

# **OIL ANALYSIS REPORT**

#### Sample Rating Trend





# Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 40 (--- 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.

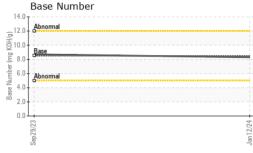
#### Fluid Condition

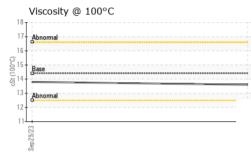
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

			Sep2023	Jan2024		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0006174	SBP0001498	
Sample Date		Client Info		12 Jan 2024	29 Sep 2023	
Machine Age	mls	Client Info		12000	0	
Oil Age	mls	Client Info		12000	0	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	٧	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		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	8	11	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>4	0	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	4	8	
Lead	ppm	ASTM D5185m	>40	1	0	
Copper	ppm	ASTM D5185m	>330	2	2	
Tin	ppm	ASTM D5185m	>15	2	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	0	<1	
Barium	ppm	ASTM D5185m	10	0	0	
Molybdenum	ppm	ASTM D5185m	100	61	58	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m	450	928	992	
Calcium	ppm	ASTM D5185m	3000	1010	1070	
Phosphorus	ppm	ASTM D5185m	1150	1034	1038	
Zinc	ppm	ASTM D5185m	1350	1185	1310	
Sulfur	ppm	ASTM D5185m	4250	2908	3133	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	4	
Sodium	ppm	ASTM D5185m	>216	2	1	
Potassium	ppm	ASTM D5185m	>20	9	22	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.3	
Nitration	Abs/cm	*ASTM D7624	>20	7.1	6.9	
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	19.1	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	14.6	
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.3	8.7	



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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	
			11 11 11			
FLUID PROPER		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.6	13.8	
GRAPHS						
Ferrous Alloys						
iron						
0 - chromium						
8						
6-						
4						
2 -						
0	****************	************************				
Sep 29/23			Jan 12/24			
Sep			Jan			
Non-ferrous Meta	ils					
0т						
copper						
8						
Internet lead						
8						
8 - tin						
8						
8+ bn						
8						
8						
8 +	*****		Jan12/24			
Viscosity @ 100°	*****		Jan 12/24	Base Number		
8 - Ead 6 - Ead 7 - Ead 6 - Ead 6 - Ead 6 - Ead 6 - Ead 6 - Ead 7 -	*****		++++++++++++++++++++++++++++++++++++++	Base Number		
8 6 4 2 Viscosity @ 100° Abnormal	*****		14.0	Abnormal		
8 - tin 6 - tin 4 - tin 6 - tin 6 - tin 6 - tin 6 - tin 7 - tin 7 - tin 8 -	*****		14.0	Abnormal		
8 - tin 6 - tin 4 - tin 6 - tin 6 - tin 6 - tin 6 - tin 7 - tin 7 - tin 8 -	*****		14.0	Abnormal		
8	*****		14.0	Abnormal		
Viscosity @ 100°	*****		14.0	Abnormal		
8	*****		++++++++++++++++++++++++++++++++++++++	Abnormal Base Abnormal		

0.0

Sep29/23

Jan12/24 -

: 01 Feb 2024

: 02 Feb 2024



Test Package : FLEET Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. troyfr@pillenfamilyfarms.com \* - 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)

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

Diagnostician : Wes Davis

Recieved

Diagnosed

11

Unique Number : 10859485

Laboratory

Sample No.

Lab Number

Sep29/23

: SBP0006174

: 06077394

Pillen Family Farms - 722828

Jan 12/24

F:

26741 NE-91

Humphrey, NE

Contact: Troy Runge

T: (308)390-6733

US 61357