WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

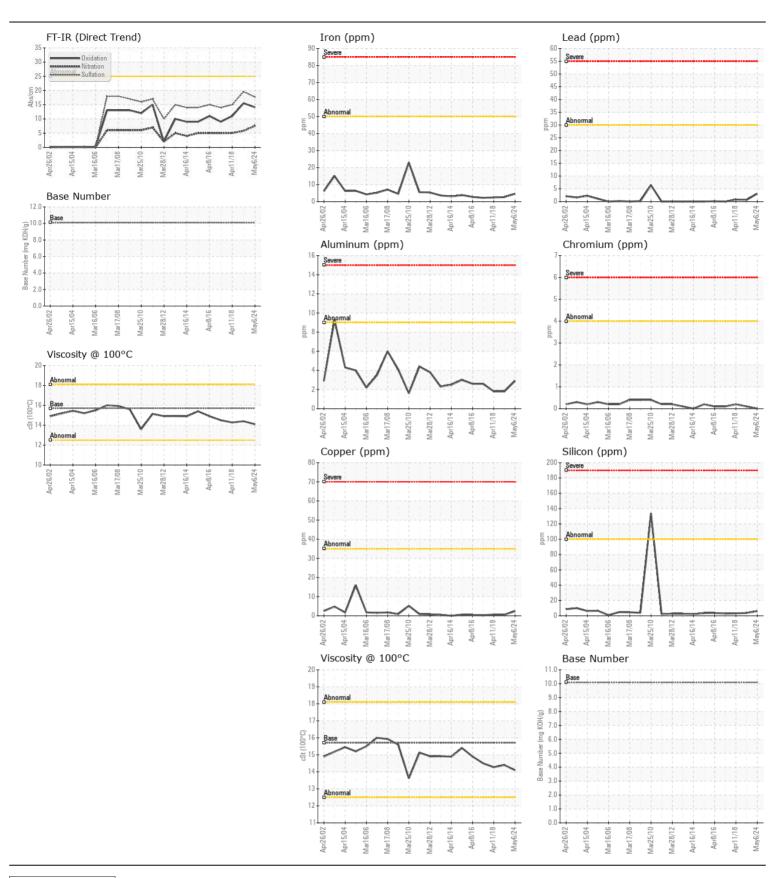
Machine Id

## **GENERAC EAGLE CREEK**

Natural Gas Engine

Fluid\_\_\_\_\_

Resample at the next service interval to monitor.	T 4	11014	NA - M-	139781	( a · )	1.00-4	111-4
Sample Date   Client Info   06 May 2024   14 Apr   Machine Age   hrs   Client Info   07   478   434   389   189		UOM		Limit/Abn		-	History2
Machine Age   hrs   Client Info   478   434   838   839   600	•						
Oil Age	·	hre			•		
Filter Age   hrs   Client Info   Changed   C	•					_	
Discrimination   Changed   Client Info   Changed   Cha	•						
Filter Changed   Sample Status		1113				-	
Metal levels are typical for a new component breaking in.   Iron						_	
Iron			Ollerit IIIIO		•	0	NORMAL
Chromium   ppm   ASTM D5185m   >4   0   <1   <1   <1   <1   <1   <1   <1							
Nickel   ppm   ASTM D5185m   >2   0   <1   <1	Iron	ppm	ASTM D5185m	>50	5	3	2
Nicket   Spirit   ASIM Discost   Spirit   Color   Color	Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Silver   ppm   ASTM D5185m   >3   <1   <1   0	Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum   ppm   ASTM D5185m   >9   3   2   2	Titanium	ppm	ASTM D5185m		0	0	0
Lead   ppm	Silver	ppm	ASTM D5185m	>3	<1	<1	0
Copper	Aluminum	ppm	ASTM D5185m	>9	3	2	2
Tin	Lead	ppm	ASTM D5185m	>30	3	<1	<1
Vanadium		ppm	ASTM D5185m	>35	2	<1	<1
White Metal   Scalar   Visual   NONE   NON		ppm		>4	<1	<1	0
Vellow Metal   scalar   Visual   NONE   NO	Vanadium	ppm	ASTM D5185m		0	-	
Silicon   ppm   ASTM D5185m   >-1.00   6   4   3	White Metal	scalar	*Visual	NONE			NONE
Potassium	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Potassium	Silicon	nnm	ASTM D5185m	<b>&gt;</b> ±100	6	4	3
Water   WC Method   So.1   NEG   NEG   NEG   NEG   NEG   So.0 %   %   *ASTM D7844   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
Soot %		ррпп					NEG
Nitration   Abs/cm   *ASTM D7624   >20   7.6   5.8   5.8		%		7 0			
Sulfation   Abs/.1mm   *ASTM D7415   >30   17.7   19.6   15.5   11.5				>20			
Silt   scalar *Visual   NONE   NORML   NORM							15.
Debris   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NORML   NORML							NONE
Sand/Dirt   Scalar   *Visual   NONE   NONE   NONE   Appearance   Scalar   *Visual   NORML	Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Odor   Scalar *Visual   NORML   NORML   NORML   Emulsified Water   Scalar *Visual   >0.1   NEG   NEG				NONE	NONE	NONE	NONE
Odor   Scalar *Visual   NORML   NORM	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
Emulsified Water   scalar   *Visual   >0.1   NEG   NEG   NEG	• •					NORML	NORN
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.    Boron   ppm   ASTM D5185m   0.0   2   0   0	<b>Emulsified Water</b>	scalar	*Visual	>0.1	NEG	NEG	NEG
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.    Boron   ppm   ASTM D5185m   0.0   2   0   0							
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   0.0   2   0   0     Molybdenum   ppm   ASTM D5185m   1.2   85   60   60     Manganese   ppm   ASTM D5185m   2   <1   <1     Magnesium   ppm   ASTM D5185m   24   220   767   84:		ppm			4	1	
oil. The condition of the oil is suitable for further service.    Barium   ppm   ASIM D5185m   0.0   2   0   0							
Manganese         ppm         ASTM D5185m         2         <1         <1           Magnesium         ppm         ASTM D5185m         24         220         767         843           Calcium         ppm         ASTM D5185m         2292         2467         1352         117           Phosphorus         ppm         ASTM D5185m         1064         1162         1058         91           Zinc         ppm         ASTM D5185m         1160         1409         1271         108           Sulfur         ppm         ASTM D5185m         4996         4645         3015         263           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.1         15.5         11.1           Base Number (BN)         mg KOH/g         ASTM D2896         10.1         7.7							
Magnesium         ppm         ASTM D5185m         24         220         767         843           Calcium         ppm         ASTM D5185m         2292         2467         1352         111           Phosphorus         ppm         ASTM D5185m         1064         1162         1058         91           Zinc         ppm         ASTM D5185m         1160         1409         1271         108           Sulfur         ppm         ASTM D5185m         4996         4645         3015         263           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.1         15.5         11.1           Base Number (BN)         mg KOH/g         ASTM D2896         10.1         7.7				1.2			
Calcium         ppm         ASTM D5185m         2292         2467         1352         11           Phosphorus         ppm         ASTM D5185m         1064         1162         1058         91           Zinc         ppm         ASTM D5185m         1160         1409         1271         108           Sulfur         ppm         ASTM D5185m         4996         4645         3015         263           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.1         15.5         11           Base Number (BN)         mg KOH/g         ASTM D2896         10.1         7.7	-						
Phosphorus         ppm         ASTM D5185m         1064         1162         1058         91           Zinc         ppm         ASTM D5185m         1160         1409         1271         108           Sulfur         ppm         ASTM D5185m         4996         4645         3015         26           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.1         15.5         11           Base Number (BN)         mg KOH/g         ASTM D2896         10.1         7.7							843
Zinc         ppm         ASTM D5185m         1160         1409         1271         100           Sulfur         ppm         ASTM D5185m         4996         4645         3015         263           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.1         15.5         11.           Base Number (BN)         mg KOH/g         ASTM D2896         10.1         7.7							1170
Sulfur         ppm         ASTM D5185m         4996         4645         3015         263           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.1         15.5         11.           Base Number (BN)         mg KOH/g         ASTM D2896         10.1         7.7							911
Oxidation         Abs/.1mm         *ASTM D7414         >25         14.1         15.5         11.           Base Number (BN)         mg KOH/g         ASTM D2896         10.1         7.7							1080
Base Number (BN)         mg KOH/g         ASTM D2896         10.1         7.7	Cultur	ppm	ASTM D5185m	4996	4645	3015	2635
			**OT** D= ***	0.5		4	4.4
Visc @ 100°C cSt ASTM D445 15.7 \ 14.1 \ 14.4 14.	Oxidation	Abs/.1mm					11.
		Sample Number Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status  Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal  Silicon Potassium Water Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	Sample Number Sample Date Machine Age hrs Oil Age hrs Filter Age hrs Oil Changed Filter Changed Sample Status  Iron ppm Chromium ppm Nickel ppm Titanium ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm White Metal scalar Yellow Metal scalar Yellow Metal scalar Silicon ppm Potassium ppm Water Soot % % Nitration Abs/cm Sulfation Abs/.mm Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Sodium ppm Manganese ppm Magnesium ppm Phosphorus	Sample Number Sample Date Machine Age Oil Age hrs Client Info Client Info Oil Age hrs Client Info Clie	Sample Number Sample Date Client Info Machine Age hrs Client Info Oil Age hrs Client Info Client Info Oil Age hrs Client Info Oil Changed Filter Age hrs Client Info Client Info Client Info Oil Changed Filter Changed Sample Status  Iron  ppm ASTM D5185m Chromium ppm ASTM D5185m Silver ppm ASTM D5185m Vanadium ppm ASTM D5185m Vanadium ppm ASTM D5185m Vanadium ppm ASTM D5185m Vanadium ppm ASTM D5185m Vone Valid V	Sample Number         Client Info         WC0933136           Sample Date         Client Info         06 May 2024           Machine Age         hrs         Client Info         478           Oil Age         hrs         Client Info         0           Filter Age         hrs         Client Info         Changed           Filter Changed         Client Info         Changed           Filter Changed Sample Status         Client Info         Changed           Iron         ppm         ASTM D5185m         >50         5           Chromium         ppm         ASTM D5185m         >4         0           Nickel         ppm         ASTM D5185m         >2         0           Titanium         ppm         ASTM D5185m         >2         0           Silver         ppm         ASTM D5185m         >3         <1	Sample Number Sample Date         Client Info         WC0933136 06 May 2024         WC0458244 06 Apr 2021           Machine Age Ins Oli Age Pitter Age Oil Age Pitter Age Oil Changed Filter Changed Sample Status         Client Info O O O Changed Changed Changed NORMAL         Changed Changed NORMAL         Changed Changed Changed NORMAL           Iron Ppm ASTM D5185m Sample Status         STM D5185m >50         5         3           Chromium Ppm ASTM D5185m > 4         0         <1







Certificate L2367

Laboratory Sample No.

Lab Number : 06188859

: WC0933136 Unique Number : 11045611

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

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

: 23 May 2024 : 24 May 2024 : 24 May 2024 - Wes Davis

PIEDMONT GENERATOR 7560 NC HWY 22 NORTH CLIMAX, NC

US 27233

T: (336)685-4859

Contact: TERRY SHEPPARD terry1pg@bellsouth.net; bill3pg@bellsouth.net

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)

F: (336)685-5297 Contact/Location: TERRY SHEPPARD - PIEJUL