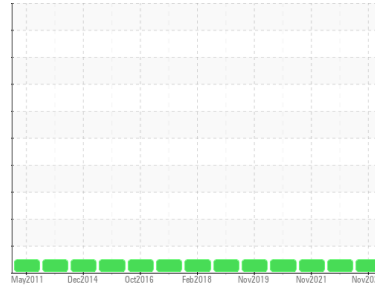


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
A109
Component
Hydraulic System
Fluid
MOBIL DTE 10 EXCEL 32 (43 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			MHI026263	MHI017170	MHI019130
Sample Date	Client Info			09 Nov 2023	17 Nov 2022	19 Nov 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		92940	86700	80831
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	5	4	2
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>20	6	6	3
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	0
Lead	ppm	ASTM D5185m	>20	1	1	0
Copper	ppm	ASTM D5185m	>20	<1	<1	0
Tin	ppm	ASTM D5185m	>20	0	<1	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

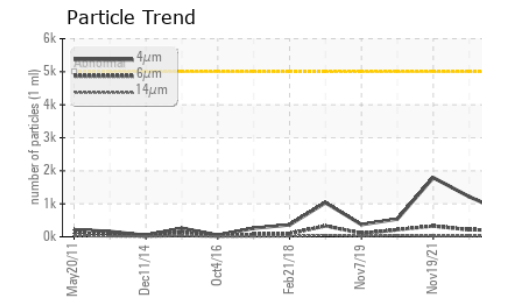
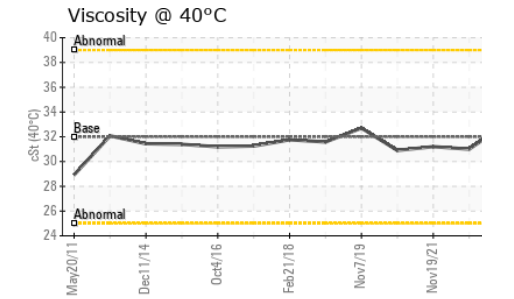
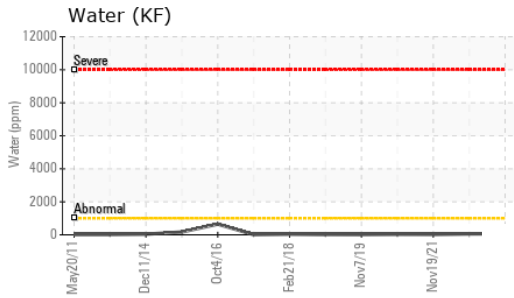
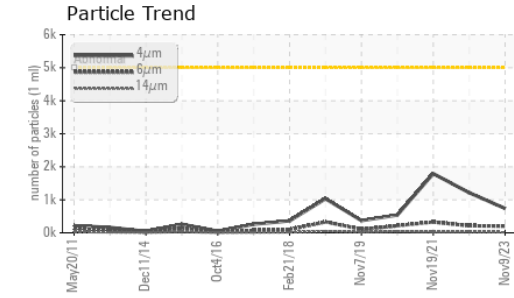
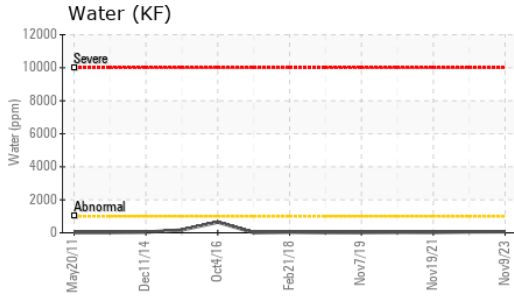
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		<1	1	0
Calcium	ppm	ASTM D5185m	120	112	109	101
Phosphorus	ppm	ASTM D5185m	475	455	436	409
Zinc	ppm	ASTM D5185m		20	27	18
Sulfur	ppm	ASTM D5185m	1275	1441	1861	1186

