

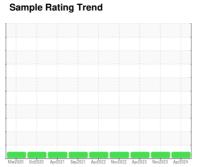
COOLANT REPORT



Machine Id **Grand Blanc CAT 4 GBLM04BE**

Jacket Water Coolant

CHEVRON HEAVY DUTY PF COOLANT (--- GAL)





Recommendation

The fluid is suitable for further service. (Customer Sample Comment: 4 jw sample 6 mo)

Corrosion

All metal levels are normal indicating no corrosion in the cooling system.

Contaminants

There is no indication of any contamination in the coolant.

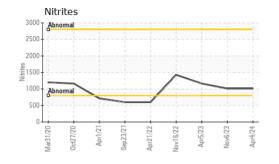
Coolant Condition

Glycol and nitrite levels are acceptable. The pH level of this fluid is within the acceptable limits.

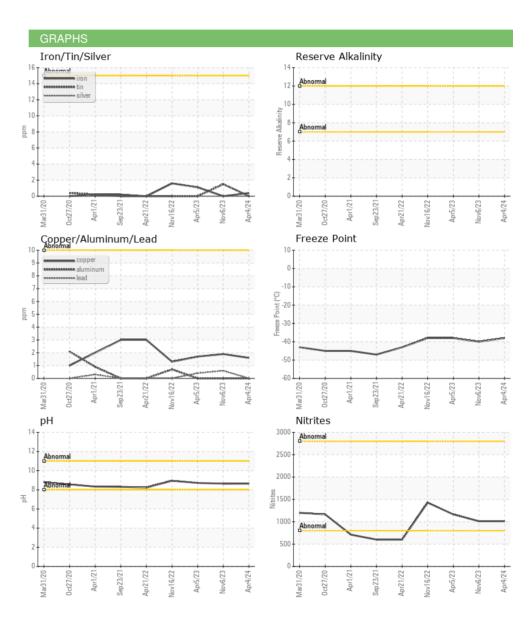
Sample Number Client Info WC0905663 WC0870107 WC079533; Sample Date Client Info O4 Apr 2024 06 Nov 2023 05 Apr 2023 05 A	PF COOLANT (- GAL)	Mar2020 Oc	2020 Apr2021 Sep2021	Apr2022 Nov2022 Apr2023 Nov2	123 Apr2U24	
Client Info	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 13342 9917 5013	Sample Number		Client Info		WC0905663	WC0870107	WC0795337
Dil Age	Sample Date		Client Info		04 Apr 2024	06 Nov 2023	05 Apr 2023
Cilic Changed Cilient Info N/A NORMAL NORMAL NORMAL	Machine Age	hrs	Client Info		68772	65347	60443
NORMAL NORMAL NORMAL NORMAL PHYSICAL TEST RESULTS method limit/base current history1 history2	Oil Age	hrs	Client Info		13342	9917	5013
PHYSICAL TEST RESULTS method limit/base current history1 history2	Oil Changed		Client Info		N/A	Not Changd	N/A
Specific Gravity Scale 0-14 ASTM D1287 10.5 8.65 8.64 8.72	Sample Status				NORMAL	NORMAL	NORMAL
Specific Gravity	PHYSICAL TEST R	ESULTS	method	limit/base	current	history1	history2
Scale 0-14 ASTM D1287 10.5 8.65 8.64 8.72	Glycol Type		FT-IR				
Nitrites	Specific Gravity		*ASTM D1298		1.069	1.070	1.069
Reserve Alkalinity Scale 0-20	рН	Scale 0-14	ASTM D1287	10.5	8.65	8.64	8.72
Percentage Glycol % ASTM D3321 50 51.8 52.0 51.4	Nitrites	ppm	AP-053:2009	>800	1012	1012	1164
Freezing Point °F ASTM D3321 -37 -38 -40 -38 Total Dissolved Solids 245.5 219.0 234.5 Carboxylate fail n/a fail CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 1000 40 53 91 Phosphorus ppm ASTM D6130 0 6 10 25 Boron ppm ASTM D6130 376 359 607 Molybdenum ppm ASTM D6130 197 201 313 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1 0 1 Aluminum ppm ASTM D6130 >10 0 0 0 Copper ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 2 0 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 0 0 4 21 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2231 2110 3130 Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1 2 <1	Reserve Alkalinity	Scale 0-20	*ASTM D1121				
Total Dissolved Solids Carboxylate Fail In/a In/	Percentage Glycol	%	ASTM D3321	50	51.8	52.0	51.4
Carboxylate fail n/a fail CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 1000 40 53 91 Phosphorus ppm ASTM D6130 0 6 10 25 Boron ppm ASTM D6130 376 359 607 Molybdenum ppm ASTM D6130 197 201 313 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1 0 1 Aluminum ppm ASTM D6130 >10 0 0 0 Copper ppm ASTM D6130 >10 2 2 2 Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 0 0 0 0 CONTAMINANTS method	Freezing Point	°F	ASTM D3321	-37	-38	-40	-38
CORROSION INHIBITORS method limit/base current history1 history2	Total Dissolved Solids				245.5	219.0	234.5
Silicon	Carboxylate				fail	n/a	fail
Phosphorus ppm ASTM D6130 0 6 10 25 Boron ppm ASTM D6130 376 359 607 Molybdenum ppm ASTM D6130 197 201 313 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1 0 1 Aluminum ppm ASTM D6130 >10 0 0 0 Copper ppm ASTM D6130 >10 2 2 2 Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 2 0 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 2231 2110 3130 <	CORROSION INH	IBITORS	method	limit/base	current	history1	history2
