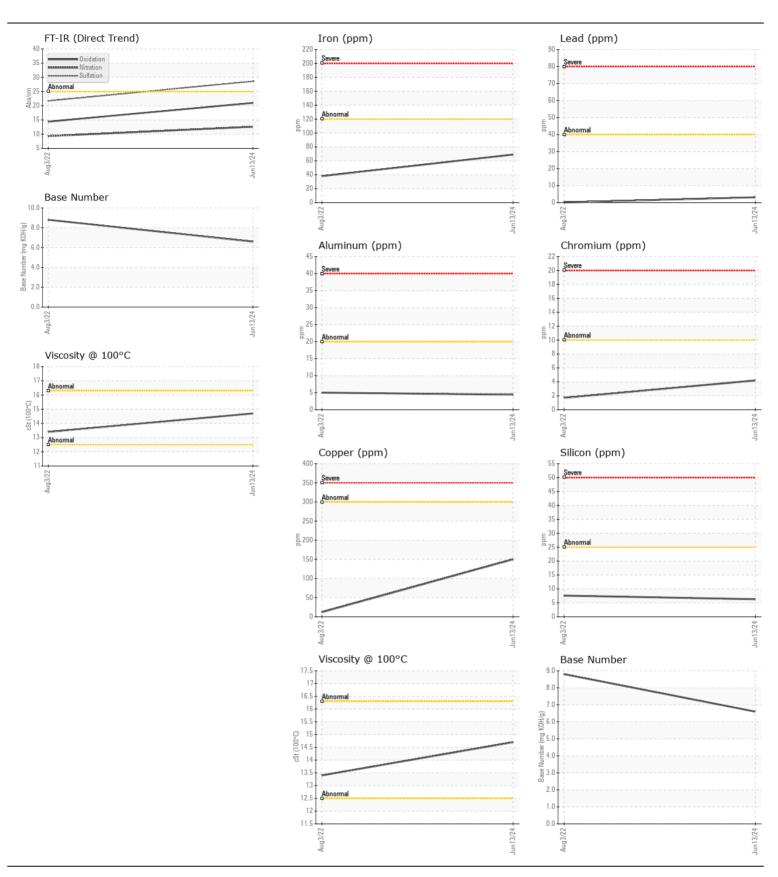
**WEAR CONTAMINATION FLUID CONDITION**  **NORMAL NORMAL NORMAL** 



TA Machines **SANY SY235 CA251 (S/N 13SY023B85188)** 

Diesel Engine

Machine Age   hrs   Client Info   2140   1526	CITGO 15W40 ( GAL)					.,		
Resample at the next service interval to monitor.   Sample Date   Client Info   13 Jau 2024   03 Jau 2022   03 Jau 2022   03 Jau 2024   03 J	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age   hrs   Cleant Info   2140   1526	Resample at the next service interval to monitor.	Sample Number		Client Info		LW0009091	-	
Machine Age   hrs   Client Info   2140   1626		Sample Date		Client Info		13 Jun 2024	03 Aug 2022	
Filter Age   Nrs   Client Info   Not Changd   Not Chang		Machine Age	hrs	Client Info		2140	1526	
Oil Changed   Cilent Info   Not Changed   Cilent Info   Not Changed   Not Changed   Cilent Info   Not Changed		Oil Age	hrs	Client Info		2140	1526	
Filter Changed   Sample Status		Filter Age	hrs	Client Info		0	0	
Normal   N		Oil Changed		Client Info		Not Changd	Not Changd	
Iron		Filter Changed		Client Info		N/A	N/A	
All component wear rates are normal.    Chromium   ppm   ASTM D6185m   55   1   0       Titanium   ppm   ASTM D6185m   55   1   0       Titanium   ppm   ASTM D6185m   55   1   0       Titanium   ppm   ASTM D6185m   55   1   0       All uniform   ppm   ASTM D6185m   55   1   0       All uniform   ppm   ASTM D6185m   20   4   5       ASTM D6185m   20   4   5       ASTM D6185m   20   4   5       ASTM D6185m   20   5   4       ASTM D6185m   20   5   4       ASTM D6185m   20   5   6   8       ASTM D6185m   20   5   4       ASTM D6185m		Sample Status				NORMAL	NORMAL	
All component wear rates are normal.    Chromium   ppm   ASTM D6185m   55   1   0       Titanium   ppm   ASTM D6185m   55   1   0       Titanium   ppm   ASTM D6185m   55   1   0       Titanium   ppm   ASTM D6185m   55   1   0       All uniform   ppm   ASTM D6185m   55   1   0       All uniform   ppm   ASTM D6185m   20   4   5       ASTM D6185m   20   4   5       ASTM D6185m   20   4   5       ASTM D6185m   20   5   4       ASTM D6185m   20   5   4       ASTM D6185m   20   5   6   8       ASTM D6185m   20   5   4       ASTM D6185m	WEAR	Iron	nnm	ASTM D5185m	<b>\120</b>	60	38	
Nickel	WEAIT							
Titanium   ppm   ASTM D5185m   < 1   1	All component wear rates are normal.							
Silver   ppm   ASTM D5185m   >20			• •		70			
Aluminum   ppm   ASTM D5185m   >20   4   5					>5			
Lead   ppm   ASTM DS185m   >40   3   <1								
Copper   ppm   ASTM DS185m   >30.0   150   12								
Tin								
Vanadium								
White Metal   Scalar   *Visual   NONE   NO								
Yellow Metal   scalar   *Visual   NONE   N					NONE			
Potassium   ppm   ASTM D5185m   >20   5   4		Yellow Metal		*Visual	NONE			
Potassium   ppm   ASTM D5185m   >20   5   4	CONTAMINATION  There is no indication of any contamination in the oil.	Cilioon	nnm	ACTM DE10Em	. 25	6	0	
There is no indication of any contamination in the oil.    Fue    WC Method   >4.0   <1.0   <1.0   <			• •					
Water   WC Method   So.1   NEG   N			ppiii			_		
Glycol								
Soot %					>0.1			
Nitration		•	0/_					
Sulfation   Abs/.tmm   *ASTM D7415   >30   28.6   21.7					>20			
Silt   scalar   *Visual   NONE   NONE   NONE   Debris   scalar   *Visual   NONE   NORML   NOR								
Debris   Scalar   *Visual   NONE   NORML								
Sand/Dirt   Scalar   *Visual   NONE   NONE   NORML								
Appearance								
Codor   Scalar   Visual   NORML   NO								
Emulsified Water   scalar *Visual   >0.1   NEG   NEG						NORML		
Boron   ppm   ASTM D5185m   1   0		<b>Emulsified Water</b>	scalar	*Visual	>0.1		NEG	
Boron   ppm   ASTM D5185m   1   0	ELUID CONDITION	Sodium	nnm	ΔSTM D5185m		5	2	
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   18   10       Molybdenum   ppm   ASTM D5185m   2   <1       Magnesium   ppm   ASTM D5185m   619   626       Calcium   ppm   ASTM D5185m   1806   1239       Phosphorus   ppm   ASTM D5185m   1108   997       Zinc   ppm   ASTM D5185m   1416   1151       Sulfur   ppm   ASTM D5185m   3495   4364       Oxidation   Abs/.1mm *ASTM D7414   >25   21.0   14.4       Base Number (BN)   mg KOH/g   ASTM D2896   6.66   8.8								
Molybdenum ppm ASTM D5185m 2 <1  Manganese ppm ASTM D5185m 2 <1  Magnesium ppm ASTM D5185m 619 626  Calcium ppm ASTM D5185m 1806 1239  Phosphorus ppm ASTM D5185m 1108 997  Zinc ppm ASTM D5185m 1416 1151  Sulfur ppm ASTM D5185m 3495 4364  Oxidation Abs/.1mm *ASTM D7414 >25 21.0 14.4  Base Number (BN) mg KOH/g ASTM D2896 6.6 8.8	The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.							
Manganese         ppm         ASTM D5185m         2         <1			• •					
Magnesium         ppm         ASTM D5185m         619         626            Calcium         ppm         ASTM D5185m         1806         1239            Phosphorus         ppm         ASTM D5185m         1108         997            Zinc         ppm         ASTM D5185m         1416         1151            Sulfur         ppm         ASTM D5185m         3495         4364            Oxidation         Abs/.1mm         *ASTM D7414         >25         21.0         14.4            Base Number (BN)         mg KOH/g         ASTM D2896         6.6         8.8		•						
Calcium         ppm         ASTM D5185m         1806         1239            Phosphorus         ppm         ASTM D5185m         1108         997            Zinc         ppm         ASTM D5185m         1416         1151            Sulfur         ppm         ASTM D5185m         3495         4364            Oxidation         Abs/.1mm         *ASTM D7414         >25         21.0         14.4            Base Number (BN)         mg KOH/g         ASTM D2896         6.6         8.8								
Phosphorus         ppm         ASTM D5185m         1108         997            Zinc         ppm         ASTM D5185m         1416         1151            Sulfur         ppm         ASTM D5185m         3495         4364            Oxidation         Abs/.1mm         *ASTM D7414         >25         21.0         14.4            Base Number (BN)         mg KOH/g         ASTM D2896         6.6         8.8		•						
Zinc         ppm         ASTM D5185m         1416         1151            Sulfur         ppm         ASTM D5185m         3495         4364            Oxidation         Abs/.1mm         *ASTM D7414         >25         21.0         14.4            Base Number (BN)         mg KOH/g         ASTM D2896         6.6         8.8								
Sulfur         ppm         ASTM D5185m         3495         4364            Oxidation         Abs/.1mm         *ASTM D7414         >25         21.0         14.4            Base Number (BN)         mg KOH/g         ASTM D2896         6.6         8.8		Zinc					1151	
Oxidation         Abs/.1mm         *ASTM D7414         >25         21.0         14.4            Base Number (BN)         mg KOH/g         ASTM D2896         6.6         8.8		Sulfur		ASTM D5185m		3495	4364	
		Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	14.4	
Visc @ 100°C cSt ASTM D445 ( 14.7 ) 13.4		Base Number (BN)	mg KOH/g	ASTM D2896		6.6	8.8	
		Visc @ 100°C	cSt	ASTM D445		14.7	13.4	







Certificate L2367

Laboratory Sample No.

: LW0009091 Lab Number : 06223138 Unique Number : 11101335

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

Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 28 Jun 2024 : 28 Jun 2024 - Wes Davis

: 28 Jun 2024

US 60411-7728 Contact: Mike Korbelik mike@chicagomachineryinc.com

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)

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