

#### Machine Id **CR1230 - S2** Component **Center Swing Drive** Filuid **GEAR OIL ISO 220 (--- GAL)**

#### RECOMMENDATION

Resample at the next service interval to monitor.

### WEAR

All component wear rates are normal.

## CONTAMINATION

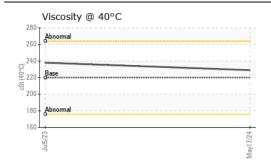
There is no indication of any contamination in the oil.

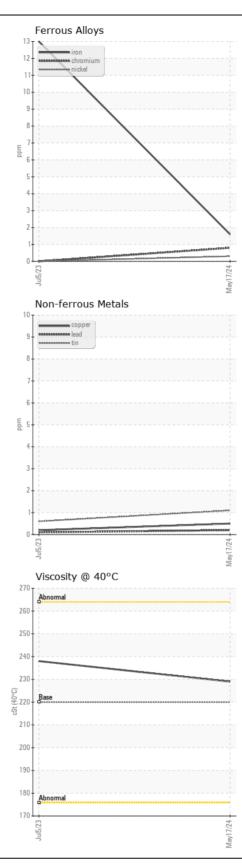
# FLUID CONDITION

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

TestUOMMethodLimit/MCurrentHistory1History2Sample NumberClient InfoVC0922914WC0823533Sample DateClient Info17 May 202405 Jul 2023Machine AgehrsClient Info21461735Oil AgehrsClient Info4111735Filter AgehrsClient InfoChangedChangedGli ChangedClient InfoChangedChangedSample StatusClient InfoChangedChangedChromiumppmASTM D5185>400213NickelppmASTM D5185>10<10NickelppmASTM D5185>10<10SilverppmASTM D5185>50<1<1AluminumppmASTM D5185>200<1<1VanadiumppmASTM D5185>2001<1YanadiumppmASTM D5185>201<YanadiumppmASTM D5185>201<1YanadiumppmASTM D5185>201<1YanadiumppmASTM D5185>201<1YanadiumppmASTM D5185>201<1YanadiumppmASTM D5185>201<1Yanad							
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Oil Age Filter AgehrsClient Info4111735Filter AgehrsClient Info00Oil ChangedClient InfoChangedChangedFilter ChangedMClient InfoChangedChangedSample StatusVClient InfoNORMALNORMALIronppmASTM D518s>400213ChromiumppmASTM D518s10<10NickelppmASTM D518s10<10SilverppmASTM D518s>20<1<1AluminumppmASTM D518s>50<1<1LeadppmASTM D518s>50<1<1VanduimppmASTM D518s>200<1<1VanduimppmASTM D518s>50<1<1VanduimppmASTM D518s>50<1<1Valduscalar'VisualNONENONENONESiliconppmASTM D518s>502<1SiliconppmASTM D518s>502<1SiliconppmASTM D518s>502<1SiliconppmASTM D518s>502<1SiliconppmASTM D518s>501<Silicon	Sample Date		Client Info		17 May 2024	05 Jul 2023	
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Chine of the construction of t	Oil Age	hrs	Client Info		411	1735	
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Iron  ppm  ASTM D5185n  >400  2  13     Chromium  ppm  ASTM D5185n  >10  <1  0     Nickel  ppm  ASTM D5185n  >10  <1  0     Titanium  ppm  ASTM D5185n  >10  <1  0     Aluminum  ppm  ASTM D5185n  >25  9  <1     Aluminum  ppm  ASTM D5185n  >50  <1  <1     Lead  ppm  ASTM D5185n  >50  <1  <1     Vanadium  ppm  ASTM D5185n  >10  1  <1     Vanadium  ppm  ASTM D5185n  >10  1  <1     Vanadium  ppm  ASTM D5185n  >10  1  <1     Vanadium  ppm  ASTM D5185n  >50  2  <1     Vanadium  ppm  ASTM D5185n  >50 <th>Filter Changed</th> <th></th> <th>Client Info</th> <th></th> <th>Changed</th> <th>Changed</th> <th></th>	Filter Changed		Client Info		Changed	Changed	
Chromium  ppm  ASTM D5185m  >10  <1	Sample Status				NORMAL	NORMAL	
Chromium  ppm  ASTM D5185m  >10  <1	Iron		AQTM D5195m	> 100	າ ເ	10	
NickelppmASTM D5185m>10<1					_	-	
Titanium  ppm  ASTM D5185m  <1						-	
Number  ppm  ASTM D5185m  <1				>10		-	
AluminumppmASTM D5185m>259<1							
Lead  ppm  ASTM D5185m  >50  <1				> 2F		-	
Copper  ppm  ASTM D5185m  >200  <1							
TinppmASTM D5185m>101<1							
Vanadium  ppm  ASTM D5185m  2  <1							
White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>502<1PotassiumppmASTM D5185m>2095WaterWC Method>0.2NEGNEGSilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m5000BariumppmASTM D5185m1500ManganeseppmASTM D5185m500<ManganeseppmASTM D5185m500<PhosphorusppmASTM D5185m500<StifurppmASTM D5185m500<ManganeseppmASTM D5185m500<PhosphorusppmASTM D5185m100<StifurppmASTM D5185m1000<Man				>10	-		
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WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m5000BariumppmASTM D5185m1500MalganeseppmASTM D5185m15<10MagnesiumppmASTM D5185m500<PhosphorusppmASTM D5185m500<SulfurppmASTM D5185m1000SulfurppmASTM D5185m1000SulfurppmASTM D5185m1000SulfurppmASTM D5185m1250S662655	Silicon	ppm	ASTM D5185m	>50	2	<1	
