



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
BOWERMAN - ORANGE COUNTY CA
Machine Id
CATERPILLAR BOW 3
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		WC0848229	WC0848216	WC0848268
Sample Date		Client Info		12 Jun 2024	06 May 2024	29 Mar 2024
Machine Age	hrs	Client Info		66217	65430	64547
Oil Age	hrs	Client Info		1260	472	3703
Filter Age	hrs	Client Info		1260	472	3703
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

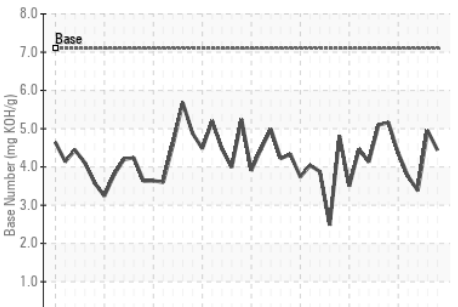
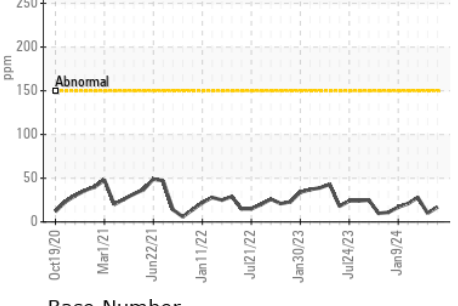
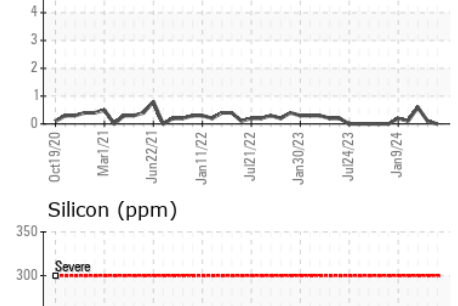
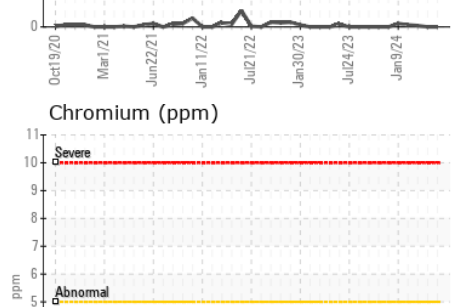
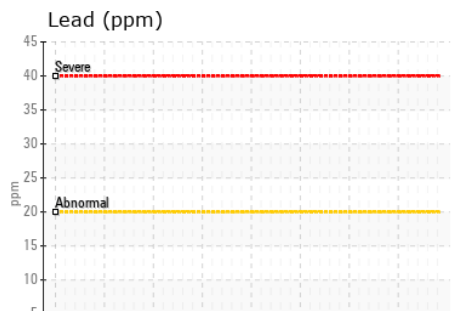
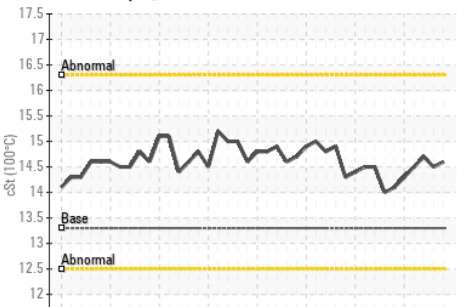
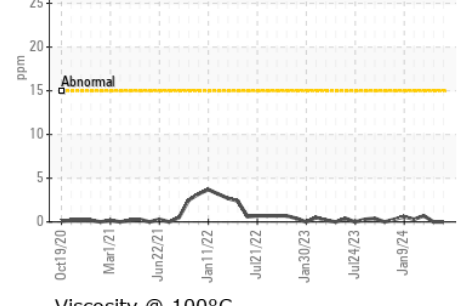
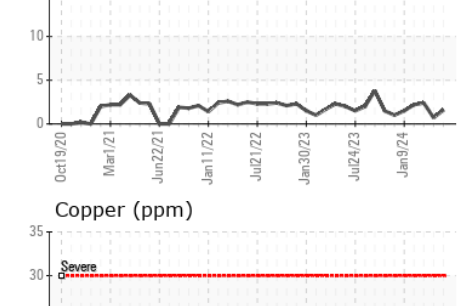
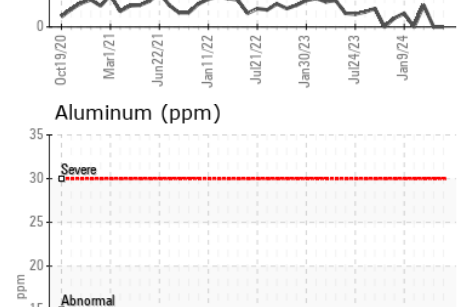
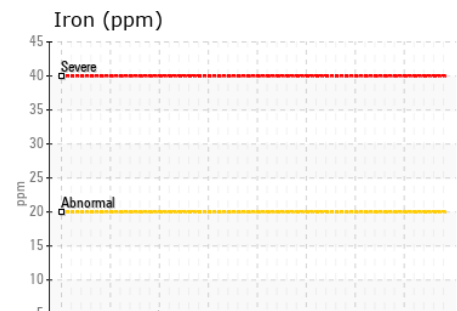
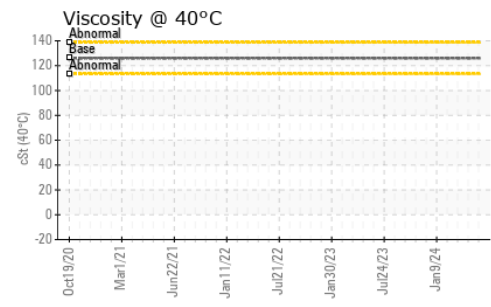
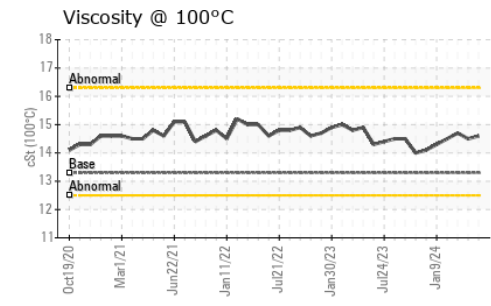
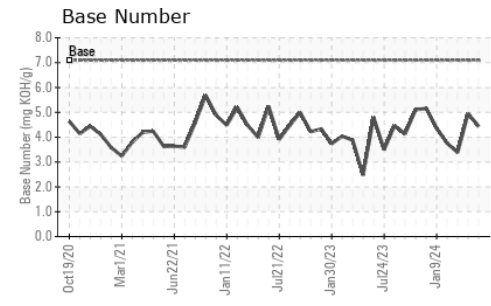
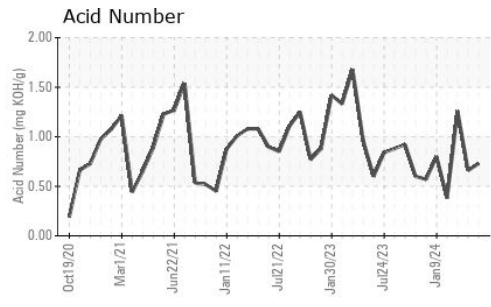
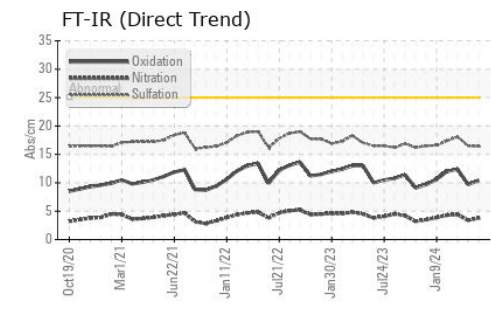
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>150	17	10	28
Potassium	ppm	ASTM D5185m	>20	0	0	1
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	3.8	3.4	4.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.4	16.5	18.1
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		<1	1	4
Boron	ppm	ASTM D5185m		80	140	45
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		0	0	1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		0	6	4
Calcium	ppm	ASTM D5185m		1688	1497	1583
Phosphorus	ppm	ASTM D5185m		417	440	366
Zinc	ppm	ASTM D5185m		535	515	531
Sulfur	ppm	ASTM D5185m		4141	4103	3655
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.4	9.7	12.4
Acid Number (AN)	mg KOH/g	ASTM D8045		0.73	0.66	1.26
Base Number (BN)	mg KOH/g	ASTM D2896	7.1	4.44	4.95	3.38
Visc @ 100°C	cSt	ASTM D445	13.3	14.6	14.5	14.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0848229
Lab Number : 06210880
Unique Number : 11083744
Test Package : MOB 2 (Additional Tests: KV40)

MONTAUK ENERGY CAPITAL LLC (TEXAS) LP
 1412 N SAM HOUSTON PKWY E, SUITE 100
 HOUSTON, TX
 US 77032

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)

Received : 14 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Sean Felton

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