

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 2026856

Component Diesel Engine Fluid {not provided} (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on 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 INFORM	/ ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0112333	PCA0079910	PCA0056221
Sample Date		Client Info		12 Dec 2023	16 Aug 2022	22 Aug 2021
Machine Age	mls	Client Info		100903	100903	0
Oil Age	mls	Client Info		100903	100903	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
		and the set	Part la racia		In the transmitter	h'stern 0
WEAR METAL	5	method	limit/base	current	nistory i	nistory2
Iron	ppm	ASTM D5185m	>100	44	29	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	1	<1	1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	4	3	4
Lead	ppm	ASTM D5185m	>40	2	1	0
Copper	ppm	ASTM D5185m	>330	6	15	36
Tin	ppm	ASTM D5185m	>15	1	<1	2
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 1	history2 4
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 0 0	history1 1 0	history2 4 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 58	history1 1 0 61	history2 4 0 57
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 58 1	history1 1 0 61 <1	history2 4 0 57 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 58 1 907	history1 1 0 61 <1 841	history2 4 0 57 <1 829
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185m	limit/base	current 0 0 58 1 907 1002	history1 1 0 61 <1 841 1090	history2 4 0 57 <1 829 1128
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 0 58 1 907 1002 942	history1 1 0 61 <1 841 1090 890	history2 4 0 57 <1 829 1128 809
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 0 58 1 907 1002 942 1217	history1 1 0 61 <1 841 1090 890 1170	history2 4 0 57 <1 829 1128 809 1119
ADDITIVES 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 58 1 907 1002 942 1217 2670	history1 1 0 61 <1 841 1090 890 1170 2836	history2 4 0 57 <1 829 1128 809 1119 2416
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 58 1 907 1002 942 1217 2670 current	history1 1 0 61 <1 841 1090 890 1170 2836 history1	history2 4 0 57 <1 829 1128 809 1119 2416 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	method ASTM D5185m	limit/base limit/base >25	current 0 0 58 1 907 1002 942 1217 2670 current 7	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	method ASTM D5185m	limit/base limit/base >25	current 0 0 58 1 907 1002 942 1217 2670 current 7 0	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm 1 ppm 2 ppm 2 ppm 2 ppm 2 ppm 2 ppm 4 ppm 4 ppm 4 ppm 2 ppm 2 ppm 1 ppm 4	method ASTM D5185m	limit/base limit/base >25 >20	current 0 0 58 1 907 1002 942 1217 2670 current 7 0 0 0	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1 4 1 4 1 4	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm 1 ppm 2 ppm 2 ppm 2 ppm 2 ppm 2 ppm 3 ppm 4 ppm 4 ppm 4 ppm 2 ppm 4 ppm 4	method ASTM D5185m	limit/base ////////////////////////////////////	current 0 0 58 1 907 1002 942 1217 2670 current 7 0 0 2 11002 942 1217 2670	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1.0	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10 <1.0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm \$	method ASTM D5185m	limit/base	current 0 0 58 1 907 1002 942 1217 2670 current 7 0 0 41.0	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1 4 1.0 history1	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10 <1.0 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm 1 ppm 2 ppm 2 ppm 2 ppm 2 ppm 2 ppm 3 ppm 4 ppm 4 ppm 4 ppm 2 ppm 4 ppm 4	method ASTM D5185m	limit/base >25 >20 >5 limit/base >3	current 0 0 58 1 907 1002 942 1217 2670 current 7 0 0 0 <th>history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1.0 history1 0.4</th> <th>history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10 <1.0 history2 0.5</th>	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1.0 history1 0.4	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10 <1.0 history2 0.5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base 	current 0 0 58 1 907 1002 942 1217 2670 current 7 0 - 0 < 0.4 11.5	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1.0 history1 0.4 10.1	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10 <1.0 history2 0.5 9.1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm t spm ppm ppm ppm spm spm spm spm spm spm	method ASTM D5185m	limit/base	current 0 0 58 1 907 1002 942 1217 2670 current 7 0 0 <1.0 current 0.4 11.5 23.0	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1 4 1.0 history1 0.4 10.1 21.7	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10 <1.0 history2 0.5 9.1 20.1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base ////////////////////////////////////	current 0 0 58 1 907 1002 942 1217 2670 current 7 0 <1.0 current 0.4 11.5 23.0	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1.0 history1 0.4 10.1 21.7 history1	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10 <1.0 history2 0.5 9.1 20.1 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7415 method *ASTM D7414	limit/base 	current 0 0 58 1 907 1002 942 1217 2670 current 7 0 <1.0 current 0.4 11.5 23.0 current 20.6	history1 1 0 61 <1 841 1090 890 1170 2836 history1 4 1 4 1 4 1.0 history1 0.4 10.1 21.7 history1 17.3	history2 4 0 57 <1 829 1128 809 1119 2416 history2 3 2 10 <1.0 history2 0.5 9.1 20.1 history2 14.9



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	
v/10/2	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Ma	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG	
	Free Water	scalar	Visual		NEG	NEG	NEG	
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2	
	Visc @ 100°C	cSt	ASTM D445		11.3	10.8	11.1	
	GRAPHS							
	Ferrous Alloys							
	40 iron			/				
	35 - nickel							
_	30							
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Certificate L2367	: WearCheck USA - 5 : PCA0112333 : 06057901 : 10829283 : FLEET (Additional	PERDUE FARMS - DILLON 2047 HWY 9 WEST DILLON, SC US 29536 Contact: JOHNNY WILKINS						
To discuss this sample report,	conditional sector and the sector of the sec							
* - Denotes test methods that a Statements of conformity to spece	T: F: (843)841-8070							

