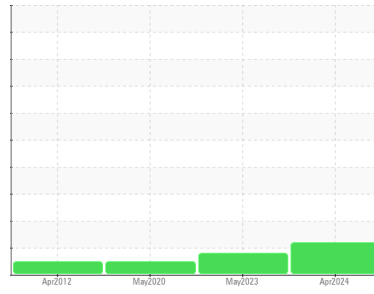


# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**H-05**  
Component  
**Hydraulic System**  
Fluid  
**MOBIL DTE 10 EXCEL 32 (45 GAL)**

### DIAGNOSIS

#### Recommendation

Re-sample to verify the actual oil condition. Replace filter elements. Change oil if cleanliness level does not improve after replacing the filter(s).

#### Wear

All component wear rates are normal.

#### Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

#### 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			<b>MHI026460</b>	MHI021614	MHI022658
Sample Date	Client Info			<b>15 Apr 2024</b>	02 May 2023	11 May 2020
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	8018
Oil Changed	Client Info			<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>ATTENTION</b>	MARGINAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>26</b>	26	11
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>20	<b>4</b>	4	<1
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	<1
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>2</b>	2	4
Calcium	ppm	ASTM D5185m	120	<b>116</b>	106	126
Phosphorus	ppm	ASTM D5185m	475	<b>346</b>	315	447
Zinc	ppm	ASTM D5185m		<b>31</b>	3	16
Sulfur	ppm	ASTM D5185m	1275	<b>1511</b>	1191	1407

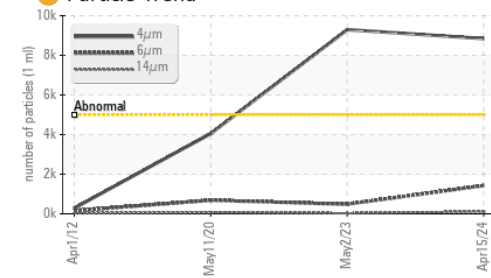
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+30	<b>1</b>	1	2
Sodium	ppm	ASTM D5185m		<b>3</b>	1	1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Water	%	ASTM D6304	>0.1	<b>0.005</b>	0.011	0.001
ppm Water	ppm	ASTM D6304	>1000	<b>57</b>	116	9.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>8846</b>	9294	4051
Particles >6µm		ASTM D7647	>1300	<b>1424</b>	483	684
Particles >14µm		ASTM D7647	>160	<b>114</b>	25	67
Particles >21µm		ASTM D7647	>40	<b>30</b>	9	18
Particles >38µm		ASTM D7647	>10	<b>1</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/18/14</b>	20/16/12	19/17/13

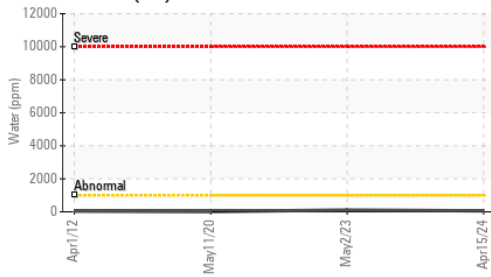
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.196</b>	0.178	0.091

# OIL ANALYSIS REPORT

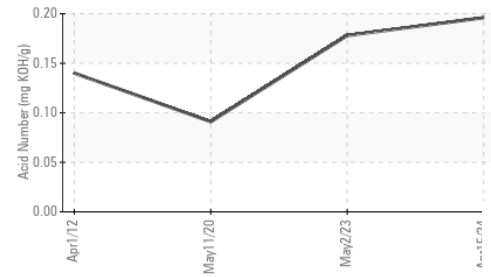
## Particle Trend



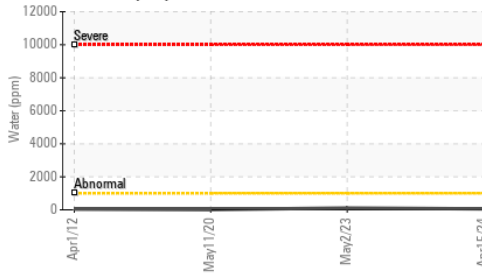
## Water (KF)



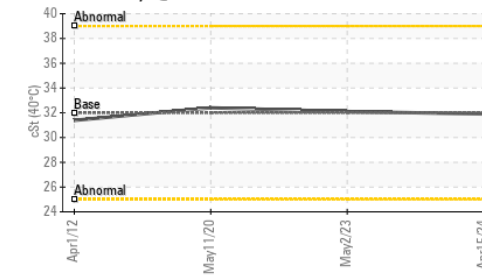
## Acid Number



## Water (KF)



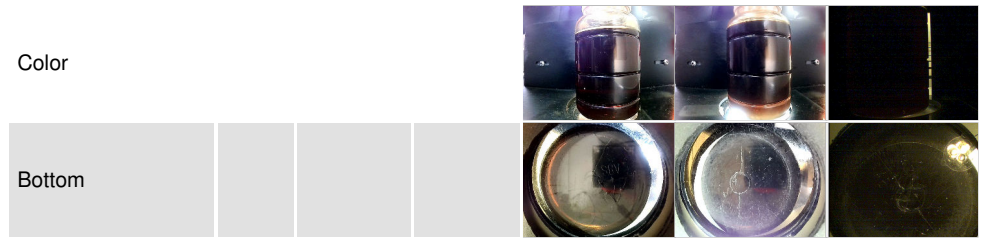
## Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
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

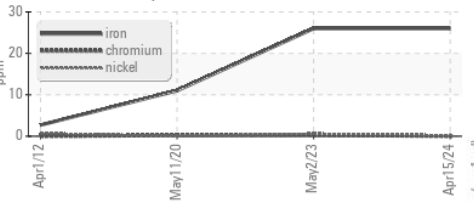
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	31.9	32.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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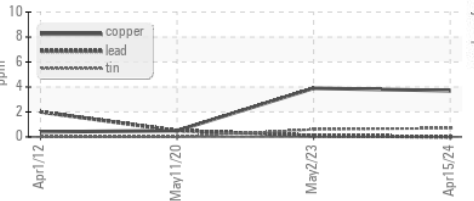


## GRAPHS

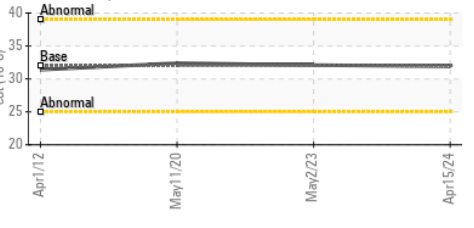
### Ferrous Alloys



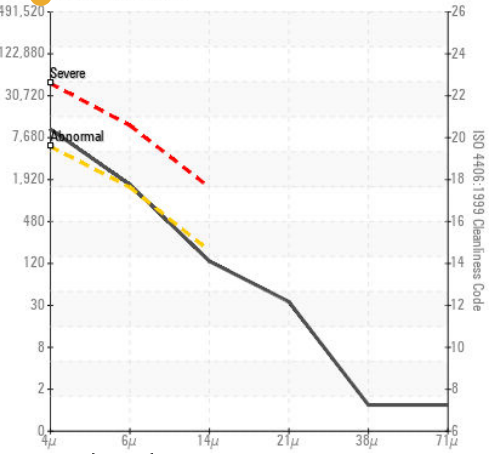
### Non-ferrous Metals



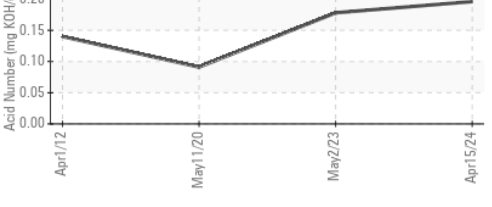
### Viscosity @ 40°C



### Particle Count



### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MHI026460 **Received** : 10 Jun 2024  
**Lab Number** : 06204599 **Tested** : 11 Jun 2024  
**Unique Number** : 11072060 **Diagnosed** : 12 Jun 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF )

**DIAMOND WTG - WHITE DEER SITE - MPS WD**  
 PO BOX 872  
 WHITE DEER, TX  
 US 79097

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