



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
BOWERMAN - ORANGE COUNTY CA
Machine Id
CATERPILLAR BOW 1
Component
Biogas Engine
Fluid
MOBIL PEGASUS 605 (480 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0848214	WC0848264	WC0848300
Sample Date		Client Info		13 May 2024	29 Mar 2024	27 Feb 2024
Machine Age	hrs	Client Info		65203	64320	63589
Oil Age	hrs	Client Info		447	3518	2787
Filter Age	hrs	Client Info		447	3518	2787
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	12	2	0
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>15	6	2	2
Lead	ppm	ASTM D5185m	>20	<1	<1	<1
Copper	ppm	ASTM D5185m	>15	5	<1	<1
Tin	ppm	ASTM D5185m	>5	<1	3	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

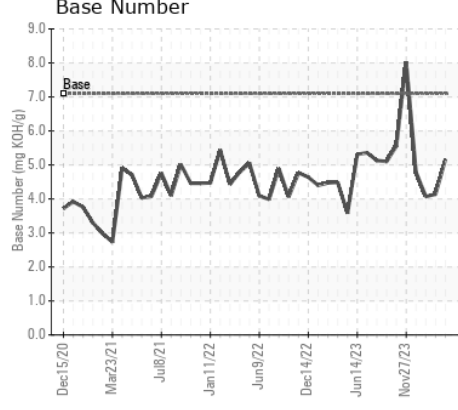
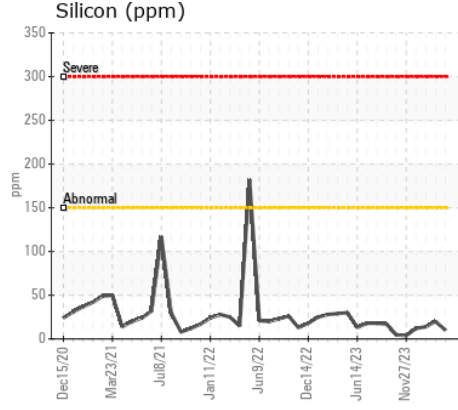
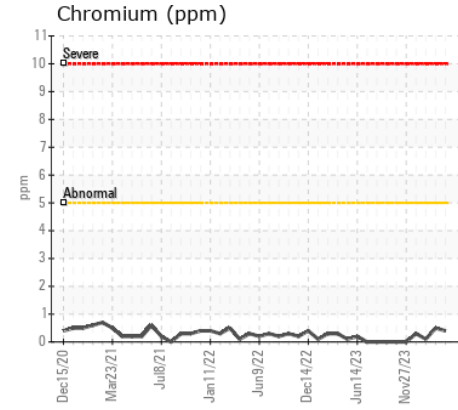
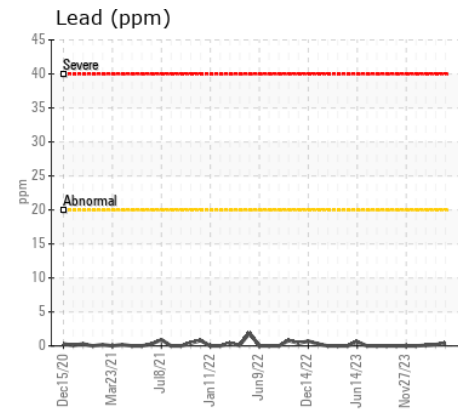
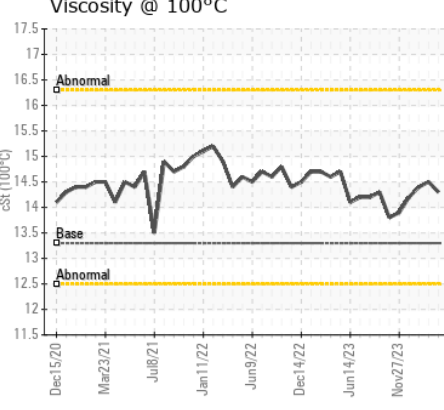
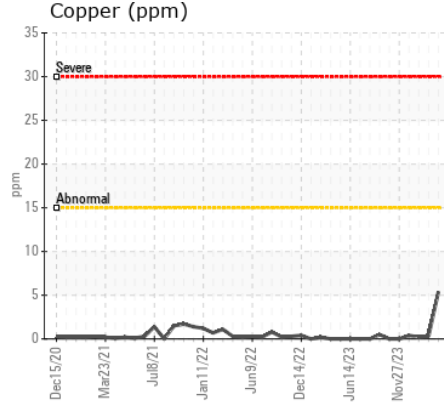
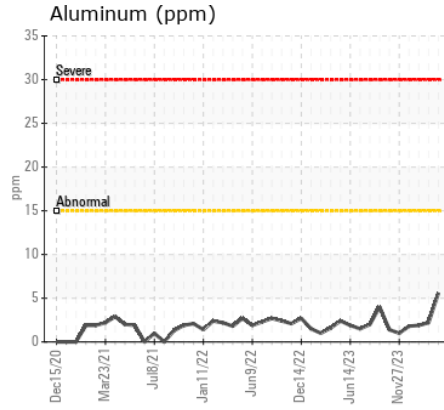
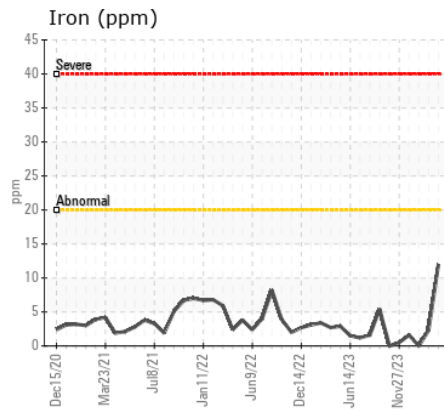
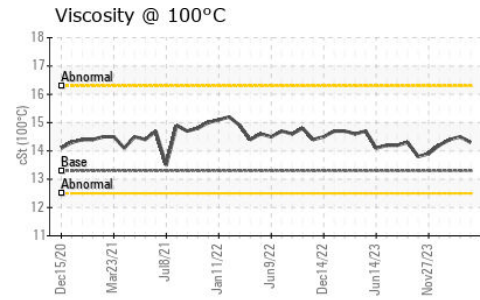
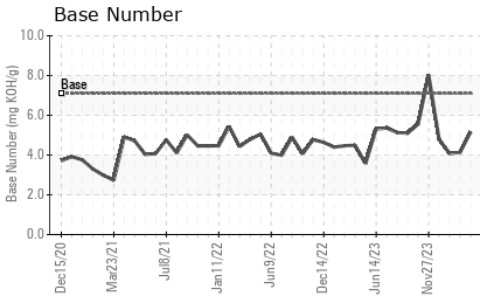
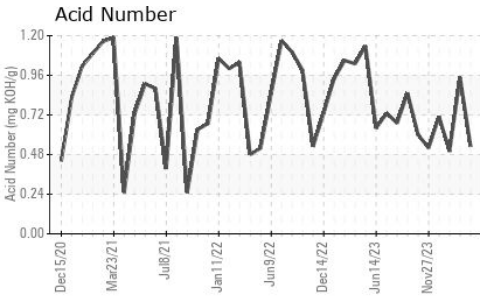
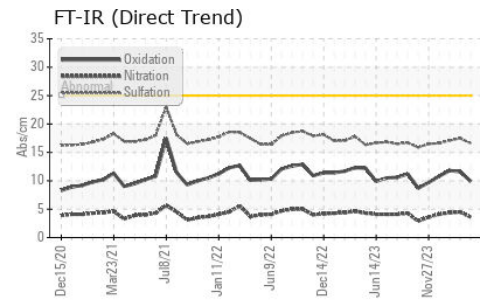
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>150	10	20	14
Potassium	ppm	ASTM D5185m	>20	4	1	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	3.6	4.5	4.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.6	17.5	17.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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 BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		16	<1	<1
Boron	ppm	ASTM D5185m		15	69	62
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	2	0
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		36	11	9
Calcium	ppm	ASTM D5185m		1354	1575	1616
Phosphorus	ppm	ASTM D5185m		485	401	438
Zinc	ppm	ASTM D5185m		573	556	574
Sulfur	ppm	ASTM D5185m		1813	3843	3833
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.9	11.6	11.8
Acid Number (AN)	mg KOH/g	ASTM D8045		0.53	0.947	0.50
Base Number (BN)	mg KOH/g	ASTM D2896	7.1	5.16	4.14	4.07
Visc @ 100°C	cSt	ASTM D445	13.3	14.3	14.5	14.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0848214
Lab Number : 06177865
Unique Number : 11029191
Test Package : MOB 2

Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 15 May 2024 - Sean Felton

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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)