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+30	<1	<1	0
Sodium	ppm	ASTM D5185m		<1	3	1
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water	%	ASTM D6304	>0.1	0.006	0.005	0.002
ppm Water	ppm	ASTM D6304	>1000	65	55.4	18.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	738	1215	1793
Particles >6µm		ASTM D7647	>1300	203	214	327
Particles >14µm		ASTM D7647	>160	16	30	23
Particles >21µm		ASTM D7647	>40	5	12	3
Particles >38µm		ASTM D7647	>10	0	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/11	17/15/12	18/16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.06	0.13	0.094

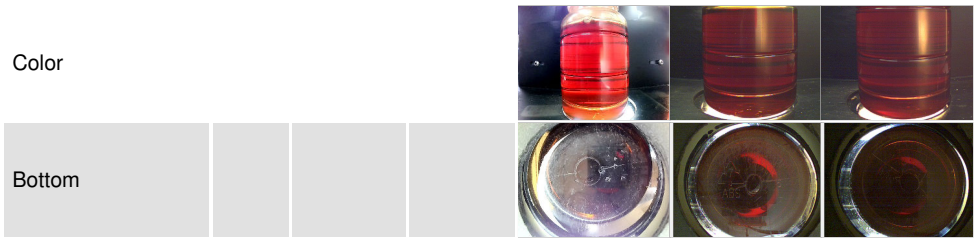
OIL ANALYSIS REPORT



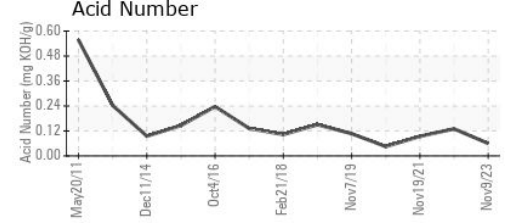
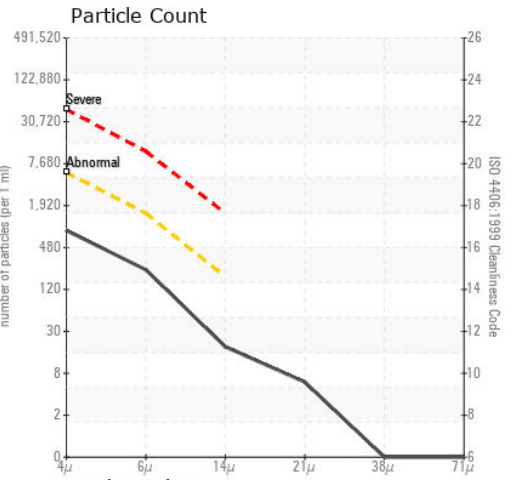
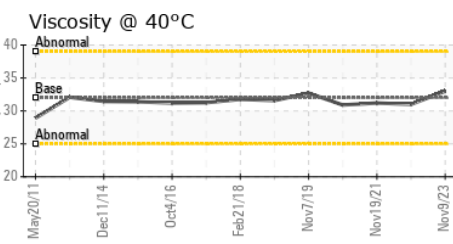
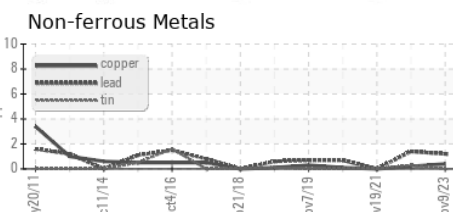
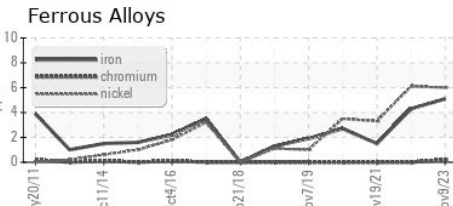
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 32	33.0	31.0	31.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MHI026263 **Received** : 22 Nov 2023
Lab Number : 06015065 **Diagnosed** : 26 Nov 2023
Unique Number : 10754209 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF)

DIAMOND WTG - DILLON
P.O. BOX 880
DESERT HOT SPRINGS, CA
US 92240
Contact: DANIEL BOYD
daniel.boyd@diamondwtg.com
T: (760)329-7171
F: (760)329-7122

Certificate L2367
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)