

# **OIL ANALYSIS REPORT**

### Sample Rating Trend





# **EDLTAY TAYM07BE (S/N 1256580)**

**Biogas Engine** 

CHEVRON HDAX 9500 GAS ENGINE OIL 40 (200 GAL)





### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the

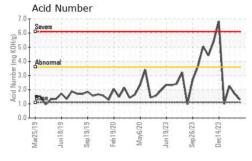
#### Fluid Condition

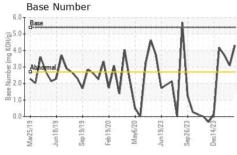
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

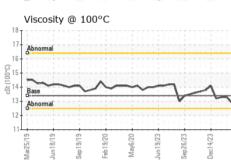
<u> </u>				May2020 Jun2023 Sep2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0901617	WC0788186	WC0788184
Sample Date		Client Info		13 Mar 2024	23 Jan 2024	15 Jan 2024
Machine Age	hrs	Client Info		112819	112819	112819
Oil Age	hrs	Client Info		178	54824	57995
Oil Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	ı	method	limit/base	current	history1	history2
Fuel	N .	WC Method	>4.0	<1.0	<1.0	<1.0
				<1.0 NEG	NEG	NEG
Water			>.2			
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>15	7	<1	2
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>6	2	3	2
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>6	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	1	2	2
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		limit/base		history1	history2
Boron	ppm	ASTM D5185m	limit/base	2	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	2 0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 8	0 0 1	0 0 1
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 8 <1	0 0 1 <1	0 0 1 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 8 <1 9	0 0 1 <1 3	0 0 1 <1 5
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 8 <1 9 1735	0 0 1 <1 3 1773	0 0 1 <1 5 1707
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 8 <1 9 1735 271	0 0 1 <1 3 1773 242	0 0 1 <1 5 1707 279
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 8 <1 9 1735 271 298	0 0 1 <1 3 1773 242 302	0 0 1 <1 5 1707 279 300
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 0 8 <1 9 1735 271 298 2822	0 0 1 <1 3 1773 242 302 3534	0 0 1 <1 5 1707 279 300 2804
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 8 <1 9 1735 271 298	0 0 1 <1 3 1773 242 302	0 0 1 <1 5 1707 279 300
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 0 8 <1 9 1735 271 298 2822 current	0 0 1 <1 3 1773 242 302 3534	0 0 1 <1 5 1707 279 300 2804
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >181	2 0 8 <1 9 1735 271 298 2822 current	0 0 1 <1 3 1773 242 302 3534 history1	0 0 1 <1 5 1707 279 300 2804
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >181 >20	2 0 8 <1 9 1735 271 298 2822 current	0 0 1 <1 3 1773 242 302 3534 history1	0 0 1 <1 5 1707 279 300 2804 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >181 >20	2 0 8 <1 9 1735 271 298 2822 current	0 0 1 <1 3 1773 242 302 3534 history1 22 <1	0 0 1 <1 5 1707 279 300 2804 history2 16 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >181 >20 >20	2 0 8 <1 9 1735 271 298 2822 current 11 4	0 0 1 <1 3 1773 242 302 3534 history1 22 <1	0 0 1 <1 5 1707 279 300 2804 history2 16 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method	limit/base >181 >20 >20   imit/base	2 0 8 <1 9 1735 271 298 2822 current 11 4	0 0 1 <1 3 1773 242 302 3534 history1 22 <1 12	0 0 1 <1 5 1707 279 300 2804 history2 16 <1 11
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method  *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >181 >20 >20 limit/base >2	2 0 8 <1 9 1735 271 298 2822 current 11 4 4	0 0 1 <1 3 1773 242 302 3534 history1 22 <1 12 history1 0	0 0 1 <1 5 1707 279 300 2804 history2 16 <1 11 history2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method  *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >181 >20 >20 limit/base >2 >20	2 0 8 <1 9 1735 271 298 2822 current 11 4 4 current 0 4.8	0 0 1 <1 3 1773 242 302 3534 history1 22 <1 12 history1 0 4.7	0 0 1 <1 5 1707 279 300 2804 history2 16 <1 11 history2 0 4.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  ASTM D5185m ASTM D5185m  ASTM D5185m ASTM D5185m  ASTM D5185m  ASTM D5185m  Method  *ASTM D7844  *ASTM D7624  *ASTM D7415  Method	limit/base >181 >20 >20 limit/base >2 >20 >30 limit/base	2 0 8 <1 9 1735 271 298 2822 current 11 4 4 current 0 4.8 16.6	0 0 1 <1 3 1773 242 302 3534 history1 22 <1 12 history1 0 4.7 20.3 history1	0 0 1 <1 5 1707 279 300 2804 history2 16 <1 11 history2 0 4.7 17.9 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  *ASTM D7185m  *ASTM D7844  *ASTM D7624  *ASTM D7415  *ASTM D7414	limit/base >181 >20 >20 limit/base >2 >20 simit/base >2 >20 >30 limit/base >25	2 0 8 <1 9 1735 271 298 2822 current 11 4 4 current 0 4.8 16.6 current 8.0	0 0 1 <1 3 1773 242 302 3534 history1 22 <1 12 history1 0 4.7 20.3 history1 9.3	0 0 1 <1 5 1707 279 300 2804 history2 16 <1 11 history2 0 4.7 17.9 history2 8.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  ASTM D5185m ASTM D5185m  ASTM D5185m ASTM D5185m  ASTM D5185m  ASTM D5185m  Method  *ASTM D7844  *ASTM D7624  *ASTM D7415  Method	limit/base >181 >20 >20 limit/base >2 >20 >30 limit/base	2 0 8 <1 9 1735 271 298 2822 current 11 4 4 current 0 4.8 16.6	0 0 1 <1 3 1773 242 302 3534 history1 22 <1 12 history1 0 4.7 20.3 history1	0 0 1 <1 5 1707 279 300 2804 history2 16 <1 11 history2 0 4.7 17.9 history2

