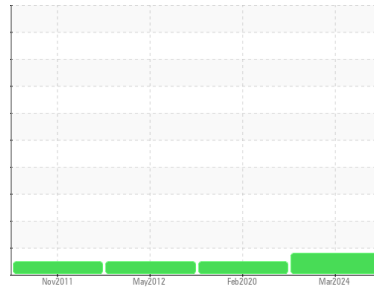


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
C-08
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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			MHI021771	MHI022960	RP107827
Sample Date	Client Info			22 Mar 2024	06 Feb 2020	10 May 2012
Machine Age	hrs	Client Info		0	0	67995
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	Not Changd	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	12	18	3
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>20	<1	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>20	<1	<1	4
Tin	ppm	ASTM D5185m	>20	0	<1	0
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1	0
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		3	6	0
Calcium	ppm	ASTM D5185m	120	121	142	119
Phosphorus	ppm	ASTM D5185m	475	424	411	580
Zinc	ppm	ASTM D5185m		31	33	27
Sulfur	ppm	ASTM D5185m	1275	1651	1425	1521

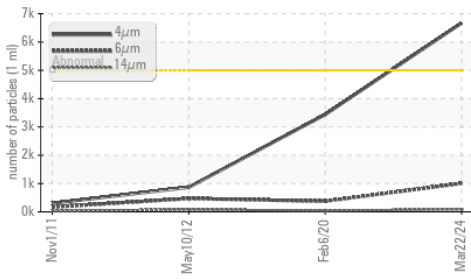
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+30	<1	2	0
Sodium	ppm	ASTM D5185m		3	<1	1
Potassium	ppm	ASTM D5185m	>20	2	0	16
Water	%	ASTM D6304	>0.1	0.003	0.003	0.005
ppm Water	ppm	ASTM D6304	>1000	27	33.4	50

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ 6669	3438	865
Particles >6µm		ASTM D7647	>1300	1004	373	471
Particles >14µm		ASTM D7647	>160	86	39	80
Particles >21µm		ASTM D7647	>40	20	13	27
Particles >38µm		ASTM D7647	>10	0	1	4
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 20/17/14	19/16/12	17/16/13

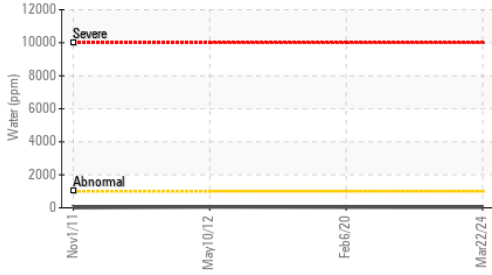
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.194	0.119	0.304

OIL ANALYSIS REPORT

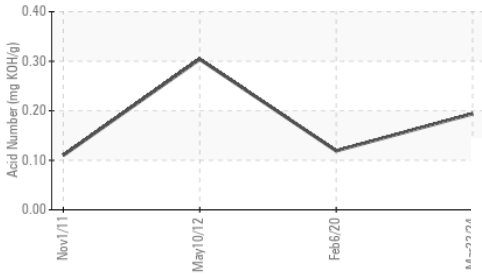
▲ Particle Trend



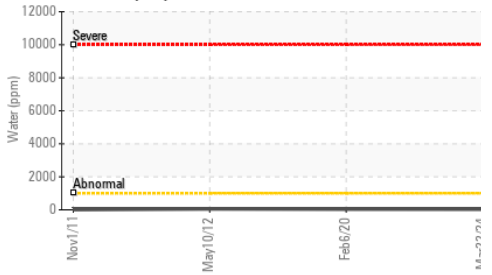
Water (KF)



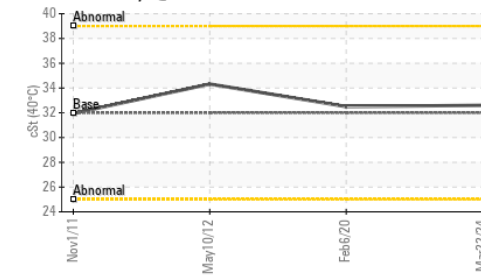
Acid Number



Water (KF)



Viscosity @ 40°C

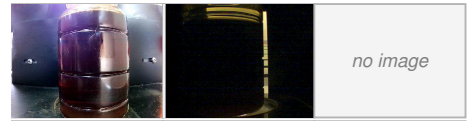


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	LIGHT	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 32	32.6	32.5	34.32

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

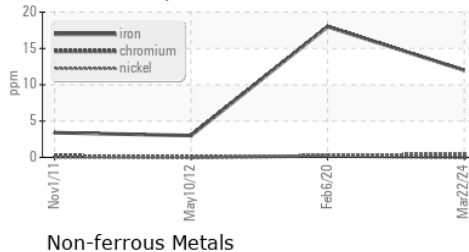


Bottom

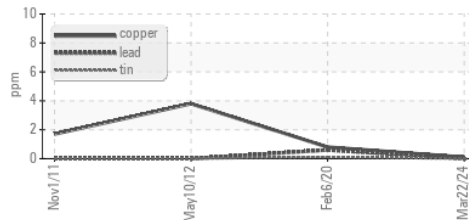


GRAPHS

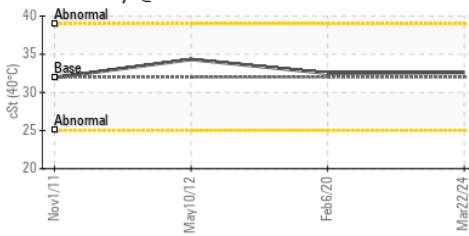
Ferrous Alloys



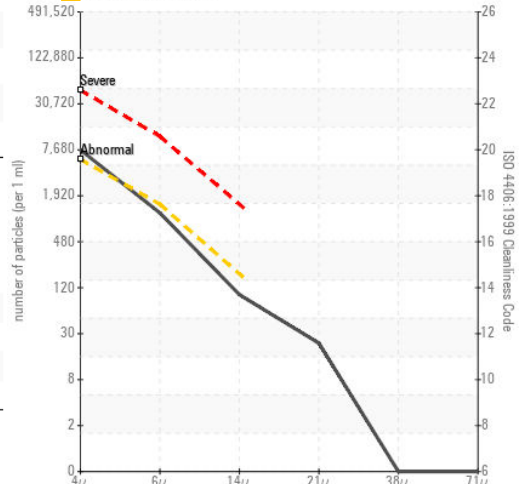
Non-ferrous Metals



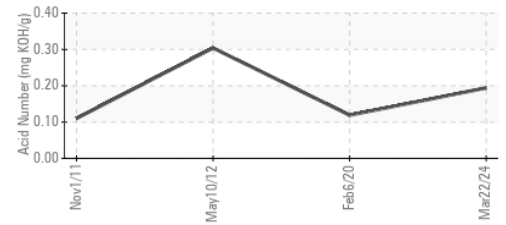
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MHI021771

Lab Number : 06204607

Unique Number : 11072068

Test Package : IND 2 (Additional Tests: KF)

Received : 10 Jun 2024

Tested : 11 Jun 2024

Diagnosed : 12 Jun 2024 - Doug Bogart

DIAMOND WTG - WHITE DEER SITE - MPS WD

PO BOX 872

WHITE DEER, TX

US 79097

Contact: WESLEY CAMPBELL

wesley.campbell@diamondwtg.com

T: (806)883-1051

F: (806)883-2004

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)