



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		WC0848335	WC0848229	WC0848216
Sample Date		Client Info		25 Jun 2024	12 Jun 2024	06 May 2024
Machine Age	hrs	Client Info		66530	66217	65430
Oil Age	hrs	Client Info		1573	1260	472
Filter Age	hrs	Client Info		1573	1260	472
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	1	0	0
Chromium	ppm	ASTM D5185m	>5	0	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>15	2	2	<1
Lead	ppm	ASTM D5185m	>20	<1	0	0
Copper	ppm	ASTM D5185m	>15	0	0	0
Tin	ppm	ASTM D5185m	>5	2	1	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

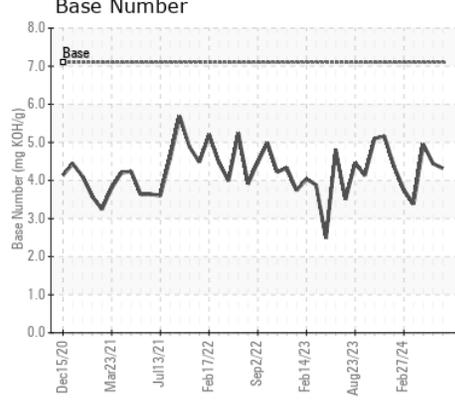
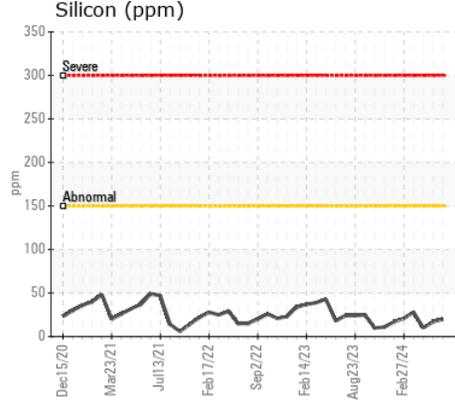
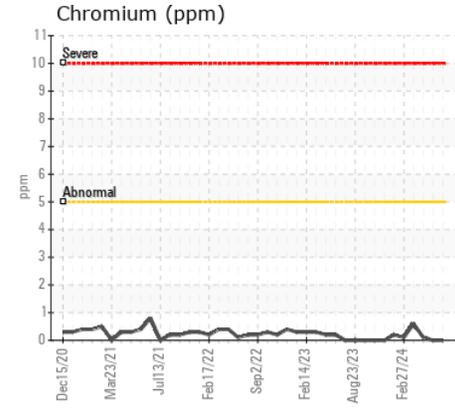
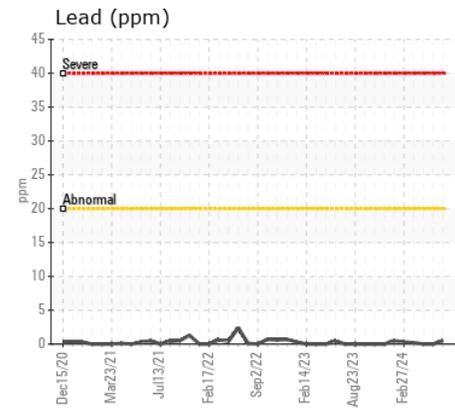
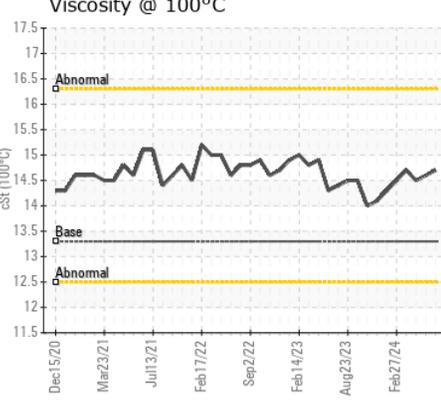
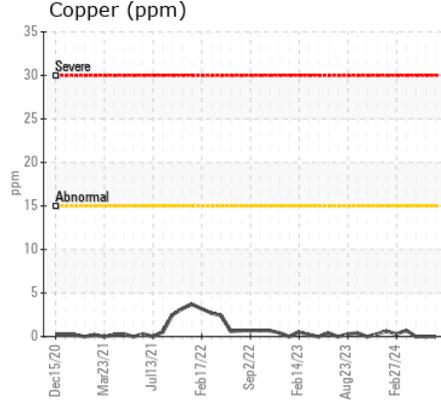
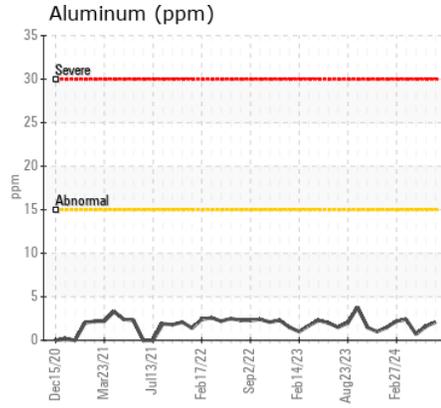
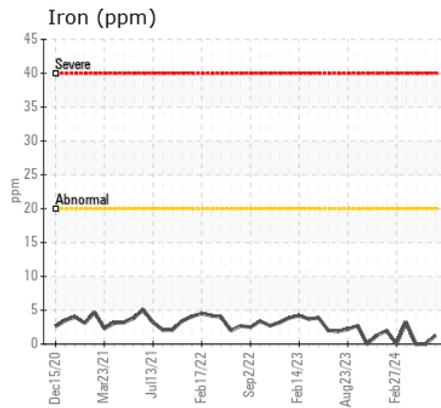
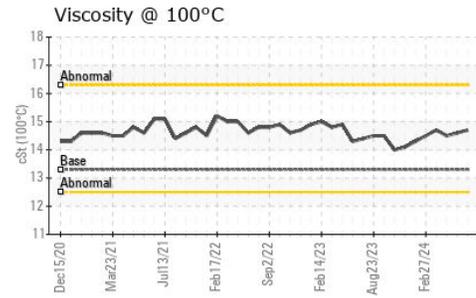
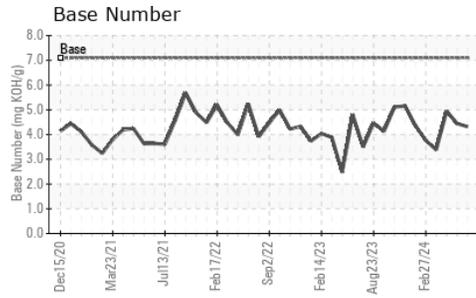
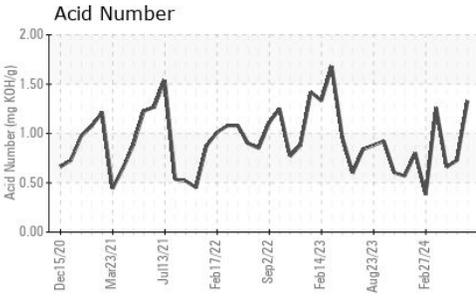
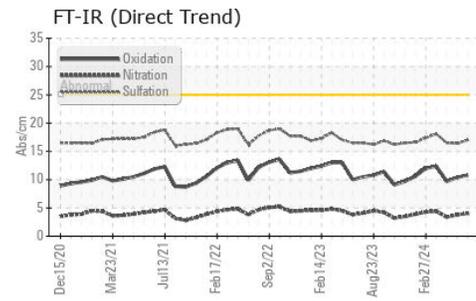
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>150	20	17	10
Potassium	ppm	ASTM D5185m	>20	0	0	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	4.0	3.8	3.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.0	16.4	16.5
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	<1	1
Boron	ppm	ASTM D5185m		69	80	140
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		4	0	6
Calcium	ppm	ASTM D5185m		1657	1688	1497
Phosphorus	ppm	ASTM D5185m		410	417	440
Zinc	ppm	ASTM D5185m		501	535	515
Sulfur	ppm	ASTM D5185m		3890	4141	4103
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.8	10.4	9.7
Acid Number (AN)	mg KOH/g	ASTM D8045		1.33	0.73	0.66
Base Number (BN)	mg KOH/g	ASTM D2896	7.1	4.32	4.44	4.95
Visc @ 100°C	cSt	ASTM D445	13.3	14.7	14.6	14.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0848335
Lab Number : 06222881
Unique Number : 11101078
Test Package : MOB 2

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

Received : 27 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 29 Jun 2024 - Don Baldrige

Contact: DAMON MCCLENAN
 dmcclenan@montaukenergy.com
 T: (713)781-1126
 F: (713)781-1127

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)