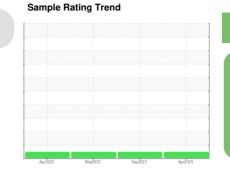
COOLANT REPORT





OKLAHOMA/102

74.29 [OKLAHOMA^102] Coolant Fluid CAT EXTENDED LIFE COOLANT (ELC) (--- GAL)

SAMPLE INFORMATION method

Recommendation

No corrective action is recommended at this time. The fluid is suitable for further service.

Area

Corrosion

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

Contaminants

There is no indication of any contamination in the coolant.

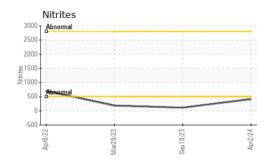
Coolant Condition

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

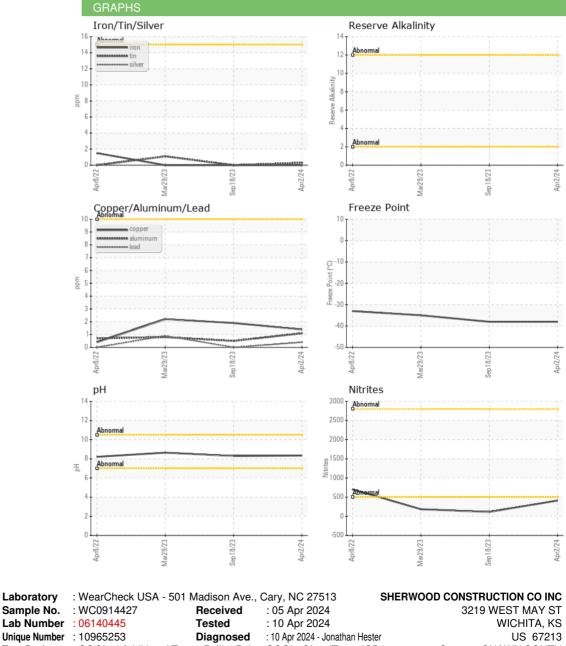
Machine Age hrs Client Info 0 2171 1510 Oil Age hrs Client Info 0 2171 1510 Oil Changed Client Info Not Changd Not Changd Not Changd Sample Status Imitbase current history1 history1 PHYSICAL TEST RESULTS method imitbase current history1 history2 Glycol Type FT-IR Specific Gravity XaStM D1238 1.069 1.069 1.069 pH Scale014 ASTM D1237 8.34 8.29 8.64 Nitrites ppm AP0532009 412 112 184 Reserve Alkalinity Scale020 'ASTM D1321 Percentage Glycol % ASTM D3321 -38 -38 -35 Total Dissolved Solids -38 -36 -38 -36 Carboxylate method imitbase current history1	Sample Number		Client Info		WC0914427	WC0819999	WC0746773			
Oil AgehrsClient Info021711510Oil ChangedClient InfoNot ChangdNot ChangdNot ChangdNot ChangdSample StatusImit/basecurrenthistory1Not ChangdPHYSICAL TEST RESULTSmethodlimit/basecurrenthistory1Nitory2Glycol TypeFT-IRSpecific Gravity'N XTM D12878.348.298.64pHScale 041ASTM D12878.348.298.64Reserve AlkalinityScale 020'ASTM D1281Percentage Glycol%ASTM D332151.751.350.9Freezing Point°FASTM D3321-38-38-35Carboxylate'FASTM D613004083176PhosphorusppmASTM D613000000BoronppmASTM D61300009MolybdenumppmASTM D6130>11<1< <td><1</td> <1PronppmASTM D613011222LeadppmASTM D6130>101<1< <td><1</td> <1CORROSIONppmASTM D613011222IronppmASTM D6130>101<1< <td><1</td> <1CopperppmASTM D6130>10122LeadppmASTM D613010<10<1<1 <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>02 Apr 2024</th> <th>18 Sep 2023</th> <th>29 Mar 2023</th>	<1	<1	<1	Sample Date		Client Info		02 Apr 2024	18 Sep 2023	29 Mar 2023
Oil ChangedClient InfoNot Changd NORMALNot Changd NORMALNot Changd NORMALPHYSICAL TEST RESULTSmethodlimit/basecurrenthistory1history2Glycol TypeFT-IRSpecific Gravity'ASTM D12981.0691.0691.068pHScale 0:4ASTM D12978.348.298.64NitritespmPA053:2009412112184Reserve AlkalinityScale 0:0'ASTM D121Percentage Glycol%ASTM D321-51.751.350.9Freezing Point°FASTM D321-38-38-35Total Dissolved SolidsfailfailpassCORROSION INHUBITORSmethodlimit/basecurrenthistory1history2SliconppmASTM D61300009BoronppmASTM D6130009936CORROSIONppmASTM D6130506341008936CORROSIONppmASTM D61301<1<11IronppmASTM D6130122IronppmASTM D6130101<1<1CorrentppmASTM D6130101<11IronppmASTM D6130101<1<1IronppmASTM D6130101<11 <t< th=""><th>Machine Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th>2171</th><th>1510</th></t<>	Machine Age	hrs	Client Info		0	2171	1510			
Sample Status NORMAL NORMAL NORMAL NORMAL PHYSICAL TEST RESULTS method limit/base current history1 history2 Glycol Type FT-IR Specific Gravity 'ASTM D1298 1.069 1.069 1.069 1.068 pH Scale 0-14 ASTM D1297 8.34 8.29 8.64 Nitrites ppm AP.053:2009 412 112 184 Reserve Alkalinity Scale 0-20 'ASTM D1291 Percentage Glycol % ASTM D3221 -38 -38 -35 50.9 Freezing Point °F ASTM D3221 -38 -38 -35 Corroxylate fail fail pass CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 0 0 0 0 Boron ppm ASTM D6130 <	Oil Age	hrs	Client Info		0	2171	1510			
PHYSICAL TEST RESULTS method limit/base current history1 history2 Glycol Type FT-IR Specific Gravity 'ASTM D1288 1.069 1.069 1.069 1.069 pH Scale 0.44 ASTM D1287 8.34 8.29 8.64 Nitrites ppm AP-053:2009 412 112 184 Reserve Alkalinity Scale 0.20 'ASTM D1287 8.34 8.29 8.64 Percentage Glycol % ASTM D321 -38 -38 -35 Total Dissolved Solids 382.0 364.0 322.5 Carboxylate rail fail fail pass Posphorus 382.0 364.0 322.5 Solicon ppm ASTM D6130 0 0 0 0 0 Boron ppm ASTM D6130 0 0 0 0 0 ASTM D6130 10 1 <1 <1 <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th>Not Changd</th> <th>Not Changd</th> <th>Not Changd</th>	Oil Changed		Client Info		Not Changd	Not Changd	Not Changd			
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pH Scale 0-14 ASTM D1287 8.34 8.29 8.64 Nitrites ppm AP-053:2009 412 112 184 Reserve Alkalinity Scale 0-20 *ASTM D1121 Percentage Glycol % ASTM D3321 -38 -38 -35 Total Dissolved Solids fail fail pass CORROSION INHIBITORS method imit/base current history1 history2 Silicon ppm ASTM D6130 0 40 83 176 Phosphorus ppm ASTM D6130 0 0 0 9 Boron ppm ASTM D6130 0 0 0 9 Iron ppm ASTM D6130 >10 1 <1 1 Iron ppm ASTM D6130 >10 1 <1 2 Iron ppm ASTM D6130 >10 1 <1 1 Iron	Glycol Type		FT-IR							
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Percentage Glycol % ASTM D3321 51.7 51.3 50.9 Freezing Point °F ASTM D3321 -38 -38 -35 Total Dissolved Solids 382.0 364.0 322.5 Carboxylate fail fail pass CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 0 40 83 176 Phosphorus ppm ASTM D6130 0 0 0 0 Boron pm ASTM D6130 950 634 1008 936 CORROSION method imit/base current history1 history2 Iron pm ASTM D6130 >10 1 <1 <1 CORROSION method imit/base current history1 history2 Iron ppm ASTM D6130 >10 1 <1 <1 Copper ppm ASTM D6130 <th>Nitrites</th> <th>ppm</th> <th>AP-053:2009</th> <th></th> <th>412</th> <th>112</th> <th>184</th>	Nitrites	ppm	AP-053:2009		412	112	184			
Freezing Point °F ASTM D3321 -38 -38 -35 Total Dissolved Solids Image: Solid Solids 382.0 364.0 322.5 Carboxylate fail fail fail pass CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 0 40 83 176 Phosphorus ppm ASTM D6130 0 0 0 0 0 Boron ppm ASTM D6130 0 0 0 0 936 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 0 0 Aluminum ppm ASTM D6130 >10 1 <1 <1 Copper ppm ASTM D6130 >10 <1 0 <1 Zinc ppm ASTM D6130 >10 <1 0 1	Reserve Alkalinity	Scale 0-20	*ASTM D1121							
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CORROSION INHIBITORSmethodlimit/basecurrenthistory1history2SiliconppmASTM D613004083176PhosphorusppmASTM D61300000BoronppmASTM D61300009MolybdenumppmASTM D61309506341008936CORROSIONmethodlimit/basecurrenthistory1history2IronppmASTM D6130>15000AluminumppmASTM D6130>101<1<1CopperppmASTM D6130>10122LeadppmASTM D6130>10<10<1TinppmASTM D6130>10<10<1ZincppmASTM D6130>10<10<1CONTAMINANTSmethodlimit/basecurrenthistory1history2ChlorineppmASTM D6130141030CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130141265319SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D6130<1111	Total Dissolved Solids				382.0	364.0	322.5			
Silicon ppm ASTM D6130 0 40 83 176 Phosphorus ppm ASTM D6130 0 0 0 0 0 Boron ppm ASTM D6130 0 0 0 0 9 Molybdenum ppm ASTM D6130 950 634 1008 936 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 0 0 Aluminum ppm ASTM D6130 >10 1 <1 <1 Copper ppm ASTM D6130 >10 1 2 2 Lead ppm ASTM D6130 >10 <1 0 1 Zinc ppm ASTM D6130 >10 <1 0 <1 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 141	Carboxylate				fail	fail	pass			
