

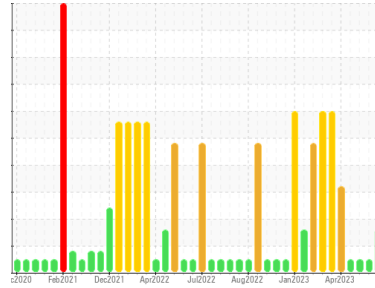


OIL ANALYSIS REPORT



Area
EDLCOV
Machine Id
COVM01BL
Component
Biogas Engine
Fluid
CHEVRON HDAX 6500 LFG GAS ENGINE OIL (141 GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal.

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		WC0816091	WC0816132	WC0816089
Sample Date	Client Info		24 Aug 2023	09 Aug 2023	21 Jul 2023
Machine Age	hrs	Client Info	124751	162423	124056
Oil Age	hrs	Client Info	790	456	95
Oil Changed	Client Info		Not Chngd	Filtered	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		7	7	14
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		8	8	8
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		41	37	36
Calcium	ppm	ASTM D5185m		1924	1695	1654
Phosphorus	ppm	ASTM D5185m		316	294	284
Zinc	ppm	ASTM D5185m		377	352	340
Sulfur	ppm	ASTM D5185m		2336	2242	1951

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>181	▲ 188	102	21
Sodium	ppm	ASTM D5185m		15	15	17
Potassium	ppm	ASTM D5185m	>20	0	2	<1

INFRA-RED

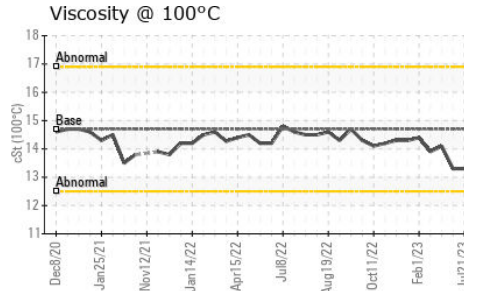
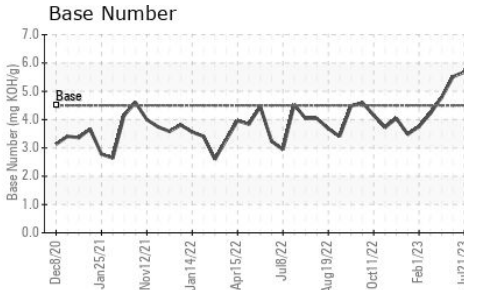
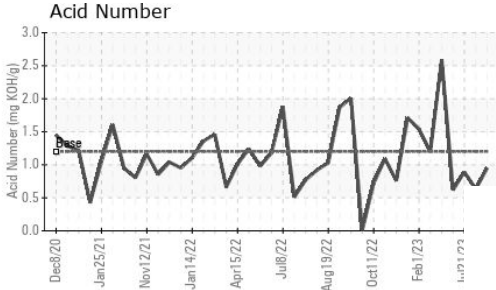
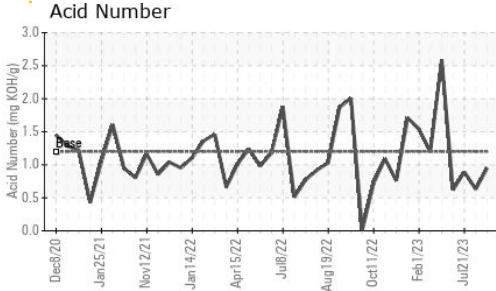
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	5.5	5.1	4.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.0	16.2	14.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.4	8.9	7.7
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	0.949	0.63	0.89
Base Number (BN)	mg KOH/g	ASTM D2896	4.5	5.46	6.38	5.68