Boron	Silicon	ppm	ASTM D6130	1000	40	53	91
Molybdenum ppm ASTM D6130 197 201 313 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1 0 1 Aluminum ppm ASTM D6130 >10 0 0 0 Copper ppm ASTM D6130 >10 2 2 2 Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 2 0 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 2231 2110 3130 Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2	Phosphorus	ppm	ASTM D6130	0	6	10	25
CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1 0 1 Aluminum ppm ASTM D6130 >10 0 0 0 Copper ppm ASTM D6130 >10 2 2 2 Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 2 0 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 0 4 21 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2	Boron	ppm	ASTM D6130		376	359	607
Astrophysical Color Astrophysical Color	Molybdenum	ppm	ASTM D6130		197	201	313
Aluminum ppm ASTM D6130 >10 0 0 0 Copper ppm ASTM D6130 >10 2 2 2 Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 2 0 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 0 4 21 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1 2 <1	CORROSION		method	limit/base	current	history1	history2
Copper ppm ASTM D6130 >10 2 2 2 Lead ppm ASTM D6130 >10 0 <1	Iron	ppm	ASTM D6130	>15	<1	0	1
Lead ppm ASTM D6130 >10 0 <1	Aluminum	ppm	ASTM D6130	>10	0	0	0
Tin ppm ASTM D6130 >10 0 2 0 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 0 4 21 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2231 2110 3130 Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1	Copper	ppm	ASTM D6130	>10	2	2	2
Zinc ppm ASTM D6130 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 0 4 21 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2231 2110 3130 Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1	Lead	ppm	ASTM D6130	>10	0	<1	<1
CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 0 4 21 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2231 2110 3130 Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1 2 <1	Tin	ppm	ASTM D6130	>10	0	2	0
Chlorine ppm ASTM D6130 0 4 21 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2231 2110 3130 Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1	Zinc	ppm	ASTM D6130		0	0	0
CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2231 2110 3130 Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1 2 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D6130 2231 2110 3130 Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1	Chlorine	ppm	ASTM D6130		0	4	21
Potassium ppm ASTM D6130 45 49 115 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1	CARRIER SALTS		method	limit/base	current		history2
SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1 2 <1	Sodium	ppm	ASTM D6130		2231	2110	3130
Calcium ppm ASTM D6130 <1	Potassium	ppm	ASTM D6130		45	49	115
PP	SCALE POTENTI	AL	method	limit/base	current	history1	history2
MagnesiumppmASTM D6130010	Calcium	ppm	ASTM D6130		<1	2	<1
	Magnesium	ppm	ASTM D6130		0	1	0



COOLANT REPORT



VISUAL	method	limit/base	current	history1	history2
Coolant Color	*Visual	Grn/Prpl	Red	Red	Pink
Coolant Appearance	*Visual	Clear	normal	normal	normal
Color					
Bottom					







Certificate 12367

Laboratory Sample No.

: WC0905663 Lab Number : 06146296 Unique Number : 10976374

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

Diagnosed

: 11 Apr 2024 : 16 Apr 2024 : 16 Apr 2024 - Jonathan Hester

Grand Blanc Powerstation, 2361 West Grand Blanc Road Grand Blanc, MI

US 48439 Contact: Tony Saint Marie tony.saintmarie@edlenergy.com

EDL NA Recips-Grand Blanc

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)

Test Package : COOL- (Additional Tests: BoilingPoint, COOL, GlycolType, ICP)

T:

F: