

# **OIL ANALYSIS REPORT**

## Sample Rating Trend



Machine Id G41 Component Natural Gas Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- 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.

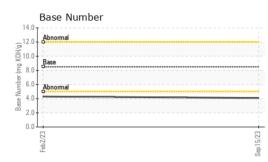
#### Fluid Condition

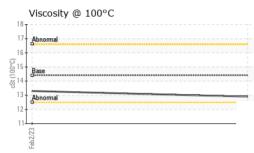
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

			Feb2023	Sep2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0841396	WC0758939	
Sample Date		Client Info		15 Sep 2023	02 Feb 2023	
Machine Age	hrs	Client Info		2562	1976	
Oil Age	hrs	Client Info		537	401	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	5	3	
Chromium	ppm	ASTM D5185m	>4	0	<1	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>9	<1	1	
Lead	ppm	ASTM D5185m	>30	2	<1	
Copper	ppm	ASTM D5185m	>35	3	2	
Tin	ppm	ASTM D5185m	>4	<1	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	47	76	
Barium	ppm	ASTM D5185m	10	0	0	
Molybdenum	ppm	ASTM D5185m	100	112	109	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m	450	86	83	
Calcium	ppm	ASTM D5185m	3000	2192	2060	
Phosphorus	ppm	ASTM D5185m	1150	829	768	
Zinc	ppm	ASTM D5185m	1350	1045	944	
Sulfur	ppm	ASTM D5185m	4250	4414	3951	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	6	5	
Sodium	ppm	ASTM D5185m	>158	6	0	
Potassium	ppm	ASTM D5185m	>20	4	0	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	
Nitration	Abs/cm	*ASTM D7624	>20	7.7	6.5	
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	15.3	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.8	9.7	
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.1	4.3	



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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	>0.1	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	13.3	
GRAPHS						
Ferrous Alloys						
10 iron						
8 -						
TICKEI						
6- mdd						
4						
2						
0			Annual (1997)			
Feb2/23			Sep15/23			
			Sep			
Non-ferrous Metals	5					
copper						
8 - management tin						
6						
E d						
4						
2			and a start			
3			23			
Feb2/23			Sep15/23			
Viscosity @ 100°C				Base Number		
18			14.0	T ;		
17 Abnormal			12.0	Abnormal		
16			<sup>8</sup> Нол	Base		
(j) 15 Base 35 14			8.0	<b>Q</b>		
tg 14			0.01 8.0 9.0 Burner 8.0 8.0 8 8 8 8 8 8	Abnormal		
13 - Abnormal				-		
12-			2.0			
11			0.0			
Feb2/23			Sep15/23	Feb 2/23		Sep15/23
ца П			Sep	ц <u>р</u>		Sep



 Vertex Laboration
 Unique Number
 : 10661647
 Diagnostician
 : Wes Davis

 Certificate 12367
 Test Package
 : CONST (Additional Tests: TBN)

 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)

: WC0841396

: 05960434

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

: 25 Sep 2023

: 26 Sep 2023

Received

Diagnosed

**Apple Valley Waste - SEW Location** 

Laboratory Sample No.

Lab Number

T:

F: