

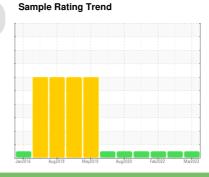
OIL ANALYSIS REPORT

KEMP QUARRIES / MUSKOGEE SAND **OHT086**

Component

Front Right 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

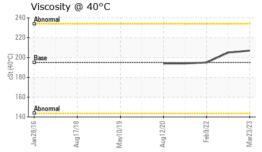
Fluid Condition

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

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0087093	PCA0062266	PCA0061802
Sample Date		Client Info		23 Mar 2023	23 Jun 2022	09 Feb 2022
Machine Age	hrs	Client Info		19795	19380	19025
Oil Age	hrs	Client Info		770	355	2210
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	10	6	42
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	<1	2
Lead	ppm	ASTM D5185m	>25	<1	1	1
Copper	ppm	ASTM D5185m	>100	2	1	10
Tin	ppm	ASTM D5185m	>10	0	<1	1
Antimony	ppm	ASTM D5185m	>5			1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		4	4	9
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		11	9	26
Calcium	ppm	ASTM D5185m		3025	2163	3130
Phosphorus	ppm	ASTM D5185m		1012	753	1074
Zinc	ppm	ASTM D5185m		1233	896	1289
Sulfur	ppm	ASTM D5185m		6605	5034	12580
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	12	11	8
Sodium	ppm	ASTM D5185m		0	3	3
Potassium	ppm	ASTM D5185m	>20	2	7	2
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
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



OIL ANALYSIS REPORT





GRAPHS							
Iron (ppm)				Lead (ppm)			
Severe				120 Severe			
Severe				80			
				E 60+			
Abnormal			-	Abnormal	<u> </u>		
9 80		2	3	0		2	
Jan28/16 Aug17/18	Aug12/20	Feb 9/22	Mar23/23	Jan28/16 Aug17/18	May 10/13	Feb 9/22	
Aluminum (ppm)	₹ ∀		2	Chromium (ppm)			
Severe		7		30			
- Corona				25 - 3evere			
				E 15		ļļļ	
Abnormal				10 - Abnormal	***************************************		
				5			-
Jan28/16 -	May 10/13	Feb9/22 -	Mar23/23	Jan28/16-	May 1 U/ 1 3 -	Feb 9/22	
	Aug	臣	Mar		May	Ē	
Copper (ppm)				Silicon (ppm)			
Severe	-		-	200 - Severe			
				150 -			
Abnormal			-	Abnormal			
				50			
92 82	20	722	/23	0 9 8	720	727	=
Jan 28/16 Aug 17/18	Aug12/20	Feb 9/22	Mar23/23	Jan 28/16-	May 10/13	Feb 9/22	
Viscosity @ 40°C				Additives			
Abnormal				3500 calcium			
Base				2500 - zinc		1	1
				E 2000 -		· · · · · · · · · · · · · · · · · · ·	-
				1000			-
Abnormal				500	- Control of the Cont	-	Bre River
Jan 28/16	Aug12/20	Feb9/22 -	Mar23/23	Jan 28/16 Aug 17/18	May10/19	Feb 9/22	





Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10562196 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0087093 : 05900840

: 17 Jul 2023 Received Diagnosed : 19 Jul 2023 Diagnostician : Wes Davis

Kemp Quarries - Muskogee Sand 3395 W 50th St N

Porter, OK US 74454 Contact:

muskogee@muskogeesand.com

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)

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