WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Area

[W45132]

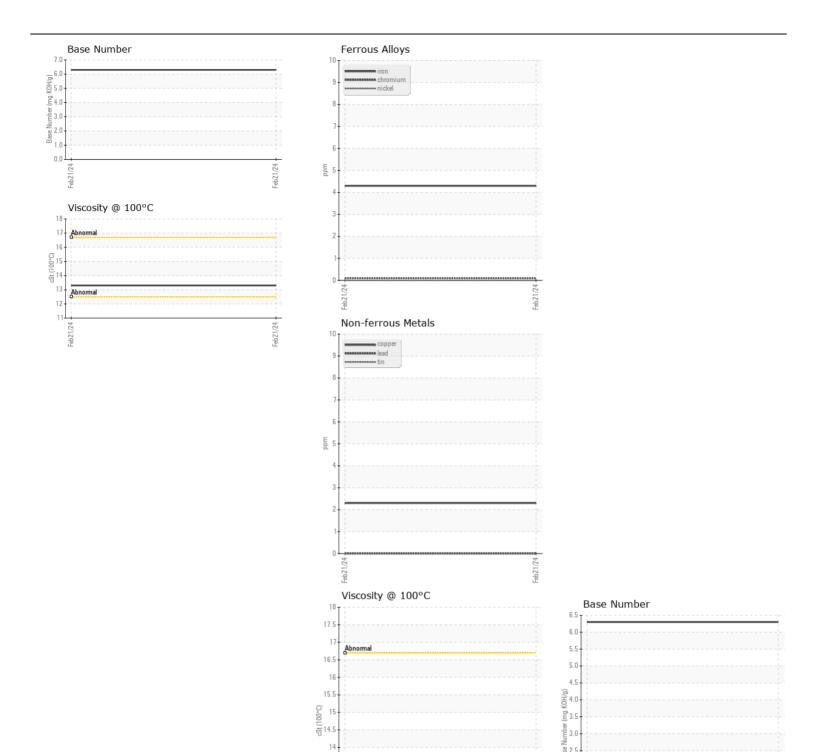
## **BOBCAT 560 C319550 (S/N B4GR11181)**

Component Diesel Engine

Fluid

{not provided} (--- GAL)

Pesample at the next service interval to monitor.	{not provided} ( GAL)							
Resample at the next service interval to monitor.   Sample Date   Client Info   Sample Date   Client Info   1756	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date   Client Info   21 Feb 2024		Sample Number		Client Info		JR0208389		
Oil Age   hrs   Client Info   O   Changed   Filter Age   hrs   Client Info   Changed   Changed	Resample at the next service interval to monitor.	Sample Date				21 Feb 2024		
Filter Age		Machine Age	hrs	Client Info		1756		
Oil Changed   Client Info   Changed   Change		Oil Age	hrs	Client Info		0		
Filter Changed   Sample Status   Client Info   Changed   Chombad   Changed   Changed		Filter Age	hrs	Client Info		0		
Normal		Oil Changed		Client Info		Changed		
Iron		_		Client Info		Changed		
All component wear rates are normal.    Chromium   ppm   ASTM D5185m   >20   <1         Nickel   ppm   ASTM D5185m   >4   0       Titanium   ppm   ASTM D5185m   >4   0       Titanium   ppm   ASTM D5185m   >20   2       All uninium   ppm   ASTM D5185m   >20   2       All uninium   ppm   ASTM D5185m   >20   2       All uninium   ppm   ASTM D5185m   >20   2       Lead   ppm   ASTM D5185m   >20   2       Copper   ppm   ASTM D5185m   >20   0       Copper   ppm   ASTM D5185m   >20   0       Tin   ppm   ASTM D5185m   >20   0       Winder   Winder   ASTM D5185m   >15   0       Winder   Winder   NONE   NONE       Winder   Winder   NONE   NONE       Water   Winder   Winder   NONE   NONE       Glycol   Winder   Winder   None   None       Water   Winder   Winder   None   None       Winder   Winder   Winder   None   None       Winder   Winder   Winder   None   None       Soit   % 6   KSTM D5185m   >20   3       Suffation   Aste image   Astm D5185m   None   None       Appearance   Astm D5185m   None   None       Appearance   Astm D5185m   None   None       Sand/Dirt   Scalar   Visual   None   None       Sodium   ppm   ASTM D5185m   0       Appearance   Astm D5185m   0       Sodium   ppm   ASTM D5185m   0       Suffation   Ast		Sample Status				NORMAL		
All component wear rates are normal.    Chromium   ppm   ASTM D5185m   >20   <1         Nickel   ppm   ASTM D5185m   >4   0       Titanium   ppm   ASTM D5185m   >4   0       Titanium   ppm   ASTM D5185m   >20   2       All uninium   ppm   ASTM D5185m   >20   2       All uninium   ppm   ASTM D5185m   >20   2       All uninium   ppm   ASTM D5185m   >20   2       Lead   ppm   ASTM D5185m   >20   2       Copper   ppm   ASTM D5185m   >20   0       Copper   ppm   ASTM D5185m   >20   0       Tin   ppm   ASTM D5185m   >20   0       Winder   Winder   ASTM D5185m   >15   0       Winder   Winder   NONE   NONE       Winder   Winder   NONE   NONE       Water   Winder   Winder   NONE   NONE       Glycol   Winder   Winder   None   None       Water   Winder   Winder   None   None       Winder   Winder   Winder   None   None       Winder   Winder   Winder   None   None       Soit   % 6   KSTM D5185m   >20   3       Suffation   Aste image   Astm D5185m   None   None       Appearance   Astm D5185m   None   None       Appearance   Astm D5185m   None   None       Sand/Dirt   Scalar   Visual   None   None       Sodium   ppm   ASTM D5185m   0       Appearance   Astm D5185m   0       Sodium   ppm   ASTM D5185m   0       Suffation   Ast	WEAR	Iron	nnm	ΔSTM D5185m	<b>\100</b>	1		
All component wear rates are normal.    Nicke	WLAN							
Titanium   ppm   ASTM D5185m   3   0	All component wear rates are normal.							
Silver   ppm   ASTM D5185m   >20   2					7			
Aluminum   ppm   ASTM D5185m   >20   2					~3			
Lead   ppm   ASTM D5185m   >40   0								
Copper								
Tin								
Vanadium   ppm   ASTM D5185m   0								
White Metal   Scalar   *Visual   NONE   NO					>10	-		
Silicon					NONE	_		
Silicon   ppm   ASTM D5185m   >2.5   5         Potassium   ppm   ASTM D5185m   >2.5   5         Potassium   ppm   ASTM D5185m   >2.5   3         Fuel   WC Method   >5   <1.0       Glycol   WC Method   >5   <1.0       Glycol   WC Method   >6.2   NEG       Nitration   Abs/cmm   ASTM D7844   >3   0.1         Nitration   Abs/cmm   ASTM D7844   >3   0.1         Sulfation   Abs/cmm   ASTM D7845   >2.0   9.3       Silit   scalar   Visual   NONE   NONE   NONE       Debris   scalar   Visual   NONE   NONE   NONE       Appearance   scalar   Visual   NONE   NORML   NORM						_		
Potassium   ppm   ASTM 05185m   >0   3				Visuai				
Potassium   ppm   ASTM 05185m   >0   3	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5		
Water   WC Method   So.2   NEG		Potassium	ppm	ASTM D5185m	>20	3		
Glycol	There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0		
Soot %		Water		WC Method	>0.2	NEG		
Nitration		Glycol		WC Method		NEG		
Sulfation   Abs/.fmm   *ASTM D7415   >30   17.9         Silt   scalar   *Visual   NONE   NONE         Debris   scalar   *Visual   NONE   NONE         Sand/Dirt   scalar   *Visual   NONE   NONE         Appearance   scalar   *Visual   NORML   NOR		Soot %	%	*ASTM D7844	>3	0.1		
Silt   Scalar   *Visual   NONE   NONE   NONE   NONE   Scalar   Visual   NONE   NONE		Nitration	Abs/cm	*ASTM D7624	>20	9.3		
Debris   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NORML   NORML		Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9		
Sand/Dirt   Scalar *Visual   NONE   NONE   Appearance   Scalar *Visual   NORML   NOR		Silt	scalar	*Visual	NONE	NONE		
