

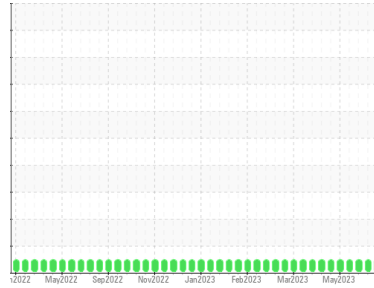


OIL ANALYSIS REPORT



Area
605 Ultra 40 TRIAL
 Machine Id
Pinconning CAT 2 PINM02BE
 Component
Biogas Engine
 Fluid
MOBIL PEGASUS 605 (--- GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0840784	WC0840777	WC0840776
Sample Date	Client Info		04 Dec 2023	13 Nov 2023	03 Nov 2023
Machine Age	hrs	Client Info	45418	44917	58965
Oil Age	hrs	Client Info	290	156	44636
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >15	1	1	<1
Chromium	ppm	ASTM D5185m >4	0	0	0
Nickel	ppm	ASTM D5185m >2	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >5	0	0	0
Aluminum	ppm	ASTM D5185m >6	2	<1	<1
Lead	ppm	ASTM D5185m >9	0	0	0
Copper	ppm	ASTM D5185m >6	2	3	3
Tin	ppm	ASTM D5185m >4	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	101	7	15
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	2	2	<1
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m	24	19	5
Calcium	ppm	ASTM D5185m	1458	1591	1523
Phosphorus	ppm	ASTM D5185m	373	245	245
Zinc	ppm	ASTM D5185m	500	343	319
Sulfur	ppm	ASTM D5185m	3153	2357	2115

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >181	91	60	29
Sodium	ppm	ASTM D5185m	2	4	5
Potassium	ppm	ASTM D5185m >20	1	<1	2

INFRA-RED

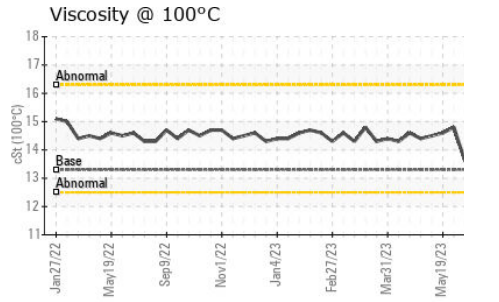
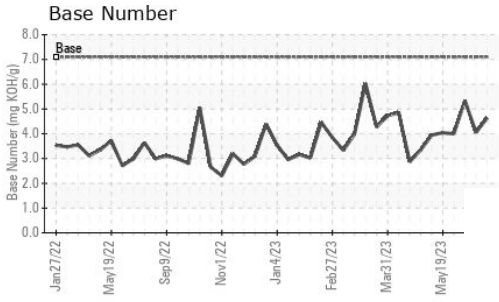
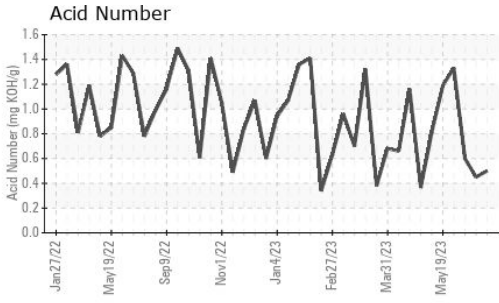
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	3.2	4.1	4.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	16.1	15.7	15.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	8.6	8.0	8.3
Acid Number (AN)	mg KOH/g	ASTM D8045	0.50	0.45	0.60
Base Number (BN)	mg KOH/g	ASTM D2896 7.1	4.64	4.05	5.34



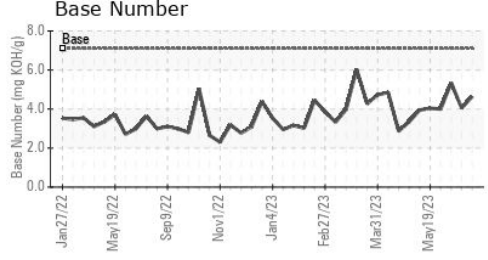
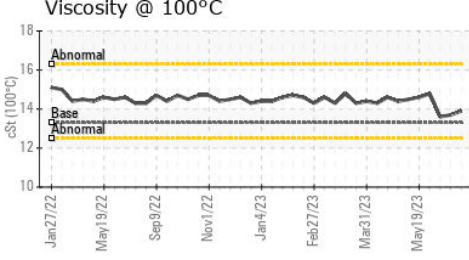
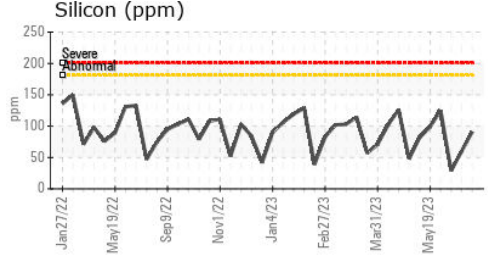
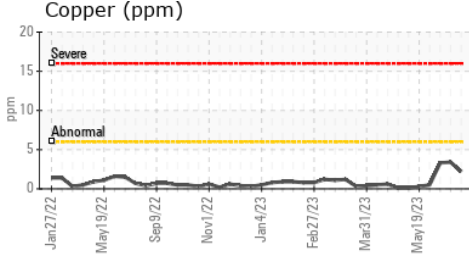
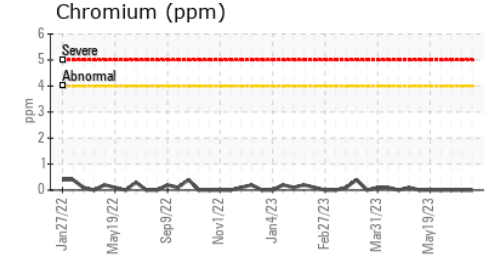
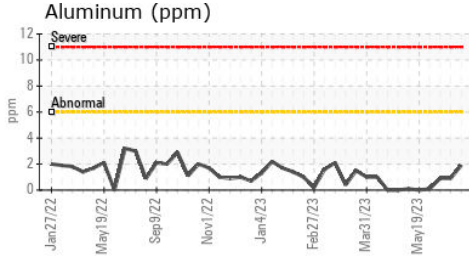
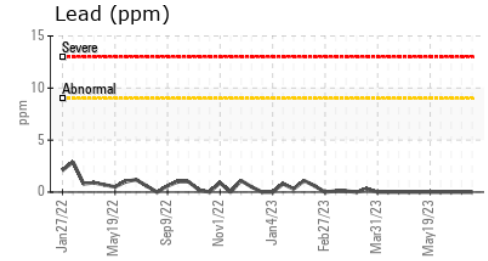
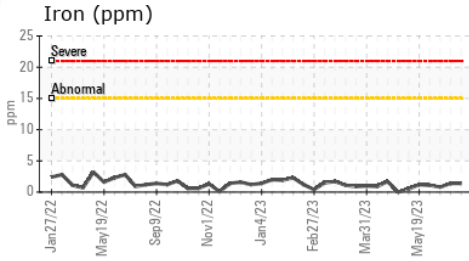
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	13.3	13.9	13.7	13.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0840784 **Received** : 07 Dec 2023
Lab Number : 06027946 **Diagnosed** : 10 Dec 2023
Unique Number : 10777737 **Diagnostician** : Don Baldrige
Test Package : MOB 2

EDL NA Recips-Pinconning
 Pinconning Powerstation, 2403 E. Whitefeather Road
 Pinconning, MI
 US 48650
 Contact: DOUG HINE
 doug.hine@edlenergy.com

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)