



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area  
**OKLAHOMA/102**  
Machine Id  
**69.104L [OKLAHOMA^102]**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC MX 15W40 (11 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>WC0834077</b>	WC0792428	WC0808000
Sample Date		Client Info		<b>28 Aug 2023</b>	20 Jul 2023	05 May 2023
Machine Age	hrs	Client Info		<b>2356</b>	2190	2000
Oil Age	hrs	Client Info		<b>356</b>	190	949
Filter Age	hrs	Client Info		<b>356</b>	190	949
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Sample Status				<b>ATTENTION</b>	ATTENTION	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>18</b>	12	42
Chromium	ppm	ASTM D5185m	>6	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>10	<b>1</b>	0	2
Copper	ppm	ASTM D5185m	>150	<b>19</b>	17	88
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

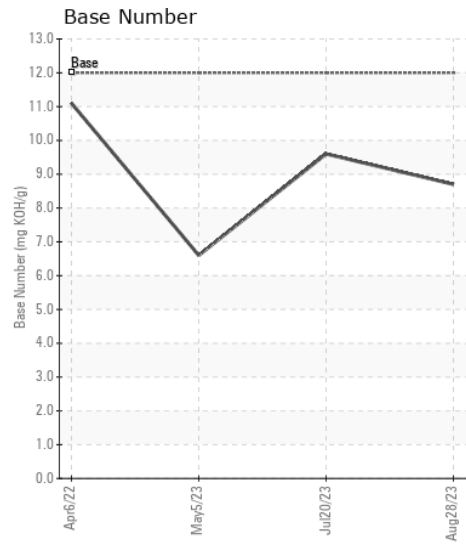
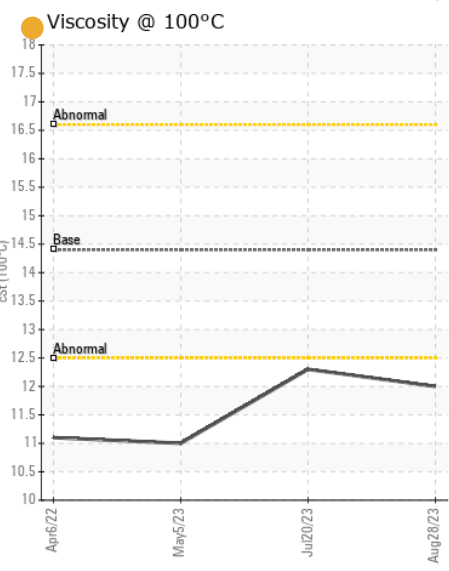
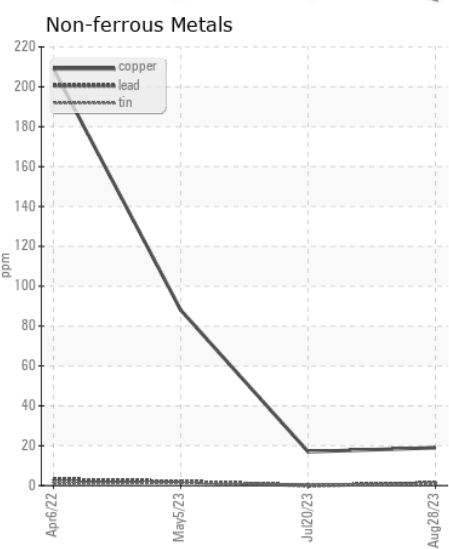
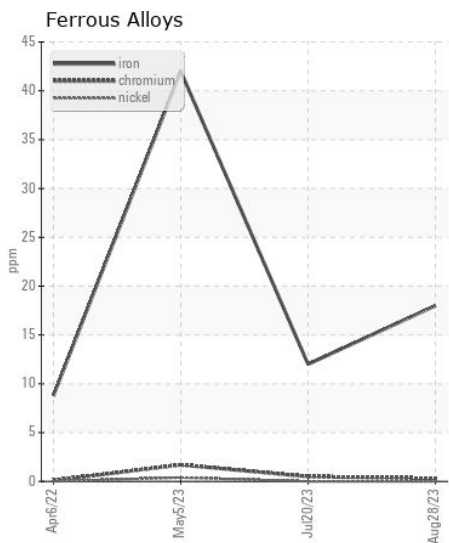
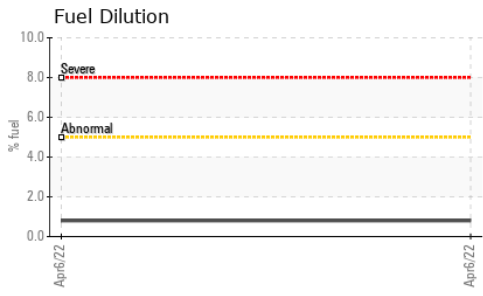
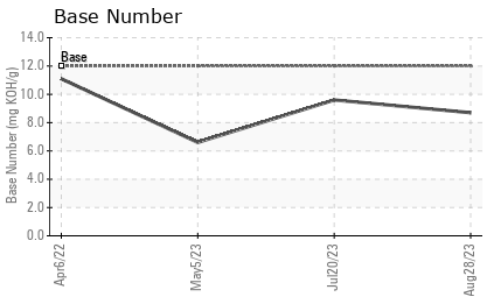
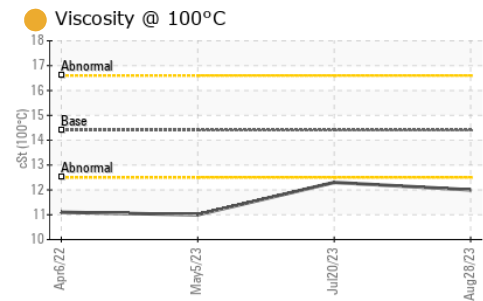
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>9</b>	6	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Fuel	%	ASTM D3524	>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>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	7.3	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	21.9	24.2
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>3</b>	1	2
Boron	ppm	ASTM D5185m		<b>27</b>	43	22
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>41</b>	40	40
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>496</b>	502	449
Calcium	ppm	ASTM D5185m		<b>1954</b>	1849	1947
Phosphorus	ppm	ASTM D5185m		<b>811</b>	814	918
Zinc	ppm	ASTM D5185m		<b>1007</b>	1003	1119
Sulfur	ppm	ASTM D5185m		<b>3269</b>	3355	3124
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.3</b>	19.2	21.9
Base Number (BN)	mg KOH/g	ASTM D2896	12	<b>8.7</b>	9.6	6.6
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.0</b>	12.3	11.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0834077 **Received** : 08 Sep 2023  
**Lab Number** : 05945438 **Tested** : 08 Sep 2023  
**Unique Number** : 10636050 **Diagnosed** : 08 Sep 2023 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, 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)