

OIL ANALYSIS REPORT

Sample Rating Trend

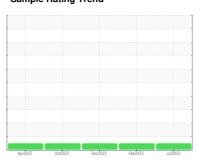
NORMAL



KANSAS/44 38.87 [KANSAS^44]

Transmission (Manual)

MOBIL MOBILTRANS AST 30 (--- GAL)





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 INFORMATION method limit/base current history1 history2	AST 30 (GAL)		Apr2022	0et2022	Dec2022 Feb2023	Jul2023	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 1532 1040 813 548	Sample Number		Client Info		WC0781238	WC0779878	WC0741794
Oil Age hrs Client Info 1390 813 548 Oil Changed Client Info N/A N/A N/A N/A Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 19 19 19 18 Iron ppm ASTM D5185m >200 19 19 19 18 Chromium ppm ASTM D5185m >5 <1	Sample Date		Client Info		06 Jul 2023	21 Feb 2023	06 Dec 2022
Oil Changed Status Client Info N/A N/A N/A N/A WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 19 19 18 Chromium ppm ASTM D5185m >5 <1 <1 <1 Nickel ppm ASTM D5185m >5 <0 0 <1 Titanium ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >7 0 0 0 Aluminum ppm ASTM D5185m >25 1 1 4 Lead ppm ASTM D5185m >22.5 13 11 10 Copper ppm ASTM D5185m >10 0 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 2 0 0	Machine Age	hrs	Client Info		1532	1040	813
NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2	Oil Age	hrs	Client Info		1390	813	548
WEAR METALS	Oil Changed		Client Info		N/A	N/A	N/A
Iron	Sample Status				NORMAL	NORMAL	NORMAL
Chromium ppm ASTM D5185m >5 <1 <1 <1 Nickel ppm ASTM D5185m >5 0 0 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>200	19	19	18
Titanium	Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Silver ppm ASTM D5185m >7 0 0 0 Aluminum ppm ASTM D5185m >25 1 1 4 Lead ppm ASTM D5185m >45 0 <1	Nickel	ppm	ASTM D5185m	>5	0	0	<1
Aluminum		ppm	ASTM D5185m		0	0	0
Lead	Silver	ppm	ASTM D5185m	>7	0	0	0
Copper ppm ASTM D5185m >22.5 13 11 10 Tin ppm ASTM D5185m >10 0 <1	Aluminum	ppm	ASTM D5185m	>25	1	1	4
Tin ppm ASTM D5185m >10 0 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 1 Barium ppm ASTM D5185m 2 2 0 Molybdenum ppm ASTM D5185m 2 2 0 Molybdenum ppm ASTM D5185m 2 2 2 0 Molybdenum ppm ASTM D5185m 2 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Lead	ppm	ASTM D5185m	>45	0	<1	5
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 1 Barium ppm ASTM D5185m 2 2 0 Molybdenum ppm ASTM D5185m 2 2 0 Manganese ppm ASTM D5185m <1 <1 <1 <1 Magnesium ppm ASTM D5185m 10 11 13 Calcium ppm ASTM D5185m 3348 3041 3145 Phosphorus ppm ASTM D5185m 1365 1250 1341 Sulfur ppm ASTM D5185m 1365 1250 1341 Sulfur ppm ASTM D5185m 3125 11 11 11 </td <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>225</td> <td>13</td> <td>11</td> <td>10</td>	Copper	ppm	ASTM D5185m	>225	13	11	10
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 1 Barium ppm ASTM D5185m 2 2 0 Molybdenum ppm ASTM D5185m -1 -1 -1 -1 Manganese ppm ASTM D5185m 10 11 13 Magnesium ppm ASTM D5185m 10 11 13 Calcium ppm ASTM D5185m 1124 985 1038 Zinc ppm ASTM D5185m 1365 1250 1341 Sulfur ppm ASTM D5185m 8329 7638 7771 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm AST	Tin	ppm	ASTM D5185m	>10	0	<1	<1
Boron ppm ASTM D5185m 2 0 1	Vanadium	ppm	ASTM D5185m		0	0	0
Boron	Cadmium	ppm	ASTM D5185m		0	0	0
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <td>Boron</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <td>2</td> <td>0</td> <td>1</td>	Boron	ppm	ASTM D5185m		2	0	1
Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 10 11 13 Calcium ppm ASTM D5185m 3348 3041 3145 Phosphorus ppm ASTM D5185m 1124 985 1038 Zinc ppm ASTM D5185m 1365 1250 1341 Sulfur ppm ASTM D5185m 8329 7638 7771 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm ASTM D5185m >20 2 3 4 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Visual NONE NONE NONE NONE NONE	Barium	ppm	ASTM D5185m		2	2	0
