

Electrical Reliability Services, Inc.

400 NW Capital Drive,
Lee's Summit, MO 64086
T (816) 525-7156
F (816) 524-3274
<http://ers.VertivCo.com>

April 1, 2021

Wallace Electric LLC
1803 Humphrey Street
Garden City, KS 67846

Attention: Mr. Alex Wallace
Email: alex.wallace@wallaceelectricco.com

Subject: The Big Pool Ground Testing Report
Project No. 1075888

Dear Mr. Wallace,

Thank you for the opportunity to provide services for you during this project. Our comprehensive report and recommendations are attached. They detail the work we performed, results obtained and provide recommendations for any corrective actions. Please let us know if you have any questions or need additional information.

As an independent third party electrical testing, maintenance and engineering services firm and full member of the InterNational Electrical Testing Association (NETA), Electrical Reliability Services prides itself in the quality of our services and skills of our people. Thanks again for the opportunity to provide you with electrical testing services. If there is anything more we can do for you, please don't hesitate to contact us.

Sincerely,

Bryan S Parkhurst
Area Manager
Electrical Reliability Services, Inc.



City Of Garden City KS

The Big Pool Ground Testing Report

VERTIV – ELECTRICAL RELIABILITY SERVICES

Purchase Order No. SIGNED PROPOSAL

Project No. 1075888

Report Date 4/1/2021

Site Address Garden Rapids At The Big Pool 401 E Maple St, Garden City, KS
67846-6528

Project Leader Steven M Phillips

Approved by Glen Simons - Service Coordinator

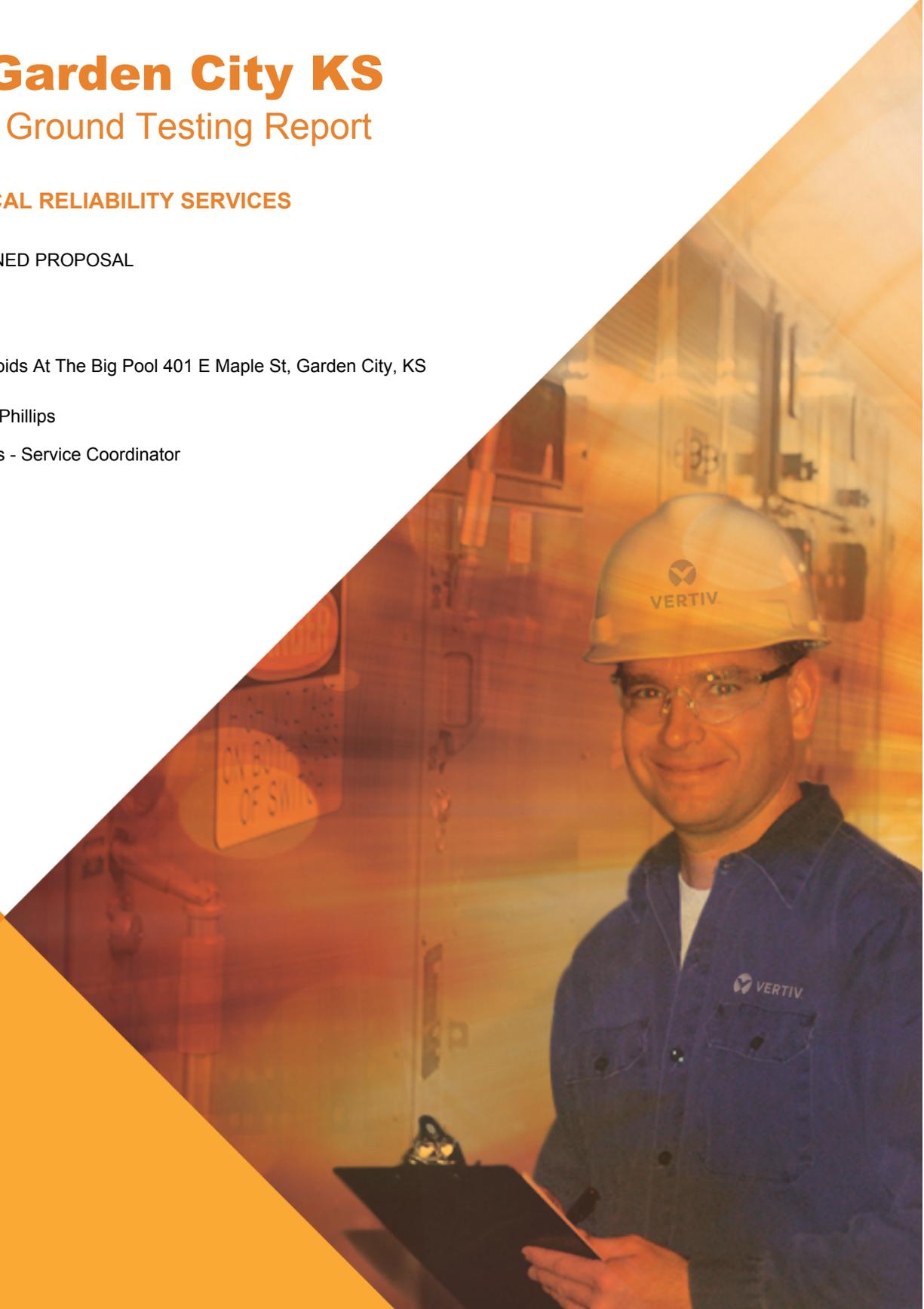


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1. SUMMARY

- 1.1 This project was initiated by Mr. Alex Wallace with Wallace Electric LLC. All testing was performed by Electrical Reliability Services Field Engineer Steve Phillips on March 29, 2021.
- 1.2 Acceptance tests and inspections help determine if electrical equipment is suitable for use.
- 1.3 This project involved fall of potential and point to point ground resistance testing.
- 1.4 Discrepancies were noted during the testing. Please refer to Section 5 for complete details regarding comments, deficiencies and recommendations.

2. OBJECTIVES

2.1 Ground Resistance

- 2.1.1 The purpose of ground resistance tests is to determine the effectiveness of individual grounding electrodes, grounding electrode systems, ground grids and connections that are used with electrical systems to protect personnel and equipment. The National Electrical Code® 2014, Section 250.53 requires a single electrode which does not have a resistance to ground of 25 ohms or less to be augmented by one additional electrode of any of the types specified in Sections 250.52(A)(2) through (A)(8).

3. SERVICE DESCRIPTION

- 3.1 This project was initiated by Mr. Alex Wallace with Wallace Electric LLC. All testing was performed by Electrical Reliability Services Field Engineer Steve Phillips on March 29, 2021.
- 3.2 Service consisted of the following testing:
 - 3.2.1 1ea Fall Of Potential ground test
 - 3.2.2 12ea Point-To-Point ground resistance tests

4. PROCEDURES

The following procedures were followed in the performance of this project:

4.1 Grounding Systems

4.1.1 Visual and Mechanical Inspection

- .1 Inspect physical and mechanical condition.
- .2 Inspect anchorage (where applicable).

4.1.2 Electrical Tests

- .1 Perform fall-of-potential or alternative test in accordance with ANSI/IEEE 81 on the main grounding electrode.
- .2 Perform point-to-point tests to determine the resistance between the main grounding system and all major electrical equipment frames.

5. RESULTS, COMMENTS, DEFICIENCIES AND RECOMMENDATIONS

- 5.1 The common reference point (main ground) resistance was acceptable in accordance with the National Electrical Code®.
- 5.2 Point-to-point ground tests were performed from various equipment to a common reference point. The National Electric Code, Article 250 standard recommends the maximum resistance from point-to-point be 0.5 ohms or below. **One or more locations (listed below) had a resistance to the reference point greater than 0.5 ohms.**
- 5.3 The following points exhibited an OPEN test result, which indicates no ground path between the reference point and the subject point:
- 5.3.1 Grey Elephant Water Feature
 - 5.3.2 Pink Flamingo Water Feature
 - 5.3.3 Green & Purple Water Feature w/ Bucket
 - 5.3.4 Lion Ground Feature
 - 5.3.5 Elephant Ground Feature
 - 5.3.6 Sea Lion Ground Feature
 - 5.3.7 Duck Ground Feature

6. APPENDIX

APPENDIX



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Job # 1075888

Electrical Reliability Services Inc.
 Kansas City Area Service Center
 400 NW Capital Drive
 Lee's Summit, MO 64086
 Phone 816-525-7156
 Fax 816-524-3274

Electrical Reliability Services

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CUSTOMER WALLACE ELECTRIC INC
 ADDRESS 1803 HUMPHREY ST; GARDEN CITY KS 67846 JOB # 1075888
 OWNER THE BIG POOL
 LOCATION/PLANT 504 E MAPLE ST

SUBSTATION EQUIPMENT IDENTIFICATION	DATA TEST FORM EQUIPMENT LOCATION	TEST DATA PAGE #
BIG POOL FALL OF POTENTIAL	24021 - FALL OF POTENTIAL GROUND TEST 504 E MAPLE ST	
BIG POOL POINT TO POINT	24210 - GROUND RESISTANCE TWO TERMINAL 504 E MAPLE ST	

