

# **OIL ANALYSIS REPORT**

Sample Rating Trend





Machine Id LINK-BELT 218V 218V (S/N V2L4-7706) Component Diesel Engine Fluid

## DIESEL ENGINE OIL SAE 15W40 (7 GAL)

#### Dirtartoolo

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

Metal levels are typical for a components first oil change.

### 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	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		LBC0000028		
Sample Date		Client Info		04 Apr 2024		
Machine Age	hrs	Client Info		100		
Oil Age	hrs	Client Info		100		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method	20.2	NEG		
-				-		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	7		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	4		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	20		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	145		
Barium	ppm	ASTM D5185m	10	4		
Molybdenum	ppm	ASTM D5185m	100	65		
Manganese	ppm	ASTM D5185m		4		
Magnesium	ppm	ASTM D5185m	450	390		
Calcium	ppm	ASTM D5185m	3000	1699		
Phosphorus	ppm	ASTM D5185m	1150	1002		
Zinc	ppm	ASTM D5185m	1350	1205		
Sulfur	ppm	ASTM D5185m	4250	3566		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	23		
Sodium	ppm	ASTM D5185m	>158	3		
Potassium	ppm	ASTM D5185m	>20	2		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1		
Nitration	Abs/cm	*ASTM D7624		4.2		
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5		
FLUID DEGRADA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.3		



35

30

25

20% 4ps/cm 10 5 0 Apr4/24

14.0

2.0 0.0 Apr4/24

18. 17 16 cSt (100°C)

Abnormal 12 11 Apr4/24

# **OIL ANALYSIS REPORT**

-IR (Direct Trend)		VISUAL		method	limit/base	current	history1	history2
Oxidation Nitration		White Metal	scalar	*Visual	NONE	NONE		
normal-Sulfation		Yellow Metal	scalar	*Visual	NONE	NONE		
		Precipitate	scalar	*Visual	NONE	NONE		
		Silt	scalar	*Visual	NONE	NONE		
		Debris	scalar	*Visual	NONE	NONE		
		Sand/Dirt	scalar	*Visual	NONE	NONE		
	Apr4/24 -	Appearance	scalar	*Visual	NORML	NORML		
	Api	Odor	scalar	*Visual	NORML	NORML		
se Number		Emulsified Water	scalar	*Visual	>0.2	NEG		
		Free Water	scalar	*Visual		NEG		
nomal		FLUID PROPERT	IFS	method	limit/base	current	history1	history2
58								, , , , , , , , , , , , , , , , , , ,
		Visc @ 100°C	cSt	ASTM D445	14.4	14.2		
normal		GRAPHS						
		Ferrous Alloys						
	VC	iron						
	C. Prov	8 hickel						
		6						
scosity @ 100°C								
		4						
nomal		2						
		2						
150		0 4:						
nomal		Apr4/24			Apr4/24			
					A			
	VC	Non-ferrous Metal	S					
	And	copper						
		15 - tin						
		톮 10-						
		5-						
		0 54 24			24			
		Apr4/2			Apr4/2			
		Viscosity @ 100°C						
		<sup>18</sup> T			14.0	Base Number		
		17 Abnormal				Abnormal		
		16 Abnormal			12.0	<b>Q</b>		-
	i				0.0 (H/d) 0.0 (Md KOH/d) 0.0 (Md KOH/d)	Base		
		5 15 - Base 3 14 -			ຍິ 8.0 ອ			
	ć	1			4 6.0	Abnormal		
		13 Abnormal			쁂 4.0			
		12			2.0	•		
		11				**		
		Apr4/24			Apr4/24	Apr4/24		Apr4/24
		4			A	A		A
	ratory :	WearCheck USA - 50	1 Madiso			Columbu		Co P103900
			Rece	ived : 08	8 Apr 2024			formance Way
ANAR Samp		LBC0000028						
Samp	lumber :	: 06140932	Teste	ed : 08	Apr 2024	an Davia		Columbus, OH
Samp Lab N Unique	Number : Number :		Teste Diagr	ed : 08 nosed : 08		es Davis		

\* - 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)

Submitted By: Brody Parsons Page 2 of 2

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