

# **OIL ANALYSIS REPORT**

Sample Rating Trend



#### Machine Id LINK-BELT 238 F5I7-7469 Component

**Diesel Engine** 

Fluid DIESEL ENGINE OIL SAE 40 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

# Wear

All component wear rates are normal.

## Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

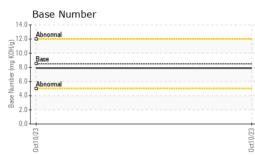
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

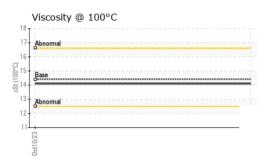
SAMPLE INFORM		method	limit/base	current	history1	history2
Sample Number		Client Info	innivodoc	LBC0000182		
1				10 Oct 2023		
Sample Date	la va	Client Info				
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	2		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	<1		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	<1		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	193		
				-		
Barium	ppm	ASTM D5185m	10	0		
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	10 100	0 6		
				-		
Molybdenum	ppm	ASTM D5185m		6		
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m	100	6 <1		
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	100 450	6 <1 99		
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000	6 <1 99 1940		
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150	6 <1 99 1940 989		  
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150 1350	6 <1 99 1940 989 1138	  	  
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150 1350 4250 limit/base	6 <1 99 1940 989 1138 3481	   	   
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150 1350 4250 <b>limit/base</b> >25	6 <1 99 1940 989 1138 3481 current	   	    
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	100 450 3000 1150 1350 4250 imit/base >25 >216	6 <1 99 1940 989 1138 3481 current 2	    history1	    history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150 1350 4250 imit/base >25 >216	6 <1 99 1940 989 1138 3481 current 2 4	    history1 	    history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150 1350 4250 <b>limit/base</b> >25 >216 >20	6 <1 99 1940 989 1138 3481 current 2 4 5 5	    history1  	     history2  
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	100 450 3000 1150 1350 4250 <b>imit/base</b> >25 >216 >20 <b>imit/base</b> >3	6 <1 99 1940 989 1138 3481 current 2 4 5 5 current 0.1	    history1   history1	    history2  history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	100 450 3000 1150 4250 <b>imit/base</b> >25 >216 >20 <b>imit/base</b> >3 >20	6 <1 99 1940 989 1138 3481 <u>current</u> 2 4 5 5 <u>current</u> 0.1 6.6	    history1   history1  history1	    history2   history2
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	100 450 3000 1150 1350 4250 <b>imit/base</b> >25 >216 >20 <b>imit/base</b> >3 >20 >30	6 <1 99 1940 989 1138 3481 <u>current</u> 2 4 5 <u>current</u> 0.1 6.6 19.5	    history1  history1  history1	    history2  history2  history2
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 D7624	100 450 3000 1150 1350 4250 <b>imit/base</b> >25 >216 >20 <b>imit/base</b> >3 >20 >30 <b>imit/base</b>	6 <1 99 1940 989 1138 3481 <u>current</u> 2 4 5 <u>current</u> 0.1 6.6 19.5 <u>current</u>	     history1   history1   history1	    history2  history2  history2
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 D7844 *ASTM D7624 *ASTM D7415	100 450 3000 1150 1350 4250 imit/base >25 >216 >20 imit/base >3 >20 >30 imit/base >25	6 <1 99 1940 989 1138 3481 <u>current</u> 2 4 5 <u>current</u> 0.1 6.6 19.5	    history1  history1  history1	    history2  history2  history2



# **OIL ANALYSIS REPORT**

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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
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		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	IFS	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		14.1		
GRAPHS						
Ferrous Alloys						
<sup>10</sup>						
iron						
8 - nickel						
6-						
E 4						
2						
0ct10/23			0ct10/23			
0ct1			0ct1			
Non-ferrous Metals	5					
10 copper						
8 - lead						
6						
4						
2-						
0						
0ct10/23			0ct10/23			
			Oct			
Viscosity @ 100°C				Base Number		
			14.0	т :		
17- Abnormal			12.0	Abnormal		
16-			HOX 10.0	Base		
ට 15 8 14			ີຍີ 8.0	0		
zi 14-			0.01 8.0 9.0 Mumper 8.0 8.0 8 8 8 8 8 8 8 8 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	Abnormal		
13 Abnormal			2 82 4.0	-		
12			2.0			
11			0.0			
0ct10/23			0ct10/23	0ct1 0/23		0ct10/23
Oct			Oct	Oct		Octi



Unique Number : 10696573 Diagnostician : Wes Davis Test Package : CONST (Additional Tests: TBN) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. hallie\_long@atlanticandsouthern.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)

: LBC0000182

: 05979278

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

: 16 Oct 2023

: 16 Oct 2023

Received

Diagnosed

Laboratory Sample No.

Lab Number

Atlantic & Southern Equipment - P103000

1642 Forest Parkway

Contact: HALLIE LONG

Morrow, GA

US 30260

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