Appearance		Debris	scalar	*Visual	NONE	NONE		
Codor   Scalar *Visual   NORML   NORML   NORML   Scalar *Visual   NORML   NO		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water   scalar   *Visual   >0.2   NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium   ppm   ASTM D5185m   98		Odor	scalar	*Visual	NORML	NORML		
Boron   ppm   ASTM D5185m   98         Barium   ppm   ASTM D5185m   8         Molybdenum   ppm   ASTM D5185m   100       Manganese   ppm   ASTM D5185m   0       Manganese   ppm   ASTM D5185m   0       Calcium   ppm   ASTM D5185m   1104       Phosphorus   ppm   ASTM D5185m   1104       Phosphorus   ppm   ASTM D5185m   717       Zinc   ppm   ASTM D5185m   782       Sulfur   ppm   ASTM D5185m   3073       Oxidation   Abs/.1mm   *ASTM D7414   >25   15.4       Base Number (BN)   mg KOH/g   ASTM D2896   6.3		<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
Boron   ppm   ASTM D5185m   98         Barium   ppm   ASTM D5185m   8         Molybdenum   ppm   ASTM D5185m   100       Manganese   ppm   ASTM D5185m   0       Manganese   ppm   ASTM D5185m   0       Calcium   ppm   ASTM D5185m   1104       Phosphorus   ppm   ASTM D5185m   1104       Phosphorus   ppm   ASTM D5185m   717       Zinc   ppm   ASTM D5185m   782       Sulfur   ppm   ASTM D5185m   3073       Oxidation   Abs/.1mm   *ASTM D7414   >25   15.4       Base Number (BN)   mg KOH/g   ASTM D2896   6.3	ELUID CONDITION	Codium		ACTM DE10Em		•		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.    Barium   ppm   ASTM D5185m   100         Manganese   ppm   ASTM D5185m   0         Magnesium   ppm   ASTM D5185m   601         Calcium   ppm   ASTM D5185m   1104         Phosphorus   ppm   ASTM D5185m   717         Zinc   ppm   ASTM D5185m   782         Sulfur   ppm   ASTM D5185m   3073         Oxidation   Abs/.1mm   *ASTM D7414   >25   15.4         Base Number (BN)   mg KOH/g   ASTM D2896   6.3	FLUID CONDITION							
Molybdenum ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 1104 Calcium ppm ASTM D5185m 1104 T104 T2inc ppm ASTM D5185m 782 Sulfur ppm ASTM D5185m 3073 Oxidation Abs/.1mm *ASTM D7414 >25 15.4 Base Number (BN) mg KOH/g ASTM D2896 6.3	The BN result indicates that there is suitable alkalinity remaining in the							
Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         601             Calcium         ppm         ASTM D5185m         1104             Phosphorus         ppm         ASTM D5185m         717             Zinc         ppm         ASTM D5185m         782             Sulfur         ppm         ASTM D5185m         3073             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.4             Base Number (BN)         mg KOH/g         ASTM D2896         6.3	oil. The condition of the oil is acceptable for the time in service.							
Magnesium         ppm         ASTM D5185m         601             Calcium         ppm         ASTM D5185m         1104             Phosphorus         ppm         ASTM D5185m         717             Zinc         ppm         ASTM D5185m         782             Sulfur         ppm         ASTM D5185m         3073             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.4             Base Number (BN)         mg KOH/g         ASTM D2896         6.3		-						
Calcium         ppm         ASTM D5185m         1104             Phosphorus         ppm         ASTM D5185m         717             Zinc         ppm         ASTM D5185m         782             Sulfur         ppm         ASTM D5185m         3073             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.4             Base Number (BN)         mg KOH/g         ASTM D2896         6.3								
Phosphorus         ppm         ASTM D5185m         717             Zinc         ppm         ASTM D5185m         782             Sulfur         ppm         ASTM D5185m         3073             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.4             Base Number (BN)         mg KOH/g         ASTM D2896         6.3		•						
Zinc         ppm         ASTM D5185m         782             Sulfur         ppm         ASTM D5185m         3073             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.4             Base Number (BN)         mg KOH/g         ASTM D2896         6.3								
Sulfur         ppm         ASTM D5185m         3073             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.4             Base Number (BN)         mg KOH/g         ASTM D2896         6.3		•						
Oxidation         Abs/.1mm         *ASTM D7414         >25         15.4             Base Number (BN)         mg KOH/g         ASTM D2896         6.3								
Base Number (BN) mg KOH/g ASTM D2896 6.3					>25			
					/20			
VISCO TO CO. MOTIVIDATO								
		1.00 @ 100 0	551	. 10 1111 0 1110		.5.5	,	







Laboratory Sample No.

Lab Number : 06099978

Unique Number : 10898208

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0208389

13.

12.5

11.5

Received **Tested** Test Package : CONST (Additional Tests: TBN)

Diagnosed

: 27 Feb 2024

: 27 Feb 2024 - Don Baldridge

: 26 Feb 2024 9107 OWENS DRIVE

MANASSAS PARK, VA US 20111 Contact: DON VEST dvest@jamesriverequipment.com

JRE - MANASSAS PARK

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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