



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
BOBCAT 001588
 Component
Hydraulic System
 Fluid
TDH FLUID SAE 75W80 (9 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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		WC0856180	WC0700970	WC0583946
Sample Date		Client Info		02 Jul 2024	16 Sep 2022	08 Jul 2021
Machine Age	hrs	Client Info		10153	9878	9638
Oil Age	hrs	Client Info		1000	240	1050
Filter Age	hrs	Client Info		275	240	350
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	5	7	8
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>10	3	2	3
Lead	ppm	ASTM D5185m	>10	<1	<1	3
Copper	ppm	ASTM D5185m	>75	4	5	4
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

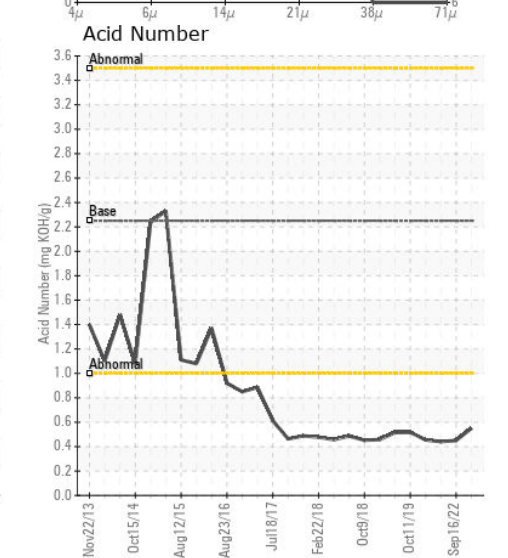
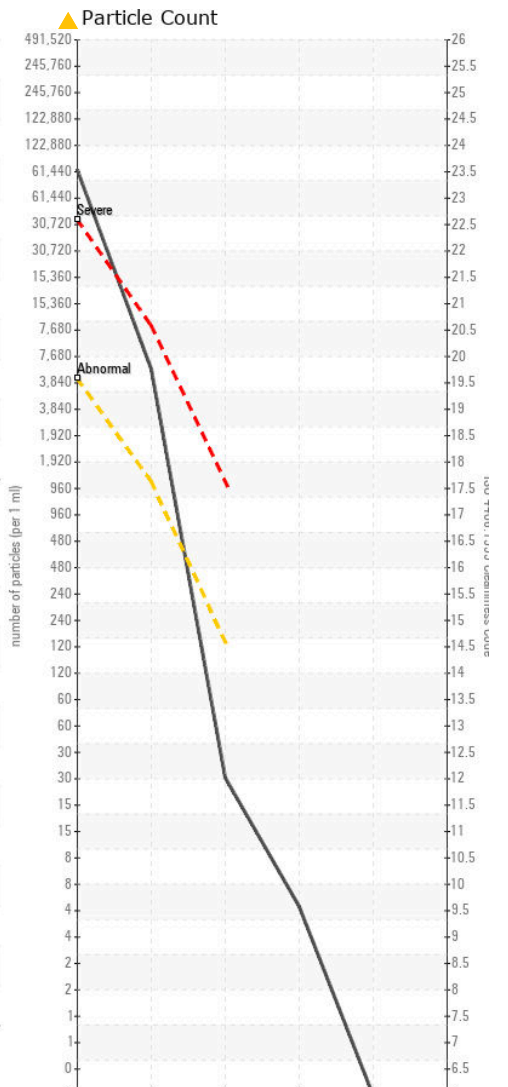
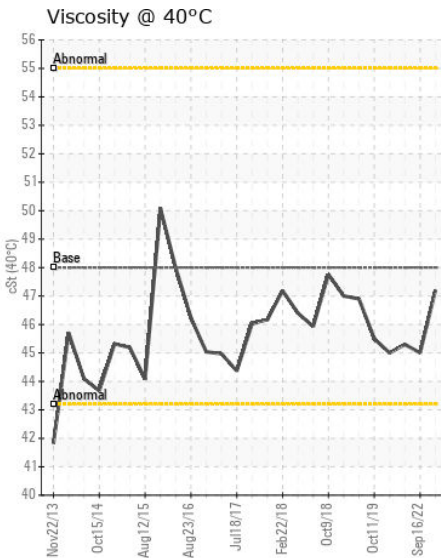
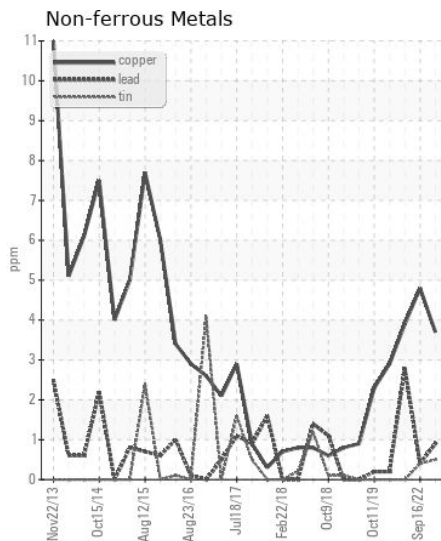
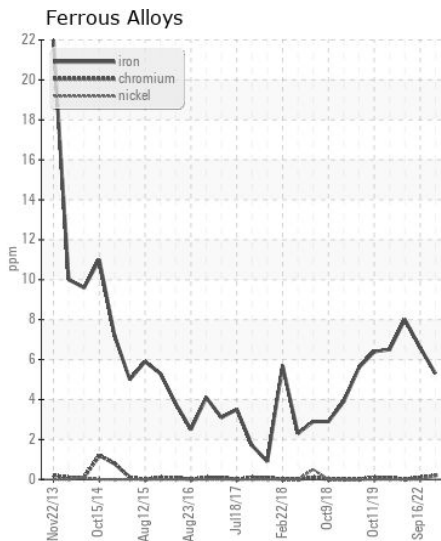
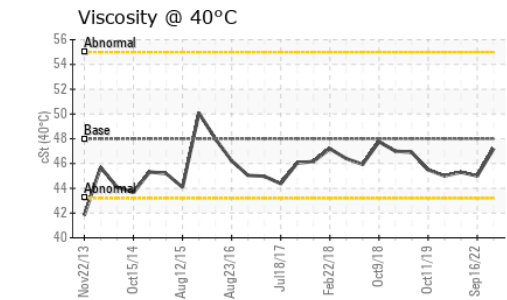
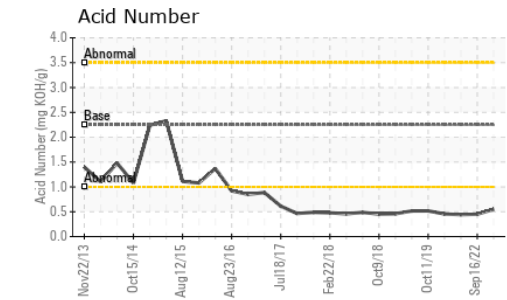
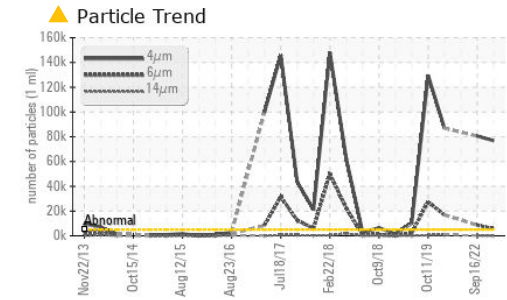
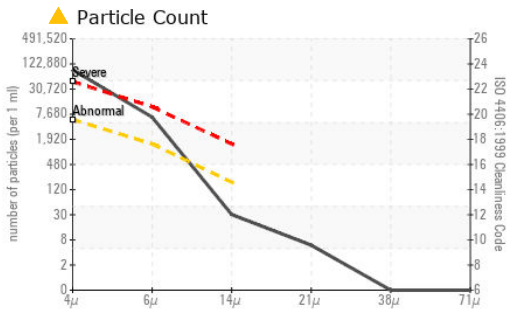
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	5	5	7
Potassium	ppm	ASTM D5185m	>20	2	0	9
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 76833	▲ 80582	---