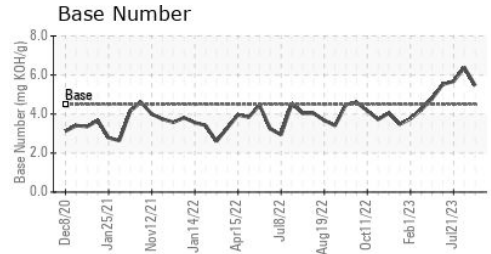
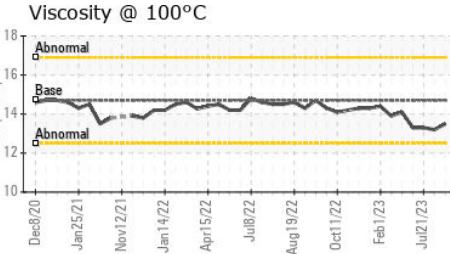
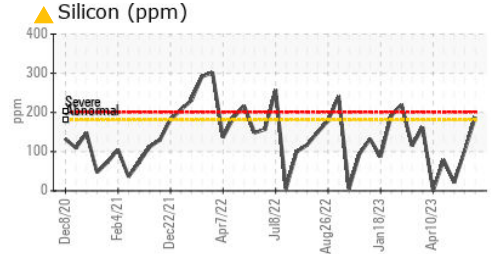
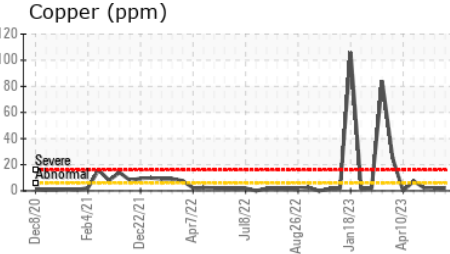
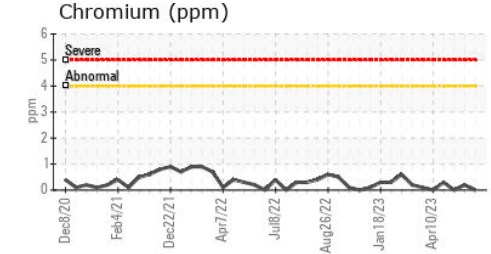
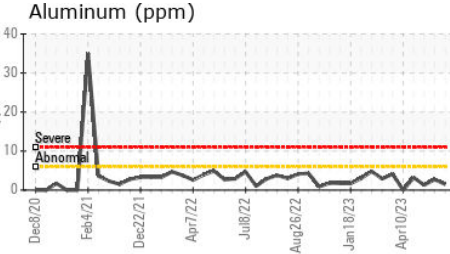
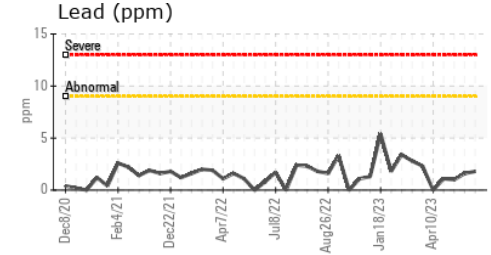
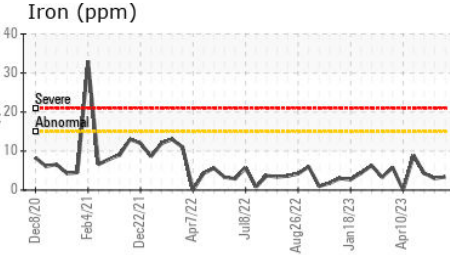
OIL ANALYSIS REPORT



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	14.7	13.5	13.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0816091 Received : 28 Aug 2023
 Lab Number : 05936321 Diagnosed : 29 Aug 2023
 Unique Number : 10621592 Diagnostician : Don Baldrige
 Test Package : MOB 2

EDL NA Recips-Covel
 COVEL GARDENS POWER STATION, 8611 COVEL ROAD
 SAN ANTONIO, TX
 US 78252
 Contact: ARIEL CARRION
 ariel.carrion@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)

T:
F: