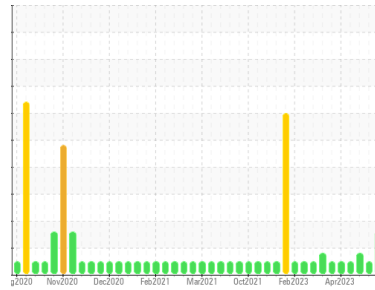




# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id  
**PECM04BE**  
Component  
**Biogas Engine**  
Fluid  
**CHEVRON HDAX 9500 GAS ENGINE OIL 40 (150 GAL)**

## 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 indicating ingress of seal material.

### 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		<b>WC0788393</b>	WC0788279	WC0788274
Sample Date	Client Info		<b>21 Feb 2024</b>	07 Feb 2024	23 Jan 2024
Machine Age	hrs	Client Info	<b>66510</b>	66172	65825
Oil Age	hrs	Client Info	<b>519</b>	180	750
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

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

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>16</b>	83	4
Barium	ppm	ASTM D5185m		<b>5</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>5</b>	2	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>28</b>	23	30
Calcium	ppm	ASTM D5185m		<b>2268</b>	1381	1694
Phosphorus	ppm	ASTM D5185m		<b>340</b>	308	255
Zinc	ppm	ASTM D5185m		<b>442</b>	489	342
Sulfur	ppm	ASTM D5185m		<b>4192</b>	2979	3137

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>181	<b>194</b>	133	152
Sodium	ppm	ASTM D5185m		<b>0</b>	1	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	7

## INFRA-RED

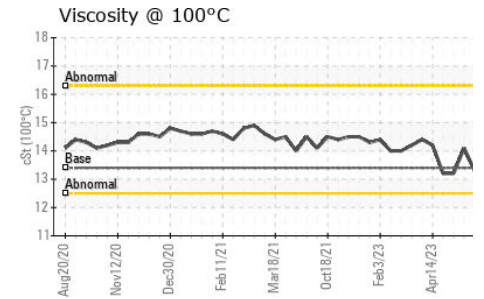
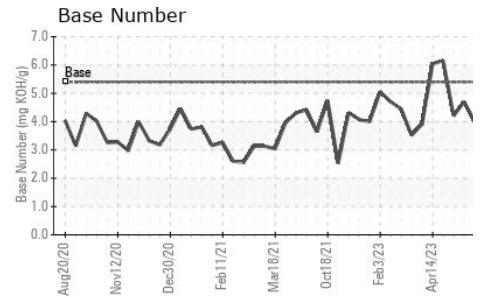
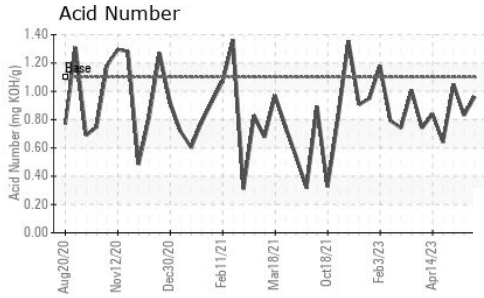
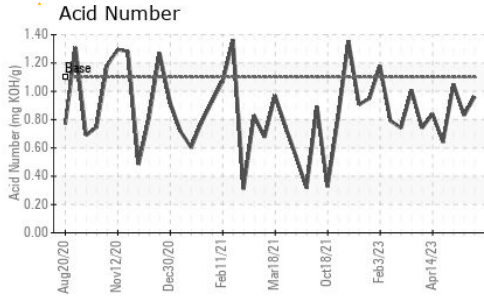
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.1</b>	4.9	5.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.3</b>	16.3	18.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.4</b>	8.3	9.3
Acid Number (AN)	mg KOH/g	ASTM D8045	1.1	<b>0.96</b>	0.83	1.05
Base Number (BN)	mg KOH/g	ASTM D2896	5.4	<b>4.01</b>	4.69	4.21



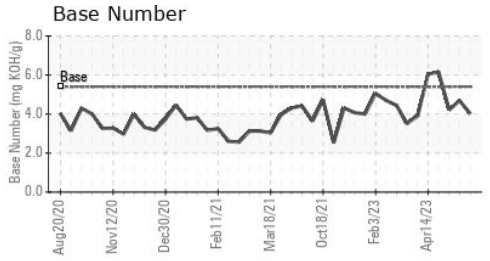
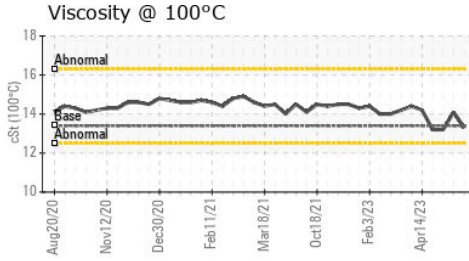
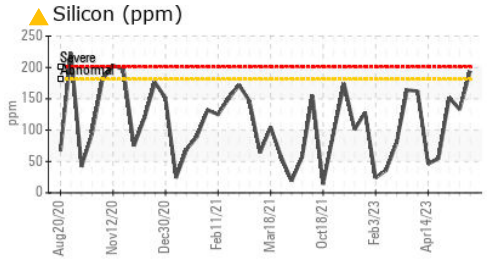
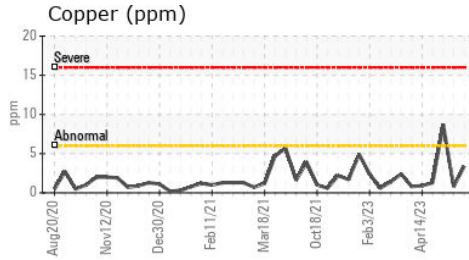
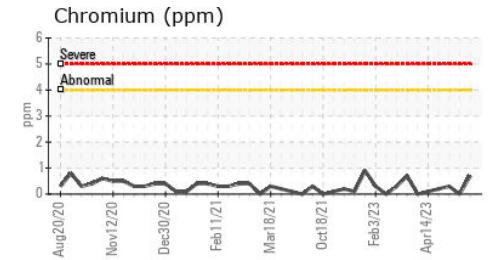
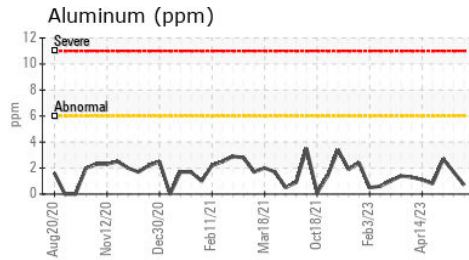
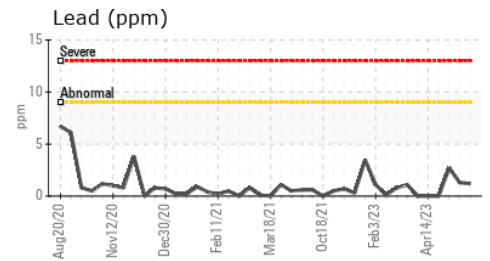
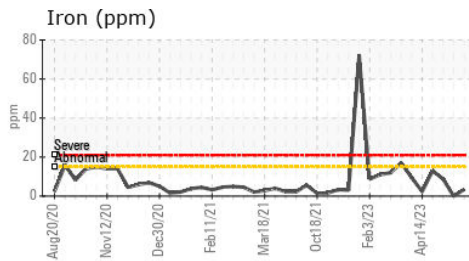
# OIL ANALYSIS REPORT



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	13.4	13.3	14.1

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0788393  
 Lab Number : 06099289  
 Unique Number : 10897519  
 Test Package : MOB 2

Received : 23 Feb 2024  
 Tested : 26 Feb 2024  
 Diagnosed : 27 Feb 2024 - Sean Felton

**EDL NA Recips-Pecan Row**  
 PECAN ROW POWER STATION, 2995 WHERINGTON LN  
 VALDOSTA, GA  
 US 31601  
 Contact: JASON JONES  
 jason.jones@energydi.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)

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