

Machine Id **CR6619 - 4.1** Component **Left Winch** Fluid **GEAR OIL ISO 220 (--- GAL)**

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

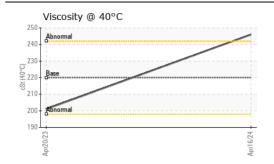
There is no indication of any contamination in the oil.

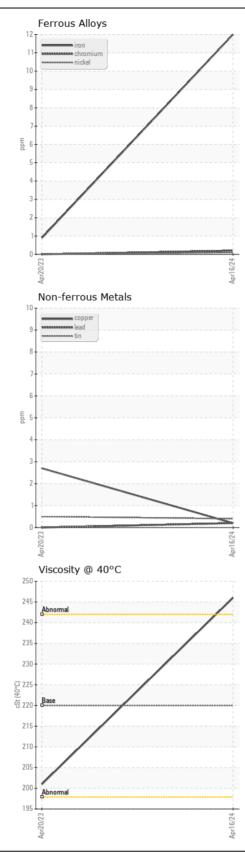
FLUID CONDITION

The condition of the oil is acceptable for the time in service.

TestUOMMethodLimit/ACurrentHistory1History1Sample NumberClient InfoMC0704492VC0784921Sample DateClient InfoI6 Apr 202420 Apr 2023Machine AgehrsClient InfoI000922Oil AgehrsClient InfoO0Oil ChangedIclient InfoOOFilter AgehrsClient InfoChangedChangedFilter AngedClient InfoN/AChangedSample StatusClient InfoN/AChangedTronppmASTM D5185>10c10NickelppmASTM D5185>10c10NickelppmASTM D5185>10c10SilverppmASTM D5185>15c10AuminumppmASTM D5185>15c13VanadiumppmASTM D5185>15c13VanadiumppmASTM D5185>2222VanadiumppmASTM D5185>2022VanadiumppmASTM D5185>2022VanadiumppmASTM D5185>202VanadiumppmASTM D5185>202VanadiumppmASTM D5185 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
Sample DateClient InfoIn A Part 2020 Apr 2023Machine AgehrsClient Info1000922Oil AgehrsClient Info00Filter AgehrsClient InfoChangedChangedOil ChangedClient InfoInfoChangedChangedFilter ChangedClient InfoInfoN/AChangedSample StatusClient InfoInfoN/AChangedIronppmASTM D5185>10C10NickelppmASTM D5185>10c10NickelppmASTM D5185>10c10SilverppmASTM D5185>50c10AluminumppmASTM D5185>50c10VanadiumppmASTM D5185>50c10VanadiumppmASTM D5185>50c13VanadiumppmASTM D5185>20c1VanadiumppmASTM D5185>202VanadiumppmASTM D5185>202VanadiumppmASTM D5185>202VanadiumppmASTM D5185>202VanadiumppmASTM D5185>201Vanadium <th>Test</th> <th>UOM</th> <th>Method</th> <th>Limit/Abn</th> <th>Current</th> <th>History1</th> <th>History2</th>	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine AgehrsClient Info72216570Oil AgehrsClient Info0922Filter AgehrsClient Info00Oil ChangedClient InfoN/AChangedFilter ChangedQClient InfoN/AChangedSample StatusVIANORMALNORMALIronppmASTM D5185n>1012<1NickelppmASTM D5185n>10<10NickelppmASTM D5185n>10<10SilverppmASTM D5185n>520AluminumppmASTM D5185n>5521<QopperppmASTM D5185n>5521<AluminumppmASTM D5185n>5521<AgadiumppmASTM D5185n>5521<VanadiumppmASTM D5185n>5521<VanadiumppmASTM D5185n>5221<VanadiumppmASTM D5185n>25212VanadiumppmASTM D5185n>25212VanadiumppmASTM D5185n>202<1VanadiumppmASTM D5185n>20NORENOREVanadium<	Sample Number		Client Info		WC0704492	WC0784921	
Oil Age Filter AgehrsClient InfoI000922Filter AgehrsClient Info00Oil ChangedClient InfoN/AChangedFilter Changed0Client InfoN/AChangedSample StatusVNORMALNORMALNORMALIronppmASTM D518s>1010ChromiumppmASTM D518s>10<10NickelppmASTM D518s10<10SilverppmASTM D518s5520AluminumppmASTM D518s55<10LeadppmASTM D518s>55<10VanduimppmASTM D518s>15<10VanduimppmASTM D518s>55<10VanduimppmASTM D518s>55<10VanduimppmASTM D518s>20<1<Vallow Metalscalar'VisualNONENONENONESiliconppmASTM D518s>202<1SiliconppmASTM D518s>202<1SiliconppmASTM D518s>202<1SiliconppmASTM D518s>20NONENONESiliconppm	Sample Date		Client Info		16 Apr 2024	20 Apr 2023	
Filter Age OIInitial ImageInitial ImageImage OI <th< th=""><th>Machine Age</th><th>hrs</th><th>Client Info</th><th></th><th>7221</th><th>6570</th><th></th></th<>	Machine Age	hrs	Client Info		7221	6570	
Cili Changed Filter ChangedCilent InfoChangedChangedFilter ChangedCilent InfoN/ANCRMALSample StatusNORMANORMALIronppmASTM D5185m>10<10NickelppmASTM D5185m>10<10NickelppmASTM D5185m>10<10SilverppmASTM D5185m>10<10AluminumppmASTM D5185m>520LeadppmASTM D5185m>15<10CopperppmASTM D5185m>10<13VanadiumppmASTM D5185m>20<1VanadiumppmASTM D5185m>2212Vellow Metalscalar'VisualNONENONENONESiliconppmASTM D5185m>20212VaterWC Method>0.2NEGNONESilitonscalar'VisualNONENONENONESilitonscalar'VisualNORMNORMLNORMLSilitonscalar'VisualNORMNORMLNORMLSilitonscalar'VisualNORMNORMLNORMLSodiumppmASTM D5185m5.0316Sodium <t< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>1000</th><th>922</th><th></th></t<>	Oil Age	hrs	Client Info		1000	922	
Filter ChangedClient InfoN/AChangedChangedFilter ChangedClient InfoN/AChangedSample StatusVINORMALNORMALIronppmASTM D5185m>1012<1ChromiumppmASTM D5185m>10<10NickelppmASTM D5185m>10<10SilverppmASTM D5185m00AluminumppmASTM D5185m520LeadppmASTM D5185m<10<CopperppmASTM D5185m<10<VanadiumppmASTM D5185m<1<1VanadiumppmASTM D5185m>2021<Vellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>202<12SiliconppmASTM D5185m>202<1SiliconppmASTM D5185m>202<12SiliconppmASTM D5185m>202<1SiliconppmASTM D5185m>202<1SiliconppmASTM D5185m>202<1SoliconppmASTM D5185m>20NONENONE<	Filter Age	hrs	Client Info		0	0	
Sample StatusNORMALNORMALNORMALIronppmASTM D5185m>1012<1ChromiumppmASTM D5185m>10<10NickelppmASTM D5185m>10<10TitaniumppmASTM D5185m>10<10SilverppmASTM D5185m520AluminumppmASTM D5185m>520LeadppmASTM D5185m<10<CopperppmASTM D5185m>15<10VanadiumppmASTM D5185m>15<1<1VanadiumppmASTM D5185m>80<13Vellow Metalscalar*VisualNONENONENONEVellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>202<1VaterWC Method>.2NEGNONESilitscalar*VisualNONENONENONESand/Dirtscalar*VisualNORNORENONEAppearancescalar*VisualNORNORENORESodiumppmASTM D5185m1500Mappearancescalar*VisualNORENORENORE	Oil Changed		Client Info		Changed	Changed	
IronppmASTM D5185m>10012<1	Filter Changed		Client Info		N/A	Changed	
Chromium ppm ASTM D5185m >10 <1	Sample Status				NORMAL	NORMAL	
Chromium ppm ASTM D5185m >10 <1	Iron		ACTM DE105m	. 150	10		
Nickel ppm ASTM D5185m >10 <1					. –		
Titanium ppm ASTM D5185m <1							
SilverppmASTM D5185m00AluminumppmASTM D5185m>520LeadppmASTM D5185m>15<10CopperppmASTM D5185m>80<13TinppmASTM D5185m<<1<1VanadiumppmASTM D5185m<0<1<White Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>25212PotassiumppmASTM D5185m>202<1Silitscalar*VisualNONEMODERNONESilitscalar*VisualNONEMODERNONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMNORMLNORMLGorscalar*VisualNORNORMLNORMLSodiumppmASTM D5185m50316BoronppmASTM D5185m1500MalganeseppmASTM D5185m50480ManganeseppmASTM D5185m50480PhosphorusppmASTM D5185m504				>10			
Aluminum ppm ASTM D5185m >5 2 0							
Lead ppm ASTM D5185m >15 <1				-	-		
Copper ppm ASTM D5185m >80 <1					_		
TinppmASTM D5185m<							
VanadiumppmASTM D5185m0<1		ppm		>80			
White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Silicon ppm ASTM D5185m >25 2 12 Potassium ppm ASTM D5185m >20 2 <1		ppm	ASTM D5185m		<1	<1	
Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>20212PotassiumppmASTM D5185m>202<1WaterWC Method>0.2NEGNEGSiltscalar*VisualNONEMODERNONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGSodiumppmASTM D5185m50316BariumppmASTM D5185m1500MalganeseppmASTM D5185m50<10MagnesiumppmASTM D5185m50<1<1PhosphorusppmASTM D5185m50<480ZincppmASTM D5185m100250SulfurppmASTM D5185m12500<47193688	Vanadium	ppm	ASTM D5185m		0		
Silicon ppm ASTM D5185m >25 2 12 Potassium ppm ASTM D5185m >20 2 <1	White Metal	scalar	*Visual	NONE	NONE	NONE	
PotassiumppmASTM D5185m>202<1	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
WaterWC Method>0.2NEGNEGSiltscalar*VisualNONEMODERNONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m50316BoronppmASTM D5185m1500MolybdenumppmASTM D5185m15<10ManganeseppmASTM D5185m50480CalciumppmASTM D5185m503051335PhosphorusppmASTM D5185m100250SulfurppmASTM D5185m125047193688	Silicon	ppm	ASTM D5185m	>25	2	12	
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Debrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m50316BoronppmASTM D5185m1500MolybdenumppmASTM D5185m15<10MagnesiumppmASTM D5185m50<1<1PhosphorusppmASTM D5185m50<480PhosphorusppmASTM D5185m3503051335ZincppmASTM D5185m1250047193688	Water		WC Method	>0.2	NEG	NEG	
Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m50316BoronppmASTM D5185m50316BariumppmASTM D5185m1500MolybdenumppmASTM D5185m15<10MagnesiumppmASTM D5185m50<480PhosphorusppmASTM D5185m3503051335ZincppmASTM D5185m100250SulfurppmASTM D5185m1250047193688	Silt	scalar	*Visual	NONE	MODER	NONE	
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Odorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m02BoronppmASTM D5185m50316BariumppmASTM D5185m1500MolybdenumppmASTM D5185m1500ManganeseppmASTM D5185m50<10MagnesiumppmASTM D5185m50<1<1PhosphorusppmASTM D5185m3503051335ZincppmASTM D5185m100250SulfurppmASTM D5185m1250047193688	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Emulsified Water scalar *Visual >0.2 NEG NEG Sodium ppm ASTM D5185m 0 2 Boron ppm ASTM D5185m 50 3 16 Barium ppm ASTM D5185m 15 0 0 Molybdenum ppm ASTM D5185m 15 <1 0 Manganese ppm ASTM D5185m 50 <1 0 Magnesium ppm ASTM D5185m 50 <1 0 Phosphorus ppm ASTM D5185m 50 <1 <1 Phosphorus ppm ASTM D5185m 50 <48 0 Zinc ppm ASTM D5185m 350 305 1335 Sulfur ppm ASTM D5185m 100 25 0	Appearance	scalar	*Visual	NORML	NORML	NORML	
