

OIL ANALYSIS REPORT

Pillen Family Farms Env 30

Component **Diesel Engine** Fluid { unknown } (--- GAL)

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

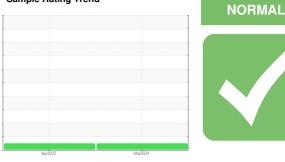
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



Sample Rating Trend

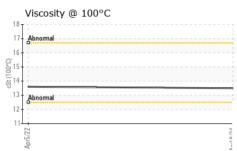


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0006829	SBP0000721	
Sample Date		Client Info		18 Mar 2024	05 Apr 2022	
Machine Age	hrs	Client Info		350	0	
Oil Age	hrs	Client Info		350	0	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS			limit/base	-		history
WEAR METALS		method		current	history1	history2
Iron	ppm	ASTM D5185m	>100	8	4	
Chromium	ppm		>20	<1	1	
Nickel	ppm	ASTM D5185m	>4	0	2	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>20	2	2	
Lead	ppm	ASTM D5185m	>40	<1	7	
Copper	ppm	ASTM D5185m	>330	2	1	
Tin	ppm	ASTM D5185m	>15	0	3	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		10	93	
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m		10 0	93 0	
Barium	ppm	ASTM D5185m		0	0	
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m		0 49	0 3	
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 49 <1	0 3 <1	
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 49 <1 919	0 3 <1 856	
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 49 <1 919 1099	0 3 <1 856 1535	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 49 <1 919 1099 1070	0 3 <1 856 1535 791	
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	limit/base	0 49 <1 919 1099 1070 1203	0 3 <1 856 1535 791 993	
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	limit/base	0 49 <1 919 1099 1070 1203 3501	0 3 <1 856 1535 791 993 2844	
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		0 49 <1 919 1099 1070 1203 3501 current	0 3 <1 856 1535 791 993 2844 history1	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>25	0 49 <1 919 1099 1070 1203 3501 current 3	0 3 <1 856 1535 791 993 2844 history1 4	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>25	0 49 <1 919 1099 1070 1203 3501 current 3 4	0 3 <1 856 1535 791 993 2844 history1 4 13	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>25 >20	0 49 <1 919 1099 1070 1203 3501 <u>current</u> 3 4 1	0 3 <1 856 1535 791 993 2844 <u>history1</u> 4 13 25	 history2
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 ASTM D5185m	>25 >20 limit/base	0 49 <1 919 1099 1070 1203 3501 current 3 4 1 current 0.1	0 3 <1 856 1535 791 993 2844 history1 4 13 25 history1	 history2 history2
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 ASTM D5185m	>25 >20 limit/base >3	0 49 <1 919 1099 1070 1203 3501 current 3 4 1 1 current	0 3 <1 856 1535 791 993 2844 history1 4 13 25 history1 0.2	 history2 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 ASTM D5185m	>25 >20 limit/base >3 >20	0 49 <1 919 1099 1070 1203 3501 <u>current</u> 3 4 1 1 <u>current</u> 0.1 10.0	0 3 <1 856 1535 791 993 2844 history1 4 13 25 history1 0.2 8.9	 history2 history2
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 ASTM D7844 *ASTM D7624 *ASTM D7415	>25 >20 limit/base >3 >20 >30 limit/base	0 49 - 1 919 1099 1070 1203 3501 <i>current</i> 3 4 1 1 <i>current</i> 0.1 10.0 18.2 <i>current</i>	0 3 <1 856 1535 791 993 2844 history1 4 13 25 history1 0.2 8.9 20.5 history1	 history2 history2
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 ASTM D5185m	>25 >20 limit/base >3 >20 >30	0 49 <1 919 1099 1070 1203 3501 <u>current</u> 3 4 1 1 <u>current</u> 0.1 10.0 18.2	0 3 <1 856 1535 791 993 2844 history1 4 13 25 history1 0.2 8.9 20.5	 history2 history2 history2 history2

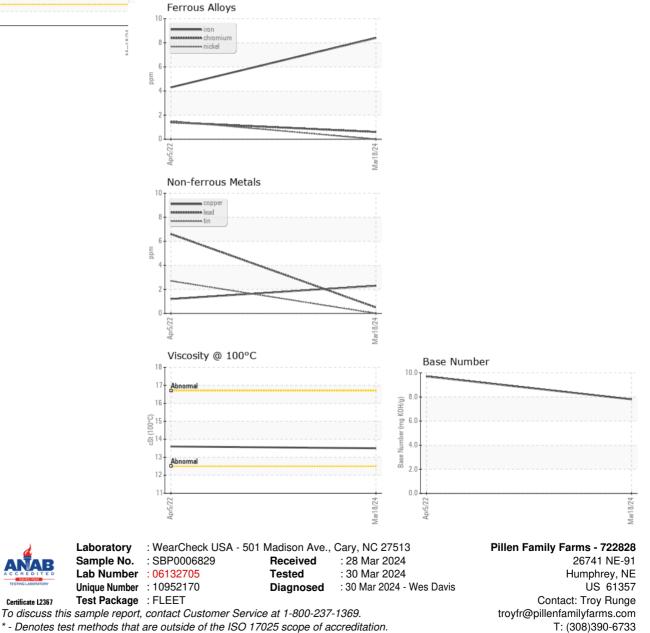


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Base Number 10.0 (mg KOH/g) 8 6.0 lumber 4. Base 2 (0.0 Anr5/77 Mar18/24



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	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPER		method	limit/base	current	history1	history2
		memou	iiiiii/base	Current	Thistory I	TIIStOLYZ
Visc @ 100°C	cSt	ASTM D445		13.5	13.6	
GRAPHS						



* - 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)

F:

Certificate L2367