



LEAHY-WOLF
Lubricating specialists since 1946

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area

TA Machines

Machine Id

Sany SY335 TA964 (S/N 13SY033A36508)

Component

Diesel Engine

Fluid

CITGO 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LW0008290	LW0006826	LW0006748
Sample Date		Client Info		05 Feb 2024	18 Apr 2023	07 Mar 2023
Machine Age	hrs	Client Info		4865	4614	4141
Oil Age	hrs	Client Info		4865	4614	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	42	12	2
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	1	0	0
Titanium	ppm	ASTM D5185m		5	5	<1
Silver	ppm	ASTM D5185m	>3	0	0	2
Aluminum	ppm	ASTM D5185m	>20	4	0	<1
Lead	ppm	ASTM D5185m	>40	1	0	0
Copper	ppm	ASTM D5185m	>330	58	3	7
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

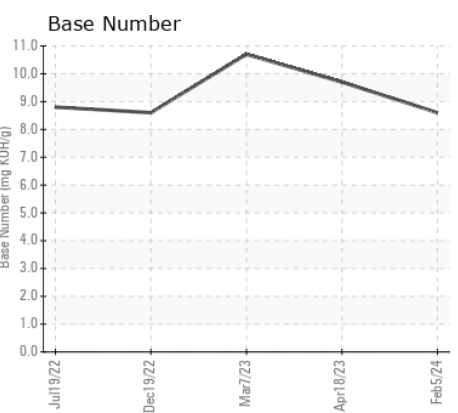
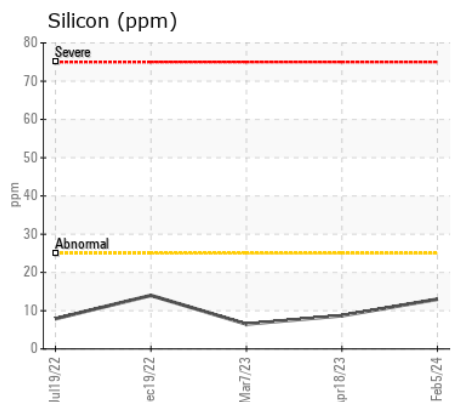
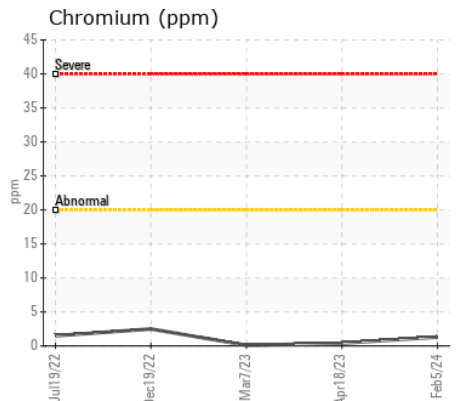
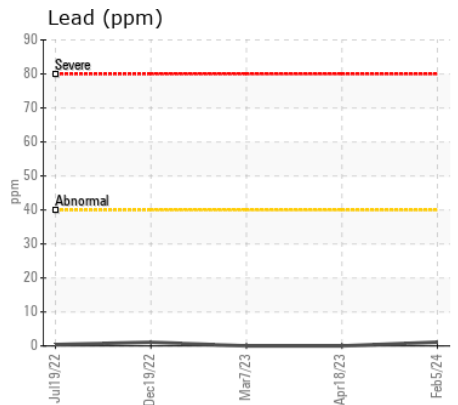
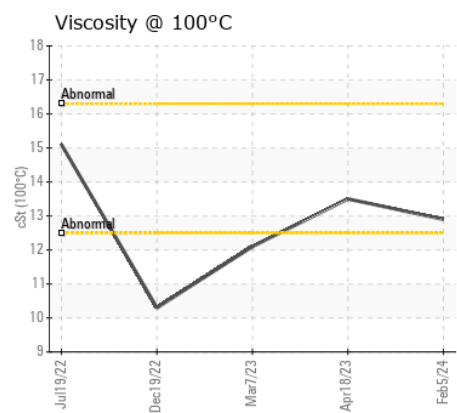
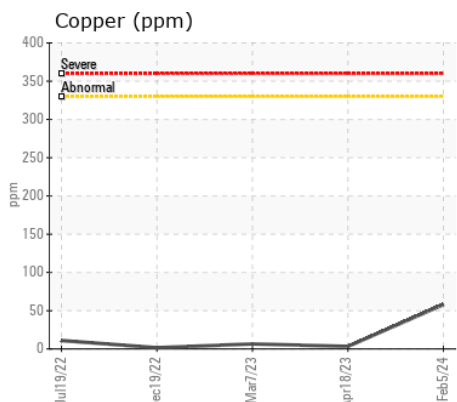
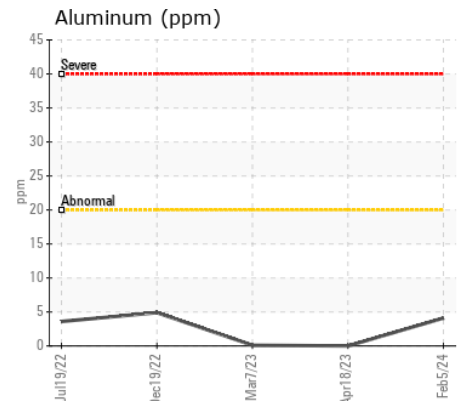
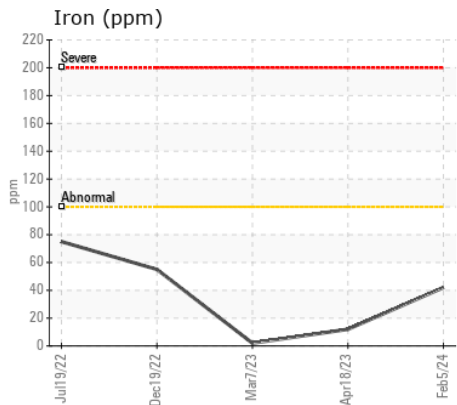
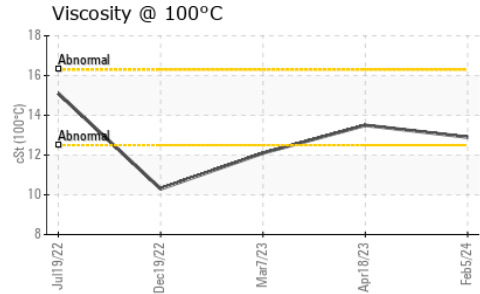
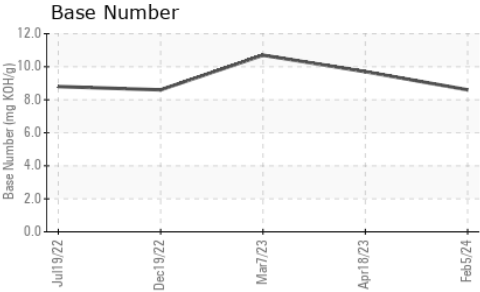
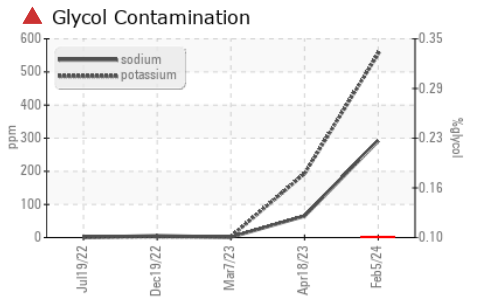
Sodium and/or potassium levels are high. Test for glycol is positive.

Silicon	ppm	ASTM D5185m	>25	13	9	6
Potassium	ppm	ASTM D5185m	>20	555	193	2
Fuel		WC Method	>5	<1.0	2.0	8.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		0.10	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.2	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.8	6.9	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	18.9	22.0
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		292	65	1
Boron	ppm	ASTM D5185m		24	65	28
Barium	ppm	ASTM D5185m		14	0	0
Molybdenum	ppm	ASTM D5185m		56	26	49
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		563	608	967
Calcium	ppm	ASTM D5185m		1312	1377	1313
Phosphorus	ppm	ASTM D5185m		1039	1002	1090
Zinc	ppm	ASTM D5185m		1090	1176	1304
Sulfur	ppm	ASTM D5185m		3854	3369	3941
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	13.3	17.0
Base Number (BN)	mg KOH/g	ASTM D2896		8.6	9.7	10.7
Visc @ 100°C	cSt	ASTM D445		12.9	13.5	12.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LW0008290 **Received** : 12 Feb 2024
Lab Number : 06085688 **Tested** : 13 Feb 2024
Unique Number : 10873133 **Diagnosed** : 13 Feb 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

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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)