



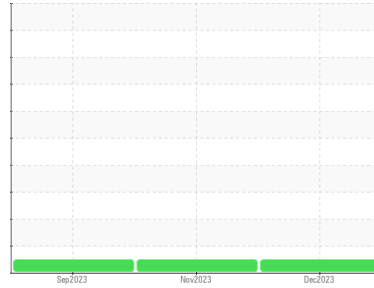
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Bridgewater**  
 Machine Id  
**CATERPILLAR 5642**  
 Component  
**Rear Differential**  
 Fluid  
**TDTO FLUID SAE 30 (--- QTS)**



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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0875301</b>	WC0864883	WC0850646
Sample Date	Client Info		<b>23 Dec 2023</b>	09 Nov 2023	14 Sep 2023
Machine Age	hrs	Client Info	<b>2007</b>	1578	1072
Oil Age	hrs	Client Info	<b>500</b>	1578	0
Oil Changed		Client Info	<b>N/A</b>	N/A	Not Changd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	<b>73</b>	81	71
Chromium	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >30	<b>2</b>	3	1
Lead	ppm	ASTM D5185m >13	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >103	<b>49</b>	50	50
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 37	<b>0</b>	<1	2
Barium	ppm	ASTM D5185m 7	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 5	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>2</b>	2	1
Magnesium	ppm	ASTM D5185m 40	<b>11</b>	12	8
Calcium	ppm	ASTM D5185m 2650	<b>2828</b>	2947	2914
Phosphorus	ppm	ASTM D5185m 1050	<b>987</b>	1054	1064
Zinc	ppm	ASTM D5185m 1075	<b>1189</b>	1270	1207
Sulfur	ppm	ASTM D5185m 5750	<b>6011</b>	6374	7015

## CONTAMINANTS

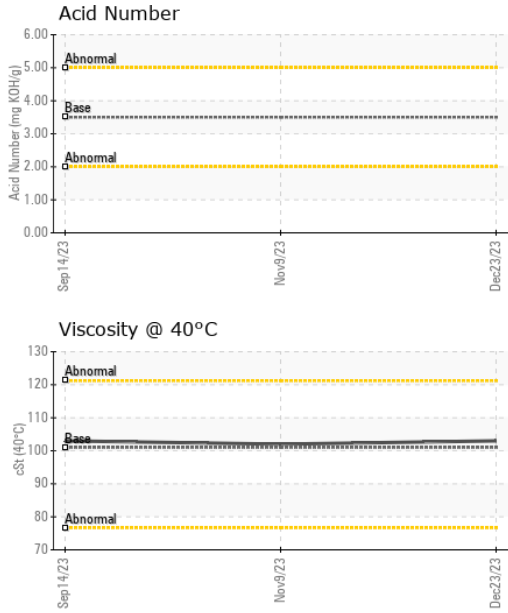
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	<b>5</b>	6	6
Sodium	ppm	ASTM D5185m	<b>3</b>	4	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 3.50	<b>1.94</b>	---	---



# OIL ANALYSIS REPORT

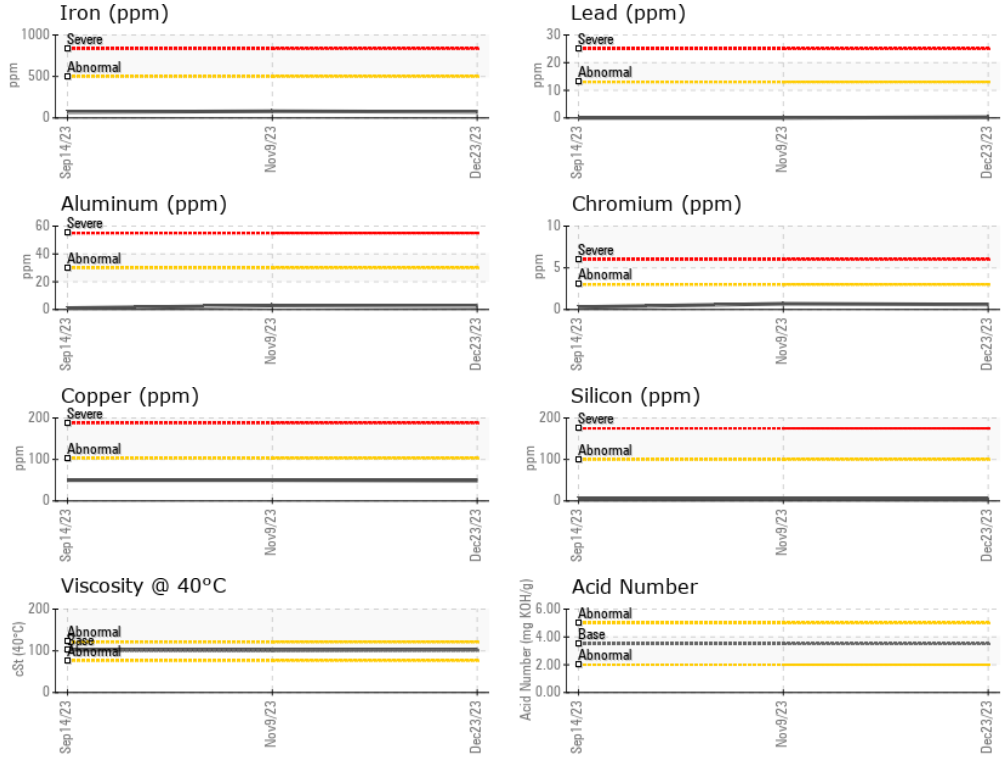


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 101	<b>103</b>	102	103

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.** : WC0875301 **Recieved** : 08 Jan 2024  
**Lab Number** : 06054066 **Diagnosed** : 09 Jan 2024  
**Unique Number** : 10820015 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

**INTERSTATE WASTE-BRIDGewater**  
 15 POLHEMUS LANE  
 BRIDGEwater, NJ  
 US 08807  
 Contact: PABLO CHARDON  
 PChardon@interstatewaste.com  
 T: (609)366-7431  
 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)