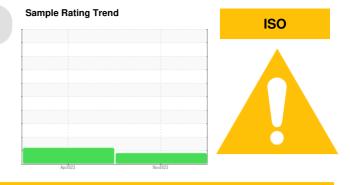


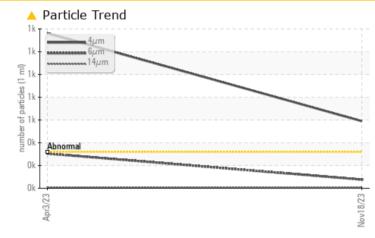
PROBLEM SUMMARY



Machine Id MOGGPB-1 (S/N 16-119) Component

Hydraulic Power Pack Fluid MOBIL DTE 25 (335 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter 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. (Customer Sample Comment: Viscosity index please)

Sample Status			ATTENTION	ABNORMAL	
Particles >4µm	ASTM D7647	>320	<u> </u>	🔺 1362	
Oil Cleanliness	ISO 4406 (c)	>15/13/10	<u> </u>	1 8/15/10	

Customer Id: WESCONSC Sample No.: WC0782723 Lab Number: 06015739 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

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

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Fluid			?	Oil and filter change at the time of sampling has been noted.			
Change Filter			?	Oil and filter change at the time of sampling has been noted.			

HISTORICAL DIAGNOSIS



03 Apr 2023 Diag: Angela Borella

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.All 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 acceptable for the time in service.





OIL ANALYSIS REPORT

Sample Rating Trend

ISO

MoggPB-1 (S/N 16-119)

Hydraulic Power Pack Fluid MOBIL DTE 25 (335 GAL)

DIAGNOSIS

Recommendation

Oil and filter 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. (Customer Sample Comment: Viscosity index please)

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

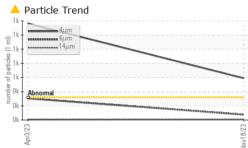
Fluid Condition

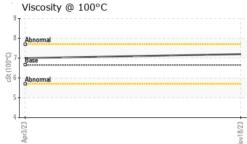
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

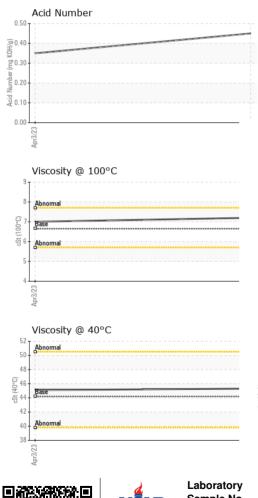
			Apr2023	Nov2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0782723	WC0782729	
Sample Date		Client Info		18 Nov 2023	03 Apr 2023	
Machine Age	hrs	Client Info		23692	23692	
Dil Age	hrs	Client Info		200	3400	
Oil Changed	1110	Client Info		Changed	Filtered	
Sample Status				ATTENTION	ABNORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>20	0	0	
Chromium	ppm	ASTM D5185m	>20	0	0	
Nickel	ppm	ASTM D5185m	>20	0	0	
Titanium		ASTM D5185m	20	0	0	
Silver	ppm	ASTM D5185m		0	0	
	ppm		. 20	-	1	
Aluminum	ppm	ASTM D5185m		0		
Lead	ppm	ASTM D5185m	>20	0	0	
Copper	ppm	ASTM D5185m	>20	4	14	
Tin	ppm	ASTM D5185m	>20	0	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
	ppm ppm	ASTM D5185m ASTM D5185m		0	0	
Barium						
Barium Molybdenum	ppm	ASTM D5185m		0	0	
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m		0 0	0 0	
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0	0 0 <1	
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 0	0 0 <1 2	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 0 61	0 0 <1 2 59	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 0 61 312	0 0 <1 2 59 339	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 61 312 517	0 0 <1 2 59 339 500	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >15	0 0 0 61 312 517 692	0 0 <1 2 59 339 500 575	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 61 312 517 692 current	0 0 <1 2 59 339 500 575 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>15	0 0 0 61 312 517 692 current	0 0 <1 2 59 339 500 575 history1 0	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>15	0 0 0 61 312 517 692 current <1 <1	0 0 <1 2 59 339 500 575 history1 0 0	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>15 >20	0 0 0 61 312 517 692 current <1 <1 <1 0	0 0 <1 2 59 339 500 575 history1 0 0 0	 history2
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	ASTM D5185m ASTM D5185m	>15 >20 limit/base >320	0 0 0 61 312 517 692 current <1 <1 0	0 0 <1 2 59 339 500 575 history1 0 0 0 0 history1	 history2 history2
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	ASTM D5185m ASTM D5185m	>15 >20 limit/base >320	0 0 0 61 312 517 692 current <1 <1 0 current	0 0 (-1) 2 59 339 500 575 history1 0 0 0 0 0 0 0 0 1362	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>15 >20 limit/base >320 >80 >10	0 0 0 61 312 517 692 current <1 <1 <1 0 0 current 0 590 76	0 0 339 500 575 history1 0 0 0 0 history1 ∧ 1362 ∧ 305	 history2 history2
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	ASTM D5185m ASTM D5185m	>15 >20 limit/base >320 >80 >10	0 0 0 61 312 517 692 current <1 <1 <1 0 0 current 0 590 76 7	0 0 31 2 59 339 500 575 history1 0 0 0 0 0 0 0 1362 ▲ 1362 ▲ 1362	 history2 history2 history2
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	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >320 >320 >80 >10 >3 >3	0 0 0 61 312 517 692 current <1 <1 <1 0 current 0 590 76 7 3	0 0 3 2 59 339 500 575 history1 0 0 0 0 0 history1 1 305 10 10	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >320 >320 >80 >10 >3 >3	0 0 0 61 312 517 692 current <1 <1 0 current 0 590 76 7 3 0 0	0 0 3 59 339 500 575 history1 0 0 0 0 0 history1 1 305 10 1 1 0 1 0	 history2 history2 history2
Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >320 >80 >10 >3 >3 >3	0 0 0 61 312 517 692 current <1 <1 0 current 0 590 76 7 3 0 0 0 0	0 0 3 2 59 339 500 575 history1 0 0 0 0 0 history1 ▲ 1362 ▲ 305 10 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	 history2 history2 -
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647	>15 >20 limit/base >320 >80 >10 >3 >3 >3 >3 >15/13/10	0 0 0 0 61 312 517 692 <urrent <1 <1 0 <urrent 590 76 7 3 0 0 0 16/13/10</urrent </urrent 	0 0 3 2 59 339 500 575 history1 0 0 0 0 history1 1 305 10 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	 history2



