WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Area

Dunleavy

Kobelco SK210L YOO8U1288

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

Recommendation	DIESEL ENGINE OIL SAE 15W40 (GAL)							
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	RECOMMENDATION	Test	UOM	Method	I imit/Abn	Current	History1	History2
Sample Date Client Info Machine Age hrs Client Info 10073	TIESOWIWIENDATION						,	
Machine Ago hrs Citent Info 10073		•						
Col Age			hrs			-		
Filter Age		•						
Oil Changed Client Info NA								
Filter Changed Sample Status		-	1110					
Normal N								
Iron		_		Oliciti IIIIo				
Chromium ppm ASTMD5185m 20 2 2 3 3 3 3 3 3 3 3								
Mickel ppm ASTM D5186m >4 0	WEAR	Iron	ppm	ASTM D5185m	>100	7		
Nicker Spill Trainium Spill		Chromium	ppm	ASTM D5185m	>20	2		
Silver	Metal levels are typical for a components first oil change.	Nickel	ppm	ASTM D5185m	>4	0		
Aluminum ppm ASTM D5185m >20 4		Titanium	ppm	ASTM D5185m		0		
Lead ppm ASTM D5185m 3-40 3		Silver	ppm	ASTM D5185m	>3	0		
Copper		Aluminum	ppm	ASTM D5185m	>20	4		
Copper ppm ASTM D5185m >330 1		Lead	ppm	ASTM D5185m	>40	3		
Tin		Copper		ASTM D5185m	>330	1		
Vanadium Vanadium Vanadium Vanite Metal Valuar Valuar								
White Metal Scalar *Visual NONE NO		Vanadium		ASTM D5185m				
CONTAMINATION		White Metal			NONE	NONE		
Potassium ppm ASTM D5185m 2-0 -1		Yellow Metal	scalar	*Visual	NONE			
Potassium ppm ASTM D5185m 2-0 -1								
Fuel WC Method >5	CONTAMINATION	Silicon	ppm			7		
Water WC Method Sol NEG Sol So	There is no indication of any contamination in the oil.	Potassium	ppm			<1		
Glycol Soot % %		Fuel		WC Method	>5	<1.0		
Soot %		Water		WC Method	>0.2	NEG		
Nitration Abs/cm *ASTM D7624 >20 8.1		Glycol		WC Method		NEG		
Sulfation Abs/.tmm 'ASTM D7415 >30 17.3		Soot %	%	*ASTM D7844	>3	0.1		
Silt Scalar *Visual NONE NONE NONE NONE Sand/Dirt Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NORML		Nitration	Abs/cm	*ASTM D7624	>20	8.1		
Debris Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NONE NONE Sand Sand		Sulfation	Abs/.1mm	*ASTM D7415	>30	17.3		
Sand/Dirt Scalar *Visual NONE NONE NONE Appearance Scalar *Visual NORML NORM		Silt	scalar	*Visual	NONE	NONE		
Appearance Scalar *Visual NORML NORML Codor Scalar *Visual NORML		Debris	scalar	*Visual	NONE	NONE		
Codor Emulsified Water Scalar *Visual NORML NORML		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.2 NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium ppm ASTM D5185m >158 1		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 250 69 Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 100 81 Manganese ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2151 Phosphorus ppm ASTM D5185m 1150 1046 Zinc ppm ASTM D5185m 4250 4158 Sulfur ppm ASTM D5185m 4250 4158 Sulfur ppm ASTM D5185m 4250 4158 Sulfur ppm ASTM D5185m 4250 4158 Sulfur ppm ASTM D5185m 4250 4158		Emulsified Water	scalar	*Visual	>0.2	NEG		
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The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 100 81 Manganese ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2151 Phosphorus ppm ASTM D5185m 1150 1046 Zinc ppm ASTM D5185m 1350 1168 Sulfur ppm ASTM D5185m 4250 4158 Oxidation Abs/.1mm *ASTM D7414 >25 13.9 Base Number (BN) mg KOHlg ASTM D2896 8.5 5.5	FLUID CONDITION							
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Molybdenum ppm ASIM D5185m 100 81 Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2151 Phosphorus ppm ASTM D5185m 1150 1046 Zinc ppm ASTM D5185m 1350 1168 Sulfur ppm ASTM D5185m 4250 4158 Oxidation Abs/.1mm *ASTM D7414 >25 13.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 5.5	· · · · · · · · · · · · · · · · · · ·							
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Visc @ 100°C cSt ASTM D445 14.4 14.1								
		Visc @ 100°C	cSt	ASTM D445	14.4	14.1		





Certificate L2367

Report Id: THOLYN [WUSCAR] 06196239 (Generated: 06/03/2024 08:03:05) Rev: 1

Laboratory Sample No.

Lab Number : 06196239 Unique Number : 11058362

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : LW0009065

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Test Package : MOB 1 (Additional Tests: TBN)

Received : 31 May 2024 **Tested**

Diagnosed

: 03 Jun 2024

: 03 Jun 2024 - Wes Davis

US 60411-7728 Contact: Mike Korbelik mike@chicagomachineryinc.com T: (708)758-2060

* - 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)

CHICAGO MACHINERY INC

3142 EAST LINCOLN

LYNWOOD, IL

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