

# **COOLANT REPORT**

Sample Rating Trend





## OKLAHOMA/102/EG - SKID STEER 53.137L [OKLAHOMA^102^EG - SKID STEER] Coolant

SAMPLE INFORMATION method

# EXTENDED LIFE COOLANT (--- GAL)

### DIAGNOSIS

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.

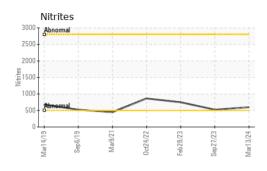
#### **Coolant Condition**

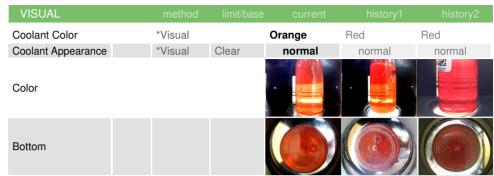
Carboxylate test failed. The pH level of this fluid is within the acceptable limits. Glycol and nitrite levels are acceptable.

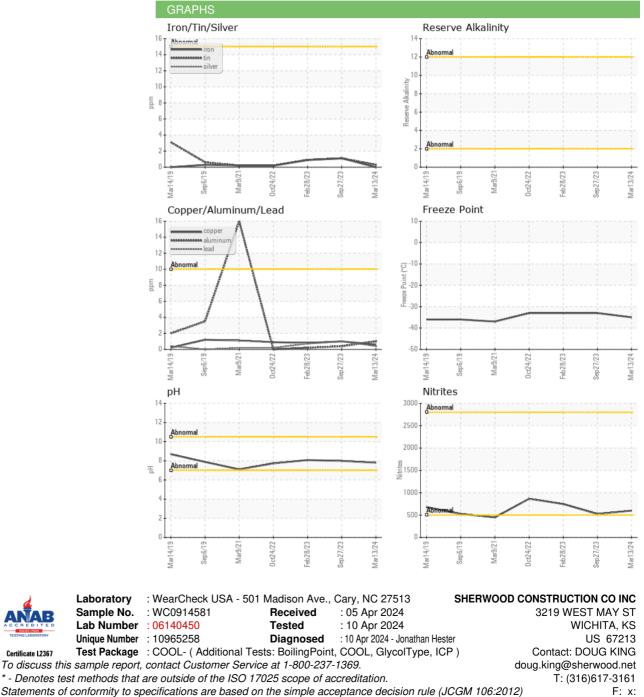
Sample Number     Client Info     WC0914581     WC0834101     WC0792511       Sample Date     Client Info     13 Mar 2024     27 Sep 2023     28 Feb 2023       Machine Age     hrs     Client Info     6545     5651     4770       Oil Age     hrs     Client Info     6545     4770     3334       Oil Changed     Client Info     6545     4770     334       Oil Changed     Client Info     Not Changd     Not Changd     Not Changd       Sample Status     Imit Nos     Current     History1     history2       Glycol Type     FT-IR          Specific Gravity     YASIM D1287     7.80     7.99     8.08       Nitrites     ppm     AP.053:2009     600     524     748       Reserve Alkalinity     Scie 0:4     ASTM D1287     -35     -33     -33       Total Dissolved Solids            Freezing Point     *F     ASTM D1332     50.7     49.4     9.4						,	
Machine Age     hrs     Client Info     6545     5651     4770       Oil Age     hrs     Client Info     Not Changd     Not Changd     Not Changd       Sample Status     Image     Client Info     Not Changd     Not Changd     Nor Changd       PHYSICAL TEST RESULTS     method     imit/base     current     history1     NorRMAL       Specific Gravity     YASTM D128     1.066     1.067     1.067       pHYSICAL TEST RESULTS     Math D1287     7.80     7.99     8.08       Nitrites     ppm     AP-053:2009     600     524     7.48       Reserve Alkalinity     Sale0:21     ASTM D1231          Percentage Glycol     %     ASTM D3321     50.7     49.4     49.4       Freezing Point     °F     ASTM D3321          Carboxylate     real     ASTM D6130     600     347.5     325.0       Carboxylate     ppm     ASTM D6130     0     12     4       Phosphorus     <	Sample Number		Client Info		WC0914581	WC0834101	WC0792531
Oil Age     hrs     Client Info     6545     4770     3334       Oil Changed     Client Info     Not Changd     Not Changd     Not Changd       Sample Status     Imit/base     current     history1     Not Changd       PHYSICAL TEST RESULTS     method     imit/base     current     history1     Not Changd       Glycol Type     FT-IR            Specific Gravity     YaSTM D1287     7.80     1.068     1.067     1.067       pH     Scale014     ASTM D1287     7.80     7.99     8.08       Nitrites     ppm     AP0632009     600     524     748       Reserve Alkalinity     Scale020     'ASTM D3221          Percentage Glycol     %     ASTM D3221     -35     -33     -33     -33       Total Dissolved Solids     1mit/base     current     history1     history2       Silicon     ppm     ASTM D6130     4     2     0       Boron <td< th=""><th>Sample Date</th><th></th><th>Client Info</th><th></th><th>13 Mar 2024</th><th>27 Sep 2023</th><th>28 Feb 2023</th></td<>	Sample Date		Client Info		13 Mar 2024	27 Sep 2023	28 Feb 2023
