

OIL ANALYSIS REPORT



KEMP QUARRIES / HULBERT WL131

Component
Front Differential

MOBIL MOBILTRANS HD 50 (--- GAL)



Sample Rating Trend



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.

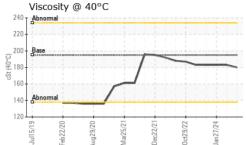
Fluid Condition

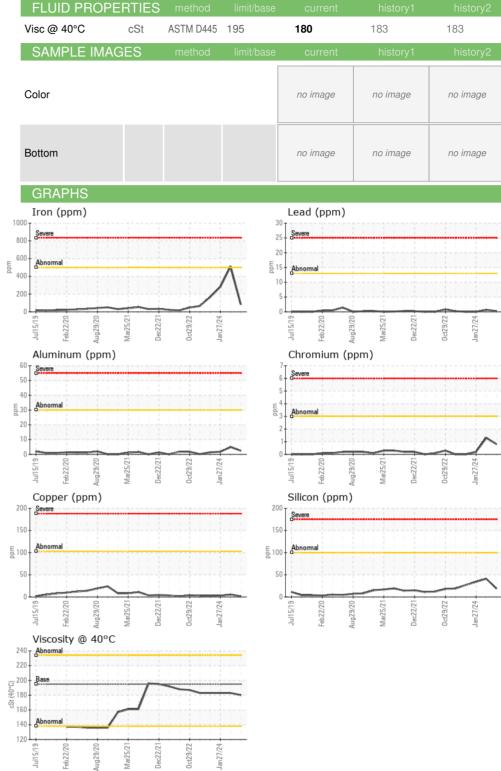
The condition of the oil is acceptable for the time in service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0085943	PCA0085909	PCA0109161
Sample Date		Client Info		07 Jun 2024	06 Apr 2024	27 Jan 2024
Machine Age	hrs	Client Info		21637	11256	10805
Oil Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method		NEG	NEG	NEG
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	82	<u></u> 513	282
Chromium	ppm	ASTM D5185m	>3	<1	1	<1
Nickel	ppm	ASTM D5185m	>3	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	2	5	2
Lead	ppm	ASTM D5185m	>13	<1	<1	0
Copper	ppm	ASTM D5185m	>103	1	5	3
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		8	4	5
Barium	ppm	ASTM D5185m		0	<1	5
Molybdenum	ppm	ASTM D5185m		4	2	<1
	ppm	ASTM D5185m ASTM D5185m		4 <1	2	<1 1
Molybdenum Manganese Magnesium				-		
Manganese	ppm	ASTM D5185m		<1	4	1
Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m		<1 42	4 33	1 32
Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 42 3356	4 33 3483	1 32 3238
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 42 3356 855	4 33 3483 1067	1 32 3238 1016
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 42 3356 855 1153	4 33 3483 1067 1333	1 32 3238 1016 1233
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 42 3356 855 1153 4714	4 33 3483 1067 1333 4785	1 32 3238 1016 1233 4698
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 42 3356 855 1153 4714 current	4 33 3483 1067 1333 4785 history1	1 32 3238 1016 1233 4698 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	>100	<1 42 3356 855 1153 4714 current	4 33 3483 1067 1333 4785 history1	1 32 3238 1016 1233 4698 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m	>100	<1 42 3356 855 1153 4714 current 19 2	4 33 3483 1067 1333 4785 history1 41 3	1 32 3238 1016 1233 4698 history2 34 0
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *Visual	>100 >20	<1 42 3356 855 1153 4714 current 19 2 <1	4 33 3483 1067 1333 4785 history1 41 3	1 32 3238 1016 1233 4698 history2 34 0 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>100 >20 limit/base	<1 42 3356 855 1153 4714 current 19 2 <1 current	4 33 3483 1067 1333 4785 history1 41 3 2	1 32 3238 1016 1233 4698 history2 34 0 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	>100 >20 limit/base NONE NONE NONE	<1 42 3356 855 1153 4714 current 19 2 <1 current NONE	4 33 3483 1067 1333 4785 history1 41 3 2 history1 NONE	1 32 3238 1016 1233 4698 history2 34 0 2 history2 NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	>100 >20 limit/base NONE NONE	<1 42 3356 855 1153 4714 current 19 2 <1 current NONE NONE	4 33 3483 1067 1333 4785 history1 41 3 2 history1 NONE NONE	1 32 3238 1016 1233 4698 history2 34 0 2 history2 NONE NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	>100 >20 limit/base NONE NONE NONE	<1 42 3356 855 1153 4714 current 19 2 <1 current NONE NONE NONE	4 33 3483 1067 1333 4785 history1 41 3 2 history1 NONE NONE NONE	1 32 3238 1016 1233 4698 history2 34 0 2 history2 NONE NONE NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>100 >20 limit/base NONE NONE NONE NONE	<1 42 3356 855 1153 4714 current 19 2 <1 current NONE NONE NONE NONE	4 33 3483 1067 1333 4785 history1 41 3 2 history1 NONE NONE NONE MODER	1 32 3238 1016 1233 4698 history2 34 0 2 history2 NONE NONE NONE MODER
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>100 >20 limit/base NONE NONE NONE NONE NONE NONE	<1 42 3356 855 1153 4714 current 19 2 <1 current NONE NONE NONE NONE NONE NONE NONE	4 33 3483 1067 1333 4785 history1 41 3 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	1 32 3238 1016 1233 4698 history2 34 0 2 history2 NONE NONE NONE NONE NONE NONE NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>100 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE	<1 42 3356 855 1153 4714 current 19 2 <1 current NONE NONE NONE NONE NONE NONE NONE NON	4 33 3483 1067 1333 4785 history1 41 3 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	1 32 3238 1016 1233 4698 history2 34 0 2 history2 NONE NONE NONE NONE NONE NONE NONE NON
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual	>100 >20 limit/base NONE	<1 42 3356 855 1153 4714 current 19 2 <1 current NONE NONE NONE NONE NONE NONE NONE NON	4 33 3483 1067 1333 4785 history1 41 3 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	1 32 3238 1016 1233 4698 history2 34 0 2 history2 NONE NONE NONE NONE NONE NONE NONE NON
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	>100 >20 limit/base NONE NORML NORML	<1 42 3356 855 1153 4714 current 19 2 <1 current NONE NONE NONE NONE NONE NONE NONE NON	4 33 3483 1067 1333 4785 history1 41 3 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	1 32 3238 1016 1233 4698 history2 34 0 2 history2 NONE NONE NONE NONE NONE NONE NONE NON



OIL ANALYSIS REPORT







Certificate 12367

Sample No.

: PCA0085943 Lab Number : 06212128 Unique Number : 11084992

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Jun 2024

Tested : 19 Jun 2024 Diagnosed

: 19 Jun 2024 - Don Baldridge

17801 Hwy 80 Hulbert, OK US 74441

Kemp Quarries - Kemp Stone - Hulbert

Test Package : MOB 1 (Additional Tests: PQ)

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

Contact: hulbert@kempstone.com

* - 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)

Report Id: KEMHUL [WUSCAR] 06212128 (Generated: 06/22/2024 22:39:40) Rev: 1

Submitted By:

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