Phosphorus ppm ASTM D6130 0 0 0 0 0 0 Boron ppm ASTM D6130 0 0 0 0 9 Molybdenum ppm ASTM D6130 950 634 1008 936 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 0 0 Aluminum ppm ASTM D6130 >10 1 <1 <1 Copper ppm ASTM D6130 >10 1 2 2 Lead ppm ASTM D6130 >10 1 0 <1 Zinc ppm ASTM D6130 >10 41 0 1 Zinc ppm ASTM D6130 >10 41 0 30 CONTAMINANTS method limit/base current history1 history2 Sodium ppm ASTM D6130 <th>CORROSION INH</th> <td>IBITORS</td> <td>method</td> <td>limit/base</td> <th>current</th> <td>history1</td> <td>history2</td>	CORROSION INH	IBITORS	method	limit/base	current	history1	history2			
Boron ppm ASTM D6130 0 0 0 9 Molybdenum ppm ASTM D6130 950 634 1008 936 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 0 0 Aluminum ppm ASTM D6130 >10 1 <1	Silicon	ppm	ASTM D6130	0	40	83	176			
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CORROSIONmethodlimit/basecurrenthistory1history2IronppmASTM D6130>15000AluminumppmASTM D6130>101<1<1CopperppmASTM D6130>10122LeadppmASTM D6130>10<10<1TinppmASTM D6130>10<10<1ZincppmASTM D6130>10<10<1CONTAMINANTSmethodlimit/basecurrenthistory1history2ChlorineppmASTM D6130141030CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130141265319PotassiumppmASTM D6130<111SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D6130<1111	Boron	ppm	ASTM D6130	0	0	0	9			
Iron ppm ASTM D6130<>15 0 0 0 Aluminum ppm ASTM D6130 >10 1 <1 <1 Copper ppm ASTM D6130 >10 1 2 2 Lead ppm ASTM D6130 >10 <1 0 <1 Tin ppm ASTM D6130 >10 <1 0 <1 Zinc ppm ASTM D6130 >10 <1 0 <1 Zinc ppm ASTM D6130 >10 <1 0 <1 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 14 10 30 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 141 265 319 SCALE POTENTIAL method limit/base current history1 history2 C	Molybdenum	ppm	ASTM D6130	950	634	1008	936			
Aluminum ppm ASTM D6130 >10 1 <1	CORROSION		method	limit/base	current	history1	history2			
Copper ppm ASTM D6130 >10 1 2 2 Lead ppm ASTM D6130 >10 <1	Iron	ppm	ASTM D6130	>15	0	0	0			
Lead ppm ASTM D6130 >10 <1	Aluminum	ppm	ASTM D6130	>10	1	<1	<1			
Tin ppm ASTM D6130 >10 <1	Copper	ppm	ASTM D6130	>10	1	2	2			
ZincppmASTM D613000<1	Lead	ppm	ASTM D6130	>10	<1	0	<1			
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ChlorineppmASTM D6130141030CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130424959515593PotassiumppmASTM D6130141265319SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D6130<111	Zinc	ppm	ASTM D6130		0	0	<1			
CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130424959515593PotassiumppmASTM D6130141265319SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D6130<111	CONTAMINANTS		method	limit/base	current	history1	history2			
Sodium ppm ASTM D6130 4249 5951 5593 Potassium ppm ASTM D6130 141 265 319 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1	Chlorine	ppm	ASTM D6130		14	10	30			
PotassiumppmASTM D6130141265319SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D6130<1	CARRIER SALTS		method	limit/base	current	history1	history2			
SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 <1	Sodium	ppm	ASTM D6130		4249	5951	5593			
Calcium ppm ASTM D6130 <1 1 1	Potassium	ppm	ASTM D6130		141	265	319			
- Photo - Phot	SCALE POTENTI	AL	method	limit/base	current	history1	history2			
Magnesium ppm ASTM D6130	Calcium	ppm	ASTM D6130		<1	1	1			
	Magnesium	ppm	ASTM D6130		<1	<1	<1			



COOLANT REPORT







 Lab Number
 : 06140445
 Tested
 : 10 Apr 2024

 Unique Number
 : 10965253
 Diagnosed
 : 10 Apr 2024 - Jonathan Hester

 Certificate L2367
 Test Package
 : COOL- (Additional Tests: BoilingPoint, COOL, GlycolType, ICP)
 Cool

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 shaw

 * - 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)

WICHITA, KS US 67213 Contact: SHAWN SOUTH shawn.south@sherwood.net T: x: 5:2012) F: x:

Report Id: SHEWIC [WUSCAR] 06140445 (Generated: 04/12/2024 03:37:34) Rev: 1

Submitted By: SHAWN SOUTH Page 2 of 2