

OIL ANALYSIS REPORT

KEMP QUARRIES / RIVER VALLEY BACKBONE Machine Id OHT073

Component Rear Differential Fluid

MOBIL MOBILTRANS HD 50 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

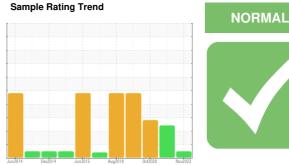
All component wear rates are normal.

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.



		Jun2014	Dec2014 Jun2015	Aug2018 Oct2020	Nov2023	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0084868	PCA0019663	PCA0017388
Sample Date		Client Info		02 Nov 2023	27 Jan 2021	05 Oct 2020
Machine Age	hrs	Client Info		47581	47422	47010
Oil Age	hrs	Client Info		1200	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL
WEAR METAI	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	216	288	238
Chromium	ppm	ASTM D5185m	>3	<1	1	1
Nickel	ppm	ASTM D5185m	>3	1	1	<1
Titanium	ppm	ASTM D5185m	>2	1	2	2
Silver	ppm	ASTM D5185m	>2	0	0	3
Aluminum	ppm	ASTM D5185m	>30	10	<u> </u>	<u> </u>
Lead	ppm	ASTM D5185m	>13	1	2	2
Copper	ppm	ASTM D5185m	>103	18	18	16
Tin	ppm	ASTM D5185m	>5	1	<1	1
Antimony	ppm	ASTM D5185m	>5		0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		3	4	15
	ppm ppm			3 0		15 0
Boron		ASTM D5185m		-	4	
Boron Barium	ppm	ASTM D5185m ASTM D5185m		0	4 0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0	4 0 4	0 3
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 1 2	4 0 4 3	0 3 2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 1 2 30	4 0 4 3 28	0 3 2 28
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 1 2 30 2896	4 0 4 3 28 2999	0 3 2 28 3016
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 1 2 30 2896 1099	4 0 4 3 28 2999 1026	0 3 2 28 3016 991
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 1 2 30 2896 1099 1310	4 0 4 3 28 2999 1026 1205	0 3 2 28 3016 991 1247
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >100	0 1 2 30 2896 1099 1310 11815	4 0 4 3 28 2999 1026 1205 10041	0 3 2 28 3016 991 1247 9836
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 1 2 30 2896 1099 1310 11815 current	4 0 4 3 28 2999 1026 1205 10041 history1	0 3 2 28 3016 991 1247 9836 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m		0 1 2 30 2896 1099 1310 11815 current 77	4 0 4 3 28 2999 1026 1205 10041 history1 ▲ 87	0 3 2 28 3016 991 1247 9836 history2 ▲ 88
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm NTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>100	0 1 2 30 2896 1099 1310 11815 current 77 2	4 0 4 3 28 2999 1026 1205 10041 history1 ▲ 87 0	0 3 2 28 3016 991 1247 9836 history2 ▲ 88 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm NTS	ASTM D5185m ASTM D5185m	>100 >20	0 1 2 30 2896 1099 1310 11815 current 77 2 4	4 0 4 3 28 2999 1026 1205 10041 history1 ▲ 87 0 4	0 3 2 28 3016 991 1247 9836 history2 ▲ 88 4 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm NTS ppm ppm	ASTM D5185m ASTM D5185m	>100 >20 limit/base	0 1 2 30 2896 1099 1310 11815 current 77 2 4 4	4 0 4 3 28 2999 1026 1205 10041 history1 & 87 0 4 x	0 3 2 28 3016 991 1247 9836 history2 88 4 4 4 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>100 >20 limit/base NONE	0 1 2 30 2896 1099 1310 11815 current 77 2 4 4 current NONE	4 0 4 3 28 2999 1026 1205 10041 history1 ▲ 87 0 4 4 history1 NONE	0 3 2 28 3016 991 1247 9836 history2 ▲ 88 4 4 4 4 history2 MODER
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm vTS ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m Yisual	>100 >20 limit/base NONE NONE	0 1 2 30 2896 1099 1310 11815 current 77 2 4 current NONE NONE	4 0 4 3 28 2999 1026 1205 10041 history1 ▲ 87 0 4 A 7 0 4 NONE NONE	0 3 2 28 3016 991 1247 9836 history2 ▲ 88 4 4 4 × history2 MODER NONE
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm vTS	ASTM D5185m ASTM D5185m Visual *Visual	>100 >20 limit/base NONE NONE NONE	0 1 2 30 2896 1099 1310 11815 current 77 2 4 current NONE NONE NONE NONE	4 0 4 3 28 2999 1026 1205 10041	0 3 2 28 3016 991 1247 9836 history2 ▲ 88 4 4 4 bistory2 MODER NONE NONE

Sand/Dirt

Odor

Appearance

Free Water

Emulsified Water

scalar *Visual

scalar *Visual

scalar

scalar

scalar

*Visual

*Visual

*Visual

NONE

NORML

NORML

>.2

NONE

NORML

NORML

NEG

NEG

NONE

NORML

NORML

NEG

NEG

NONE

NORML

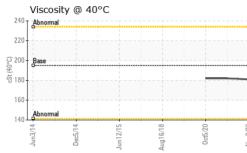
NORML

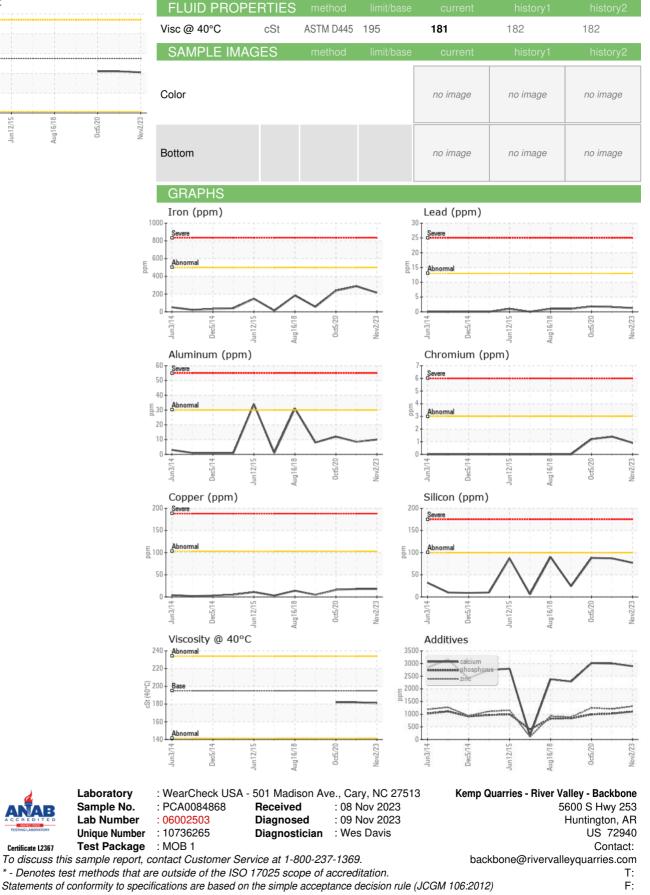
NEG

NEG



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Certificate L2367