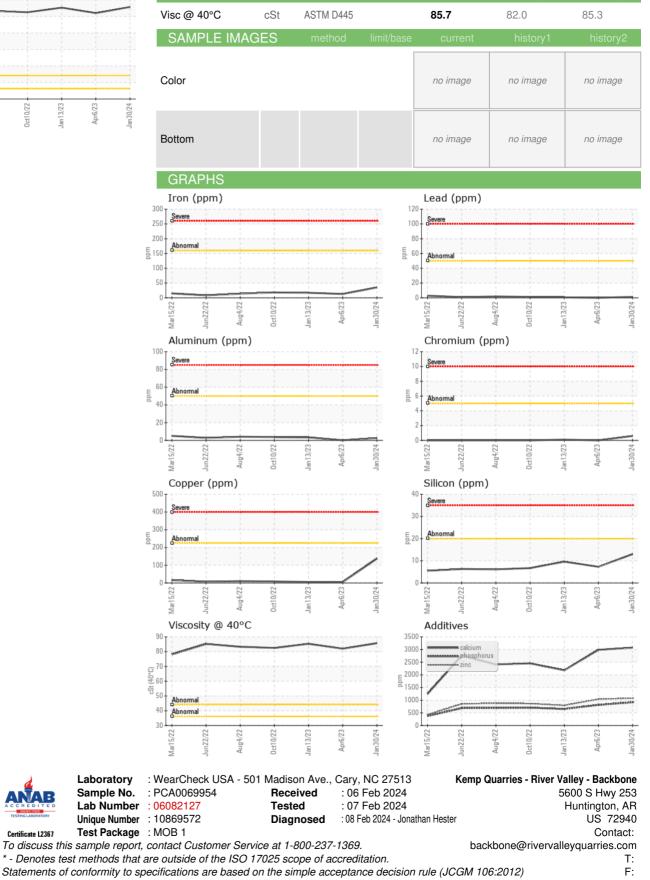
SAMPLE INFORM	/ ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0069954	PCA0085826	PCA0037163
Sample Date		Client Info		30 Jan 2024	06 Apr 2023	13 Jan 2023
Machine Age	hrs	Client Info		29627	28770	28425
Oil Age	hrs	Client Info		1200	345	1200
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	35	13	17
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	1	0	0
Titanium	ppm	ASTM D5185m		2	0	<1
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>50	3	<1	3
Lead	ppm	ASTM D5185m	>50	1	0	<1
Copper	ppm	ASTM D5185m	>225	137	5	5
Tin	ppm	ASTM D5185m	>10	1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<1	0	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	2	2
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		17	30	28
Calcium	ppm	ASTM D5185m		3077	2986	2179
Phosphorus	ppm	ASTM D5185m		920	813	652
Zinc	ppm	ASTM D5185m		1077	1040	793
Sulfur	ppm	ASTM D5185m		3428	3477	3046
				• .=•	0477	3040
CONTAMINAN	TS	method	limit/base	current	history1	history2
CONTAMINAN ⁻ Silicon	TS ppm		limit/base			
				current	history1	history2
Silicon	ppm	ASTM D5185m	>20	current 13	history1 7	history2 10
Silicon Sodium	ppm ppm	ASTM D5185m ASTM D5185m	>20	current 13 0	history1 7 0	history2 10 1
Silicon Sodium Potassium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20	current 13 0 2	history1 7 0 0	history2 10 1 0
Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>20 >20 limit/base	current 13 0 2 current	history1 7 0 0 history1	history2 10 1 0 history2
Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>20 >20 limit/base NONE	current 13 0 2 current NONE	history1 7 0 0 history1 NONE	history2 10 1 0 history2 NONE
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual	>20 >20 limit/base NONE NONE	current 13 0 2 current NONE NONE	history1 7 0 0 history1 NONE NONE	history2 10 1 0 history2 NONE NONE
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE	current 13 0 2 current NONE NONE NONE	history1 7 0 0 history1 NONE NONE NONE	history2 10 1 0 history2 NONE NONE NONE
Silicon Sodium Potassium VISUAL	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE	current 13 0 2 current NONE NONE NONE NONE NONE	history1 7 0 0 history1 NONE NONE NONE NONE	history2 10 1 0 history2 NONE NONE NONE NONE
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	current 13 0 2 current NONE NONE NONE NONE NONE	history1 7 0 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	history2 10 1 0 history2 NONE NONE NONE NONE NONE
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	current 13 0 2 current NONE NONE NONE NONE NONE NONE NONE NON	history1 7 0 0 history1 NONE NONE NONE NONE NONE NONE NONE	history2 10 1 0 history2 NONE NONE NONE NONE NONE NONE
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 Iimit/base NONE NONE NONE NONE NONE NONE NONE	current 13 0 2 current NONE NONE NONE NONE NONE NONE NONE NON	history1 7 0 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	history2 10 1 0 history2 NONE NONE NONE NONE NONE NONE NONE NON
Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	current 13 0 2 current NONE NONE NONE NONE NONE NONE NONE NON	history1 7 0 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	history2 10 1 0 <u>history2</u> NONE NONE NONE NONE NONE NONE NONE NON



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FLUID PROPERTIES





Certificate L2367