



**LEAHY-WOLF**  
Lubricating specialists since 1946

OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area

**Cozzi MH1**

Machine Id

**SANY 235 Sany 235 Cozzi SY023BGA2718**

Component

**Diesel Engine**

Fluid

**CITGO 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0009096</b>	LW0007668	LW0007309
Sample Date		Client Info		<b>25 Jun 2024</b>	05 Dec 2023	17 Aug 2023
Machine Age	hrs	Client Info		<b>15769</b>	15313	14825
Oil Age	hrs	Client Info		<b>6238</b>	5782	5294
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>17</b>	19	9
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>1</b>	<1	5
Silver	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>2</b>	11	0
Copper	ppm	ASTM D5185m	>300	<b>4</b>	29	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

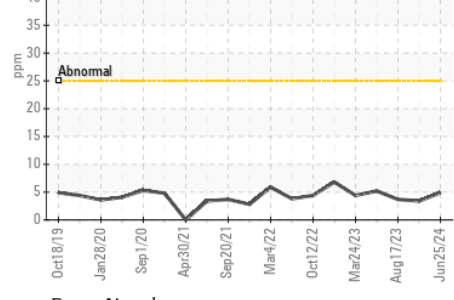
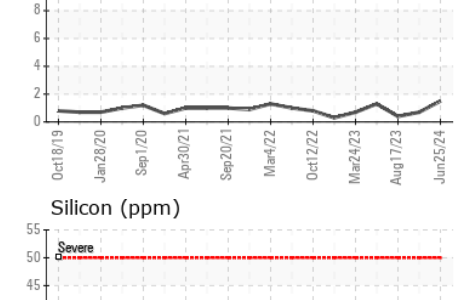
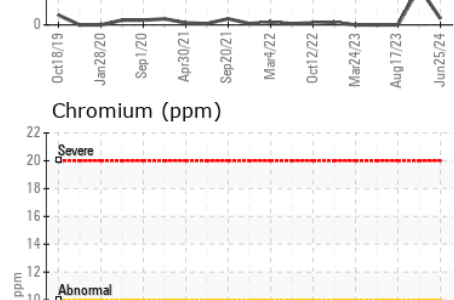
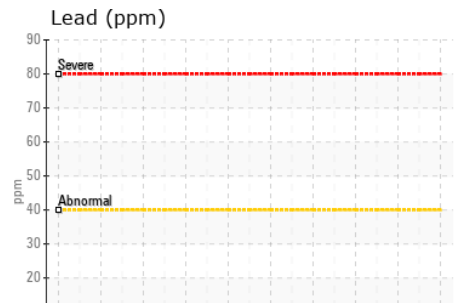
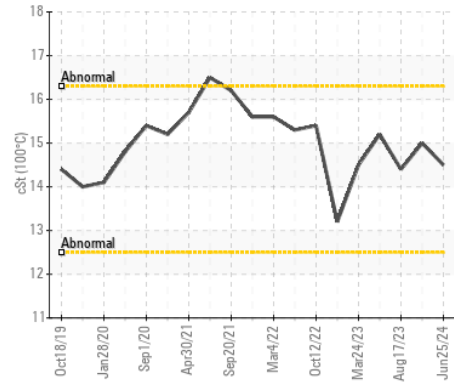
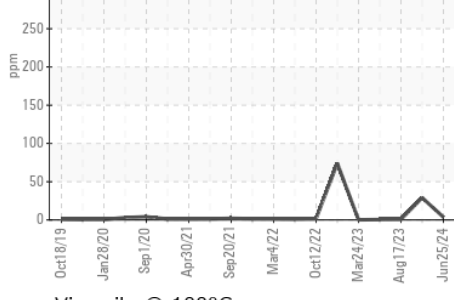
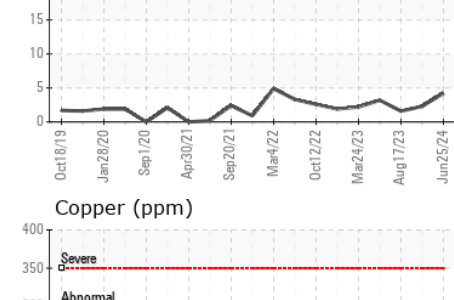
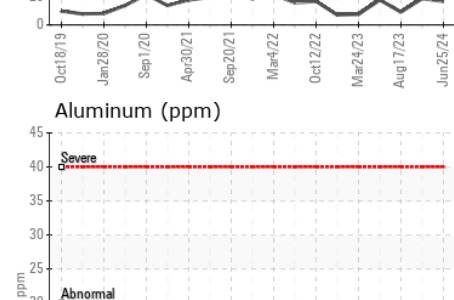
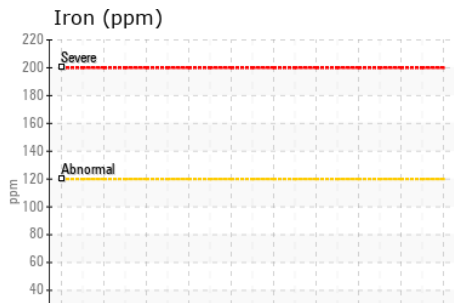
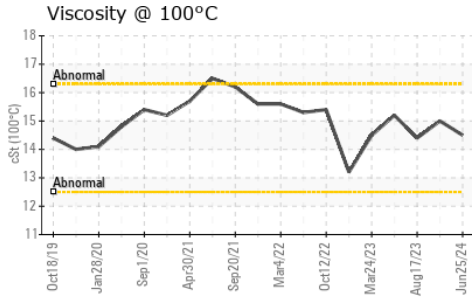
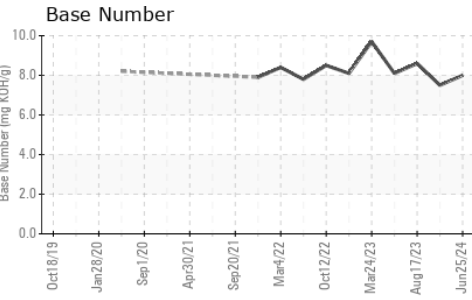
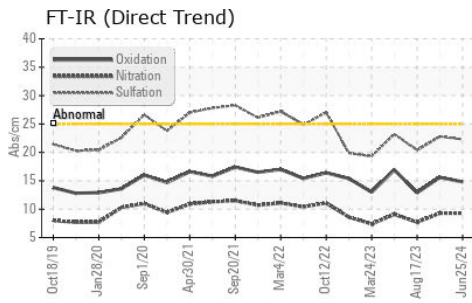
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	2
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>1.2</b>	1.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.3</b>	9.3	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.3</b>	22.8	20.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>5</b>	4	4
Boron	ppm	ASTM D5185m		<b>33</b>	25	49
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>23</b>	25	21
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>883</b>	803	788
Calcium	ppm	ASTM D5185m		<b>1349</b>	1229	1531
Phosphorus	ppm	ASTM D5185m		<b>1042</b>	1019	1077
Zinc	ppm	ASTM D5185m		<b>1326</b>	1242	1305
Sulfur	ppm	ASTM D5185m		<b>3466</b>	3404	4245
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	15.6	12.9
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.0</b>	7.5	8.6
Visc @ 100°C	cSt	ASTM D445		<b>14.5</b>	15.0	14.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0009096 **Received** : 28 Jun 2024  
**Lab Number** : 06223137 **Tested** : 28 Jun 2024  
**Unique Number** : 11101334 **Diagnosed** : 28 Jun 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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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)