Sodium ppm ASTM D5185m 0 2 Boron ppm ASTM D5185m 50 3 16 Barium ppm ASTM D5185m 15 0 0 Barium ppm ASTM D5185m 15 0 0 Molybdenum ppm ASTM D5185m 15 <1 0 Manganese ppm ASTM D5185m 50 <1 0 Magnesium ppm ASTM D5185m 50 <1 <1 Calcium ppm ASTM D5185m 50 <48 0 Phosphorus ppm ASTM D5185m 350 305 1335 Zinc ppm ASTM D5185m 100 25 0 Sulfur ppm ASTM D5185m 12500 4719 3688	Odor	scalar	*Visual	NORML	NORML	NORML	
Boron ppm ASTM D5185m 50 3 16 Barium ppm ASTM D5185m 15 0 0 Molybdenum ppm ASTM D5185m 15 0 0 Manganese ppm ASTM D5185m 50 <1 0 Magnesium ppm ASTM D5185m 50 <1 <1 Calcium ppm ASTM D5185m 50 <1 <1 Phosphorus ppm ASTM D5185m 50 <48 0 Zinc ppm ASTM D5185m 350 305 1335 Sulfur ppm ASTM D5185m 100 25 0	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Barium ppm ASTM D5185m 15 0 0 Molybdenum ppm ASTM D5185m 15 <1	Sodium	ppm	ASTM D5185m		0	2	
Molybdenum ppm ASTM D5185m 15 <1	Boron	ppm	ASTM D5185m	50	3	16	
Manganese ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m	15	0	0	
Magnesium ppm ASTM D5185m 50 <1	Molybdenum	ppm	ASTM D5185m	15	<1	0	
Calcium ppm ASTM D5185m 50 48 0 Phosphorus ppm ASTM D5185m 350 305 1335 Zinc ppm ASTM D5185m 100 25 0 Sulfur ppm ASTM D5185m 12500 4719 3688	Manganese	ppm	ASTM D5185m		<1	0	
Phosphorus ppm ASTM D5185m 350 305 1335 Zinc ppm ASTM D5185m 100 25 0 Sulfur ppm ASTM D5185m 12500 4719 3688	Magnesium		ASTM D5185m	50	<1	<1	
Zinc ppm ASTM D5185m 100 25 0 Sulfur ppm ASTM D5185m 12500 4719 3688	Calcium	ppm	ASTM D5185m	50	48	0	
Zinc ppm ASTM D5185m 100 25 0 Sulfur ppm ASTM D5185m 12500 4719 3688	Phosphorus	ppm	ASTM D5185m	350	305	1335	
Sulfur ppm ASTM D5185m 12500 4719 3688			ASTM D5185m		25	0	
	Sulfur		ASTM D5185m			3688	
					246		

Contact/Location: MICHAEL LAWSON - BUCGRA





: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **BUCKNER HEAVY LIFT** Received : 19 Apr 2024 4732 NC 54 EAST Tested : 24 Apr 2024 GRAHAM, NC Diagnosed : 24 Apr 2024 - Sean Felton US 27253-9215 Contact: MICHAEL LAWSON To discuss this sample report, contact Customer Service at 1-800-237-1369. michaell@bucknercompanies.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (336)376-8888 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)376-4090

Report Id: BUCGRA [WUSCAR] 06155306 (Generated: 04/24/2024 10:17:37) Rev: 1

Certificate L2367

Laboratory

Sample No.

Lab Number : 06155306

Unique Number : 10990729

Test Package : CONST

: WC0704492

Contact/Location: MICHAEL LAWSON - BUCGRA Page 2 of 2