

OIL ANALYSIS REPORT

Area **KEMP QUARRIES / HULBERT** OHT049

Rear Right Final Drive Fluid MOBIL MOBILTRANS HD 50 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. 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

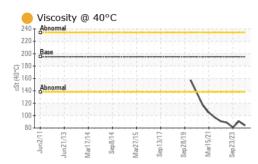
The oil viscosity is lower than normal. Confirm oil type.

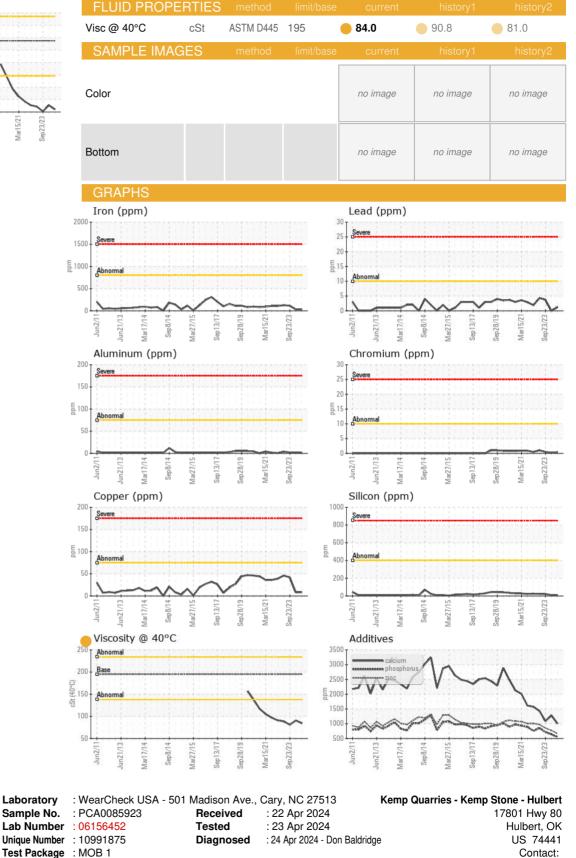


	/IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0085923	PCA0109166	PCA0086128
Sample Date		Client Info		13 Apr 2024	27 Jan 2024	23 Sep 2023
Machine Age	hrs	Client Info		9818	9318	8820
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>800	30	31	111
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	2
Titanium	ppm	ASTM D5185m	>15	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>75	1	2	2
Lead	ppm	ASTM D5185m	>10	1	0	4
Copper	ppm	ASTM D5185m	>75	8	8	42
Tin	ppm	ASTM D5185m	>8	1	0	2
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		0	2	12
Barium	ppm	ASTM D5185m		0	5	0
Molybdenum	ppm	ASTM D5185m		4	3	22
Manganese	ppm	ASTM D5185m		<1	0	1
Magnesium	ppm	ASTM D5185m		53	65	347
Calcium	ppm	ASTM D5185m		1003	1281	1090
Phosphorus	ppm	ASTM D5185m		551	641	717
Zinc	ppm	ASTM D5185m		661	769	853
Sulfur	ppm	ASTM D5185m		2240	2770	3789
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>400	8	9	22
				0	5	
Sodium	ppm	ASTM D5185m		2	0	2
Sodium Potassium	ppm ppm	ASTM D5185m ASTM D5185m				2 <1
				2 1	0	_
Potassium		ASTM D5185m	>20	2 1	0 2	<1
Potassium VISUAL	ppm	ASTM D5185m method	>20 limit/base	2 1 current	0 2 history1	<1 history2
Potassium VISUAL White Metal	ppm scalar	ASTM D5185m method *Visual	>20 limit/base NONE	2 1 current NONE	0 2 history1 NONE	<1 history2 MODER
Potassium VISUAL White Metal Yellow Metal	ppm scalar scalar	ASTM D5185m method *Visual *Visual	>20 limit/base NONE NONE	2 1 current NONE NONE	0 2 history1 NONE NONE	<1 history2 MODER NONE
Potassium VISUAL White Metal Yellow Metal Precipitate	ppm scalar scalar scalar	ASTM D5185m method *Visual *Visual *Visual	>20 limit/base NONE NONE NONE	2 1 current NONE NONE NONE	0 2 history1 NONE NONE NONE	<1 history2 MODER NONE NONE
Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm scalar scalar scalar scalar	ASTM D5185m method *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE	2 1 current NONE NONE NONE NONE	0 2 history1 NONE NONE NONE NONE	<1 history2 MODER NONE NONE NONE
Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm scalar scalar scalar scalar scalar	ASTM D5185m method *Visual *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE	2 1 NONE NONE NONE NONE NONE NONE	0 2 history1 NONE NONE NONE LIGHT	<1 history2 MODER NONE NONE NONE NONE
Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE	2 1 NONE NONE NONE NONE NONE NONE	0 2 history1 NONE NONE NONE LIGHT NONE	<1 history2 MODER NONE NONE NONE NONE
Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE NONE NOREL	2 1 Current NONE NONE NONE NONE NONE NORE	0 2 history1 NONE NONE NONE LIGHT NONE NORML	<1 history2 MODER NONE NONE NONE NONE NONE NORML
Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm Scalar Scalar Scalar Scalar Scalar Scalar Scalar Scalar	ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE NONE NONE NORML NORML	2 1 Current NONE NONE NONE NONE NORE NORML NORML	0 2 history1 NONE NONE NONE LIGHT NONE NORML NORML	<1 history2 MODER NONE NONE NONE NONE NONE NONE NORML NORML



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* - 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)

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Certificate 12367

Laboratory

Sample No.

T:

F:

hulbert@kempstone.com