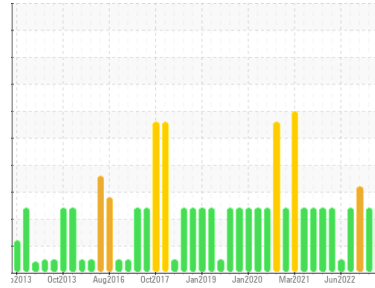




# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**LIPPMAN 05062 NON-DRIVE**

Component  
**Gearbox**  
Fluid  
**ESSO SPARTAN EP 220 (40 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0746930</b>	WC0633900	WC0746940
Sample Date	Client Info		<b>02 Dec 2023</b>	23 Aug 2023	28 Dec 2022
Machine Age	hrs	Client Info	<b>18402</b>	18090	17264
Oil Age	hrs	Client Info	<b>312</b>	375	315
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>162</b>	123	▲ 238
Chromium	ppm	ASTM D5185m >10	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185m >10	<b>&lt;1</b>	2	0
Titanium	ppm	ASTM D5185m	<b>2</b>	1	1
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	▲ <b>62</b>	▲ 42	▲ 39
Lead	ppm	ASTM D5185m >50	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m .5	<b>29</b>	27	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>2</b>	1	2
Magnesium	ppm	ASTM D5185m 0	<b>4</b>	3	2
Calcium	ppm	ASTM D5185m 1.7	<b>18</b>	21	11
Phosphorus	ppm	ASTM D5185m 250	<b>208</b>	217	175
Zinc	ppm	ASTM D5185m .3	<b>&lt;1</b>	6	8
Sulfur	ppm	ASTM D5185m	<b>10195</b>	11357	12253

## CONTAMINANTS

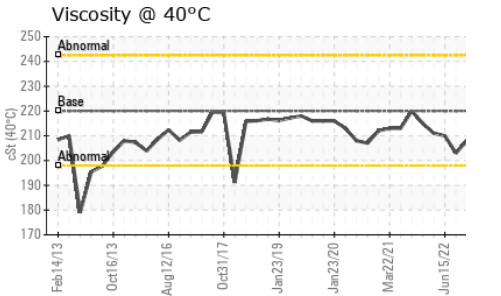
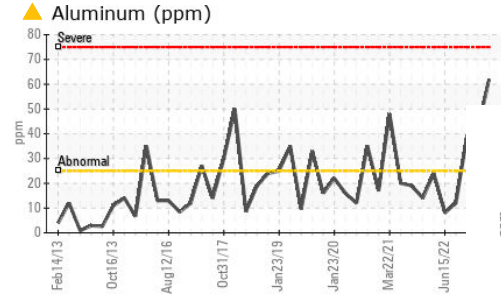
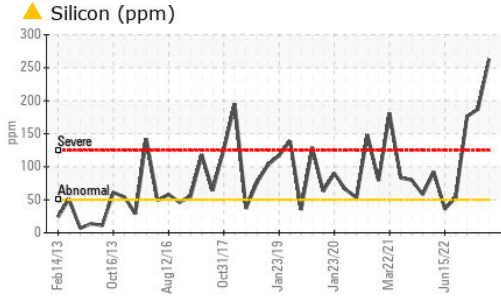
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	▲ <b>263</b>	▲ 187	▲ 176
Sodium	ppm	ASTM D5185m	<b>20</b>	10	11
Potassium	ppm	ASTM D5185m >20	<b>31</b>	22	17

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	MODER	LIGHT
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>MODER</b>	NONE	LIGHT
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
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG



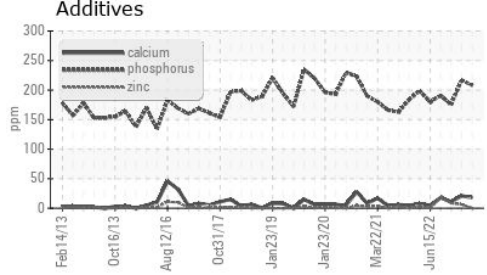
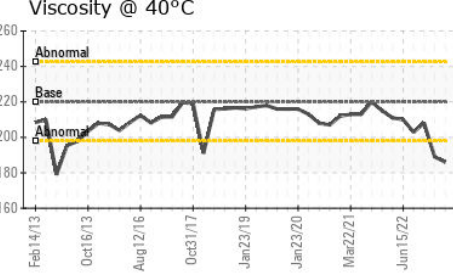
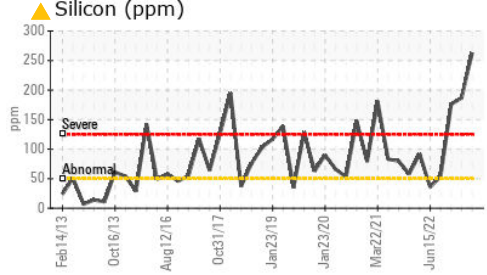
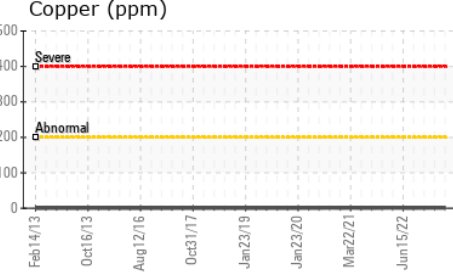
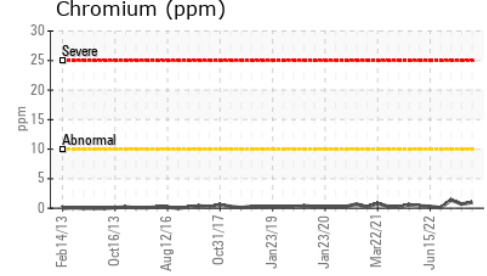
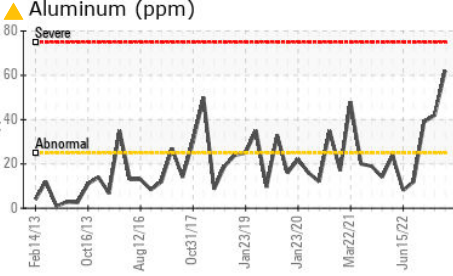
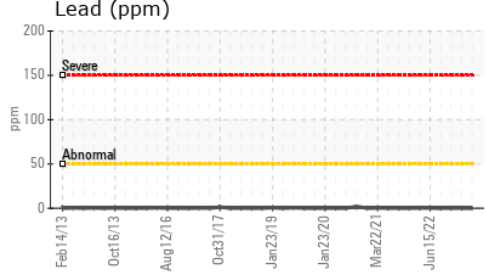
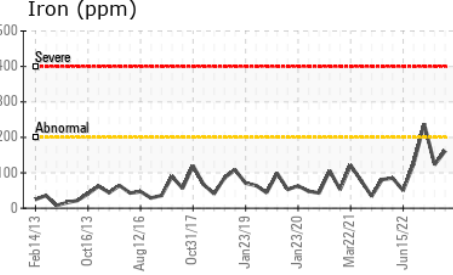
# OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	<b>186</b>	189	208

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0746930 **Received** : 06 Dec 2023  
**Lab Number** : **06026813** **Diagnosed** : 08 Dec 2023  
**Unique Number** : 10776604 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1

**WAKE STONE CORPORATION - BATTLEBORO**  
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 BATTLEBORO, NC  
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 waynehill@wakestonecorp.com  
 T:  
 F:

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)