

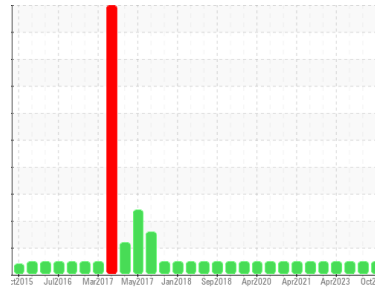


# OIL ANALYSIS REPORT



Area  
**OKLAHOMA/3/EG - EXCAVATOR**  
 Machine Id  
**20.69L [OKLAHOMA^3^EG - EXCAVATOR]**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0857248</b>	WC0778380	WC0821755
Sample Date	Client Info		<b>19 Oct 2023</b>	24 Aug 2023	12 Jul 2023
Machine Age	hrs	Client Info	<b>12365</b>	12115	11857
Oil Age	hrs	Client Info	<b>205</b>	204	11496
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >75	<b>33</b>	28	22
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >54	<b>1</b>	4	4
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185m >240	<b>2</b>	2	2
Tin	ppm	ASTM D5185m >5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>45</b>	48	43
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>44</b>	46	48
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>530</b>	589	521
Calcium	ppm	ASTM D5185m	<b>1699</b>	1941	1891
Phosphorus	ppm	ASTM D5185m	<b>730</b>	848	845
Zinc	ppm	ASTM D5185m	<b>933</b>	1020	1002
Sulfur	ppm	ASTM D5185m	<b>2414</b>	3117	2865

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	<b>6</b>	5	5
Sodium	ppm	ASTM D5185m	<b>5</b>	5	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	1

## INFRA-RED

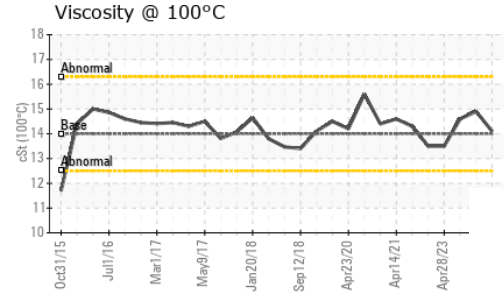
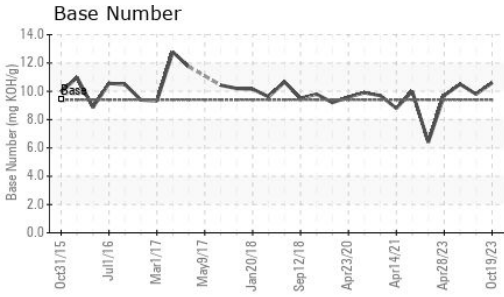
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.7</b>	2.7	2.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.6</b>	12.5	12.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>27.2</b>	30.0	29.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>24.4</b>	25.7	26.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	<b>10.6</b>	9.8	10.5



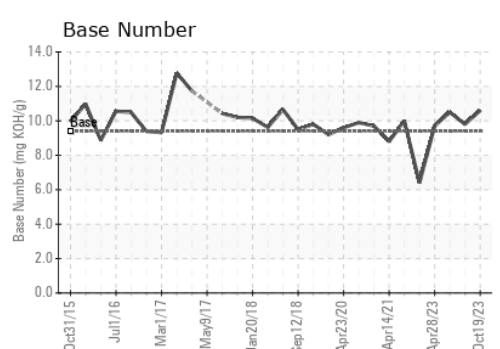
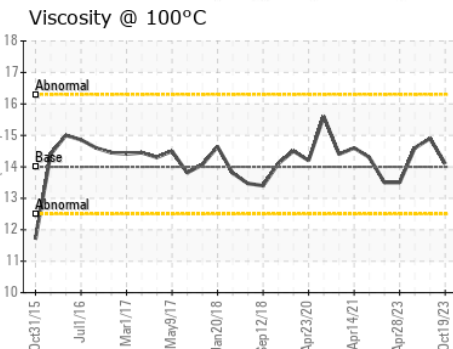
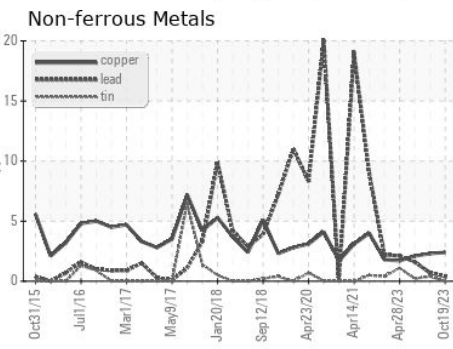
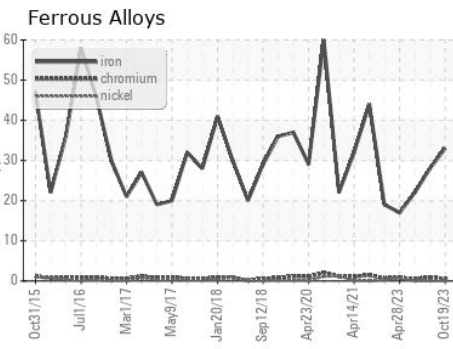
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 14	<b>14.1</b>	14.9	14.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0857248 **Received** : 03 Nov 2023  
**Lab Number** : **05997754** **Diagnosed** : 06 Nov 2023  
**Unique Number** : 10726114 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: DOUG KING  
 doug.king@sherwood.net  
 T: (316)617-3161  
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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)