Magnesium ppm ASTM D5185m 10 11 13 Calcium ppm ASTM D5185m 3348 3041 3145 Phosphorus ppm ASTM D5185m 1124 985 1038 Zinc ppm ASTM D5185m 1365 1250 1341 Sulfur ppm ASTM D5185m 8329 7638 7771 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm ASTM D5185m >125 11	Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Calcium ppm ASTM D5185m 3348 3041 3145 Phosphorus ppm ASTM D5185m 1124 985 1038 Zinc ppm ASTM D5185m 1365 1250 1341 Sulfur ppm ASTM D5185m 8329 7638 7771 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm ASTM D5185m >125 11<	Manganese	ppm	ASTM D5185m		<1	<1	<1
Phosphorus ppm ASTM D5185m 1124 985 1038 Zinc ppm ASTM D5185m 1365 1250 1341 Sulfur ppm ASTM D5185m 8329 7638 7771 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm ASTM D5185m >20 2 3 4 Potassium ppm ASTM D5185m >20 2 3 4 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE NONE NONE NONE	Magnesium	ppm	ASTM D5185m		10	11	13
Zinc ppm ASTM D5185m 1365 1250 1341 Sulfur ppm ASTM D5185m 8329 7638 7771 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm ASTM D5185m >20 2 3 4 Potassium ppm ASTM D5185m >20 2 3 4 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE	Calcium	ppm	ASTM D5185m		3348	3041	3145
Sulfur ppm ASTM D5185m 8329 7638 7771 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm ASTM D5185m >20 2 3 4 Potassium ppm ASTM D5185m >20 2 3 4 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE<	Phosphorus	ppm	ASTM D5185m		1124	985	1038
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm ASTM D5185m > 4 4 4 4 Potassium ppm ASTM D5185m >20 2 3 4 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Zinc	ppm	ASTM D5185m		1365	1250	1341
Silicon ppm ASTM D5185m >125 11 11 11 11 Sodium ppm ASTM D5185m 4 4 4 4 Potassium ppm ASTM D5185m >20 2 3 4 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Sulfur	ppm	ASTM D5185m		8329	7638	7771
Sodium ppm ASTM D5185m 4 4 4 4 Potassium ppm ASTM D5185m >20 2 3 4 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	CONTAMINANTS		method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>20234VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	Silicon	ppm	ASTM D5185m	>125	11	11	11
White Metal scalar *Visual NONE 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 NONE Debris scalar *Visual NONE 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 >0.1 NEG NEG NEG Free Water	Sodium	ppm	ASTM D5185m		4	4	4
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 >0.1 NEG NEG NEG Free Water	Potassium	ppm	ASTM D5185m	>20	2	3	4
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE 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 >0.1 NEG NEG Free Water scalar *Visual NEG NEG NEG	White Metal	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 >0.1 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG NEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
FLUID PROPERTIES method limit/base current history1 history2	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPERT	IES	method	limit/base	current	history1	history2

Visc @ 40°C

cSt

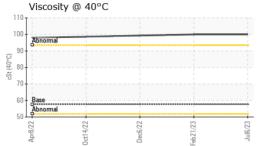
ASTM D445 57.6

100

99.3

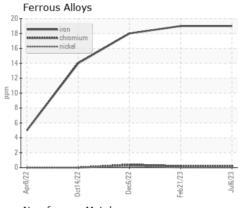


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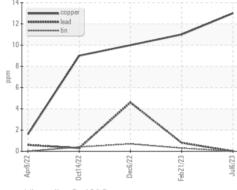


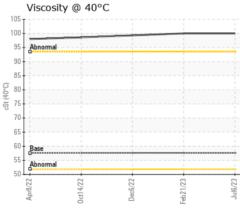


GRAPHS



Non-ferrous Metals









Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10566055 Test Package : CONST

: WC0781238 : 05904699

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 21 Jul 2023 Received Diagnosed

: 25 Jul 2023 Diagnostician : Don Baldridge

3219 WEST MAY ST WICHITA, KS US 67213 Contact: DOUG KING

SHERWOOD CONSTRUCTION CO INC

doug.king@sherwood.net T: (316)617-3161

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)

F: x: