

Machine Id AGC Port Reduction Gear Fluid {not provided} (--- GAL)

RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

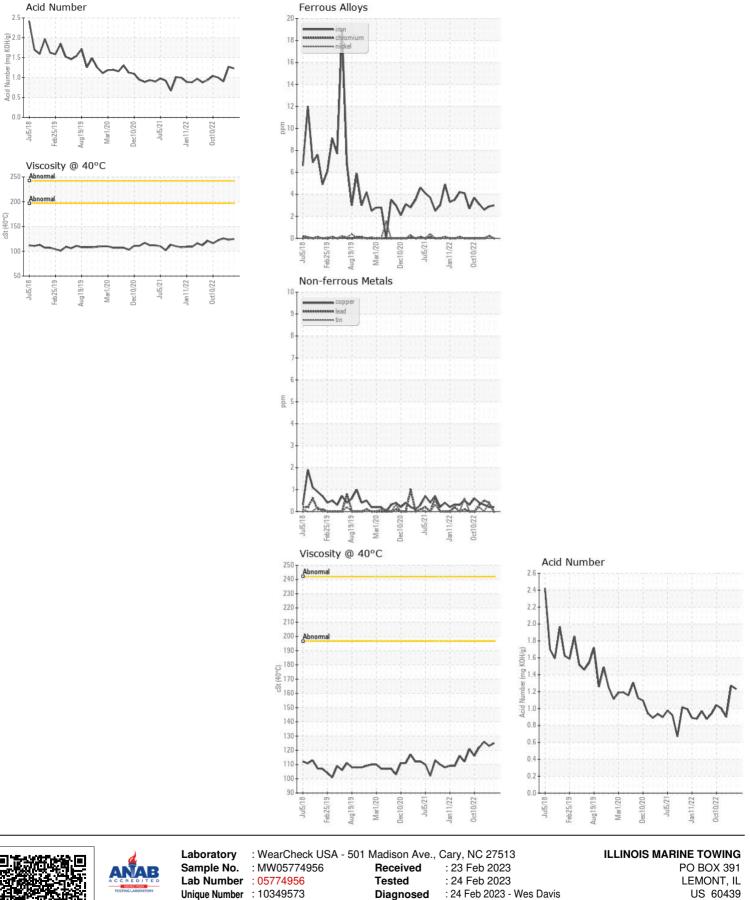
FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample Date Client Info 22 Feb 2023 22 Jan 2023 14 Dec 2023 Machine Age hrs Client Info 56941 56164 55348 Oil Age hrs Client Info 1528 816 1674 Filter Age hrs Client Info N/A N/A N/A Filter Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A Iron ppm ASTM D5185m >150 3 3 3 Chromium ppm ASTM D5185m >10 0 <1 0 Nickel ppm ASTM D5185m >10 0 <1 0 Aluminum ppm ASTM D5185m >10 0 <1 <1 Lead ppm ASTM D5185m >10 0 <1 <1 Vanadium ppm ASTM D5185m >10 0 <1 <1 Vanadium<								
Sample Date Client Info 22 Feb 203 22 Jan 2023 14 Dec 2022 Machine Age hrs Client Info 56941 56164 55348 Oil Age hrs Client Info 1528 816 1674 Filter Age hrs Client Info N/A N/A N/A N/A Filter Changed Client Info N/A N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A N/A Iron ppm ASTM D5185m >100 Q Q Q Nickel ppm ASTM D5185m >10 Q Q Q Aluminum ppm ASTM D5185m >10 Q Q Q Aluminum ppm ASTM D5185m >10 Q Q Q Aluminum ppm ASTM D5185m >10 Q Q Q Vanadium ppm ASTM D5185m >10 Q Q	Test	UOM	Method	Limit/Abn	Current	History1	History2	
Machine Age hrs Client Info 56941 56164 55348 Oil Age hrs Client Info 1528 816 1674 Filter Age hrs Client Info N/A N/A N/A Filter Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A Iron ppm ASTM D5185m >10 0 <1 0 Nickel ppm ASTM D5185m >10 0 <1 0 Silver ppm ASTM D5185m >10 0 <1 1 Lead ppm ASTM D5185m >10 0 <1 1 Copper ppm ASTM D5185m >10 0 <1 0 Vanadium ppm ASTM D5185m >10 0 <1 0 Vanadium ppm ASTM D5185m >10 0 <1 0 Vanadi	Sample Number		Client Info		MW05774956	WC05745361	MW05718514	
Oil AgehrsClient Info15288161674Filter AgehrsClient Info152800Oil ChangedClient InfoN/AN/AN/AFilter ChangedClient InfoN/AN/AN/ASample StatusClient InfoN/AN/AN/AIronppmASTM D5185>100<10NickelppmASTM D5185>100<10NickelppmASTM D5185>100<11SilverppmASTM D5185>100<11SilverppmASTM D5185>1000<11CopperppmASTM D5185>1000<11TinppmASTM D5185>1000<11QanadiumppmASTM D5185>50<1<10VanadiumppmASTM D5185 </th <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>22 Feb 2023</th> <th>22 Jan 2023</th> <th>14 Dec 2022</th>	Sample Date		Client Info		22 Feb 2023	22 Jan 2023	14 Dec 2022	
Filter Age Oil ChangedIsoClient Info152800Oil ChangedClient InfoN/AN/AN/AFilter ChangedClient InfoN/AN/AN/ASample StatusNORMALNORMALNORMALNORMALIronppmASTM D5185m>150333ChromiumppmASTM D5185m>100<10NickelppmASTM D5185m>100<10TitaniumppmASTM D5185m>25111SilverppmASTM D5185m>25111LeadppmASTM D5185m>1000<11CopperppmASTM D5185m>1000<10VanadiumppmASTM D5185m>50<1<10VanadiumppmASTM D5185m>50<1<10VanadiumppmASTM D5185m>50<1<10VanadiumppmASTM D5185m>50<46<4PotassiumppmASTM D5185m>50<46<4PotassiumppmASTM D5185m>50<46<4PotassiumppmASTM D5185m>200<10SiliconppmASTM D5185m>200<10MaterwickulaNONENONENONENONENONESodiumppmASTM D5185m<	Machine Age	hrs	Client Info		56941	56164	55348	
Oil ChangedClient InfoN/AN/AN/AFilter ChangedClient InfoN/AN/AN/ASample StatusNORMALNORMALNORMALNORMALIronppmASTM D5185m>150333ChromiumppmASTM D5185m>100<10NickelppmASTM D5185m>100<10NickelppmASTM D5185m>10000AluminumppmASTM D5185m>25111LeadppmASTM D5185m>50<1<1<1CopperppmASTM D5185m>100<10VanadiumppmASTM D5185m>50<1<10VanadiumppmASTM D5185m>50<1<10VanadiumppmASTM D5185m>50<1<10VanadiumppmASTM D5185m>50<1<10VanadiumppmASTM D5185m>50464PotassiumppmASTM D5185m>200<10SiliconppmASTM D5185m>200<10WaterwC Method>.0.1NEGNORENORESiliconppmASTM D5185m>200<10SoliconppmASTM D5185m>200<10MaterwC Method>.0.1NEGNORE <td< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>1528</th><th>816</th><th>1674</th></td<>	Oil Age	hrs	Client Info		1528	816	1674	
Filter Changed Sample Status Client Info N/A N/A N/A N/A Iron ppm ASTM D5185m >150 3 3 3 Iron ppm ASTM D5185m >10 0 <1 0 Nickel ppm ASTM D5185m >10 0 <1 0 Titanium ppm ASTM D5185m >10 0 <1 0 Auminum ppm ASTM D5185m >10 0 <1 1 Lead ppm ASTM D5185m >50 <1 <1 <1 Copper ppm ASTM D5185m >50 <1 <1 <1 Lead ppm ASTM D5185m >10 0 <1 <1 <1 Lead ppm ASTM D5185m >10 0 <1 <1 <1 Varadium ppm ASTM D5185m >10 0 <1 0 Varadium ppm ASTM D5185m >50	Filter Age	hrs	Client Info		1528	0	0	
Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL Iron ppm ASTM D5185m >100 0 <1 0 Nickel ppm ASTM D5185m >10 0 <1 0 Nickel ppm ASTM D5185m >10 0 <1 0 Silver ppm ASTM D5185m >25 1 1 1 Lead ppm ASTM D5185m >250 <1 <1 <1 Copper ppm ASTM D5185m >10 0 <1 <1 <1 Lead ppm ASTM D5185m >50 <1 <1 <1 <1 Lead ppm ASTM D5185m >50 <1 <1 <1 <1 Lead ppm ASTM D5185m >50 <1 <1 <1 <1 Varadium ppm ASTM D5185m >50 <1 <1 0 <1 0 Varadium <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th>N/A</th> <th>N/A</th>	Oil Changed		Client Info		N/A	N/A	N/A	
Iron ppm ASTM D5185m >150 3 3 3 Chromium ppm ASTM D5185m >10 0 <1 0 Nickel ppm ASTM D5185m >10 0 <1 0 Titanium ppm ASTM D5185m >10 0 <1 0 ASTM D5185m Ppm ASTM D5185m 0 0 0 0 Auminum ppm ASTM D5185m >100 0 <1 <1 Lead ppm ASTM D5185m >100 0 <1 <1 Copper ppm ASTM D5185m >10 0 <1 <1 Yead NONE NONE NONE NONE NONE NONE Vanadium ppm ASTM D5185m >10 0 <1 0 Vanadium ppm ASTM D5185m >20 0 <1 0 Vallow NONE NONE NONE NONE NONE </th <th>Filter Changed</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th>N/A</th> <th>N/A</th>	Filter Changed		Client Info		N/A	N/A	N/A	
Chromium ppm ASTM D5185m >10 0 <1	Sample Status				NORMAL	NORMAL	NORMAL	
Nickel ppm ASTM D5185m >10 0 <1	Iron	ppm	ASTM D5185m	>150	3	3	3	
Titanium ppm ASTM D5185m <1	Chromium	ppm	ASTM D5185m	>10	0	<1	0	
Titanium ppm ASTM D5185m <1	Nickel	ppm	ASTM D5185m	>10	0	<1	0	
Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >25 1 1 1 Lead ppm ASTM D5185m >100 0 <1 <1 Copper ppm ASTM D5185m >100 0 <1 <1 Tin ppm ASTM D5185m >10 0 <1 0 Vanadium ppm ASTM D5185m >10 0 <1 0 White Metal scalar *Visual NONE NONE NONE NONE NONE Silicon ppm ASTM D5185m >50 4 6 4 Potassium ppm ASTM D5185m >20 0 <1 0 Water WC Method >0.1 NEG NONE NONE NONE Sadd/Dirt scalar *Visual NONE NONE NONE NORE Appearance scalar *Visual NORH <	Titanium		ASTM D5185m		<1	<1	<1	
Aluminum ppm ASTM D5185m >25 1 1 1 Lead ppm ASTM D5185m >100 0 <1 <1 Copper ppm ASTM D5185m >50 <1 <1 <1 Tin ppm ASTM D5185m >10 0 <1 0 Vanadium ppm ASTM D5185m >10 0 0 0 0 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Silicon ppm ASTM D5185m >20 0 <1 0 Water WC Method >0.1 NEG NORE NONE NONE Debris scalar *Visual NONE NONE NONE NORE Appearance scalar *Visual NORH NORML NORH NORH Odo	Silver		ASTM D5185m		0	0	0	
Copper ppm ASTM D5185m >50 <1	Aluminum		ASTM D5185m	>25	1	1	1	
Tin ppm ASTM D5185m >10 0 <1	Lead	ppm	ASTM D5185m	>100	0	<1	<1	
VanadiumppmASTM D5185m0000White Metalscalar*VisualNONENONENONELIGHTYellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m>50464PotassiumppmASTM D5185m>200<10WaterWC Method>0.1NEGNEGNEGSilitscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m321BoronppmASTM D5185m000MolybdenumppmASTM D5185m3841130ManganeseppmASTM D5185m8771077114CalciumppmASTM D5185m265730512192PhosphorusppmASTM D5185m9241136799SulfurppmASTM D5185m378347523467Acid Number (AN)mg KOHgASTM D80451.231.270.90 <th>Copper</th> <th>ppm</th> <th>ASTM D5185m</th> <th>>50</th> <th><1</th> <th><1</th> <th><1</th>	Copper	ppm	ASTM D5185m	>50	<1	<1	<1	
White Metalscalar*VisualNONENONENONENONELIGHTYellow Metalscalar*VisualNONENONENONENONENONENONESiliconppmASTM D5185m>50464PotassiumppmASTM D5185m>200<10WaterWC Method>0.1NEGNEGNEGSilitscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLNORMLNORMLBoronppmASTM D5185m3211BariumppmASTM D5185m3841130ManganeseppmASTM D5185m3702192114CalciumppmASTM D5185m265730512192PhosphorusppmASTM D5185m9241136799SulfurppmASTM D5185m378347523467Acid Number (AN)mg KOHgASTM D5185m1.231.270.90	Tin	ppm	ASTM D5185m	>10	0	<1	0	
Yellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m>50464PotassiumppmASTM D5185m>200<10WaterWC Method>0.1NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLNORMLOdorscalar*Visual>0.1NEGNEGNEGSodiumppmASTM D5185m321BoronppmASTM D5185m000MalganeseppmASTM D5185m<1<1< <td><1</td> MagnesiumppmASTM D5185m265730512192PhosphorusppmASTM D5185m265730512192PhosphorusppmASTM D5185m9241136799SulfurppmASTM D5185m378347523467Acid Number (AN)mg KOH/gASTM D5185m1.231.270.90	<1	Vanadium	ppm	ASTM D5185m		0	0	0
SiliconppmASTM D5185m>50464PotassiumppmASTM D5185m>200<1	White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT	
PotassiumppmASTM D5185m>200<1	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
PotassiumppmASTM D5185m>200<1	Silicon	nom	ASTM D5185m	>50	4	6	4	
WaterWC Method>0.1NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGSodiumppmASTM D5185m3211BoronppmASTM D5185m0000MalganeseppmASTM D5185m00014MagnesiumppmASTM D5185m1265730512192PhosphorusppmASTM D5185m801978718ZincppmASTM D5185m9241136799SulfurppmASTM D5185m1.231.270.90					-			
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Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGNEGSodiumppmASTM D5185m321111BoronppmASTM D5185m40837026000BariumppmASTM D5185m00000MolybdenumppmASTM D5185m3841130114CalciumppmASTM D5185m265730512192PhosphorusppmASTM D5185m801978718ZincppmASTM D5185m9241136799SulfurppmASTM D5185m378347523467Acid Number (AN)mg KOH/gASTM D80451.231.270.90	Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*Visual>0.1NORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGNEGSodiumppmASTM D5185m321BoronppmASTM D5185m408370260BariumppmASTM D5185m000MolybdenumppmASTM D5185m000ManganeseppmASTM D5185m<11<11<11CalciumppmASTM D5185m871107114PhosphorusppmASTM D5185m<801978718ZincppmASTM D5185m9241136799SulfurppmASTM D5185m1.231.270.90	Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGSodiumppmASTM D5185m321BoronppmASTM D5185m408370260BariumppmASTM D5185m000MolybdenumppmASTM D5185m3841130ManganeseppmASTM D5185m<11<1<1MagnesiumppmASTM D5185m265730512192PhosphorusppmASTM D5185m801978718ZincppmASTM D5185m9241136799SulfurppmASTM D5185m1.231.270.90	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
Emulsified Water scalar *Visual >0.1 NEG NEG NEG Sodium ppm ASTM D5185m 3 2 1 Boron ppm ASTM D5185m 408 370 260 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 41 30 Magnesium ppm ASTM D5185m 41 114 Calcium ppm ASTM D5185m 871 107 114 Calcium ppm ASTM D5185m 801 978 718 Zinc ppm ASTM D5185m 801 979 3467 Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Sodium ppm ASTM D5185m 3 2 1 Boron ppm ASTM D5185m 408 370 260 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m <38 41 30 Magnesium ppm ASTM D5185m <1 <1 <1 Calcium ppm ASTM D5185m 877 107 114 Calcium ppm ASTM D5185m 801 978 718 Zinc ppm ASTM D5185m 924 1136 799 Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
Boron ppm ASTM D5185m 408 370 260 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 38 41 30 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 87 107 114 Calcium ppm ASTM D5185m 801 978 718 Phosphorus ppm ASTM D5185m 924 1136 799 Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG	
Boron ppm ASTM D5185m 408 370 260 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 38 41 30 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 87 107 114 Calcium ppm ASTM D5185m 801 978 718 Phosphorus ppm ASTM D5185m 924 1136 799 Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90	Sodium	mag	ASTM D5185m		3	2	1	
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 38 41 30 Manganese ppm ASTM D5185m <1	-						260	
Molybdenum ppm ASTM D5185m 38 41 30 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 87 107 114 Calcium ppm ASTM D5185m 2657 3051 2192 Phosphorus ppm ASTM D5185m 801 978 718 Zinc ppm ASTM D5185m 924 1136 799 Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90						0		
Manganese ppm ASTM D5185m <1	Molybdenum		ASTM D5185m		38	41	30	
Magnesium ppm ASTM D5185m 87 107 114 Calcium ppm ASTM D5185m 2657 3051 2192 Phosphorus ppm ASTM D5185m 801 978 718 Zinc ppm ASTM D5185m 924 1136 799 Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90			ASTM D5185m			<1	<1	
Calcium ppm ASTM D5185m 2657 3051 2192 Phosphorus ppm ASTM D5185m 801 978 718 Zinc ppm ASTM D5185m 924 1136 799 Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90	Magnesium		ASTM D5185m		87	107	114	
Zinc ppm ASTM D5185m 924 1136 799 Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90	Calcium		ASTM D5185m		2657	3051	2192	
Sulfur ppm ASTM D5185m 3783 4752 3467 Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90	Phosphorus	ppm	ASTM D5185m		801	978	718	
Acid Number (AN) mg KOH/g ASTM D8045 1.23 1.27 0.90	Zinc	ppm	ASTM D5185m		924	1136	799	
	Sulfur	ppm	ASTM D5185m		3783	4752	3467	
Visc @ 40°C cSt ASTM D445 125 123 126	Acid Number (AN)	mg KOH/g	ASTM D8045		1.23	1.27	0.90	
	Visc @ 40°C	cSt	ASTM D445		125	123	126	

Contact/Location: RHETT DANIEL - AMELEMIL

WEAR NORMAL CONTAMINATION NORMAL NORMAL FLUID CONDITION



 Certificate L2367
 Test Package
 : MAR 2
 Control

 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)
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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