

OIL ANALYSIS REPORT

Sample Rating Trend

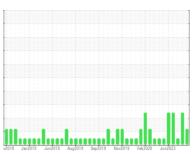
DEGRADATION



EDLTAY TAYM03BE (S/N 1256582)

Biogas Engine

CHEVRON HDAX 6500 LFG GAS ENGINE OIL (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

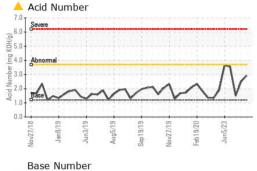
▲ Fluid Condition

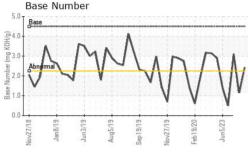
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is at the top-end of the recommended limit.

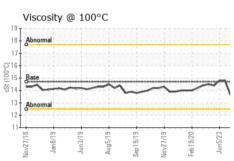
and Livalive oil (1)				Sep2019 Nov2019 Feb2020 .		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0788242	WC0788246	WC0788178
Sample Date		Client Info		09 Aug 2023	01 Aug 2023	10 Jul 2023
Machine Age	hrs	Client Info		55664	55664	4000
Oil Age	hrs	Client Info		43977	11687	0
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
CONTAMINATIO	V	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	8	8	8
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	<1
Aluminum	ppm	ASTM D5185m	>6	3	2	2
Lead	ppm	ASTM D5185m	>20	<1	0	<1
Copper	ppm	ASTM D5185m	>6	2	2	2
Tin	ppm	ASTM D5185m	>4	5	4	3
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	1
Boron Barium	ppm	ASTM D5185m ASTM D5185m		0	0	1
	• • •					
Barium	ppm	ASTM D5185m		0	0	1
Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m		0 <1	0 <1	1
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 <1	0 <1 <1	1 1 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 <1 12	0 <1 <1 10	1 1 <1 11
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 <1 12 1977	0 <1 <1 10 1983	1 1 <1 11 1956
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 <1 12 1977 305	0 <1 <1 10 1983 291	1 1 <1 11 1956 299
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 <1 12 1977 305 397	0 <1 <1 10 1983 291 401	1 1 <1 11 1956 299 379
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm 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 >181	0 <1 <1 12 1977 305 397 5532	0 <1 <1 10 1983 291 401 4746	1 1 <1 11 1956 299 379 4361
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 <1 12 1977 305 397 5532 current	0 <1 <1 10 1983 291 401 4746 history1	1 1 <1 11 1956 299 379 4361 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>181	0 <1 <1 12 1977 305 397 5532 current	0 <1 <1 10 1983 291 401 4746 history1 9	1 1 1 11 1956 299 379 4361 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>181 >20	0 <1 <1 12 1977 305 397 5532 current 14 7	0 <1 <1 10 1983 291 401 4746 history1 9 5	1 1 1 11 1956 299 379 4361 history2 6
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>181 >20 >20	0 <1 <1 12 1977 305 397 5532 current 14 7 2	0 <1 <1 10 1983 291 401 4746 history1 9 5 1	1 1 1 11 1956 299 379 4361 history2 6 8
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	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	>181 >20 >20 limit/base >2	0 <1 <1 12 1977 305 397 5532 current 14 7 2 current 0	0 <1 <1 10 1983 291 401 4746 history1 9 5 1 history1 0	1 1 1 11 1956 299 379 4361 history2 6 8 2 history2 0.1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	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	>181 >20 >20 limit/base >2	0 <1 <1 12 1977 305 397 5532 current 14 7 2 current	0 <1 <1 10 1983 291 401 4746 history1 9 5 1 history1	1 1 1 11 1956 299 379 4361 history2 6 8 2 history2
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	>181 >20 >20 >20 limit/base >2 >20	0 <1 <1 <1 12 1977 305 397 5532 current 14 7 2 current 0 5.0	0 <1 <1 10 1983 291 401 4746 history1 9 5 1 history1 0 5.0	1 1 1 1 11 1956 299 379 4361 history2 6 8 2 history2 0.1 5.1
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	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	>181 >20 >20 limit/base >2 >20 >30	0 <1 <1 12 1977 305 397 5532 current 14 7 2 current 0 5.0 29.8	0 <1 10 1983 291 401 4746 history1 9 5 1 history1 0 5.0 27.2	1 1 1 1 1 1956 299 379 4361 history2 6 8 2 history2 0.1 5.1 23.9
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 method	>181 >20 >20 limit/base >2 >20 limit/base	0 <1 <1 12 1977 305 397 5532 current 14 7 2 current 0 5.0 29.8 current	0 <1 <1 10 1983 291 401 4746 history1 9 5 1 history1 0 5.0 27.2 history1	1 1 1 1 1 1956 299 379 4361 history2 6 8 2 history2 0.1 5.1 23.9 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m Method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415 Method *ASTM D7414	>181 >20 >20 limit/base >2 >20 limit/base >2 >20 >30 limit/base >25	0 <1 <1 12 1977 305 397 5532 current 14 7 2 current 0 5.0 29.8 current 13.6	0 <1 <1 10 1983 291 401 4746 history1 9 5 1 history1 0 5.0 27.2 history1 12.6	1 1 1 1 11 1956 299 379 4361 history2 6 8 2 history2 0.1 5.1 23.9 history2 10.6



OIL ANALYSIS REPORT





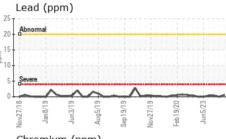


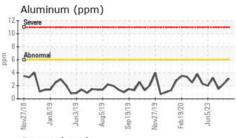
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

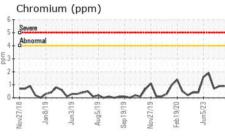
I LOID I NOI LI	TILO	memou	IIIIII/Dase	Current	HISTOLAL	HISTOLA
Visc @ 100°C	cSt	ASTM D445	14.7	13.7	13.8	13.6

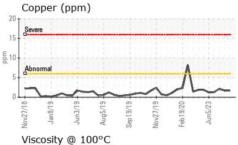
Severe						
Abnormal						
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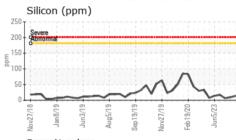
GRAPHS

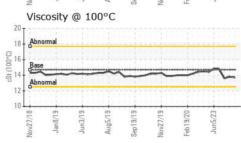


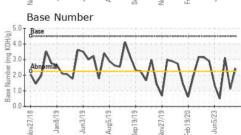
















Laboratory Sample No. Lab Number **Unique Number**

: WC0788242 : 05922385 : 10602332

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed Diagnostician

: 11 Aug 2023 : 14 Aug 2023 : Don Baldridge **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

Test Package : MOB 2 Certificate L2367

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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