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Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m5000BoronppmASTM D5185m5000BariumppmASTM D5185m1500MolybdenumppmASTM D5185m15<10MagnesiumppmASTM D5185m500<MagnesiumppmASTM D5185m500<PhosphorusppmASTM D5185m500<PhosphorusppmASTM D5185m1000SulfurppmASTM D5185m1000SulfurppmASTM D5185m1250S662655	Silt	scalar	*Visual	NONE	NONE	NONE	
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Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m5000BoronppmASTM D5185m5000BariumppmASTM D5185m1500MolybdenumppmASTM D5185m15<10ManganeseppmASTM D5185m50<1<1MagnesiumppmASTM D5185m50<10CalciumppmASTM D5185m500<1PhosphorusppmASTM D5185m1000<ZincppmASTM D5185m10000SulfurppmASTM D5185m125005662655	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Emulsified Water  scalar  *Visual  >0.2  NEG  NEG     Sodium  ppm  ASTM D5185m  30  3     Boron  ppm  ASTM D5185m  50  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  0     Phosphorus  ppm  ASTM D5185m  50  <1  0     Phosphorus  ppm  ASTM D5185m  50  <1  0     Phosphorus  ppm  ASTM D5185m  350  15  22     Zinc  ppm  ASTM D5185m  100  0  0     Sulfur  ppm  ASTM D5185m  12500 <td< th=""><th>Appearance</th><th>scalar</th><th>*Visual</th><th>NORML</th><th>NORML</th><th>NORML</th><th></th></td<>	Appearance	scalar	*Visual	NORML	NORML	NORML	
Sodium  ppm  ASTM D5185m  30  3     Boron  ppm  ASTM D5185m  50  0  0     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  <1     Magnesium  ppm  ASTM D5185m  50  <1  0     Calcium  ppm  ASTM D5185m  50  <1  <1     Phosphorus  ppm  ASTM D5185m  50  <1  <     Zinc  ppm  ASTM D5185m  100  <15  22  <    Sulfur  ppm  ASTM D5185m  100  0  <	Odor	scalar	*Visual	NORML	NORML	NORML	
Boron  ppm  ASTM D5185m  50  0  0     Barium  ppm  ASTM D5185m  15  0  0     Molybdenum  ppm  ASTM D5185m  15  0  0     Manganese  ppm  ASTM D5185m  15  <1  0     Magnesium  ppm  ASTM D5185m  50  <1  0     Calcium  ppm  ASTM D5185m  50  <1  0     Phosphorus  ppm  ASTM D5185m  50  <1  22     Zinc  ppm  ASTM D5185m  100  0  0     Sulfur  ppm  ASTM D5185m  100  0	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Boron  ppm  ASTM D5185m  50  0  0     Barium  ppm  ASTM D5185m  15  0  0     Molybdenum  ppm  ASTM D5185m  15  0  0     Manganese  ppm  ASTM D5185m  15  <1  0     Magnesium  ppm  ASTM D5185m  50  <1  0     Calcium  ppm  ASTM D5185m  50  <1  0     Phosphorus  ppm  ASTM D5185m  50  <1  22     Zinc  ppm  ASTM D5185m  100  0      Sulfur  ppm  ASTM D5185m  12500  566  2655	Sodium	nnm	ASTM D5185m		30	3	
Barium  ppm  ASTM D5185m  15  0  0     Molybdenum  ppm  ASTM D5185m  15 <b>1 1</b> 0     Manganese  ppm  ASTM D5185m  15 <b>&lt; 1</b> <1				50			
Molybdenum  ppm  ASTM D5185m  15  <1							
Manganese  ppm  ASTM D5185m  <1	Molvbdenum						
Magnesium  ppm  ASTM D5185m  50  <1							
Calcium  ppm  ASTM D5185m  50  0  <1	-			50			
Phosphorus  ppm  ASTM D5185m  350  15  22     Zinc  ppm  ASTM D5185m  100  0  0     Sulfur  ppm  ASTM D5185m  12500  566  2655	-						
Zinc  ppm  ASTM D5185m  100  0  0     Sulfur  ppm  ASTM D5185m  12500  566  2655							
Sulfur  ppm  ASTM D5185m  12500  566  2655							
	Sulfur		ASTM D5185m			2655	
Visc @ 40°C cSt ASTM D445 220 229 238							

Contact/Location: MICHAEL LAWSON - BUCGRA







Sample No. : WC0922914 Received : 23 May 2024 4732 NC 54 EAST Lab Number : 06189620 Tested : 25 May 2024 GRAHAM, NC Unique Number : 11046372 Diagnosed : 28 May 2024 - Sean Felton US 27253-9215 Test Package : CONST Contact: MICHAEL LAWSON Certificate L2367 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

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

Laboratory

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

**BUCKNER HEAVY LIFT**