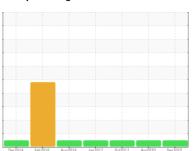


OIL ANALYSIS REPORT



Sample Rating Trend





KEMP QUARRIES / BCS - GRAVETTE TTT003

Component **Right Final Drive**

MOBIL MOBILTRANS HD 50 (

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-4 changed fluid)

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

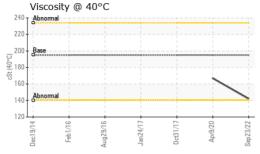
Fluid Condition

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

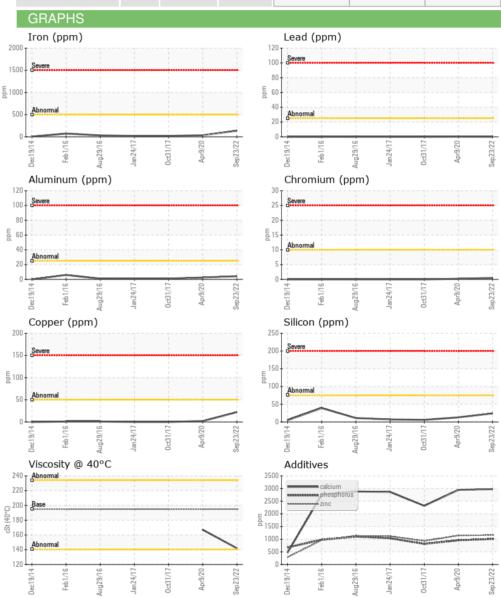
Sample Date	HD 50 (GAL)		Dec2014	Feb2016 Aug2016	Jan2017 Oct2017 Apr2020	Sep2022	
Sample Date	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs	Sample Number		Client Info		PCA0062343	PCA0014411	PCA18199045
Oil Changed	Sample Date		Client Info		23 Sep 2022	09 Apr 2020	31 Oct 2017
Client Info Changed N/A N/A NORMAL N	Machine Age	hrs	Client Info		15416	13889	12570
NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 history2 limit/base current history1 history2 limit/base current history2 limit/base current history2 limit/base limit/bas	Oil Age	hrs	Client Info		15416	0	
NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2	Oil Changed		Client Info		Changed	N/A	N/A
Pron	-				_	NORMAL	NORMAL
Chromium ppm ASTM D5185m >10 <1 <1 0 Nickel ppm ASTM D5185m 0 0 0 Tittanium ppm ASTM D5185m 0 0 Siliver ppm ASTM D5185m >25 4 2 1 Aluminum ppm ASTM D5185m >25 0 <1 0 Aluminum ppm ASTM D5185m >50 22 2 0 Lead ppm ASTM D5185m >50 22 2 0 Lead ppm ASTM D5185m >50 22 2 0 Tin ppm ASTM D5185m -10 0 0 0 Antimony ppm ASTM D5185m -10 0 0 Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0	WEAR METAL	_S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>500	138	36	20
Titanium	Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Silver	Nickel	ppm	ASTM D5185m		0	0	0
Silver	Titanium		ASTM D5185m		<1	<1	
Aluminum	Silver		ASTM D5185m		0	0	
Lead	Aluminum		ASTM D5185m	>25	4	2	1
Copper ppm ASTM D5185m >50 22 2 0 Tin ppm ASTM D5185m >10 0 0 0 Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 9 4 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 4 4 2 Magnesium ppm ASTM D5185m 68 64 48 Calcium ppm ASTM D5185m 2974 2946 2319 Phosphorus ppm ASTM D5185m 1010 957 814 Zinc ppm ASTM D5185m 1010 957 81							
Tin							
Antimony							
Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 9 4 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 4 4 2 Manganese ppm ASTM D5185m 1 -1 Magnesium ppm ASTM D5185m 2974 2946 2319 Phosphorus ppm ASTM D5185m 1010 957 814 Zinc ppm ASTM D5185m 1161 1144 932 Sulfur ppm ASTM D5185m 12400 10342 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 2 24 1				>10			
Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 9 4 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 4 4 2 Manganesium ppm ASTM D5185m 1 <1	•						
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 9 4 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 4 4 2 Manganese ppm ASTM D5185m 1 <1							
Boron		ppm	MCQ1CG IN15A		U	U	
Barium	ADDITIVES		method	limit/base		•	· · · · · · · · · · · · · · · · · · ·
Molybdenum ppm ASTM D5185m 4 4 2 Manganese ppm ASTM D5185m 1 <1 <1 < Magnesium ppm ASTM D5185m 68 64 48 Calcium ppm ASTM D5185m 2974 2946 2319 Phosphorus ppm ASTM D5185m 1010 957 814 Zinc ppm ASTM D5185m 1161 1144 932 Sulfur ppm ASTM D5185m 12400 10342 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m >20 0 <1 0 VISUAL method limit/base current history1 history2 White Metal	Boron	ppm	ASTM D5185m				4
Manganese ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 68 64 48 Calcium ppm ASTM D5185m 2974 2946 2319 Phosphorus ppm ASTM D5185m 1010 957 814 Zinc ppm ASTM D5185m 1161 1144 932 Sulfur ppm ASTM D5185m 12400 10342 CONTAMINANTS method limit/base current history1 history2 CONTAMINANTS method limit/base current hist	Barium	ppm	ASTM D5185m		0	0	0
Magnesium ppm ASTM D5185m 68 64 48 Calcium ppm ASTM D5185m 2974 2946 2319 Phosphorus ppm ASTM D5185m 1010 957 814 Zinc ppm ASTM D5185m 1161 1144 932 Sulfur ppm ASTM D5185m 12400 10342 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m >20 0 <1	Molybdenum	ppm	ASTM D5185m		4	4	2
Calcium ppm ASTM D5185m 2974 2946 2319 Phosphorus ppm ASTM D5185m 1010 957 814 Zinc ppm ASTM D5185m 1161 1144 932 Sulfur ppm ASTM D5185m 12400 10342 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m >20 0 <1	Manganese	ppm	ASTM D5185m		1	<1	
Phosphorus ppm ASTM D5185m 1010 957 814 Zinc ppm ASTM D5185m 1161 1144 932 Sulfur ppm ASTM D5185m 12400 10342 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m >0 2 3 Potassium ppm ASTM D5185m >20 0 <1	Magnesium	ppm	ASTM D5185m		68	64	48
Zinc ppm ASTM D5185m 1161 1144 932 Sulfur ppm ASTM D5185m 12400 10342 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m >0 2 3 Potassium ppm ASTM D5185m >20 0 <1	Calcium	ppm	ASTM D5185m		2974	2946	2319
Sulfur ppm ASTM D5185m 12400 10342 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m >0 2 3 Potassium ppm ASTM D5185m >20 0 <1	Phosphorus	ppm	ASTM D5185m		1010	957	814
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m 0 2 3 Potassium ppm ASTM D5185m >20 0 <1	Zinc	ppm	ASTM D5185m		1161	1144	932
Silicon ppm ASTM D5185m >75 24 13 6 Sodium ppm ASTM D5185m 0 2 3 Potassium ppm ASTM D5185m >20 0 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML NORML Appearance scalar *Visual NORML NORML NORML NORML Codor scalar *Visual	Sulfur	ppm	ASTM D5185m		12400	10342	
Sodium ppm ASTM D5185m 0 2 3 Potassium ppm ASTM D5185m >20 0 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar	CONTAMINAN	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	Silicon	ppm	ASTM D5185m	>75	24	13	6
White Metal scalar *Visual NONE NONE NONE NONE Scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Sodium	ppm	ASTM D5185m		0	2	3
White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual >0.2 NEG NEG	Potassium	ppm	ASTM D5185m	>20	0	<1	0
Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Codor scalar *Visual >0.2 NEG NEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	White Metal	scalar				NONE	
Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	Silt	scalar	*Visual	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	Appearance	scalar	*Visual		NORML	NORML	
Emulsified Water scalar *Visual >0.2 NEG NEG	• •	scalar			NORML	NORML	
	Emulsified Water						
	Free Water	scalar	*Visual		NEG	NEG	



OIL ANALYSIS REPORT









Certificate L2367

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

: PCA0062343

: 05654823 : 10154375

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Sep 2022 Diagnosed

: 03 Oct 2022 Diagnostician : Don Baldridge Kemp Quarries - Benton County Stone - Gravette

15100 N Hwy 59 Sulphur Springs, AR

US 72768 Contact:

gravette@bentoncountystone.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)

T:

F: