

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# Area BOWERS [Z20001] Machine Id HINO 48

Diesel Engine Fluid DELO SLK 15W40 (--- LTR)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

### 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	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC06152951		
Sample Date		Client Info		02 Apr 2024		
Machine Age	hrs	Client Info		2150		
Oil Age	hrs	Client Info		250		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	3		
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	2		
Lead	ppm	ASTM D5185m	>40	1		
Copper	ppm	ASTM D5185m	>330	1		
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		555		
Barium	ppm	ASTM D5185m		2		
Molybdenum	ppm	ASTM D5185m		86		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		381		
Calcium	ppm	ASTM D5185m		1355		
Phosphorus	ppm	ASTM D5185m		1068		
Zinc	ppm	ASTM D5185m		1190		
Sulfur	ppm	ASTM D5185m		3697		
CONTAMINANTS		method			history1	history2
Silicon	ppm	ASTM D5185m	>25	5		
Silicon Sodium	ppm ppm	ASTM D5185m ASTM D5185m	>25	5 0		
			>25 >20			
Sodium	ppm	ASTM D5185m		0		
Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	>20	0 4		
Sodium Potassium INFRA-RED	ppm ppm	ASTM D5185m ASTM D5185m method	>20 limit/base	0 4 current	  history1	 history2
Sodium Potassium INFRA-RED Soot %	ppm ppm %	ASTM D5185m ASTM D5185m method *ASTM D7844	>20 limit/base >3	0 4 current 0.1	  history1	 history2 
Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624	>20 limit/base >3 >20	0 4 current 0.1 4.8	  history1 	 history2 
Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7415	>20 limit/base >3 >20 >30	0 4 current 0.1 4.8 20.8	 history1 	 history2  



F 35

30 25 20% 4ps/cm 1 ÷ 10 5 0. Apr2/24 -

10.0

(B/HOX Bw)

Base Number () 7.0

0.0 Anr7/74

16 (0.15. (100-01) 14.

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-13 12

# **OIL ANALYSIS REPORT**

		VISUAL		method			
Oxidation		White Metal	scalar	*Visual	NONE	NONE	
nemal - Sulfation		Yellow Metal	scalar	*Visual	NONE	NONE	
		Precipitate	scalar	*Visual	NONE	NONE	
		Silt	scalar	*Visual	NONE	NONE	
	1	Debris	scalar	*Visual	NONE	NONE	
		Sand/Dirt	scalar	*Visual	NONE	NONE	
	Apr2/24 -	Appearance	scalar	*Visual	NORML	NORML	
	Apri	Odor	scalar	*Visual	NORML	NORML	
		Emulsified Water	scalar	*Visual	>0.2	NEG	
se Number		Free Water	scalar	*Visual		NEG	
		FLUID PROPER	TIFS	method	limit/base	current	history1
		Visc @ 100°C	cSt	ASTM D445	innibacc	13.3	
		GRAPHS	001	ACTIM D440		10.0	
		Ferrous Alloys					
		<sup>10</sup>					
	100	8+					
	America	o needed in the second					
cosity @ 100°C		6-					
		е dd 4-					
normal							
		2-					
		0					
		Apr2/24			Apr2/24		
normal		Ap			Api		
		Non-ferrous Meta	ls				
	100	10 copper					
	<	8 - Reason lead					
		6					
		4					
		2 -					
		Apr2/24			Apr2/24		
			<u>_</u>		~		
		Viscosity @ 100°	L 			Base Number	
					9.0	1	
		-				1.1	
		16- G			HOX 6.0	)	
		().001 314-			ڦ 5.0 س	)	
		ಕ್ಷ <sup>14</sup>				1	
		13 - Abnormal			(B)HOX (B)HOX (B)HOX (B)J (B) (B) (B) (B) (B) (B) (B) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	1	
		12			1.0		
		11			0.0	, L	
		/24			Apr2/24	Apr2/24	
		211			12	12	
		Apr2/24			Apri	Apri	

MECHANICAL 27 PROGRESS DR Received : 18 Apr 2024 Sample No. : WC06152951 ANAB Lab Number : 06152951 : 19 Apr 2024 OTOROHANGA, ZZ Tested : 19 Apr 2024 - Wes Davis Unique Number : 10983029 Diagnosed ΝZ Test Package : FLEET Contact: ADELE FOWKES Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. adele.fowkes@htsl.co.nz \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: ADELE FOWKES - HTSOTO

Apr2/24

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