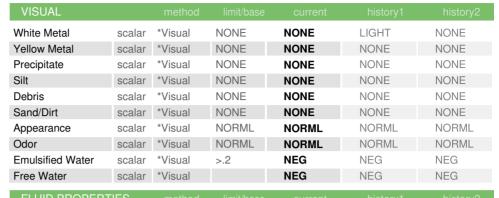


## **OIL ANALYSIS REPORT**





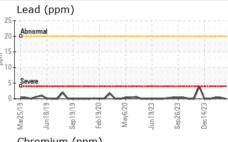


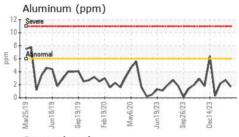


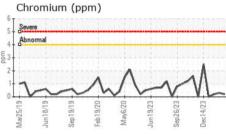
FLUID PROPER	HES	method	ilmivbase		nistory i	nistory2	
Visc @ 100°C	cSt	ASTM D445	13.4	12.9	13.3	13.3	

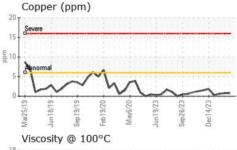
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0 19	18/19	- 61/	/20	120	123	V33-V	V W
Mar25/19	Jun18	Sep19	Feb 19	May6/20	Jun19/2	Sep26/23	Dec14/23
Alu	minui	m (pp	m)				

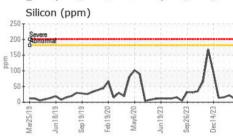
**GRAPHS** 

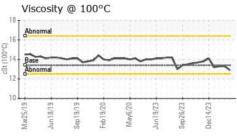


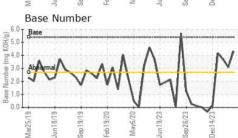
















Certificate L2367

Laboratory Sample No.

: WC0901617

Lab Number : 06123241 Unique Number: 10937392 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Mar 2024

**Tested** : 20 Mar 2024 : 22 Mar 2024 - Sean Felton Diagnosed

**EDL NA Recips-Taylor County** 

TAYLOR COUNTY POWER STATION, COUNTY ROAD 33 & STEWART ROAD MAUK, GA US 31058

Contact: STEVEN BABB

steven.babb@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:

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