

# **PROBLEM SUMMARY**

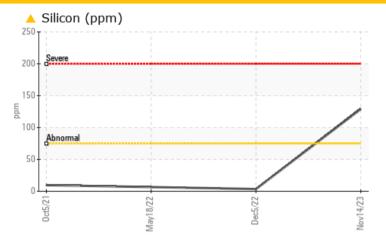
# Sample Rating Trend DIRT

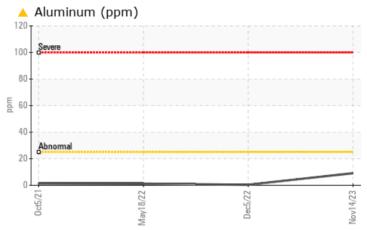


# CATERPILLAR 308 8371

Component
Right Final Drive
Fluid
NOT GIVEN (--- GAL)

# **COMPONENT CONDITION SUMMARY**





# 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. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC	TEST R	ESULTS				
Sample Status				ABNORMAL	NORMAL	NORMAL
Aluminum	ppm	ASTM D5185m	>25	<u> </u>	<1	1
Silicon	ppm	ASTM D5185m	>75	<b>129</b>	4	7

Customer Id: TRANEW Sample No.: WC0879368 Lab Number: 06012816 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data: Sean Felton +1 919-379-4092 sfelton@wearcheckusa.com

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

### **RECOMMENDED ACTIONS**

Action	Status	Date	Done By	Description
Information Required			?	Please specify the brand, type, and viscosity of the oil on your next sample.
Check Dirt Access			?	We advise that you check all areas where dirt can enter the system.

# HISTORICAL DIAGNOSIS

### 05 Dec 2022 Diag: Sean Felton





Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.



# 18 May 2022 Diag: Don Baldridge

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



# 05 Oct 2021 Diag: Doug Bogart

NORMAL



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





# **OIL ANALYSIS REPORT**

# Sample Rating Trend

# DIRT DIRT



CATERPILLAR 308 8371

Right Final Drive Fluid NOT GIVEN (--- 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. Please specify the brand, type, and viscosity of the oil on your next sample.

