



# OIL ANALYSIS REPORT

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

Area  
**Store 9 - Marietta**  
Machine Id  
**534**  
Component  
**Diesel Engine**  
Fluid  
**{not provided} (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0028306</b>	LEC0041322	LEC0034646
Sample Date		Client Info		<b>09 Jan 2024</b>	14 Aug 2023	17 Feb 2023
Machine Age	hrs	Client Info		<b>4716</b>	4655	4442
Oil Age	hrs	Client Info		<b>0</b>	213	275
Filter Age	hrs	Client Info		<b>0</b>	213	275
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>4</b>	19	19
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>47</b>	55	68
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	5	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

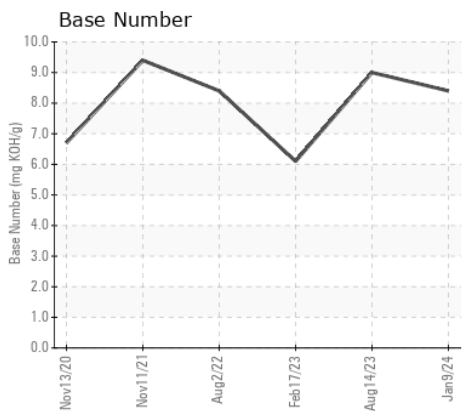
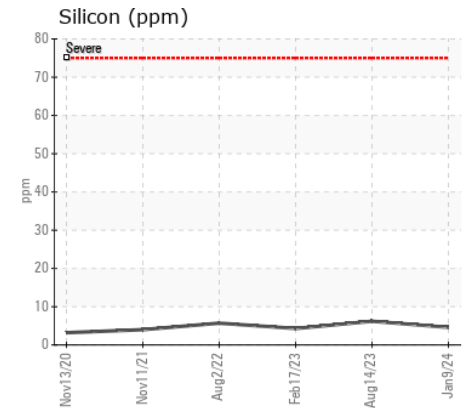
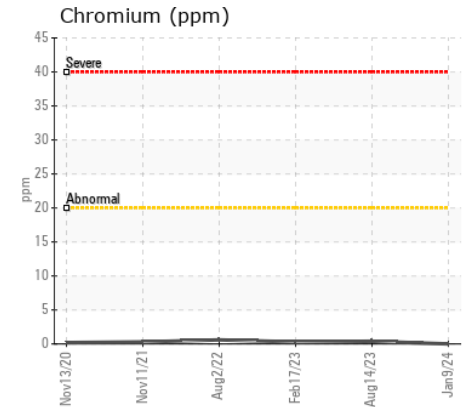
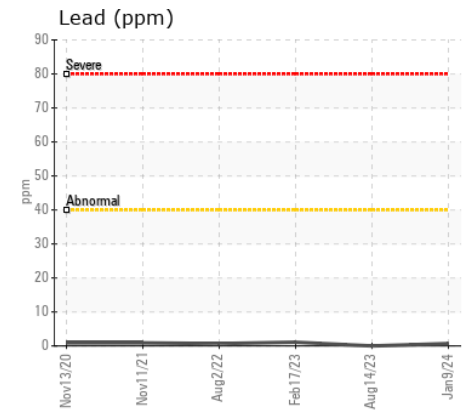
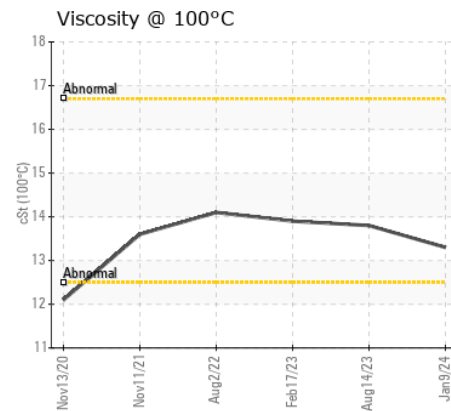
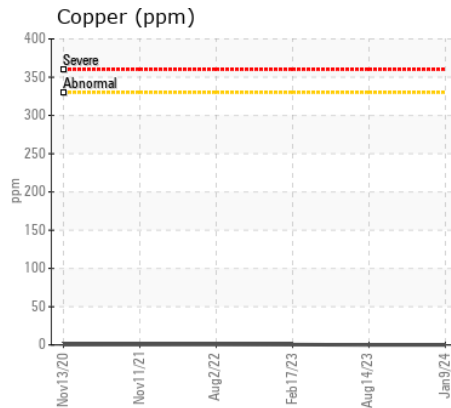
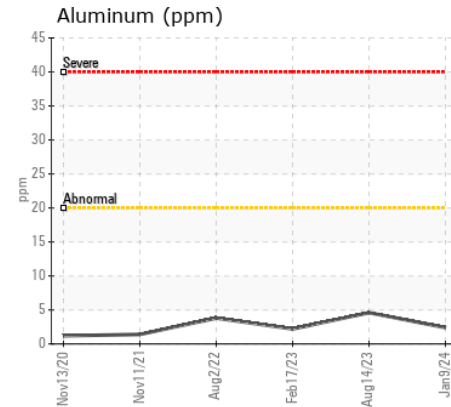
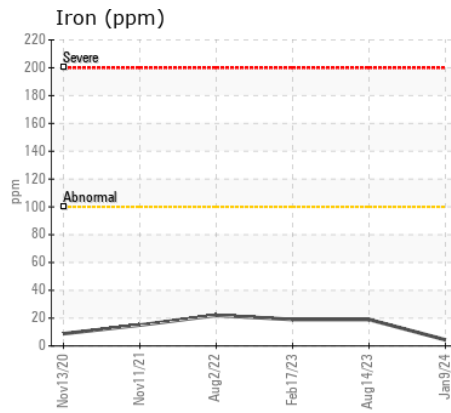
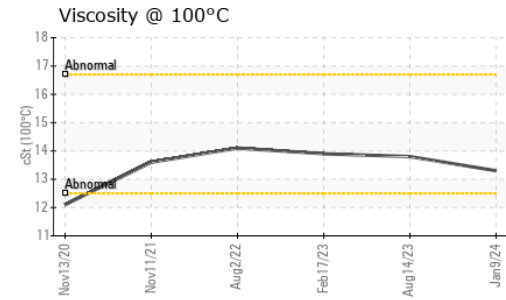
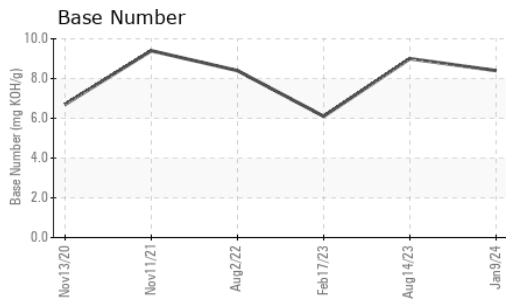
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>5</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	7	3
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	0.0	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	8.9	3.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.6</b>	19.7	14.4
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	>0.2	<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>9</b>	▲ 160	3
Boron	ppm	ASTM D5185m		<b>103</b>	106	110
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>17</b>	11	8
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>395</b>	559	397
Calcium	ppm	ASTM D5185m		<b>1504</b>	1710	1878
Phosphorus	ppm	ASTM D5185m		<b>920</b>	1059	1004
Zinc	ppm	ASTM D5185m		<b>1128</b>	1252	1221
Sulfur	ppm	ASTM D5185m		<b>3557</b>	4627	4495
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.0</b>	14.6	6.4
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.4</b>	9.0	6.1
Visc @ 100°C	cSt	ASTM D445		<b>13.3</b>	13.8	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0028306 **Received** : 11 Jan 2024  
**Lab Number** : 06057943 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829325 **Diagnostician** : Don Baldrige  
**Test Package** : MOBCE ( Additional Tests: TBN )

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)

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