

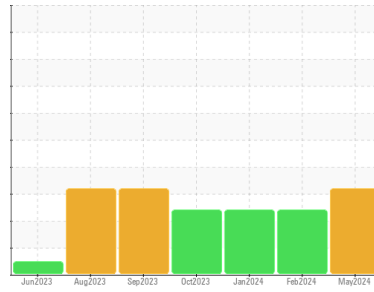


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR D6 LGP 10039 (S/N KEW01125)**  
 Component  
**Hydraulic System**  
 Fluid  
**{not provided} (--- 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 for time on oil.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. 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>WC0913082</b>	WC0879302	WC0888020
Sample Date	Client Info		<b>07 May 2024</b>	21 Feb 2024	16 Jan 2024
Machine Age	hrs	Client Info	<b>3845</b>	3376	2812
Oil Age	hrs	Client Info	<b>3845</b>	3376	2812
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<b>36</b>	31	30
Chromium	ppm	ASTM D5185m	>10	<b>3</b>	2	2
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>2</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>28</b>	24	20
Lead	ppm	ASTM D5185m	>10	<b>3</b>	2	2
Copper	ppm	ASTM D5185m	>75	<b>19</b>	18	17
Tin	ppm	ASTM D5185m	>10	<b>1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>10</b>	5	3
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>12</b>	5	10
Calcium	ppm	ASTM D5185m		<b>527</b>	339	297
Phosphorus	ppm	ASTM D5185m		<b>848</b>	731	732
Zinc	ppm	ASTM D5185m		<b>1036</b>	890	944
Sulfur	ppm	ASTM D5185m		<b>2317</b>	1724	1836

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	<b>53</b>	44	39
Sodium	ppm	ASTM D5185m		<b>2</b>	4	<1
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	2	4

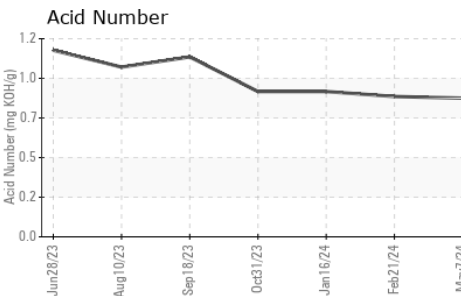
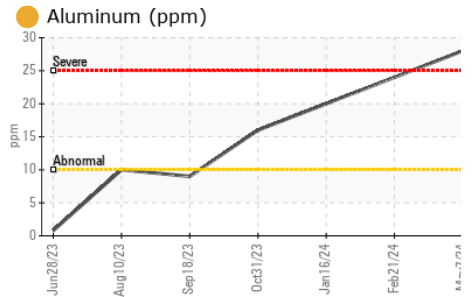
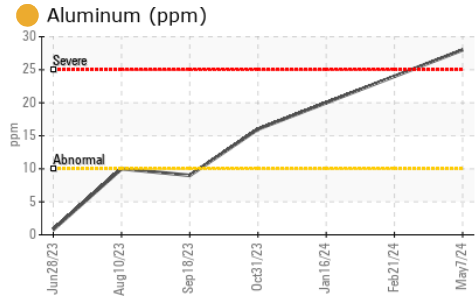
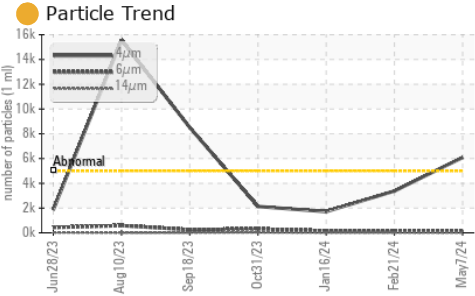
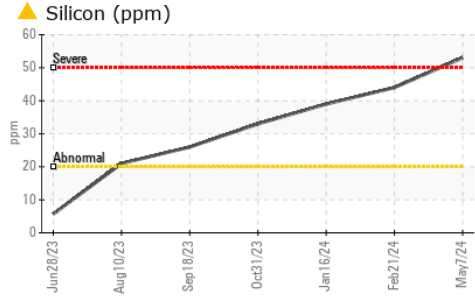
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>6087</b>	3377	1714
Particles >6µm	ASTM D7647	>1300	<b>170</b>	121	159
Particles >14µm	ASTM D7647	>160	<b>7</b>	10	11
Particles >21µm	ASTM D7647	>40	<b>3</b>	2	3
Particles >38µm	ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>20/15/10</b>	19/14/10	18/14/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.84</b>	0.85	0.88

# OIL ANALYSIS REPORT

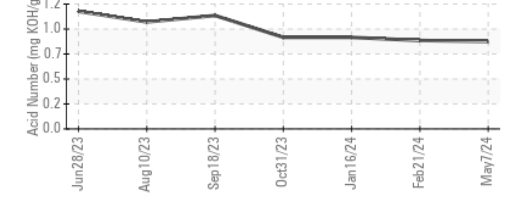
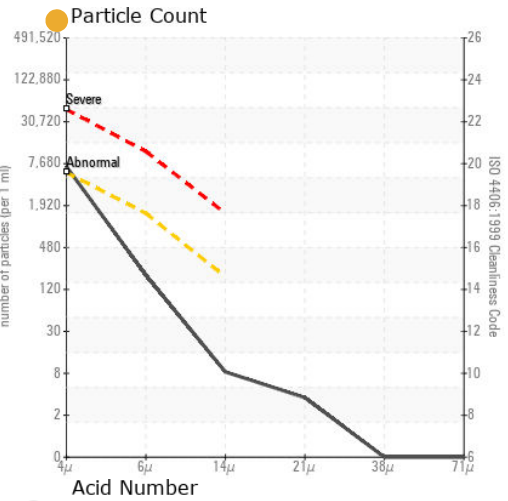
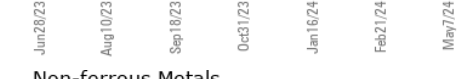
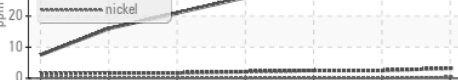


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	39.8	40.2	40.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0913082  
**Lab Number** : 06180107  
**Unique Number** : 11031433  
**Test Package** : CONST  
**Received** : 15 May 2024  
**Tested** : 16 May 2024  
**Diagnosed** : 17 May 2024 - Don Baldrige

**TRADER CONSTRUCTION CO.**  
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 NEW BERN, NC  
 US 28563  
 Contact: MIKE WYATT  
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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)