

#### Machine Id WESTERN STAR 18-131 Component Coolant

{not provided} (--- LTR)

#### RECOMMENDATION

We recommend drain system, and refill with 50/50 antifreeze water mixture. We advise that you replenish the supplemental coolant additives (SCAs) and add per manufacturer's specifications. We recommend an early resample to monitor this condition.

## CORROSION

The iron level is high indicating rust in the system which clogs the cooling system.

## **CONTAMINANTS**

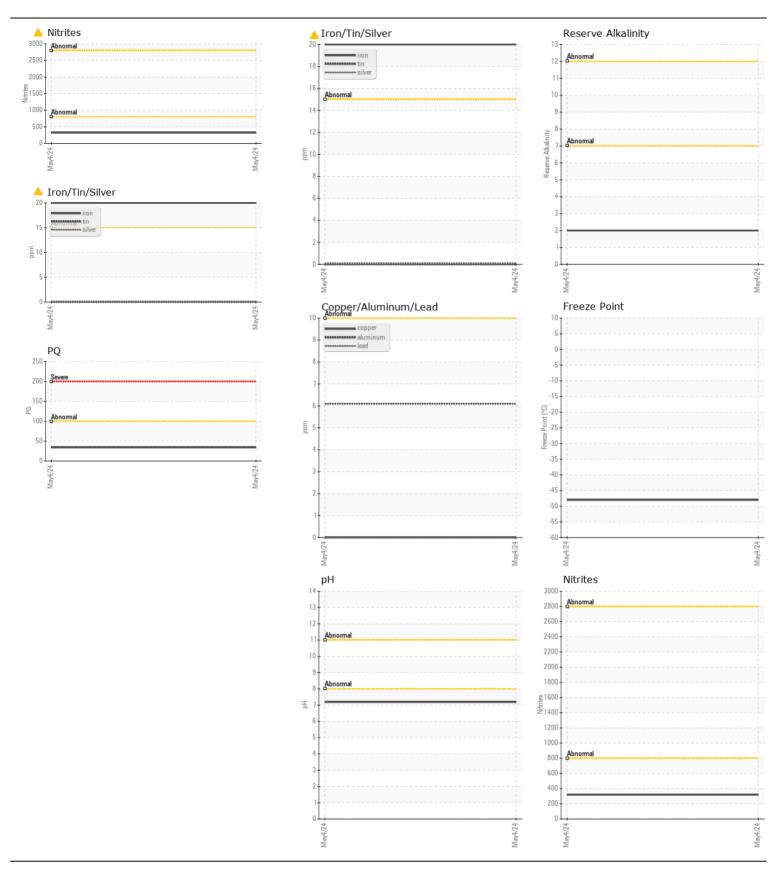
There is no indication of any contamination in the coolant.

# COOLANT CONDITION

The coolant is cloudy indicating either an overconcentration of coolant additives, or a mixing of incompatible coolant technologies. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0872153		
Sample Date		Client Info		04 May 2024		
Machine Age	kms	Client Info		170073		
Oil Age	kms	Client Info		170073		
Oil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
Iron			. 15	A 20		
Iron	ppm	ASTM D5185(m)	>15	▲ 20 0		
Aluminum	ppm	ASTM D5185(m)	>10	6		
Copper	ppm	ASTM D5185(m)	>10	0		
Lead	ppm	ASTM D5185(m)	>10	0		
Tin	ppm	ASTM D5185(m)	>10	0		
Silver	ppm	ASTM D5185(m)	>10	<1		
Zinc	ppm	ASTM D5185(m)	>10	4		
Calcium	ppm	ASTM D5185(m)	>100	6		
Magnesium	ppm	ASTM D5185(m)	>40	2		
Appearance	scalar	Visual*	NORML	HAZY		
Odor	scalar	Visual*	NORML	NORML		
Coolant Appearance		Visual*	Clear	🔺 Very cld		
				·····		
Boiling Point	°C	WC Method*		109		
Specific Gravity		ASTM D1298*		1.078		
рН	Scale 0-14	ASTM D1287*		7.19		
Nitrites	ppm	Alcan Test Kit*		320		
Reserve Alkalinity	Scale 0-20	ASTM D1121*		2.0		
Percentage Glycol	%	ASTM D3321*		58.2		
Freezing Point	°C	ASTM D3321*		-48		
Carboxylate						
Silicon	ppm	ASTM D5185(m)		10		
Phosphorus	ppm	ASTM D5185(m)		13		
Boron	ppm	ASTM D5185(m)		377		
Molybdenum	ppm	ASTM D5185(m)		10		
Sodium	ppm	ASTM D5185(m)		3470		
Potassium	ppm	ASTM D5185(m)		411		
Coolant Color		Visual*		Red		

Contact/Location: Joe Cunha - BRA155CAM Page 1 of 2



**BRANTCO CONSTRUCTION** Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : WC0872153 Received 1555 BISHOP STREET UNIT 1 :08 May 2024 Lab Number : 02634208 Tested CAMBRIDGE, ON : 10 May 2024 ISO 17025:2017 Accredited Laboratory Unique Number : 5775361 : 10 May 2024 - Kevin Marson CA N1R 7J4 Diagnosed Test Package : COOL (Additional Tests: GlycolType, PQ) Contact: Joe Cunha To discuss this sample report, contact Customer Service at 1-800-268-2131. jcunha@brantco.ca T: (519)223-0397 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: (519)622-2443 Validity of results and interpretation are based on the sample and information as supplied.