

OIL ANALYSIS REPORT

SAMPLE INFORMATION metho

Sample Rating Trend



Area **KANSAS/44 53.168L [KANSAS^44] Hydraulic System**

Fluid MOBIL MOBILTRANS AST 30 (10 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status	hrs hrs	Client Info Client Info Client Info Client Info		WC0918160 08 Apr 2024 2010 2010 Not Changd NORMAL	WC0821569 08 Feb 2024 1643 1643 N/A NORMAL	WC0741786 14 Oct 2022 1072 1072 Not Changd NORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	18	8	16
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	2	0
Lead	ppm	ASTM D5185m	>10	2	2	0
Copper	ppm	ASTM D5185m	>75	13	56	16
Tin	ppm	ASTM D5185m	>10	0	<1	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method		current		history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 8	history1 31	history2 0
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 8 <1	history1 31 0	history2 0 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 1	history1 31 0 7	history2 0 0 2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 1 <1	history1 31 0 7 <1	history2 0 0 2 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 1 <1 8	history1 31 0 7 <1 109	history2 0 2 <1 8
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 8 <1 1 <1 8 694	history1 31 0 7 <1 109 2418	history2 0 2 <1 8 269
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 8 <1 1 <1 8 694 653	history1 31 0 7 <1 109 2418 890	history2 0 2 <1 8 269 662
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 8 <1 1 <1 8 694 653 736	history1 31 0 7 <1 109 2418 890 1083	history2 0 2 <1 8 269 662 797
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 1 <1 694 653 736 2281	history1 31 0 7 <1 109 2418 890 1083 4557	history2 0 2 <1 8 269 662 797 1896
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 1 <1 694 653 736 2281 Current	history1 31 0 7 <1 109 2418 890 1083 4557 history1	history2 0 2 <1 8 269 662 797 1896 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base limit/base >20	current 8 <1 1 <1 8 694 653 736 2281 current 6	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7	history2 0 2 <1 8 269 662 797 1896 history2 5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	limit/base limit/base >20	current 8 <1 1 <1 8 694 653 736 2281 current 6 4	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7 5	history2 0 2 <1 8 269 662 797 1896 history2 5 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	limit/base	current 8 <1 1 <1 694 653 736 2281 current 6 4 10	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7 5 0	history2 0 2 <1 8 269 662 797 1896 history2 5 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base limit/base >20 >20 limit/base	current 8 <1 1 <1 694 653 736 2281 current 6 4 10 current	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7 5 0 history1	history2 0 2 <1 8 269 662 797 1896 history2 5 0 0 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base <pre>s20 limit/base s20 limit/base</pre>	current 8 <1 1 <1 694 653 736 2281 current 6 4 10 current 14490	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7 5 0 history1 38147	history2 0 2 <1 8 269 662 797 1896 history2 5 0 0 history2 19976
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	limit/base >20 >20 limit/base >20 limit/base	current 8 <1 1 <1 694 653 736 2281 current 6 4 10 current 14490 274	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7 5 0 history1 38147 1517	history2 0 2 <1 8 269 662 797 1896 history2 5 0 0 history2 19976 920
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	limit/base	current 8 <1 1 <1 694 653 736 2281 current 6 4 10 current 14490 274 13	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7 5 0 history1 38147 1517 9	history2 0 2 <1 8 269 662 797 1896 history2 5 0 0 history2 19976 920 31
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >20 >20 limit/base >20 >20 20 2500 >640 >160	current 8 <1 1 <1 8 694 653 736 2281 current 6 4 10 current 14490 274 13 4	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7 5 0 history1 38147 1517 9 1	history2 0 2 <1 8 269 662 797 1896 history2 5 0 0 history2 19976 920 31 6
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 8 <1 1 <1 8 694 653 736 2281 current 6 4 10 current 14490 274 13 4 0	history1 31 0 7 <1 109 2418 890 1083 4557 history1 7 5 0 history1 38147 1517 9 1 0	history2 0 2 <1 8 269 662 797 1896 history2 5 0 0 history2 19976 920 31 6 0

ISO 4406 (c) >--/18/16

21/15/11

Oil Cleanliness

21/17/12

22/18/10



OIL ANALYSIS REPORT

	ŧμm		
50k -	6μm I4μm		
40k -		\wedge	
30k -	1/	\sim	~
20k -	~		1
10k - 10000000			
0k L	2	47-	
27	12	12	





50k -	lµm βµm 4µm		
30k		\frown	
10k -			
eb 15/22	let14/22	Feb8/24	

FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.73	1.14	0.67
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	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	48.3	83.7	41.0
SAMPLE IMAGES	;	method	limit/base	current	history1	history2

Color



Bottom



SHERWOOD CONSTRUCTION CO INC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : WC0918160 3219 WEST MAY ST Received : 17 Apr 2024 Lab Number : 06151923 Tested : 18 Apr 2024 WICHITA, KS Unique Number : 10982001 Diagnosed : 19 Apr 2024 - Don Baldridge US 67213 Test Package : CONST Contact: RANDY ROBERTS Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. randy.roberts@sherwood.net T: (316)943-6491 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. F: x:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Submitted By: JAMES MOORE

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