



# OIL ANALYSIS REPORT

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



Area  
**OKLAHOMA/102/EG - EXCAVATOR**  
Machine Id  
**20.520L [OKLAHOMA^102^EG - EXCAVATOR]**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (9 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0857398</b>	WC0746305	WC0686991
Sample Date		Client Info		<b>28 Nov 2023</b>	09 Jan 2023	28 Jun 2022
Machine Age	hrs	Client Info		<b>4206</b>	3100	2460
Oil Age	hrs	Client Info		<b>500</b>	3100	460
Filter Age	hrs	Client Info		<b>500</b>	300	460
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	>100	<b>6</b>	8	11
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	<1	8
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	1
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

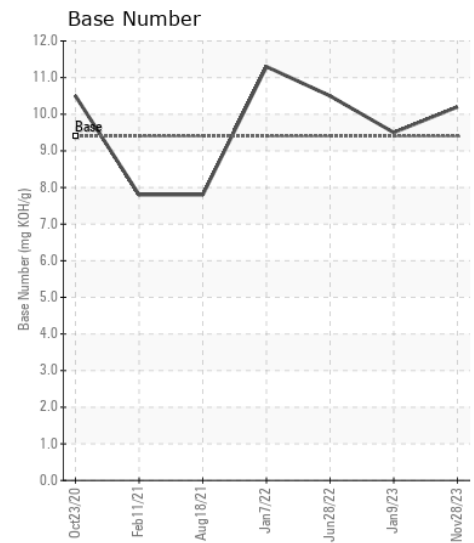
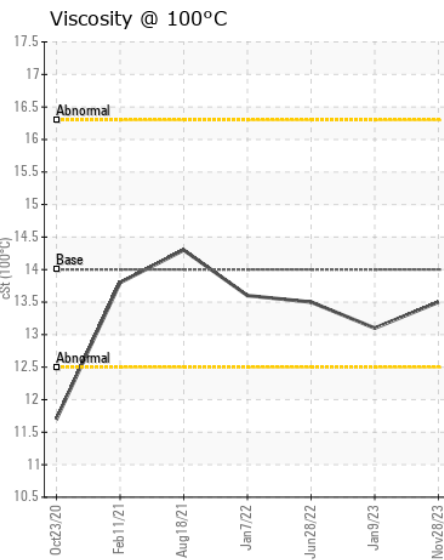
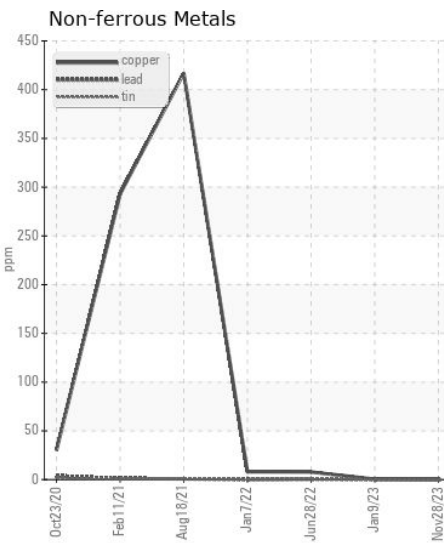
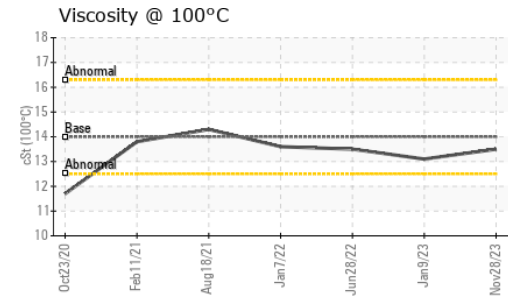
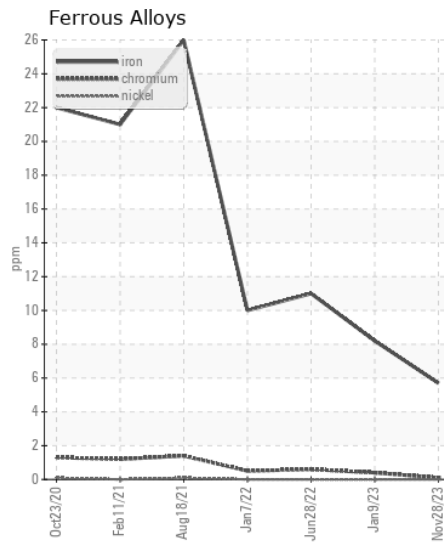
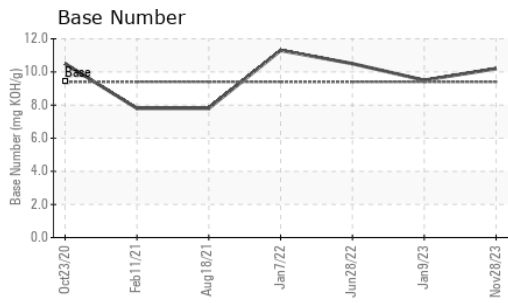
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>12</b>	4	12
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
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>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.2	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.8</b>	7.6	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	22.6	23.9
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		<b>0</b>	9	2
Boron	ppm	ASTM D5185m	0	<b>61</b>	38	42
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>39</b>	38	39
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>523</b>	434	500
Calcium	ppm	ASTM D5185m		<b>1639</b>	1578	1715
Phosphorus	ppm	ASTM D5185m		<b>777</b>	678	717
Zinc	ppm	ASTM D5185m		<b>948</b>	826	877
Sulfur	ppm	ASTM D5185m		<b>2660</b>	2246	2876
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.3</b>	22.0	21.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>10.2</b>	9.5	10.5
Visc @ 100°C	cSt	ASTM D445	14	<b>13.5</b>	13.1	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0857398 **Received** : 14 Dec 2023  
**Lab Number** : 06034396 **Diagnosed** : 15 Dec 2023  
**Unique Number** : 10789625 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( 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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