



**LEAHY-WOLF**  
Lubricating specialists since 1946

OIL ANALYSIS REPORT

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

Area

**Cozzi MH1**

Machine Id

**SANY 405K Sany SW405K SW4054CB00668**

Component

**Rear Differential**

Fluid

**CITGO PREMIUM GEAR 80W90 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0008270</b>	LW0007630	LW0007327
Sample Date		Client Info		<b>09 Jan 2024</b>	03 Nov 2023	31 Aug 2023
Machine Age	hrs	Client Info		<b>3549</b>	3057	2534
Oil Age	hrs	Client Info		<b>3549</b>	3057	2534
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>ABNORMAL</b>	ABNORMAL	ATTENTION

**WEAR**

Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>500	<b>120</b>	95	71
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	1
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>100	<b>▲ 213</b>	▲ 131	81
Tin	ppm	ASTM D5185m	>10	<b>▲ 11</b>	6	4
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

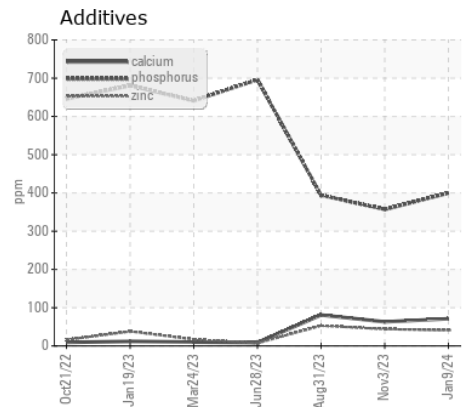
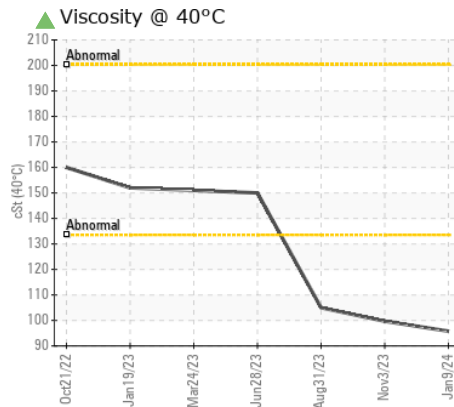
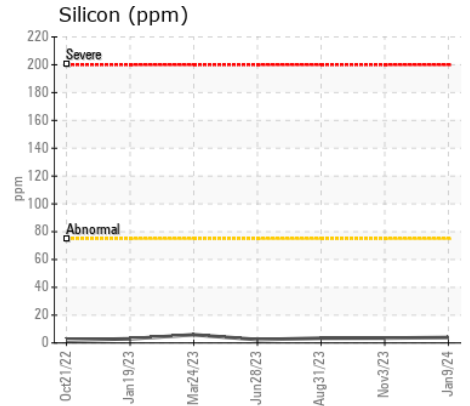
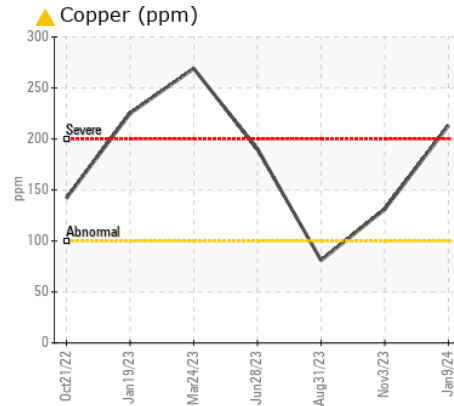
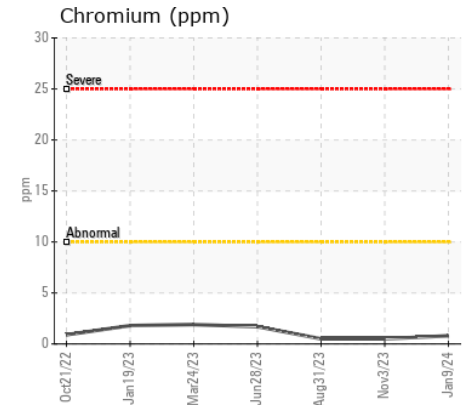
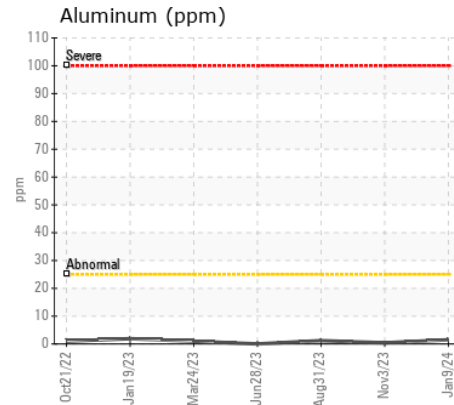
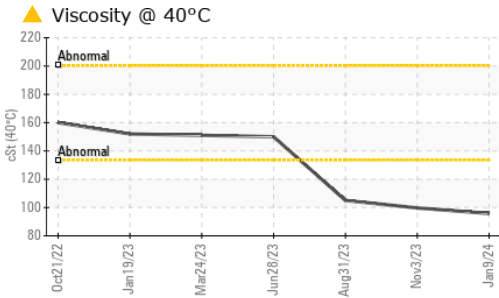
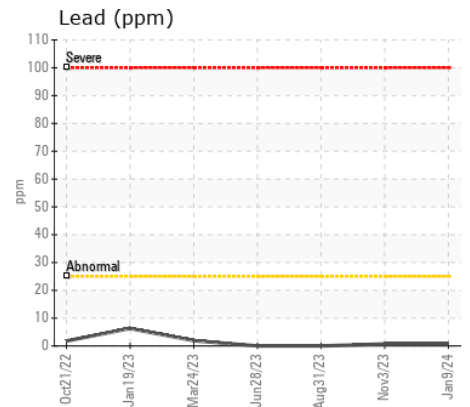
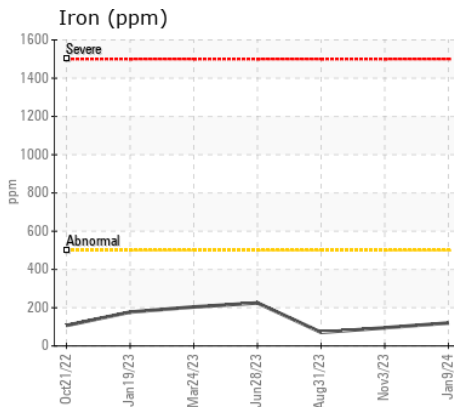
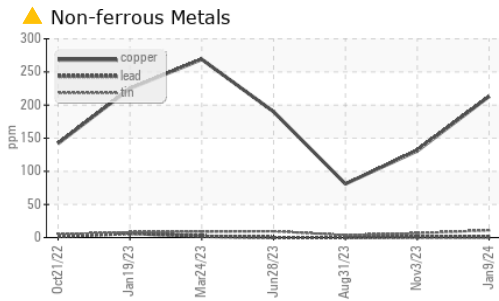
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>4</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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	>.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The oil viscosity is lower than normal. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>0</b>	2	3
Boron	ppm	ASTM D5185m		<b>1</b>	<1	<1
Barium	ppm	ASTM D5185m		<b>5</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>5</b>	4	3
Manganese	ppm	ASTM D5185m		<b>2</b>	2	2
Magnesium	ppm	ASTM D5185m		<b>13</b>	2	15
Calcium	ppm	ASTM D5185m		<b>71</b>	63	81
Phosphorus	ppm	ASTM D5185m		<b>400</b>	357	394
Zinc	ppm	ASTM D5185m		<b>41</b>	44	53
Sulfur	ppm	ASTM D5185m		<b>18601</b>	17096	19988
Visc @ 40°C	cSt	ASTM D445		<b>▲ 95.8</b>	▲ 99.7	▲ 105



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0008270 **Received** : 12 Jan 2024  
**Lab Number** : 06059689 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10831071 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 1

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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)