

OIL ANALYSIS REPORT





Area EDLTAY Machine Id TAYM06BE (S/N 1256578) Component Biogas Engine

CHEVRON HDAX 9500 GAS ENGINE OIL 40 (180 GAL)





DIAGNOSIS

Recommendation

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

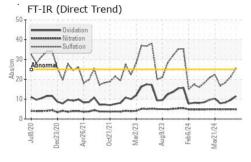
▲ Fluid Condition

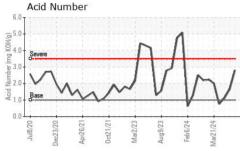
The BN level is low.

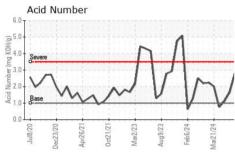
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0901629	WC0901635	WC0901604
Sample Date		Client Info		25 Apr 2024	10 Apr 2024	03 Apr 2024
Machine Age	hrs	Client Info		112819	112819	65985
Oil Age	hrs	Client Info		696	336	168
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	NORMAL	NORMAL
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method		NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
	nnm		>14	2	<1	0
Iron Chromium	ppm	ASTM D5185m		2 <1	<1	0
Nickel	ppm	ASTM D5185m	20	0	<1	0
Titanium	ppm	ASTM D5165III		ں <1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	2	2	<1
Lead	ppm	ASTM D5185m	>6	0	1	0
Copper	ppm	ASTM D5185m	>5	<1	<1	0
Tin	ppm	ASTM D5185m	>6	2	3	1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
				•	< I	
ADDITIVES		method	limit/base	current	history1	history2
		method	limit/base	current	history1	history2
Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	
Boron Barium	ppm ppm	method	limit/base	current	history1	history2
Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 0 0	history1 0 0	history2 0 0
Boron Barium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 1	history1 0 0 2	history2 0 0 <1
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 1 <1	history1 0 0 2 <1	history2 0 0 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 1 <1 5	history1 0 0 2 <1 6	history2 0 0 <1 <1 6
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 1 <1 5 1884	history1 0 0 2 <1 6 1927	history2 0 0 <1 <1 6 1735
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 0 0 1 <1 5 1884 250	history1 0 0 2 <1 6 1927 275	history2 0 0 <1 <1 6 1735 240
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 0 0 1 <1 5 1884 250 302	history1 0 0 2 <1 6 1927 275 332	history2 0 0 <1 <1 6 1735 240 299
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 0 0 1 <1 5 1884 250 302 4558	history1 0 0 2 <1 6 1927 275 332 3948	history2 0 0 <1 <1 6 1735 240 299 2505
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 0 0 1 <1 5 1884 250 302 4558 current	history1 0 0 2 <1 6 1927 275 332 3948 history1	history2 0 0 <1 <1 6 1735 240 299 2505 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >180	current 0 0 1 <1 5 1884 250 302 4558 current	history1 0 0 2 <1 6 1927 275 332 3948 history1 7	history2 0 0 <1 <1 6 1735 240 299 2505 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >180	current 0 0 1 <1 5 1884 250 302 4558 current 9 5	history1 0 0 2 <1 6 1927 275 332 3948 history1 7	history2 0 0 <1 <1 6 1735 240 299 2505 history2 5 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >180 >20	current 0 0 1 <1 5 1884 250 302 4558 current 9 5 3	history1 0 0 2 <1 6 1927 275 332 3948 history1 7 3 5	history2 0 0 <1 <1 6 1735 240 299 2505 history2 5 4 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method	limit/base >180 >20 limit/base	current 0 0 1 <1 5 1884 250 302 4558 current 9 5 3	history1 0 0 2 <1 6 1927 275 332 3948 history1 7 3 5	history2 0 0 <1 <1 <1 6 1735 240 299 2505 history2 5 4 2
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	method ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >180 >20 limit/base >2	current 0 0 1 <1 5 1884 250 302 4558 current 9 5 3 current	history1 0 0 2 <1 6 1927 275 332 3948 history1 7 3 5	history2 0 0 <1 <1 6 1735 240 299 2505 history2 5 4 2 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	method ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >180 >20 limit/base >2 >2 >20	current 0 0 1 <1 5 1884 250 302 4558 current 9 5 3 current 0.1 4.8	history1 0 0 2 <1 6 1927 275 332 3948 history1 7 3 5 history1 0 4.9	history2 0 0 <1 <1 6 1735 240 299 2505 history2 5 4 2 history2 0 4.9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m METHOD *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >180	current 0 0 1 <1 5 1884 250 302 4558 current 9 5 3 current 0.1 4.8 25.8	history1 0 0 2 <1 6 1927 275 332 3948 history1 7 3 5 history1 0 4.9 21.2	history2 0 0 <1 <1 <1 6 1735 240 299 2505 history2 5 4 2 history2 0 4.9 18.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm	method ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844	limit/base >180 >20 limit/base >2 >20 >30 limit/base	current 0 0 1 <1 5 1884 250 302 4558 current 9 5 3 current 0.1 4.8 25.8 current	history1 0 0 2 <1 6 1927 275 332 3948 history1 7 3 5 history1 0 4.9 21.2 history1	history2 0 0

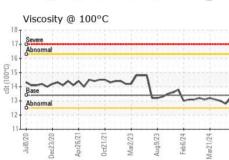


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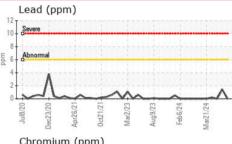


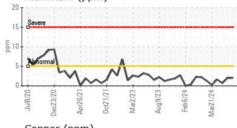
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

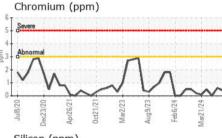
FLUID PROPER	TIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	13.4	13.2	12.8	13.0	

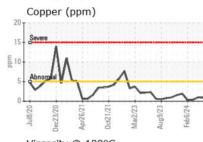
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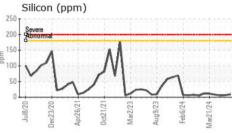
GRAPHS

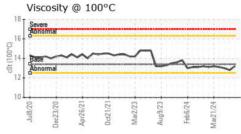


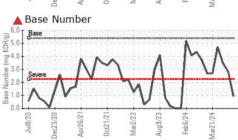
















Certificate 12367

Laboratory Sample No.

Test Package : MOB 2

: WC0901629 Lab Number : 06161683 Unique Number : 10997106

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 26 Apr 2024

Tested : 29 Apr 2024 Diagnosed : 29 Apr 2024 - Sean Felton **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)

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