WEAR CONTAMINATION FLUID CONDITION

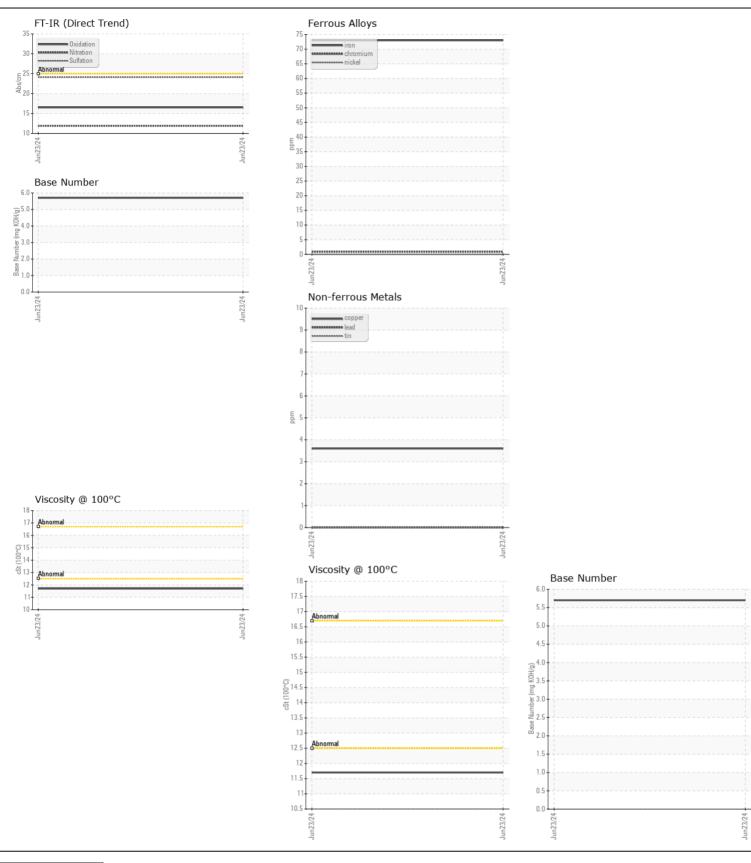
NORMAL NORMAL NORMAL

Machine Id **20621**

Component Diesel Engine

Fluid {not provided} (--- QTS)