Particles >6µm		ASTM D7647	>1300	▲ 5671	▲ 8617	---
Particles >14µm		ASTM D7647	>160	27	126	---
Particles >21µm		ASTM D7647	>40	5	28	---
Particles >38µm		ASTM D7647	>10	0	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/20/12	▲ 24/20/14	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	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		0	1	2
Boron	ppm	ASTM D5185m	10	15	6	3
Barium	ppm	ASTM D5185m	10	<1	0	0
Molybdenum	ppm	ASTM D5185m	10	9	2	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	100	49	23	17
Calcium	ppm	ASTM D5185m	3500	584	401	319
Phosphorus	ppm	ASTM D5185m	1150	452	402	372
Zinc	ppm	ASTM D5185m	1150	551	492	479
Sulfur	ppm	ASTM D5185m	5000	1491	1609	1388
Acid Number (AN)	mg KOH/g	ASTM D8045	2.25	0.55	0.45	0.441
Visc @ 40°C	cSt	ASTM D445	48	47.2	45.0	45.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0856180
Lab Number : 06231437
Unique Number : 11114930
Test Package : CONST
Received : 09 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 Jul 2024 - Don Baldrige

CJ MILLER LLC
 2903 DEDE RD
 FINKSBURG, MD
 US 21048
 Contact: JOE ROSS
 jross@cjmillerllc.com
 T: (410)239-8006
 F: (410)239-1051

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)