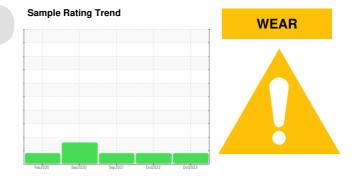


PROBLEM SUMMARY

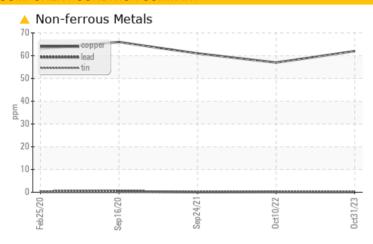
Area MT TEST CELL A8

Component **Hydraulic System**

MOBIL DTE 25 (--- GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC T	EST RE	SULTS				
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Copper	ppm	ASTM D5185m	>20	△ 62	<u>▲</u> 57	<u></u> 61

Customer Id: MICGRE **Sample No.:** WC0810908 Lab Number: 05996645 Test Package: IND 2 To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1

don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

10 Oct 2022 Diag: Don Baldridge

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



24 Sep 2021 Diag: Jonathan Hester

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



16 Sep 2020 Diag: Don Baldridge

WEAR



The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



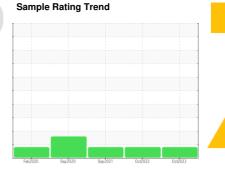


OIL ANALYSIS REPORT



Hydraulic System

MOBIL DTE 25 (--- GAL)





DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

The copper level is abnormal. All other component wear rates are normal.

Contamination

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

Fluid Condition

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

		Feb2020	Sep2020	Sep 2021 Oct2022	Oct2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0810908	WC0690130	WC0553145
Sample Date		Client Info		31 Oct 2023	10 Oct 2022	24 Sep 2021
Machine Age	hrs	Client Info		3391	3391	3391
Oil Age	hrs	Client Info		3391	3391	3391
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	17	14	13
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>20	1	0	1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	<1
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>20	62	<u>▲</u> 57	△ 61
Tin	ppm	ASTM D5185m	>20	0	0	0
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		6	5	4
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	nnm	ASTM D5185m		0	0	0
Darium	ppm	ASTIVI DOTOSITI		U	U	U
Molybdenum	ppm	ASTM D5185m		0	0	0
				-		
Molybdenum	ppm	ASTM D5185m		0	0	0
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m		0	0 <1	0 <1
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 2	0 <1 2	0 <1
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 2 94	0 <1 2 102	0 <1 1 98
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 2 94 468	0 <1 2 102 474	0 <1 1 98 413
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 2 94 468 698	0 <1 2 102 474 721	0 <1 1 98 413
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 2 94 468 698 6491	0 <1 2 102 474 721 7046	0 <1 1 98 413 595 4499
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method		0 0 2 94 468 698 6491 current	0 <1 2 102 474 721 7046 history1	0 <1 1 98 413 595 4499 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m		0 0 2 94 468 698 6491 current	0 <1 2 102 474 721 7046 history1 <1	0 <1 1 98 413 595 4499 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15	0 0 2 94 468 698 6491 current <1	0 <1 2 102 474 721 7046 history1 <1 4	0 <1 1 1 98 413 595 4499 history2 <1 8
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15 >20	0 0 2 94 468 698 6491 current <1 0	0 <1 2 102 474 721 7046 history1 <1 4 1	0 <1 1 98 413 595 4499 history2 <1 8
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15 >20 limit/base	0 0 2 94 468 698 6491 current <1 0 2	0 <1 2 102 474 721 7046 history1 <1 4 1 history1	0 <1 1 1 98 413 595 4499 history2 <1 8 0 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	>15 >20 limit/base >640	0 0 2 94 468 698 6491 current <1 0 2 current	0 <1 2 102 474 721 7046 history1 <1 4 1 history1 199	0 <1 1 1 98 413 595 4499 history2 <1 8 0 history2 98
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	ASTM D5185m Method ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>15 >20 limit/base >640 >160 >20	0 0 2 94 468 698 6491 current <1 0 2 current 387 96	0 <1 2 102 474 721 7046 history1 <1 4 1 history1 199 32	0 <1 1 98 413 595 4499 history2 <1 8 0 history2 98 25
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	ASTM D5185m Method ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647	>15 >20 limit/base >640 >160 >20	0 0 2 94 468 698 6491 current <1 0 2 current 387 96 7	0 <1 2 102 474 721 7046 history1 <1 4 1 199 32 5	0
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	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >640 >160 >20 >4	0 0 2 94 468 698 6491 current <1 0 2 current 387 96 7	0 <1 2 102 474 721 7046 history1 <1 4 1 history1 199 32 5 2	0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >640 >160 >20 >4 >3	0 0 2 94 468 698 6491 current <1 0 2 current 387 96 7 2 0	0 <1 2 102 474 721 7046 history1 <1 4 1 history1 199 32 5 2 0	0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >640 >160 >20 >4 >3 >3 >3	0 0 2 94 468 698 6491 current <1 0 2 current 387 96 7 2 0 0	0 <1 2 102 474 721 7046 history1 <1 4 1 199 32 5 2 0 0 0	0



OIL ANALYSIS REPORT

