



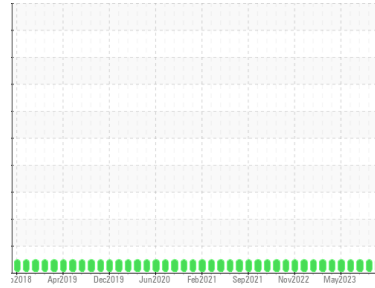
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**CATERPILLAR D10T 15105050 (S/N CATOD10TCRJG01497)**  
Component  
**Transmission (Manual)**  
Fluid  
**RP CMT 50 (--- GAL)**



## 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>RP0033738</b>	RP0033743	RP0033698
Sample Date	Client Info		<b>21 Sep 2023</b>	25 Aug 2023	13 Jul 2023
Machine Age	hrs	Client Info	<b>75411</b>	75191	74726
Oil Age	hrs	Client Info	<b>2846</b>	2621	2161
Oil Changed	Client Info		<b>Changed</b>	N/A	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<b>12</b>	10	10
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>7	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	2	1
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>225	<b>7</b>	6	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
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		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	2	<1
Molybdenum	ppm	ASTM D5185m		<b>1</b>	1	1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>11</b>	11	15
Calcium	ppm	ASTM D5185m		<b>3378</b>	3517	3737
Phosphorus	ppm	ASTM D5185m		<b>1077</b>	1095	1180
Zinc	ppm	ASTM D5185m		<b>1276</b>	1263	1404

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>125	<b>7</b>	6	7
Sodium	ppm	ASTM D5185m		<b>4</b>	0	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Water	%	ASTM D6304	>0.1	<b>0.029</b>	0.024	0.020
ppm Water	ppm	ASTM D6304	>1000	<b>291.6</b>	245.7	207.3

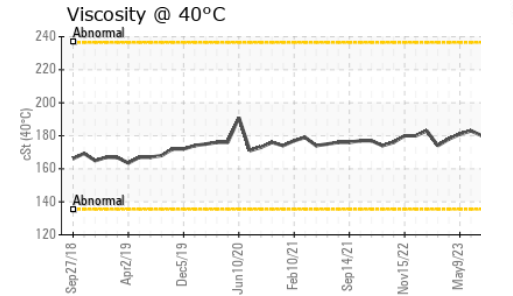
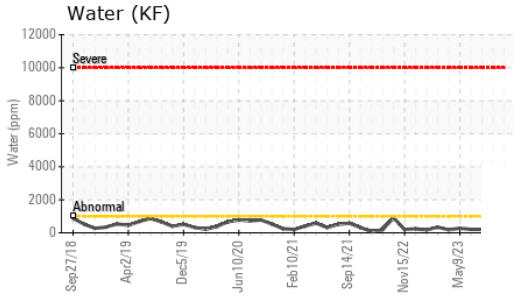
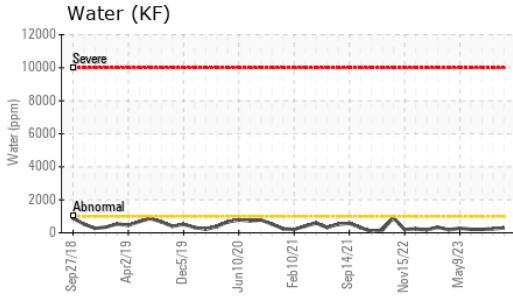
## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.98</b>	0.98	1.17

## VISUAL

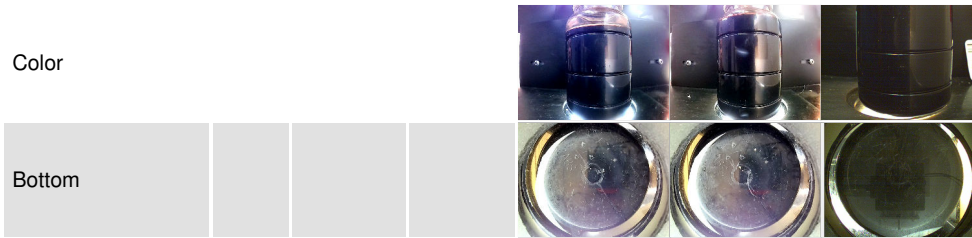
	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

# OIL ANALYSIS REPORT

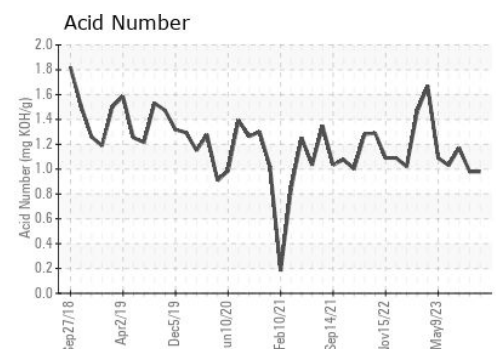
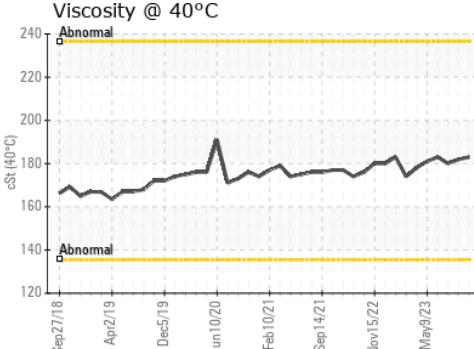
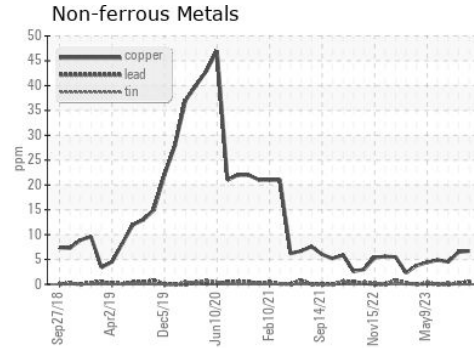
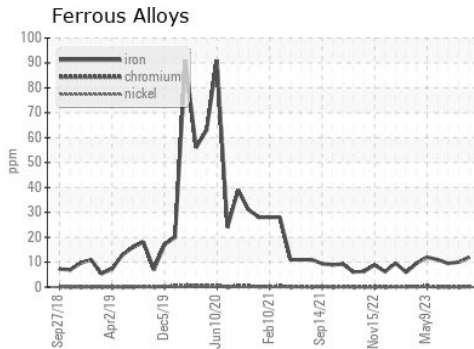


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		<b>183</b>	182	180

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0033738 **Received** : 28 Sep 2023  
**Lab Number** : **05963644** **Diagnosed** : 29 Sep 2023  
**Unique Number** : 10670195 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**NRG TEXAS LLC**  
 3784 FM 39 SOUTH  
 JEWETT, TX  
 US 75846  
 Contact: JURGEN THOMPSON  
 JThompson@ecomaterial.com  
 T: (903)626-9528  
 F: (903)626-9772

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)