# 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.

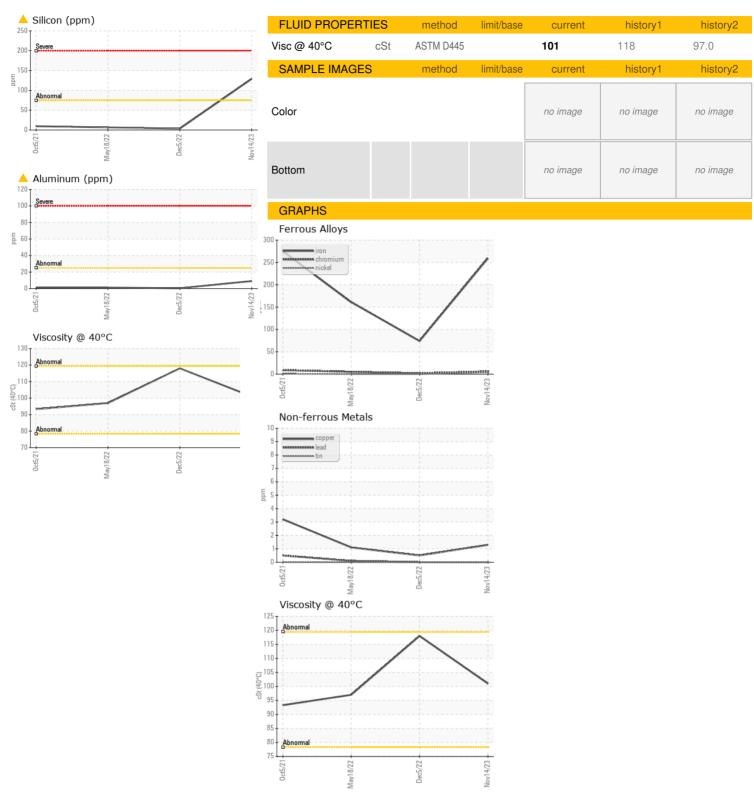
		0ct202	May2022	Dec2022 N	pv2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0879368	WC0755137	WC0693286
Sample Date		Client Info		14 Nov 2023	05 Dec 2022	18 May 2022
Machine Age	hrs	Client Info		1784	1272	941
Oil Age	hrs	Client Info		512	680	349
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	259	74	161
Chromium	ppm	ASTM D5185m	>10	6	2	5
Nickel	ppm	ASTM D5185m	>10	4	0	0
Titanium	ppm	ASTM D5185m		2	0	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	<u>^</u> 9	<1	1
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>50	1	<1	1
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m	20	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		160	212	152
				0	0	0
Barium						
	ppm	ASTM D5185m		_1		
Molybdenum	ppm	ASTM D5185m		<1 3	<1	3
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m		3	<1	3
Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		3	<1 1 2	3 3 3
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 3 215	<1 1 2 517	3 3 3 827
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 3 215 423	<1 1 2 517 810	3 3 3 827 471
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 3 215 423 81	<1 1 2 517 810 168	3 3 3 827 471 168
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/hacea	3 3 215 423 81 1790	<1 1 2 517 810 168 3333	3 3 3 827 471 168 1721
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	3 3 215 423 81 1790 current	<1 1 2 517 810 168 3333 history1	3 3 3 827 471 168 1721 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m		3 3 215 423 81 1790 current  129	<1 1 2 517 810 168 3333 history1	3 3 3 827 471 168 1721 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m	>75	3 3 215 423 81 1790  current  129 0	<1 1 2 517 810 168 3333 history1 4	3 3 3 827 471 168 1721 history2 7
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m  METhod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20	3 3 215 423 81 1790 current  129 0 5	<1 1 2 517 810 168 3333 history1 4 1	3 3 3 827 471 168 1721 history2 7 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>75 >20 limit/base	3 3 215 423 81 1790 current  ▲ 129 0 5 current	<1 1 2 517 810 168 3333 history1 4 1 2 history1	3 3 3 827 471 168 1721 history2 7 <1 4 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m Wethod *Visual	>75 >20 limit/base NONE	3 3 215 423 81 1790 current  ▲ 129 0 5 current LIGHT	<1 1 2 517 810 168 3333 history1 4 1 2 history1 LIGHT	3 3 3 827 471 168 1721 history2 7 <1 4 history2 MODER
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  METhod ASTM D5185m  METhod  ASTM D5185m  METhod  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  Wethod  *Visual	>75 >20 limit/base NONE NONE	3 3 215 423 81 1790 current  ▲ 129 0 5 current LIGHT NONE	<1 1 2 517 810 168 3333 history1 4 1 2 history1 LIGHT NONE	3 3 3 827 471 168 1721 history2 7 <1 4 history2 MODER NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium  VISUAL White Metal Yellow Metal Precipitate	ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m  Method *Visual *Visual	>75 >20 limit/base NONE NONE NONE	3 3 215 423 81 1790 current  ▲ 129 0 5 current LIGHT NONE NONE	<1 1 2 517 810 168 3333 history1 4 1 2 history1 LIGHT NONE NONE	3 3 3 827 471 168 1721 history2 7 <1 4 history2 MODER NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m  *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE	3 3 215 423 81 1790 current  ▲ 129 0 5 current LIGHT NONE NONE NONE	<1 1 2 517 810 168 3333 history1 4 1 2 history1 LIGHT NONE NONE NONE	3 3 3 827 471 168 1721 history2 7 <1 4 history2 MODER NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m  *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE NONE NONE	3 3 215 423 81 1790 current  ▲ 129 0 5 current LIGHT NONE NONE NONE NONE	<1 1 2 517 810 168 3333 history1 4 1 2 history1 LIGHT NONE NONE NONE NONE	3 3 3 827 471 168 1721 history2 7 <1 4 history2 MODER NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium  VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m  *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	3 3 215 423 81 1790 current  ▲ 129 0 5 current LIGHT NONE NONE NONE NONE NONE NONE	<1 1 2 517 810 168 3333 history1 4 1 2 history1 LIGHT NONE NONE NONE NONE NONE	3 3 3 827 471 168 1721 history2 7 <1 4 history2 MODER NONE NONE NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium  VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m  ASTM D5185m  *Visual	>75 >20  limit/base  NONE  NONE	3 3 215 423 81 1790 current  ▲ 129 0 5 current LIGHT NONE NONE NONE NONE NONE NONE NONE NON	<1 1 2 517 810 168 3333 history1 4 1 2 history1 LIGHT NONE NONE NONE NONE NONE NONE NONE NON	3 3 3 827 471 168 1721 history2 7 <1 4 history2 MODER NONE NONE NONE NONE NONE NONE NONE NO
Silicon Sodium Potassium	ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m  *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	3 3 215 423 81 1790 current  ▲ 129 0 5 current LIGHT NONE NONE NONE NONE NONE NONE	<1 1 2 517 810 168 3333 history1 4 1 2 history1 LIGHT NONE NONE NONE NONE NONE	3 3 3 827 471 168 1721 history2 7 <1 4 history2 MODER NONE NONE NONE NONE NONE NONE NONE

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# **OIL ANALYSIS REPORT**







Laboratory Sample No. Lab Number **Unique Number** 

: WC0879368 : 06012816 : 10751960 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

: 20 Nov 2023 : 22 Nov 2023 Diagnostician : Sean Felton

TRADER CONSTRUCTION CO.

PO DRAWER 1578 NEW BERN, NC US 28563

Contact: MIKE WYATT mwyatt@traderconstruction.com

T: (252)633-1399 F: (252)638-4871

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)