

OIL ANALYSIS REPORT

Sample Rating Trend

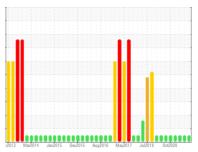
NORMAL



KEMP QUARRIES / HULBERT **WL067**

Component **Front Differential**

MOBIL MOBILTRANS HD 50 (--- GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

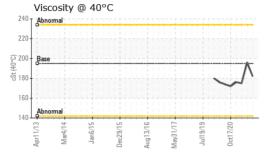
Fluid Condition

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

1D 30 (GAL)		r2013 Mar20	14 Jan 2015 Dec 2015	Aug2016 May2017 Jul2019	Oct2020	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0086825	PCA0048639	PCA003776
Sample Date		Client Info		28 Jul 2023	24 Sep 2021	28 May 2021
Machine Age	hrs	Client Info		32149	29147	28617
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	217	69	182
Chromium	ppm	ASTM D5185m	>3	0	<1	<1
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	1	1	3
Lead	ppm	ASTM D5185m	>13	0	0	<1
Copper	ppm	ASTM D5185m	>103	2	2	9
Tin	ppm		>5	0	0	<1
Antimony	ppm	ASTM D5185m	>5		7	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2	7	21
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	4	2
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		32	27	45
Calcium	ppm	ASTM D5185m		2726	2905	2724
Phosphorus	ppm	ASTM D5185m		961	971	999
Zinc	ppm	ASTM D5185m		1182	1102	1187
Sulfur	ppm	ASTM D5185m		5680	4312	10160
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>100	20	14	18
Sodium	ppm	ASTM D5185m		<1	<1	1
Potassium	ppm	ASTM D5185m	>20	0	2	0
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG



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<u> </u>	RAPH	HS														
Iro	n (ppi	m)							Lea	d (pp	m)					
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Apri	Mar	Jan	Dec2	Augl	May31/17	Jul	0ct1		Apr1	Mar	Jan	Dec2	Augl	May31/17	Jul	0ct1
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	~	6/15	9/15	3/16	1/17	9/19	7/20	50	=	→	6/15	9/15	3/16		→ 61/6	
Apr11/13	Mar4/14	Jan6/15	Dec29/15	Aug13/16	May31/17	Juli 9/19	Oct17/20			Mar4/14 -	Jan 6/15 -	Dec29/15-	Aug13/16 -	May31/17	Jul19/19	Oct17/20
April1/13	Mar4/14	@ 40		Aug13/16	May31/17	Jul19/19	Oct17/20		Apr11/13	ditive:		Dec29/15	Aug13/16 -	May31/17	61/61/lnC	Oct17/20
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Vision Vision	war4/14			Aug13/16	May31/17	Jul19/19	0ct17/20	C	Add	ditives	S alcium nosphoru:	11	Aug13/16-	May31/17	\$ 61/8/10°>	Oct17/20
Vision Vision	61/4JEW			Aug13/16	May31/17		0ct17/20	3500 3000 2500	Add April/13	ditives	S alcium	11	Aug13/16-	May31/17	Nationa V	Oct17/20
Vise Vise	61/4JEW			Aug13/16	May31/17		0ct17/20	3500 3000 2500 <u>8</u> 2000	Add	ditives	S alcium nosphoru:	11	Aug13/16-	May31/17	→ 61/8/1n/c	Oct17/20
Vise Vise	61/4JEW			Aug13/16	May31/17	Jul19/19	Oct17/20	35000 30000 25000 <u>5</u> 20000	Add	ditives	S alcium nosphoru:	11	Aug13/16-	May31/17	V 81/8/100	00ct17/20
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Vise Vise	t//beW cosity			Aug13/16 Aug13/16	May31/17	Jul19/19	0417/20	35000 30000 25000 <u>5</u> 20000	April/13	ditives	S alcium nosphoru:	11	Aug13/16 - Aug13/16 -	May31/17 - May31/17 -	Vul19/19	Oct17/20



Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10681848 Test Package : MOB 1

: 05969898

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 04 Oct 2023 : PCA0086825 Received

Diagnosed : 05 Oct 2023 Diagnostician : Wes Davis

Kemp Quarries - Kemp Stone - Hulbert

17801 Hwy 80 Hulbert, OK US 74441

Contact:

hulbert@kempstone.com

T:

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

* - 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] 05969898 (Generated: 10/12/2023 20:11:30) Rev: 1

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