



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id  
**BOBCAT 001513**  
Component  
**Hydraulic System**  
Fluid  
**CASTROL HD AW ISO 46 (5 GAL)**

## RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. The oil change at the time of sampling has been noted. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

## WEAR

All component wear rates are normal.

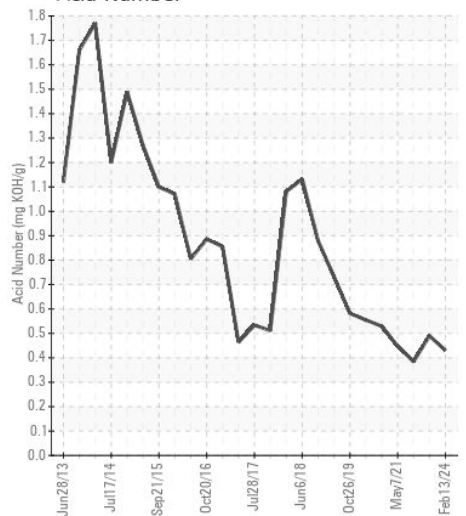
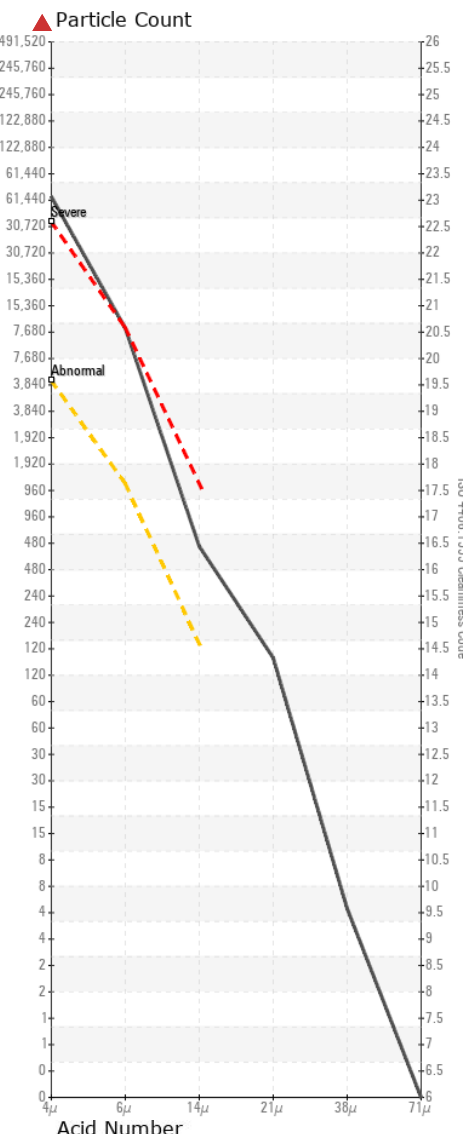
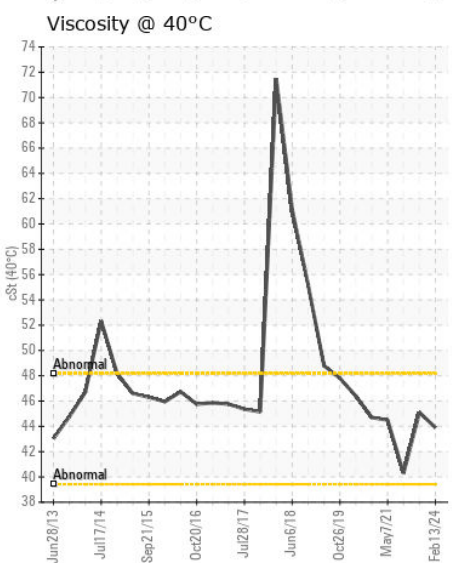
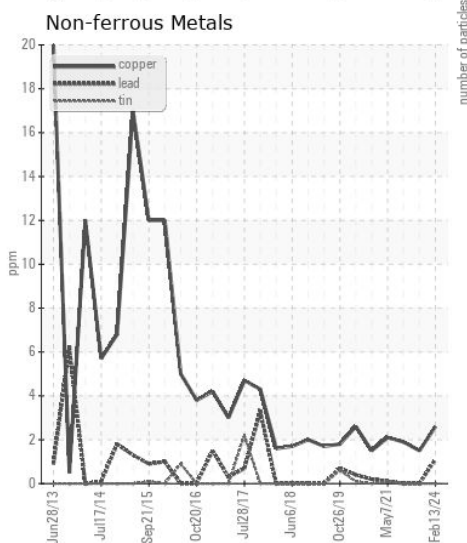
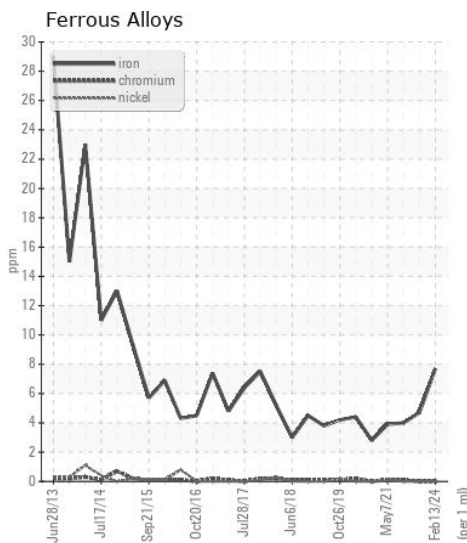
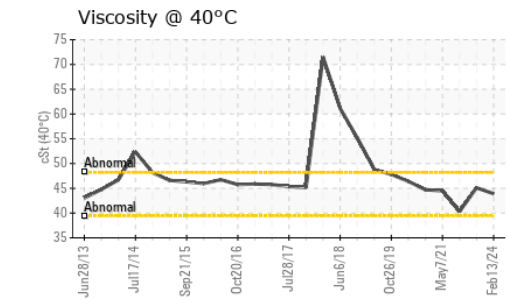
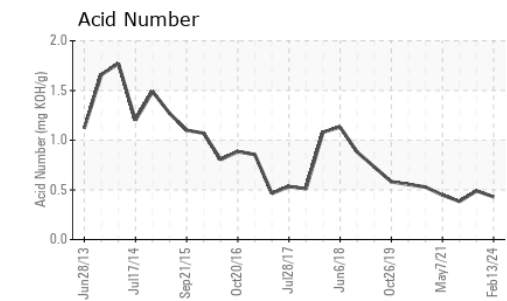
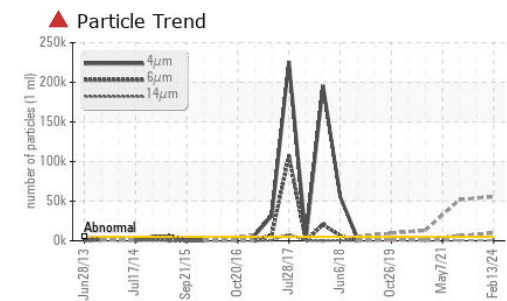
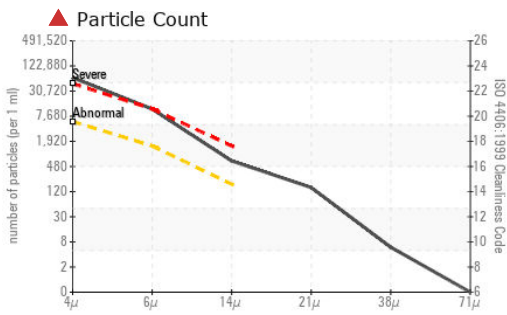
## CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

## FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0800400</b>	WC0724525	WC0604552
Sample Date		Client Info		<b>13 Feb 2024</b>	19 Apr 2023	06 Jan 2022
Machine Age	hrs	Client Info		<b>9690</b>	9329	8461
Oil Age	hrs	Client Info		<b>1000</b>	423	600
Filter Age	hrs	Client Info		<b>361</b>	423	350
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>SEVERE</b>	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	<b>8</b>	5	4
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185m	>10	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>3</b>	2	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ <b>55682</b>	---	▲ 51840
Particles >6µm		ASTM D7647	>1300	▲ <b>9943</b>	---	▲ 6252
Particles >14µm		ASTM D7647	>160	▲ <b>573</b>	---	▲ 494
Particles >21µm		ASTM D7647	>40	▲ <b>133</b>	---	▲ 144
Particles >38µm		ASTM D7647	>10	<b>5</b>	---	▲ 15
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ <b>23/20/16</b>	---	▲ 23/20/16
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	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
Sodium	ppm	ASTM D5185m		<b>3</b>	1	0
Boron	ppm	ASTM D5185m		<b>6</b>	6	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	3	3
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>56</b>	63	37
Calcium	ppm	ASTM D5185m		<b>267</b>	288	218
Phosphorus	ppm	ASTM D5185m		<b>333</b>	359	334
Zinc	ppm	ASTM D5185m		<b>406</b>	432	411
Sulfur	ppm	ASTM D5185m		<b>1082</b>	1044	1038
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.43</b>	0.49	0.384
Visc @ 40°C	cSt	ASTM D445		<b>43.9</b>	45.1	40.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0800400  
**Lab Number** : 06102412  
**Unique Number** : 10900642  
**Test Package** : CONST  
**Received** : 27 Feb 2024  
**Tested** : 28 Feb 2024  
**Diagnosed** : 28 Feb 2024 - Wes Davis

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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)