Sample Number Client Info 23 Jun 2024	{not provided} (QTS)							
Sample Aumber Client Info Lice217781	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age mis Client Info 0	Resample at the next service interval to monitor.	Sample Number		Client Info		IL06217781		
Oi Age m/s Client Info O		Sample Date		Client Info		23 Jun 2024		
Filter Age		Machine Age	mls	Client Info		0		
Colic Changed Client Info N/A N/A		Oil Age	mls	Client Info		0		
Filter Changed Client Info NA NA NORMAL NORMA		Filter Age	mls	Client Info		0		
VEAR		Oil Changed		Client Info		N/A		
Iron		Filter Changed		Client Info		N/A		
Chromium ppm ASTM D5186m >20 <1		Sample Status				NORMAL		
Chromium ppm ASTM D5186m >20 <1	WEAR	Iron	nnm	ASTM D5185m	>100	73		
Nickel ppm ASTM D5185m >4 0	WLAN							
Titanium ppm	All component wear rates are normal.							
Silver ppm					24			
Aluminum ppm ASTM D5185m >20 8					. 2			
Lead								
Copper ppm ASTM D5185m >330 4 Tin ppm ASTM D5185m >15 0 Wanadium ppm ASTM D5185m >15 0 White Metal scalar "Visual NONE NONE White Metal scalar "Visual NONE NONE Wolve Metal scalar "Visual NONE NONE There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >25 8 Potassium ppm ASTM D5185m >25 14 Fuel % ASTM D5185m >20 24.1 Fuel % ASTM D5185m								
Time								
Vanadium ppm ASTM D5185m <1								
White Metal Scalar *Visual NONE NO					>15	-		
Vellow Metal scalar Visual NONE NONE Silicon ppm ASTM 05185m >25 8 Potassium ppm ASTM 05185m >20 14 Water WC Method NEG Glycol WC Method NEG Soot % % ASTM 07844 >3 1.2 Nitration Abs/cm *ASTM 07844 >3 1.2 Sulfation Abs/cm *ASTM 07844 >3 1.2 Sulfation Abs/cm *ASTM 07844 >3 1.2 Silt scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NOR					NONE			
Silicon ppm ASTM D5185m >25 8								
Potassium ppm ASTM D5185m >20 14		Yellow Metal	scalar	"VISUAI	NONE	NONE		
Fuel % ASTM D3524 > 5 < 1.0	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
Water	There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	14		
Glycol		Fuel	%	ASTM D3524	>5	<1.0		
Soot %		Water		WC Method	>0.2	NEG		
Nitration Abs/cm *ASTM D7624 >20 11.9		Glycol		WC Method		NEG		
Sulfation Abs/.tmm *ASTM D7415 >30 24.1 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Appearance scalar *Visual NORML		Soot %	%	*ASTM D7844	>3	1.2		
Silt scalar *Visual NONE NO		Nitration	Abs/cm	*ASTM D7624	>20	11.9		
Debris Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NONE NORML N		Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1		
Sand/Dirt scalar *Visual NONE NONE NORML		Silt	scalar	*Visual	NONE	NONE		
Appearance Scalar *Visual NORML NORM		Debris	scalar	*Visual	NONE	NONE		
Codor Scalar *Visual NORML NORML NORML Emulsified Water Scalar *Visual Visual Vi		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.2 NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium ppm ASTM D5185m 1		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 17 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 38 Manganese ppm ASTM D5185m 1 Manganese ppm ASTM D5185m 211 Calcium ppm ASTM D5185m 2247 Phosphorus ppm ASTM D5185m 927 Zinc ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOHlg ASTM D2896 5.7		Emulsified Water	scalar	*Visual	>0.2	NEG		
Boron ppm ASTM D5185m 17 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 38 Manganese ppm ASTM D5185m 1 Manganese ppm ASTM D5185m 211 Calcium ppm ASTM D5185m 2247 Phosphorus ppm ASTM D5185m 927 Zinc ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Sulfur ppm ASTM D5185m 3773 Sulfur ppm ASTM D5185m 3773 Sulfur ppm ASTM D5185m 3773 Sulfur ppm ASTM D5185m 3773 Sulfur ppm ASTM D5185m 3773 Sulfur ppm ASTM D5185m 3773 Sulfur ppm ASTM D5185m 3773	THID CONDITION	C a alia		ACTM DE105				
Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 38 Magnesium ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 211 Calcium ppm ASTM D5185m 2247 Phosphorus ppm ASTM D5185m 927 Zinc ppm ASTM D5185m 927 Sulfur ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Sulfur ppm ASTM D5185m 3773 Base Number (BN) mg KOH/g ASTM D2896 5.7	LOID CONDITION							
Molybdenum ppm ASTM D5185m 38 Manganese ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 211 Calcium ppm ASTM D5185m 2247 Phosphorus ppm ASTM D5185m 927 Zinc ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 5.7	The BN result indicates that there is suitable alkalinity remaining in the							
Manganese ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 211 Calcium ppm ASTM D5185m 2247 Phosphorus ppm ASTM D5185m 927 Zinc ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOHlg ASTM D2896 5.7	oil. The condition of the oil is acceptable for the time in service.							
Magnesium ppm ASTM D5185m 211 Calcium ppm ASTM D5185m 2247 Phosphorus ppm ASTM D5185m 927 Zinc ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 5.7								
Calcium ppm ASTM D5185m 2247 Phosphorus ppm ASTM D5185m 927 Zinc ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 5.7								
Phosphorus ppm ASTM D5185m 927 Zinc ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 5.7		-						
Zinc ppm ASTM D5185m 1112 Sulfur ppm ASTM D5185m 3773 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 5.7								
Sulfur ppm ASTM D5185m 3773 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 5.7		•						
Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 5.7								
Base Number (BN) mg KOH/g ASTM D2896 5.7					05			
					>25			
Visc @ 100°C cSt ASTM D445								
		Visc @ 100°C	cSt	ASTM D445		11.7		







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : IL06217781 Lab Number : 06217781

Unique Number : 11095978

Received **Tested** Diagnosed

Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

: 25 Jun 2024 - Don Baldridge

: 24 Jun 2024

: 25 Jun 2024

NORCROSS, GA US 30071-2808

Contact/Location: RICK MARKS - IDENORGA

Contact: RICK MARKS

IDEALEASE-NORCROSS

4571 NORTH BUFORD HWY

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)