

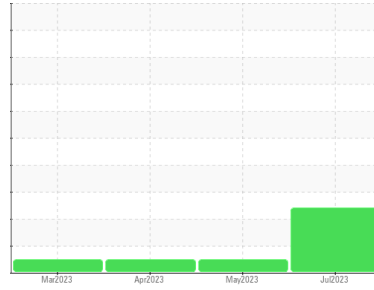


# PROBLEM SUMMARY



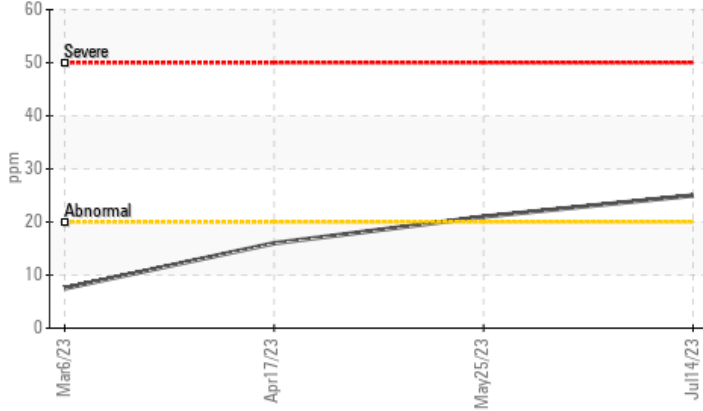
Machine Id  
**CATERPILLAR D6 10036 (S/N KEW01123)**  
 Component  
**Hydraulic System**  
 Fluid  
**NOT GIVEN (--- GAL)**

Sample Rating Trend

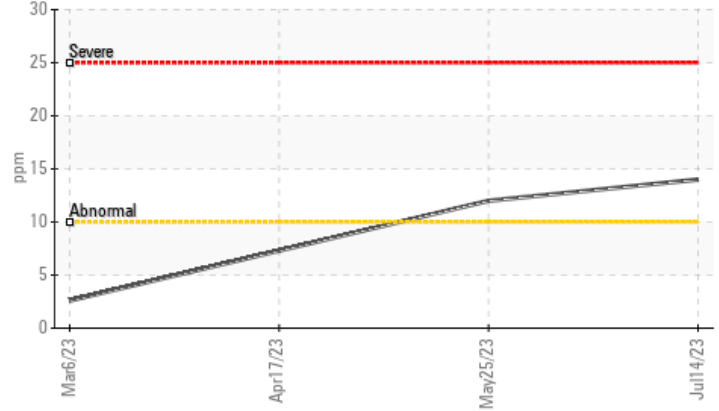


## COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Aluminum (ppm)



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL
Aluminum	ppm	ASTM D5185m	>10	▲ 14	12	7
Silicon	ppm	ASTM D5185m	>20	▲ 25	21	16

Customer Id: TRANEW  
 Sample No.: WC0816316  
 Lab Number: 05905391  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

## HISTORICAL DIAGNOSIS

### 25 May 2023 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 17 Apr 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 06 Mar 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



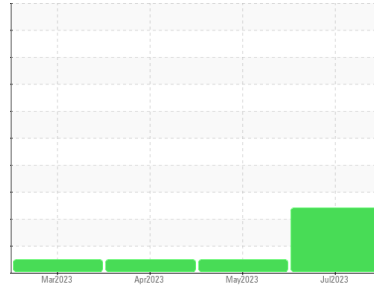


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR D6 10036 (S/N KEW01123)**  
 Component  
**Hydraulic System**  
 Fluid  
**NOT GIVEN (--- GAL)**

Sample Rating Trend



## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. The filter 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 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>WC0816316</b>	WC0816216	WC0797661
Sample Date	Client Info		<b>14 Jul 2023</b>	25 May 2023	17 Apr 2023
Machine Age	hrs	Client Info	<b>2039</b>	1594	1079
Oil Age	hrs	Client Info	<b>2039</b>	1594	1079
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>16</b>	14	10
Chromium	ppm	ASTM D5185m >10	<b>2</b>	2	1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>▲ 14</b>	12	7
Lead	ppm	ASTM D5185m >10	<b>2</b>	<1	0
Copper	ppm	ASTM D5185m >75	<b>19</b>	16	14
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>4</b>	<1	0
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>7</b>	6	4
Calcium	ppm	ASTM D5185m	<b>300</b>	253	153
Phosphorus	ppm	ASTM D5185m	<b>704</b>	737	674
Zinc	ppm	ASTM D5185m	<b>929</b>	968	880
Sulfur	ppm	ASTM D5185m	<b>1936</b>	2195	1713

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>▲ 25</b>	21	16
Sodium	ppm	ASTM D5185m	<b>0</b>	2	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	0

## FLUID CLEANLINESS

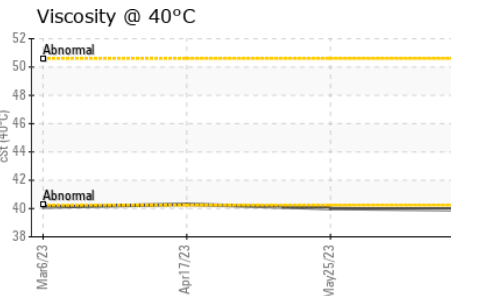
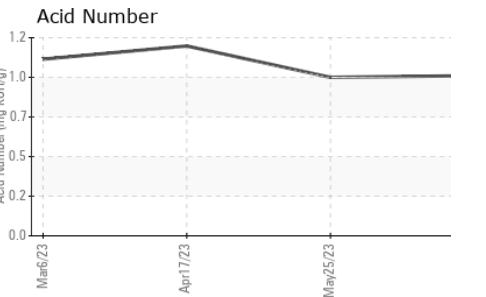
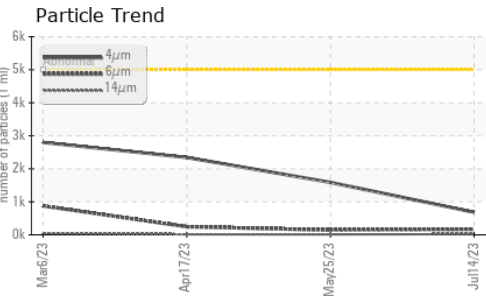
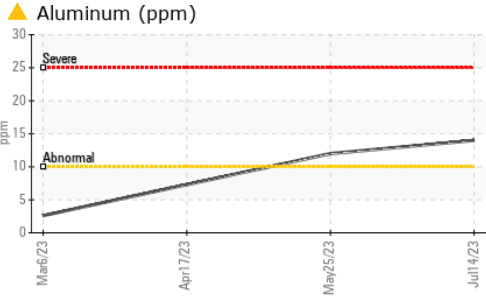
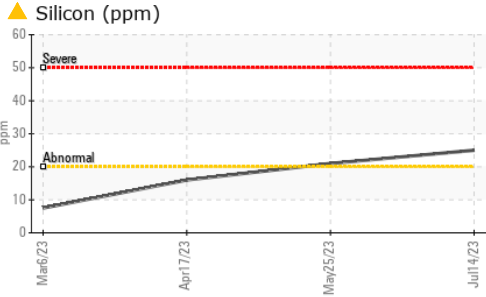
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>684</b>	1588	2343
Particles >6µm	ASTM D7647	>1300	<b>168</b>	144	246
Particles >14µm	ASTM D7647	>160	<b>20</b>	12	15
Particles >21µm	ASTM D7647	>40	<b>5</b>	3	4
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/15/11</b>	18/14/11	18/15/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.97</b>	0.96	1.15



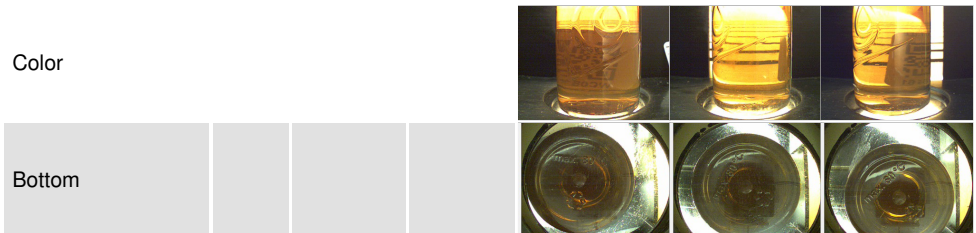
# OIL ANALYSIS REPORT



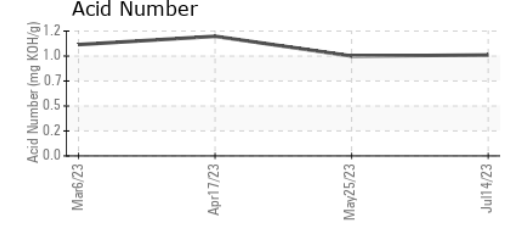
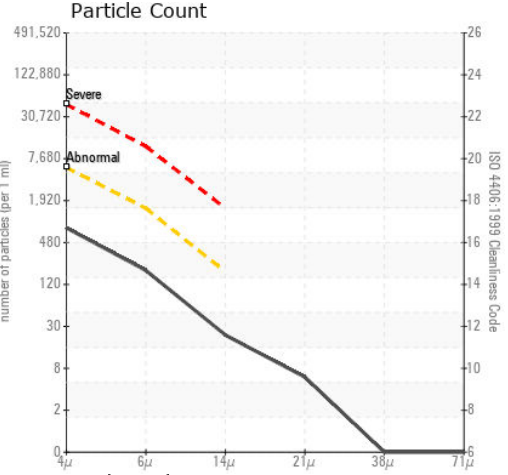
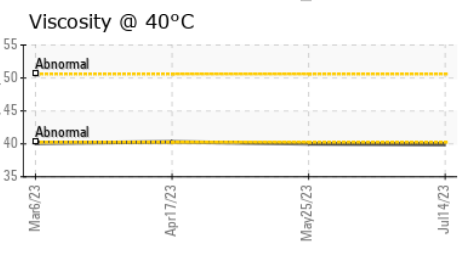
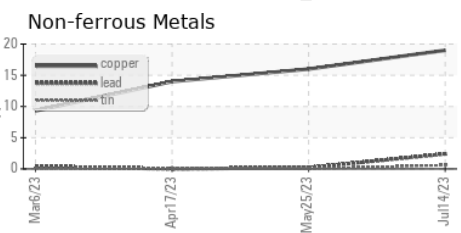
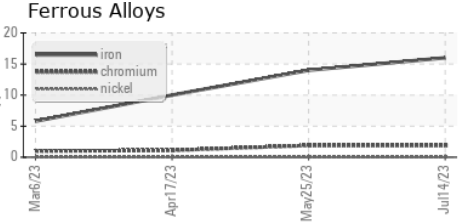
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	39.9	40.0	40.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0816316 **Received** : 24 Jul 2023  
**Lab Number** : 05905391 **Diagnosed** : 26 Jul 2023  
**Unique Number** : 10566747 **Diagnostician** : Don Baldrige  
**Test Package** : CONST

**TRADER CONSTRUCTION CO.**  
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 F: (252)638-4871

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)