



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**Off Road**  
Machine Id  
**CATERPILLAR 730 AD410 (S/N OAGF00691)**  
Component  
**Hydraulic System**  
Fluid  
**DURALENE Trans-Flo UTF (16 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0675152</b>	WC0395390	WCMCF31843
Sample Date		Client Info		<b>10 Nov 2023</b>	07 May 2020	14 Oct 2017
Machine Age	hrs	Client Info		<b>17605</b>	16824	15889
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>3</b>	2	▲ 32
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	<1	2
Lead	ppm	ASTM D5185m	>10	<b>2</b>	1	0
Copper	ppm	ASTM D5185m	>75	<b>3</b>	4	12
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

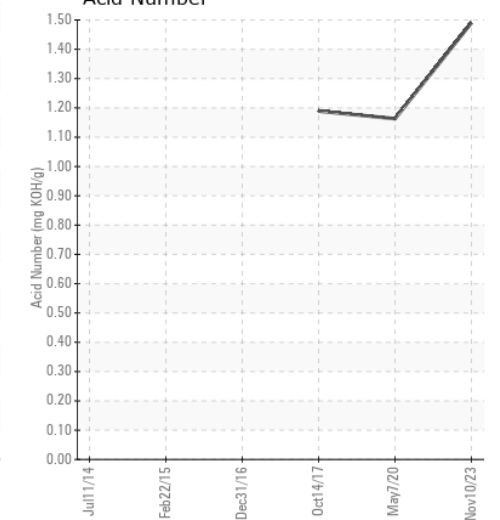
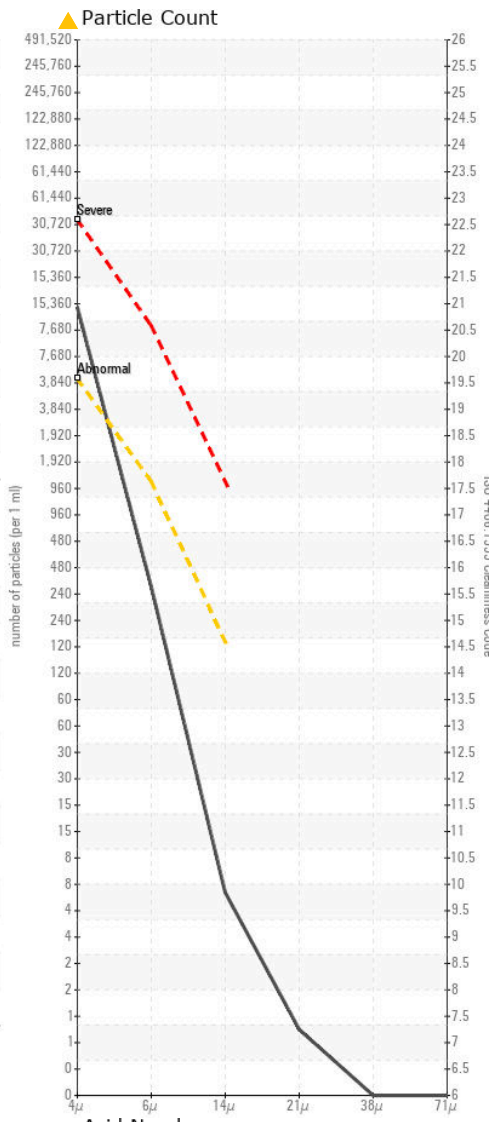
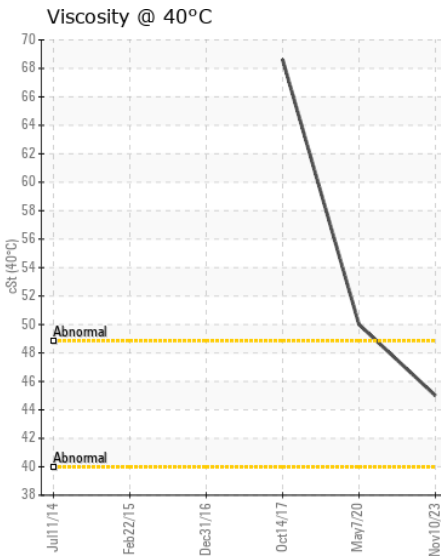
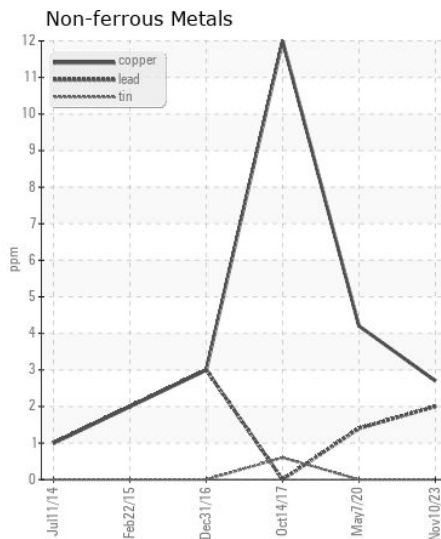
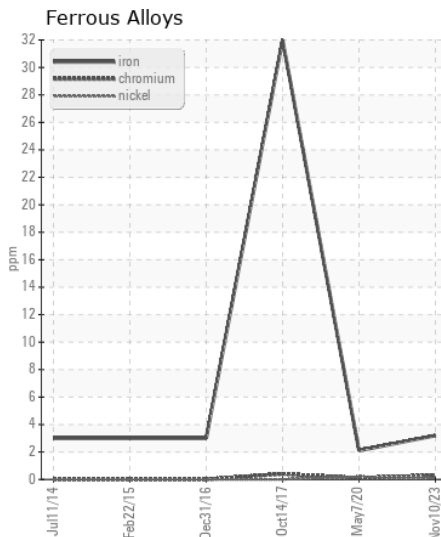
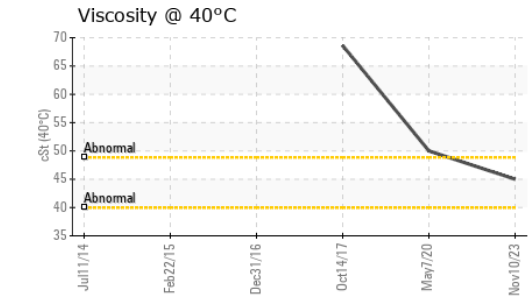
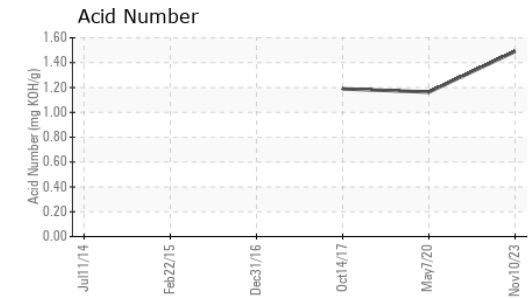
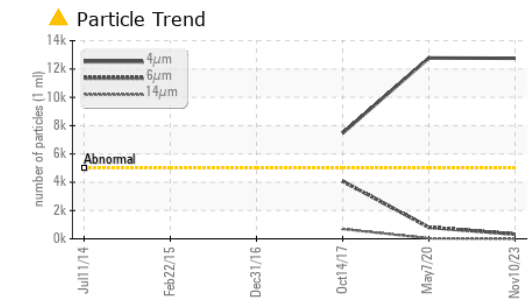
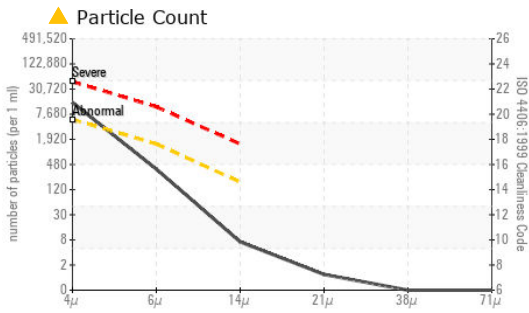
There is a high amount of silt (particulates < 6 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	3	6
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 12759</b>	▲ 12781	▲ 7473
Particles >6µm		ASTM D7647	>1300	<b>328</b>	814	▲ 4071
Particles >14µm		ASTM D7647	>160	<b>6</b>	31	▲ 693
Particles >21µm		ASTM D7647	>40	<b>1</b>	12	▲ 234
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	▲ 36
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	3
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/16/10</b>	▲ 21/17/12	▲ 20/19/17
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	LIGHT
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

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>2</b>	1	6
Boron	ppm	ASTM D5185m		<b>26</b>	35	25
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>16</b>	11	20
Calcium	ppm	ASTM D5185m		<b>3482</b>	2974	2806
Phosphorus	ppm	ASTM D5185m		<b>1132</b>	959	955
Zinc	ppm	ASTM D5185m		<b>1374</b>	1194	1174
Sulfur	ppm	ASTM D5185m		<b>8050</b>	6166	2553
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.49</b>	1.163	1.189
Visc @ 40°C	cSt	ASTM D445		<b>45.0</b>	50.0	68.62



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0675152 **Received** : 17 Jan 2024  
**Lab Number** : 06062579 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10833961 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST

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)

**GRAY & SON INC**  
 430 W PADONIA RD  
 TIMONIUM, MD  
 US 21093-2274  
 Contact: DON WIMER  
 dwimer@graynson.com  
 T: (410)771-4311  
 F: (410)560-0394