Oil Changed Sample Status Client Info Not Changd NORMAL Not Changd NORMAL Not Changd NORMAL Not Changd NORMAL   PHYSICAL TEST RESULTS method imit/base current history1 history2   Glycol Type FT-IR       Specific Gravity 'ASTM D1288 1.068 1.067 1.067   pH Scale 014 ASTM D1287 7.80 7.99 8.08   Nitrites ppm AP 053:2009 600 524 748   Reserve Alkalinity Scale 020 'ASTM D1281      Percentage Glycol % ASTM D3321       Percentage Glycol % ASTM D3321       Carboxylate 'F ASTM D3321       Silicon ppm ASTM D6130 8 11 14   Phosphorus ppm ASTM D6130 0 12 4   Molyddenum ppm ASTM D6130 10 1 -1   CoRROSION method imit/base current history1 history2   Iron ppm	Machine Age	hrs	Client Info		6545	5651	4770
Sample StatusImage: statusImage: statusNORMALNORMALNORMALNORMALPHYSICAL TEST RESULTSmethodlimit/basecurrenthistory1history2Glycol TypeFT-IRSpecific GravityYASTM D12881.0681.0671.067pHScale014ASTM D12877.807.998.08NitritesppmAP-0532009600524748Reserve AlkalinityScale029ASTM D1231Percentage Glycol%ASTM D332150.749.4449.4Freezing Point°FASTM D3321-35-33-33Total Dissolved SolidsfailfailpassCORROSION INHEITORSmethod10mit/basecurrenthistory1history2SiliconppmASTM D613081114PhosphorusppmASTM D61306825321058CORROSIONppmASTM D61301-1-1MolybdenumppmASTM D6130511-1PronppmASTM D6130101-1-1CopperppmASTM D613010-1-1-1LuminumppmASTM D613010-1-1-1LuminumppmASTM D613010-1-1-1LuminumppmASTM D613010-1-1-1Lu	Oil Age	hrs	Client Info		6545	4770	3334
PHYSICAL TEST RESULTS     method     limit/base     current     history1     history2       Glycol Type     FT-IR           Specific Gravity     'ASTM D128     1.068     1.067     1.067       pH     Scale 0.14     ASTM D1287     7.80     7.99     8.08       Nitrites     ppm     AP-053-2009     600     524     748       Reserve Alkalinity     Scale 0.20     'ASTM D1287          Percentage Glycol     %     ASTM D1321    35     -33     -33       Total Dissolved Solids      fail     fail     pass       CORROSION INHIBITORS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D6130     4     2     0     0       Boron     ppm     ASTM D6130     10     1     <1     4       Nolybdenum     ppm     ASTM D6130     >10     1     <1     1       Ion     ppm </th <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
Glycol Type     FT-IR         Specific Gravity     'ASTM D1298     1.068     1.067     1.067       pH     Scale 0-14     ASTM D1287     7.80     7.99     8.08       Nitrites     ppm     AP-053:2009     600     524     748       Reserve Alkalinity     Scale 0-20     'ASTM D121          Percentage Glycol     %     ASTM D3321     50.7     49.4     49.4       Freezing Point     °F     ASTM D3321     50.7     49.4     49.4       Percentage Glycol     %     ASTM D3321     -35     -33     -33       Total Dissolved Solids     Imit/base     current     history1     history2       Corbaxylate     Frail     fail     fail     pass       CORROSION INHIBITORS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D6130     10     1     <1     4       Phosphorus     ppm     ASTM D6130     10     1	Sample Status				NORMAL	NORMAL	NORMAL
Specific Gravity     'ASTM D1298     1.068     1.067     1.067       pH     Scale 0.14     ASTM D1287     7.80     7.99     8.08       Nitrites     ppm     AP-0532009     600     524     748       Reserve Alkalinity     Scale 0.20     'ASTM D121          Percentage Glycol     %     ASTM D3321     50.7     49.4     49.4       Freezing Point     °F     ASTM D3321     -35     -33     -33       Total Dissolved Solids      776.0     347.5     325.0       Carboxylate     fail     fail     fail     pass       CORROSION INHUSTORS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D6130     8     11     14       Phosphorus     ppm     ASTM D6130     8     11     14       Molybdenum     pm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     10     1     <1	PHYSICAL TEST R	ESULTS	method	limit/base	current	history1	history2
pH     Stale 0-14     ASTM D1287     7.80     7.99     8.08       Nitrites     ppm     AP-053:2009     600     524     748       Reserve Alkalinity     Stale 0.20     'ASTM D1121          Percentage Glycol     %     ASTM D3321     50.7     49.4     49.4       Freezing Point     °F     ASTM D3321     -35     -33     -33       Total Dissolved Solids     °F     ASTM D3321     -35     -33     -33       CORROSION INH/BITORS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D6130     8     11     14       Phosphorus     ppm     ASTM D6130     4     2     0       Boron     ppm     ASTM D6130     0     1     <1	Glycol Type		FT-IR				
Nitrites     ppm     AP-053:2009     600     524     748       Reserve Alkalinity     Scale 0:20     *ASTM D1121          Percentage Glycol     %     ASTM D3321     50.7     49.4     49.4       Freezing Point     °F     ASTM D3321     -35     -33     -33       Total Dissolved Solids      376.0     347.5     325.0       Carboxylate      fail     fail     pass       CORROSION INHIBITORS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D6130     8     11     14       Phosphorus     ppm     ASTM D6130     4     2     0       Boron     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     1     <1     1       Iron     ppm     ASTM D6130     >10     1     <1     <1       Aluminum     ppm     ASTM D6130     >10     1     <1<	Specific Gravity		*ASTM D1298		1.068	1.067	1.067
Reserve Alkalinity     Sade 0-20     *ASTM D1121         Percentage Glycol     %     ASTM D3321     50.7     49.4     49.4       Freezing Point     °F     ASTM D3321     -35     -33     -33       Total Dissolved Solids      376.0     347.5     325.0       Carboxylate     Freezing Point     °F     ASTM D6130     8     11     14       Phosphorus     ppm     ASTM D6130     8     11     14       Phosphorus     ppm     ASTM D6130     4     2     0       Boron     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     1     <1     1       Iron     ppm     ASTM D6130     >10     1     <1     1       Lead     ppm     ASTM D6130     10     1     <1	рН	Scale 0-14	ASTM D1287		7.80	7.99	8.08
Percentage Glycol     %     ASTM D3321     50.7     49.4     49.4       Freezing Point     °F     ASTM D3321     -35     -33     -33       Total Dissolved Solids      376.0     347.5     325.0       Carboxylate     fail     fail     fail     pass       CORROSION INHBITORS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D6130     8     11     14       Phosphorus     ppm     ASTM D6130     0     12     4       Boron     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     1     <1     1       Iron     ppm     ASTM D6130     >15     0     1     <1       Iron     ppm     ASTM D6130     >10     <1     <1     <1       Lead     ppm     ASTM D6130     >10     <1     <1     <1       Zinc     ppm     ASTM D6130     >10     <1	Nitrites	ppm	AP-053:2009		600	524	748
Freezing Point     °F     ASTM D3321     -35     -33     -33       Total Dissolved Solids      376.0     347.5     325.0       Carboxylate     fail     fail     pass       CORROSION INH/BITORS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D6130     8     11     14       Phosphorus     ppm     ASTM D6130     4     2     0       Boron     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     1     <1     1058       CORROSION     method     limit/base     current     history1     history2       Iron     ppm     ASTM D6130<>10     1     <1     <1       Aluminum     ppm     ASTM D6130<>10     <1     1     <1       Copper     ppm     ASTM D6130<>10     <1     1     <1       Lead	Reserve Alkalinity	Scale 0-20	*ASTM D1121				
Total Dissolved SolidsImage and the second sec	Percentage Glycol	%	ASTM D3321		50.7	49.4	49.4
CarboxylatefailfailpassCORROSION INHIBITORSmethodlimit/basecurrenthistory1history2SiliconppmASTM D613081114PhosphorusppmASTM D6130420BoronppmASTM D61300124MolybdenumppmASTM D61306825321058CORROSIONmethodlimit/basecurrenthistory1history2IronppmASTM D6130>1501<1AluminumppmASTM D6130>101<1<1CopperppmASTM D6130>10<11<1LeadppmASTM D6130>10<11<1ZincppmASTM D6130>10<11<1ZincppmASTM D613010<11<1CONTAMINANTSmethodlimit/basecurrenthistory1history2ChlorineppmASTM D6130191531CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130253714SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413	Freezing Point	°F	ASTM D3321		-35	-33	-33
CORROSION INHIBITORSmethodlimit/basecurrenthistory1history2SiliconppmASTM D613081114PhosphorusppmASTM D61300124BoronppmASTM D61300124MolybdenumppmASTM D61306825321058CORROSIONmethodlimit/basecurrenthistory1history2IronppmASTM D6130>1501<1AluminumppmASTM D6130>101<1<1CopperppmASTM D6130>10<11<1LeadppmASTM D6130>10<11<1IronppmASTM D6130>10<11<1LeadppmASTM D6130>10<11<1ZincppmASTM D6130>10<11<1ZincppmASTM D6130>10<11<1CONTAMINANTSmethodlimit/basecurrenthistory1history2ChlorineppmASTM D613019153131CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130253714SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413	Total Dissolved Solids				376.0	347.5	325.0
Silicon     ppm     ASTM D6130     8     11     14       Phosphorus     ppm     ASTM D6130     4     2     0       Boron     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     682     532     1058       CORROSION     method     limit/base     current     history1     history2       Iron     ppm     ASTM D6130     >15     0     1     <1       Aluminum     ppm     ASTM D6130     >10     1     <1     <1       Copper     ppm     ASTM D6130     >10     <1     1     <1       Lead     ppm     ASTM D6130     >10     <1	Carboxylate				fail	fail	pass
Phosphorus     ppm     ASTM D6130     4     2     0       Boron     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     682     532     1058       CORROSION     method     limit/base     current     history1     history2       Iron     ppm     ASTM D6130<>15     0     1     <1     <1       Aluminum     ppm     ASTM D6130<>10     1     <1     <1     <1       Copper     ppm     ASTM D6130<>10     <1     1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1	CORROSION INH	IBITORS	method	limit/base	current	history1	history2
Boron     ppm     ASTM D6130     0     12     4       Molybdenum     ppm     ASTM D6130     682     532     1058       CORROSION     method     limit/base     current     history1     history2       Iron     ppm     ASTM D6130     >15     0     1     <1	Silicon	ppm	ASTM D6130		8	11	14
MolybdenumppmASTM D61306825321058CORROSIONmethodlimit/basecurrenthistory1history2IronppmASTM D6130>1501<1AluminumppmASTM D6130>101<1<1CopperppmASTM D6130>10<11<1LeadppmASTM D6130>10<11<1LeadppmASTM D6130>10<11<1ZincppmASTM D6130>10<11<1ZincppmASTM D6130>10<11<1CONTAMINANTSmethodlimit/basecurrenthistory1history2ChlorineppmASTM D6130191531CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130253714SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413	Phosphorus	ppm	ASTM D6130		4	2	0
CORROSIONmethodlimit/basecurrenthistory1history2IronppmASTM D6130>1501<1AluminumppmASTM D6130>101<1<1CopperppmASTM D6130>10<11<1LeadppmASTM D6130>10<11<1TinppmASTM D6130>10<11<1ZincppmASTM D6130>10<11<1ZincppmASTM D6130>10<11<1CONTAMINANTSmethodlimit/basecurrenthistory1history2ChlorineppmASTM D6130191531CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130253714SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413		ppm	ASTM D6130		0	12	4
Iron     ppm     ASTM D6130<>15     0     1     <1	Molybdenum	ppm	ASTM D6130		682	532	1058
Aluminum     ppm     ASTM D6130     >10     1     <1	CORROSION		method	limit/base	current	history1	history2
Copper     ppm     ASTM D6130     >10     <1	Iron	ppm	ASTM D6130	>15	0	1	<1
Lead     ppm     ASTM D6130     >10     <1	Aluminum	ppm	ASTM D6130	>10	1	<1	<1
TimppmASTM D6130>10<1	Copper	ppm	ASTM D6130	>10	<1	1	<1
ZincppmASTM D613002<1	Lead	ppm	ASTM D6130	>10	<1	1	<1
CONTAMINANTSmethodlimit/basecurrenthistory1history2ChlorineppmASTM D6130191531CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130419633944939PotassiumppmASTM D6130253714SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413	Tin	ppm	ASTM D6130	>10	<1	1	<1
ChlorineppmASTM D6130191531CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130419633944939PotassiumppmASTM D6130253714SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413	Zinc	ppm	ASTM D6130		0	2	<1
CARRIER SALTSmethodlimit/basecurrenthistory1history2SodiumppmASTM D6130419633944939PotassiumppmASTM D6130253714SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium     ppm     ASTM D6130     4196     3394     4939       Potassium     ppm     ASTM D6130     25     37     14       SCALE POTENTIAL     method     limit/base     current     history1     history2       Calcium     ppm     ASTM D6130     5     4     13	Chlorine	ppm	ASTM D6130		19	15	31
PotassiumppmASTM D6130253714SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413	CARRIER SALTS		method	limit/base	current	history1	history2
SCALE POTENTIALmethodlimit/basecurrenthistory1history2CalciumppmASTM D61305413	Sodium	ppm	ASTM D6130		4196	3394	4939
Calcium     ppm     ASTM D6130     5     4     13	Potassium		ASTM D6130		25	37	14
	SCALE POTENTI	AL	method	limit/base	current	history1	history2
	Calcium	ppm	ASTM D6130		5		13
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## **COOLANT REPORT**







Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Certificate 12367

Submitted By: GARRETT ADAMS

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