



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**TEREX MIXER 221**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LP0001490</b>	LP0000502	LP0000036
Sample Date		Client Info		<b>21 Dec 2023</b>	07 Sep 2023	15 Jun 2023
Machine Age	hrs	Client Info		<b>13320</b>	12680	20474
Oil Age	hrs	Client Info		<b>500</b>	500	500
Filter Age	hrs	Client Info		<b>500</b>	500	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>6</b>	9	5
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>1</b>	0	0
Lead	ppm	ASTM D5185m	>50	<b>2</b>	3	<1
Copper	ppm	ASTM D5185m	>55	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

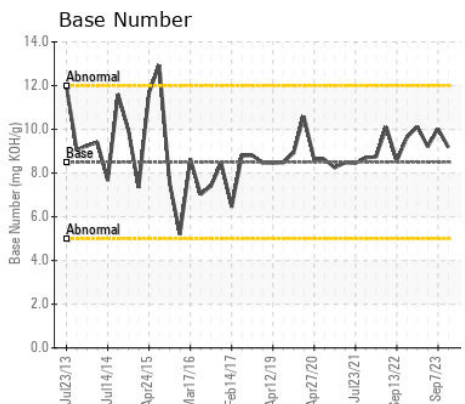
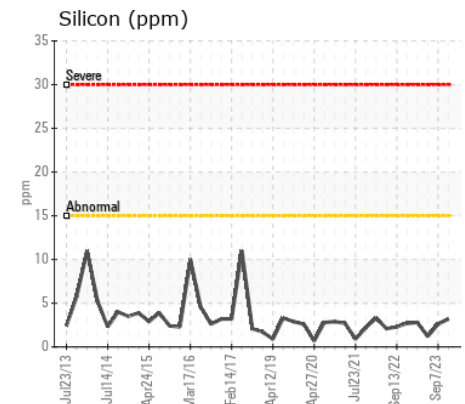
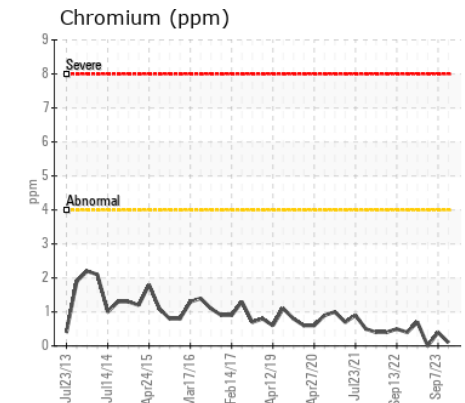
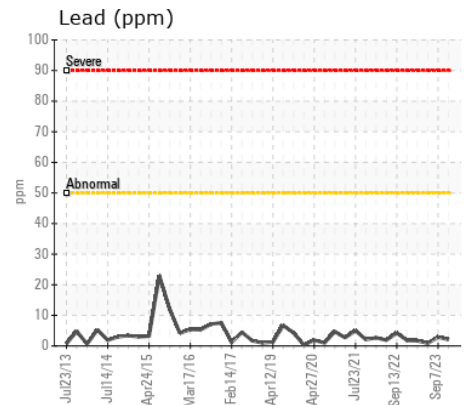
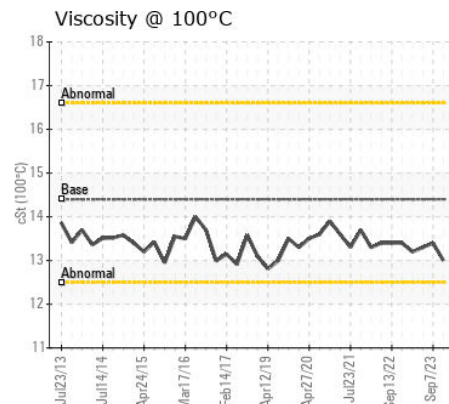
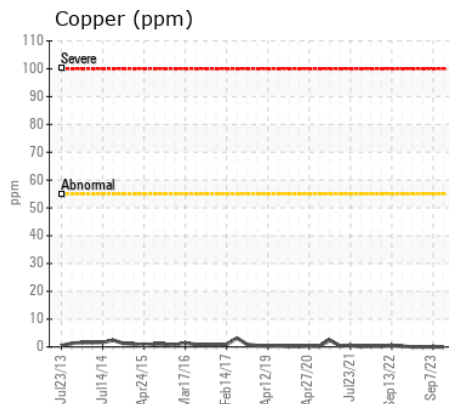
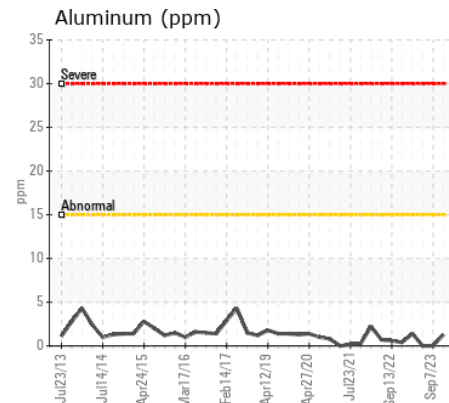
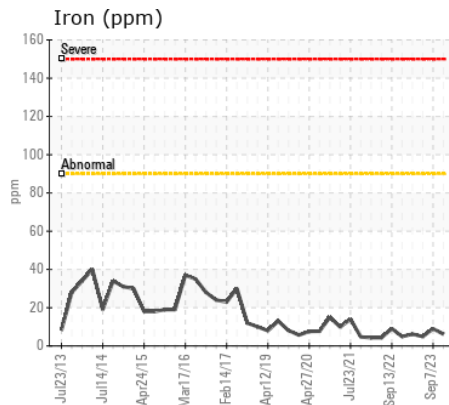
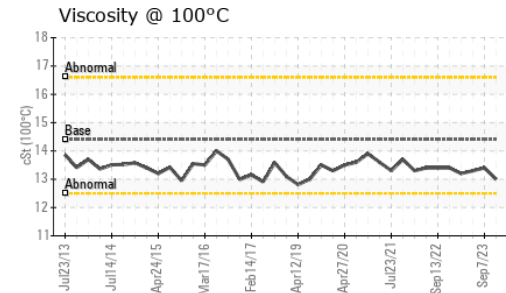
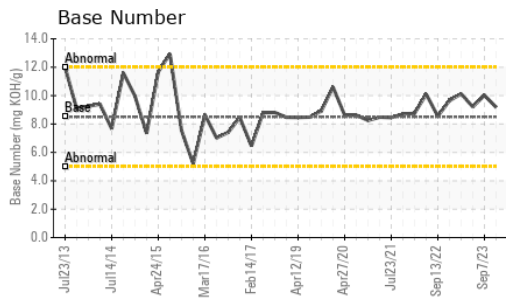
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>3</b>	3	1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	3	0
Fuel		WC Method	>3.0	<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	>6	<b>0.3</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	8.3	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.0</b>	19.7	20.9
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	>158	<b>&lt;1</b>	4	1
Boron	ppm	ASTM D5185m	250	<b>16</b>	8	13
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>36</b>	66	43
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	450	<b>367</b>	1002	338
Calcium	ppm	ASTM D5185m	3000	<b>1919</b>	1348	967
Phosphorus	ppm	ASTM D5185m	1150	<b>1051</b>	1147	620
Zinc	ppm	ASTM D5185m	1350	<b>1218</b>	1432	762
Sulfur	ppm	ASTM D5185m	4250	<b>3557</b>	4186	2372
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.6</b>	15.6	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.18</b>	10.02	9.21
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.0</b>	13.4	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LP0001490 **Received** : 12 Jan 2024  
**Lab Number** : 06060413 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10831795 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

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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)