



# OIL ANALYSIS REPORT

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

Area  
**OKLAHOMA/102/EG - CRANE**  
Machine Id  
**22.67L [OKLAHOMA^102^EG - CRANE]**  
Component  
**Hydraulic System**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0606231</b>	WC0465348	WCCF3957
Sample Date		Client Info		<b>12 Aug 2021</b>	02 Jun 2020	09 Apr 2018
Machine Age	hrs	Client Info		<b>5074</b>	4160	2932
Oil Age	hrs	Client Info		<b>914</b>	1000	0
Filter Age	hrs	Client Info		<b>0</b>	1000	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ATTENTION

## WEAR

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>1</b>	1	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>75	<b>▲ 97</b>	▲ 90	61
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	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

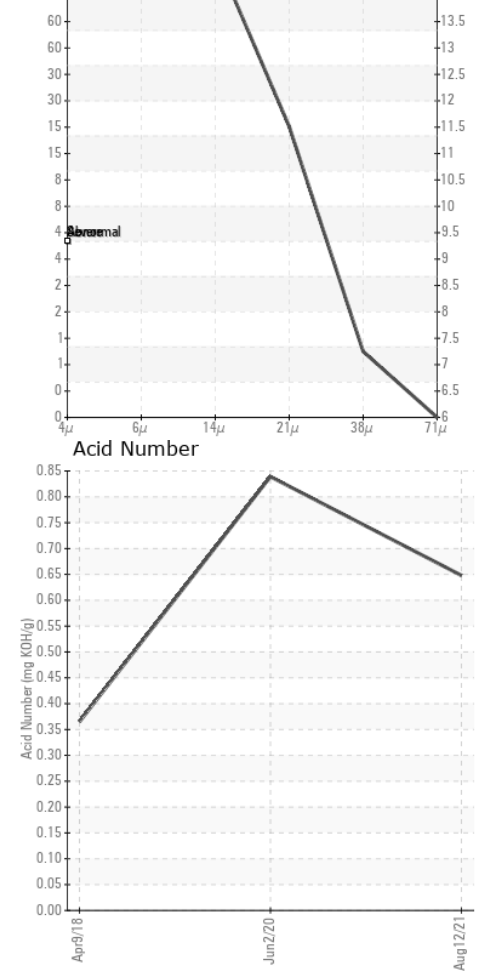
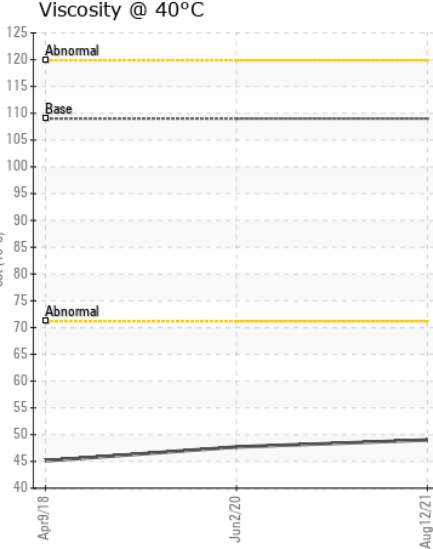
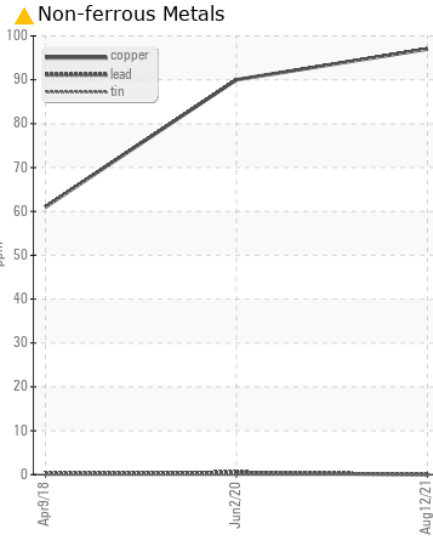
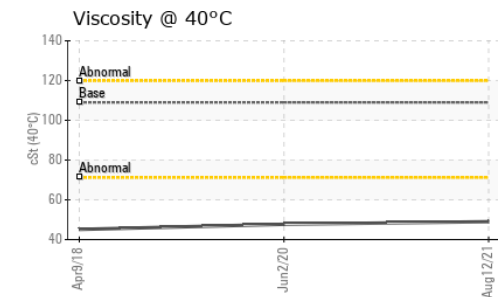
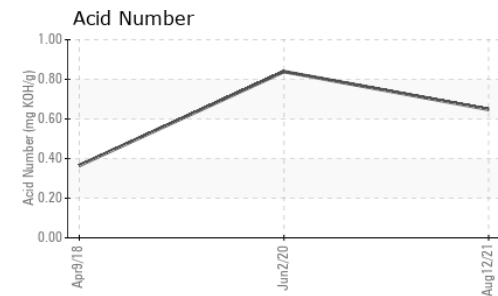
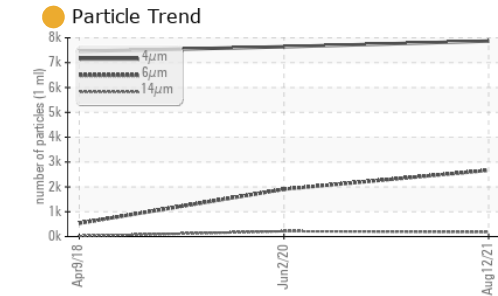
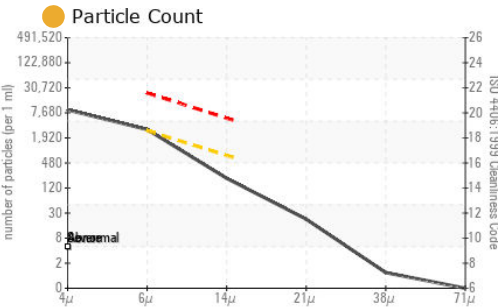
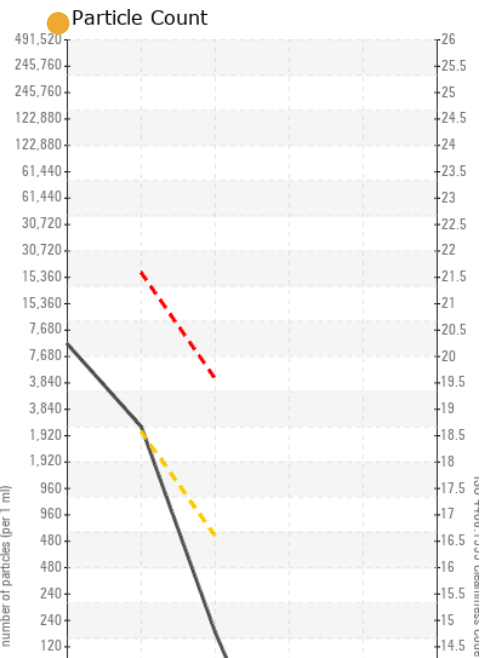
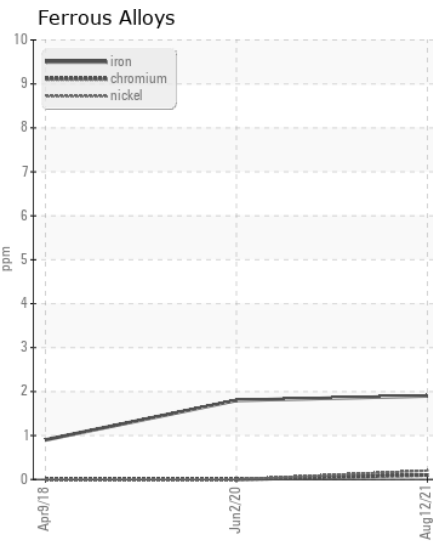
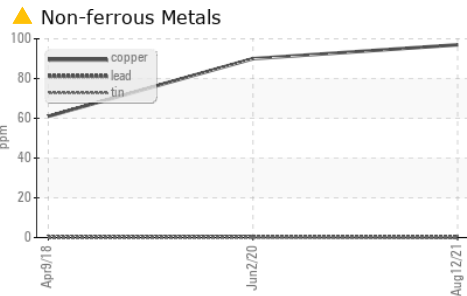
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>7</b>	6	<1
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	<1	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>7870</b>	7640	7458
Particles >6µm		ASTM D7647	>2500	<b>● 2667</b>	1906	536
Particles >14µm		ASTM D7647	>640	<b>181</b>	215	21
Particles >21µm		ASTM D7647	>160	<b>19</b>	58	17
Particles >38µm		ASTM D7647	>40	<b>1</b>	3	11
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	3
Oil Cleanliness		ISO 4406 (c)	>-/18/16	<b>● 20/19/15</b>	20/18/15	20/16/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	1	0
Boron	ppm	ASTM D5185m	0	<b>77</b>	96	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>39</b>	11	5
Calcium	ppm	ASTM D5185m		<b>2440</b>	2339	16
Phosphorus	ppm	ASTM D5185m		<b>881</b>	814	294
Zinc	ppm	ASTM D5185m		<b>1079</b>	1050	352
Sulfur	ppm	ASTM D5185m		<b>4940</b>	3960	3766
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.648</b>	0.839	0.365
Visc @ 40°C	cSt	ASTM D445	109	<b>49.0</b>	● 47.7	● 45.12



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0606231  
**Lab Number** : 05332674  
**Unique Number** : 9631672  
**Test Package** : MOBCE  
**Received** : 23 Aug 2021  
**Tested** : 24 Aug 2021  
**Diagnosed** : 24 Aug 2021 - Jonathan Hester

**SHERWOOD CONSTRUCTION CO INC**  
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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)