OIL ANALYSIS REPORT







White Metal		method	limit/base	current	history1	history
	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	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D445	44.2	45.3	45.1	
Visc @ 100°C	cSt	ASTM D445	6.65	7.2	7	
Viscosity Index (VI)	Scale	ASTM D2270	98	119	112	
SAMPLE IMAGES	5	method	limit/base	current	history1	history
Color				a		no image
Dettern			1		(Contraction)	no imore
Bottom						no image
CDADUC						
GRAPHS Ferrous Alloys				Particle Count		
Ferrous Alloys			491,520	Particle Count		
Ferrous Alloys				Particle Count		
Ferrous Alloys			491,520	Particle Count		
Ferrous Alloys			491,520 122,880 30,720	Particle Count		
Ferrous Alloys			491,520 122,880 30,720	Particle Count		
Ferrous Alloys			491,520 122,880 30,720	Particle Count		
Ferrous Alloys			491,520 122,880 30,720	Severe		
Ferrous Alloys	5		491,520 122,880 30,720	Particle Count		
Ferrous Alloys	5		491,520 122,880 30,720	Severe		
Ferrous Alloys	5		491,520 122,880 30,720 E T T S C C C C C C C C C C C C C C C C C	Severe Plagormal		
Ferrous Alloys	5		491,520 122,880 30,720 E 7,680 E 19,00 90 90 90 90 90 90 90 90 90 90 90 90 9	Severe Plagormal		
Ferrous Alloys	5		491,520 122,880 30,720 E 7,680 E 1,920 Soppad 480 120 Soppad 480 30 20 480 30 20 8 30 20 8 30 720 7 8 30 7 8 30 7 8 30 8 30 8 30 8 30 8	Severe Plagormal		
Ferrous Alloys	5		491,520 122,880 30,720 E 7,680 E 1,920 Soppad 480 120 Soppad 480 30 20 480 30 20 8 30 20 8 30 720 7 8 30 7 8 30 7 8 30 8 30 8 30 8 30 8	Severe Plagormal		
Ferrous Alloys	5		491,520 122,880 30,720 E 7,680 E 7,680 E 7,680 E 7,680 E 480 1,920 200 200 200 200 200 200 200 200 200	Severe Plagormal	14μ 21μ	
Ferrous Alloys	5		491,520 122,880 30,720 ECI6 100 ECI6 100 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 100 100 100 100 100 100 100 100 100	Severe		
Ferrous Alloys	5		491,520 122,880 30,720 ECI6 100 ECI6 100 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 100 100 100 100 100 100 100 100 100	Severe Phonomal 4 6/4		
Ferrous Alloys	5		491,520 122,880 30,720 ECI6 100 ECI6 100 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 100 100 100 100 100 100 100 100 100	Severe Phonomal 4 6/4		
Ferrous Alloys	5		491,520 122,880 30,720 ECI6 100 ECI6 100 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 100 100 100 100 100 100 100 100 100	Severe Phonomal 4 6/4		
Ferrous Alloys	5		491,520 122,880 30,720 ECI6 100 ECI6 100 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 ECI6 100 120 ECI6 100 100 100 100 100 100 100 100 100 100	Severe Phopomal 4 6/4		
Ferrous Alloys	5		491,520 122,880 30,720 E 7,680 E 19,000 990 Per 480 50 990 900 900 900 900 900 900 900 900	Severe Phopomal 4 6/4		

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)

Certificate L2367

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F:

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