



# OIL ANALYSIS REPORT

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



Area  
**OKLAHOMA/102/EG - BACKHOE LOADER**  
Machine Id  
**53.513L [OKLAHOMA^102^EG - BACKHOE LOADER]**  
Component  
**Front Right Final Drive**  
Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition. ( Customer Sample Comment: 5634 hours )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0864413</b>	WC0603254	WC0622950
Sample Date		Client Info		<b>03 May 2024</b>	17 Feb 2023	21 Sep 2021
Machine Age	hrs	Client Info		<b>5634</b>	5700	3420
Oil Age	hrs	Client Info		<b>5634</b>	2280	500
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	SEVERE

## WEAR

Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>800	<b>171</b>	241	424
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	3	5
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	3
Titanium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>75	<b>2</b>	4	4
Lead	ppm	ASTM D5185m	>10	<b>▲ 58</b>	▲ 76	▲ 153
Copper	ppm	ASTM D5185m	>75	<b>▲ 575</b>	▲ 969	▲ 2080
Tin	ppm	ASTM D5185m	>8	<b>▲ 65</b>	▲ 109	▲ 225
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

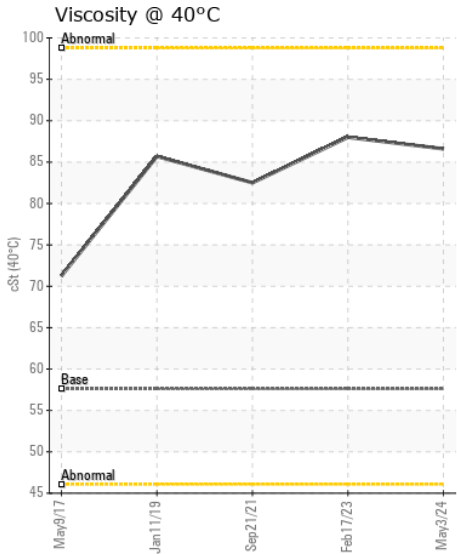
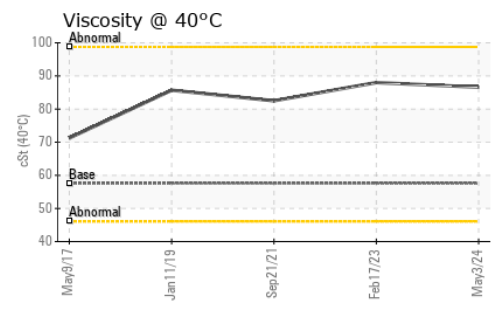
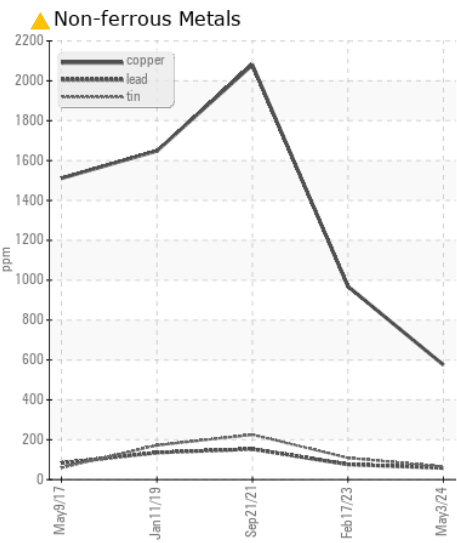
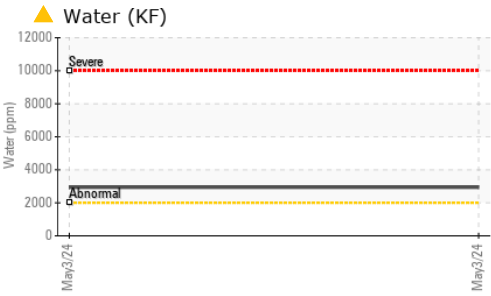
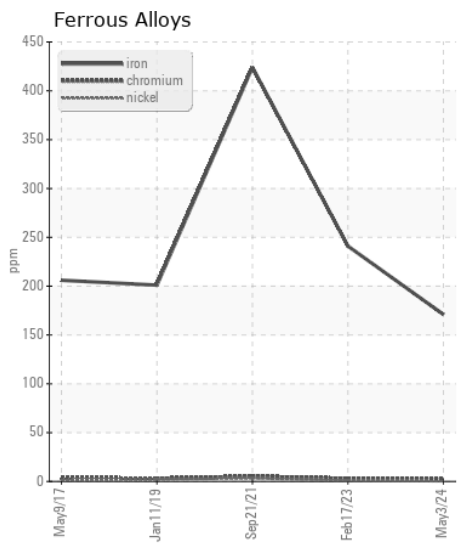
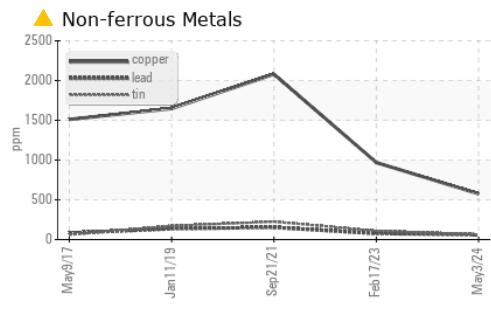
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>400	<b>18</b>	19	26
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	7
Water	%	ASTM D6304	>0.2	<b>▲ 0.294</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 2940</b>	---	---
Silt	scalar	*Visual	NONE	<b>MODER</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>0.2%</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>4</b>	4	8
Boron	ppm	ASTM D5185m		<b>16</b>	33	27
Barium	ppm	ASTM D5185m		<b>0</b>	2	7
Molybdenum	ppm	ASTM D5185m		<b>2</b>	4	8
Manganese	ppm	ASTM D5185m		<b>3</b>	2	5
Magnesium	ppm	ASTM D5185m		<b>17</b>	18	16
Calcium	ppm	ASTM D5185m		<b>3256</b>	2905	3130
Phosphorus	ppm	ASTM D5185m		<b>1006</b>	943	931
Zinc	ppm	ASTM D5185m		<b>1237</b>	1186	1085
Sulfur	ppm	ASTM D5185m		<b>5032</b>	5725	7107
Visc @ 40°C	cSt	ASTM D445	57.6	<b>86.6</b>	88.0	82.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0864413 **Received** : 13 May 2024  
**Lab Number** : 06177535 **Tested** : 15 May 2024  
**Unique Number** : 11023588 **Diagnosed** : 15 May 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: KF )

**SHERWOOD CONSTRUCTION CO INC**  
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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)