Request for Information

To:	Jimmy Lopez (City of Ocala)	**Fax:**	
From:	Kyle Taylor (AWE)	**Date:**	8/15/2025
Project:	City of Ocala WTP No.2 11&12	**Pages:**	
CC:		**Return by:**	

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** X **Please Reply** ☐ **Please Recycle**

All Webb's Enterprises, Inc (AWE) has begun drilling operations at the City of Ocala Water Treatment Plant No.2 on Wells No.11&12. Well No.11 was attempted first on closed loop mud rotary operations with a 30.5-inch reaming assembly below the 34" pit casing at 60 feet below land surface (bls). Circulation was lost at 70 feet bls and weight of bit dropped to 72 feet bls- at this point, AWE attempted mixing thicker viscosity mud, adding loss of circulation (LOC) polymers, and forcing a straw plug to regain circulation. Varying results were achieved through these multiple attempts, but a full return to circulation was never achieved. After conversations internally and with the Baroid representative, drill mud/polymer, it was ascertained that foam drilling is the only coarse of action with the deep water table (70+ feet).

AWE was able to get full return of circulation and continue drilling from 72 feet to approximately 140 feet bls. This was achieved on a Friday. When AWE came back on the following Monday, a sinkhole approximately 20 feet from the rig had opened up. After the drill rig was moved and larger beams were brought in, the agitation of driving over the site opened up a second sinkhole directly behind the well. At this point Ground Penetrating Radar (GPR), was done by GeoView, Inc on both Well 11 and 12 site. No other anomalies were found within the top 25 feet of Lithology on both well locations.

AWE requested to drill Well No.12 on a smaller diameter bit, 12.25-inch, to confirm local lithology. At 70 feet bls, loss of circulation occurred and AWE pushed drilling to 83 feet bls in order to obtain borehole data, attached, via a X-Y Caliper Log.

Based on the drilling, testing, and previous well construction design, AWE is requesting the City to approve installation of a 30-inch diameter casing to approximately 90 feet bls to seal off the zone of influence inducing the sinkholes. The 4-inch annulus between this casing and the pit casing is approved by the St. John Water Management District and this design will allow the continuance of 24-inch casing as the final casing diameter.

Please see the attached data, pricing, and back up information.

Thank you for your consideration and making the request on our behalf.

Kyle Taylor

Project:	Ocala WTP No.2 Wells 11&12
Location:	Ocala, FL
Date:	8/15/2025
Prepared For:	City of Ocala
Prepared By:	All Webb's Enterprises, Inc

Scope of Work: Provide and install an additional 30" Casing run to approximately 90 feet bls, including all materials, labor, grout placement, and use of equipment already mobilized onsite.

Item Description (PER WELL)	Unit	Quantity	Unit Price	Total Price	Mark Up per GC (%)	Final Total
30" A252 Domestic Casing	LF	90	$177.90	$16,010.84	15	$18,412.46
Grout Casing *	Yd3	4	$2,500.00	$10,000.00	0	$10,000.00
Equipment Onsite (Rig, Support Vehicles, Tools)	LS	1	$56,018.00	$56,018.00	0	$56,018.00
Welders	HR	30	$125.00	$3,750.00	5	$3,937.50
					Total Per Well:	**$88,367.96**
					Total for Two Wells:	**$176,735.93**

Notes & Assumptions

1. Equipment mobilization charges are not included, as equipment is already onsite.
2. Contract Time impact is expected to be two weeks per well for drilling, casing install, and cementing.
3. All work will be performed in accordance with FDEP 62.500 Well Construction Standards along with City Specs.
4. Grout will be placed by tremie method to ensure full annular seal.

* QTY is nominal cacluation plus 30%. This zone could take more cement.

Acceptance

Authorized By (Client): _____ Date: _____

Authorized By (Contractor): _____ Date: _____

Equipment	Army Corp Rate (HR/Gal/Night)	Cost for Two Weeks	Notes
Backhoe	$45.34	$4,534.00	100hrs
Compressor	$41.48	$4,148.00	100hrs
Telehandler	$26.65	$2,665.00	100hrs
Rig	$103.23	$10,323.00	100hrs
Fuel	$3.00	$3,000.00	1,000 gallons (average 500 gallons/week)
Lodging	$100/night	$2,000.00	2 employees for 10 days.
Time Driller	$38.00	$3,800.00	100hrs
Time Helper	$25.00	$2,500.00	100hrs
Crane	$133.48	$13,348.00	100hrs
Mud System	$55.00	$5,500.00	100hrs
Generator	$42.00	$4,200.00	100hrs
	Total:	**$56,018.00**	

ALLWEBBS ENTERPRISES, INC.

SAMMY X-Y CALIPER LOG

Company
Well OCALA P&A
Field OCALA
County MARION
State FL

Company Well 12
Field OCALA
County MARION State FL
Location: API # :
SEC TWP RGE
Permanent Datum Elevation
Log Measured From
Drilling Measured From

Other Services

Elevation
K.B.
D.F.
G.L.

Date	AUG-14TH-2025
Run Number	ONE
Depth Driller	85
Depth Logger	85
Bottom Logged Interval	
Top Log Interval	
Casing Driller	
Casing Logger	
Bit Size	
Type Fluid in Hole	
Density / Viscosity	
pH / Fluid Loss	
Source of Sample	
Rm @ Meas. Temp	
Rmf @ Meas. Temp	
Rmc @ Meas. Temp	
Source of Rmf / Rmc	
Rm @ BHT	
Time Circulation Stopped	
Time Logger on Bottom	
Maximum Recorded Temperature	
Equipment Number	
Location	
Recorded By	LEE / N.LEE
Witnessed By	

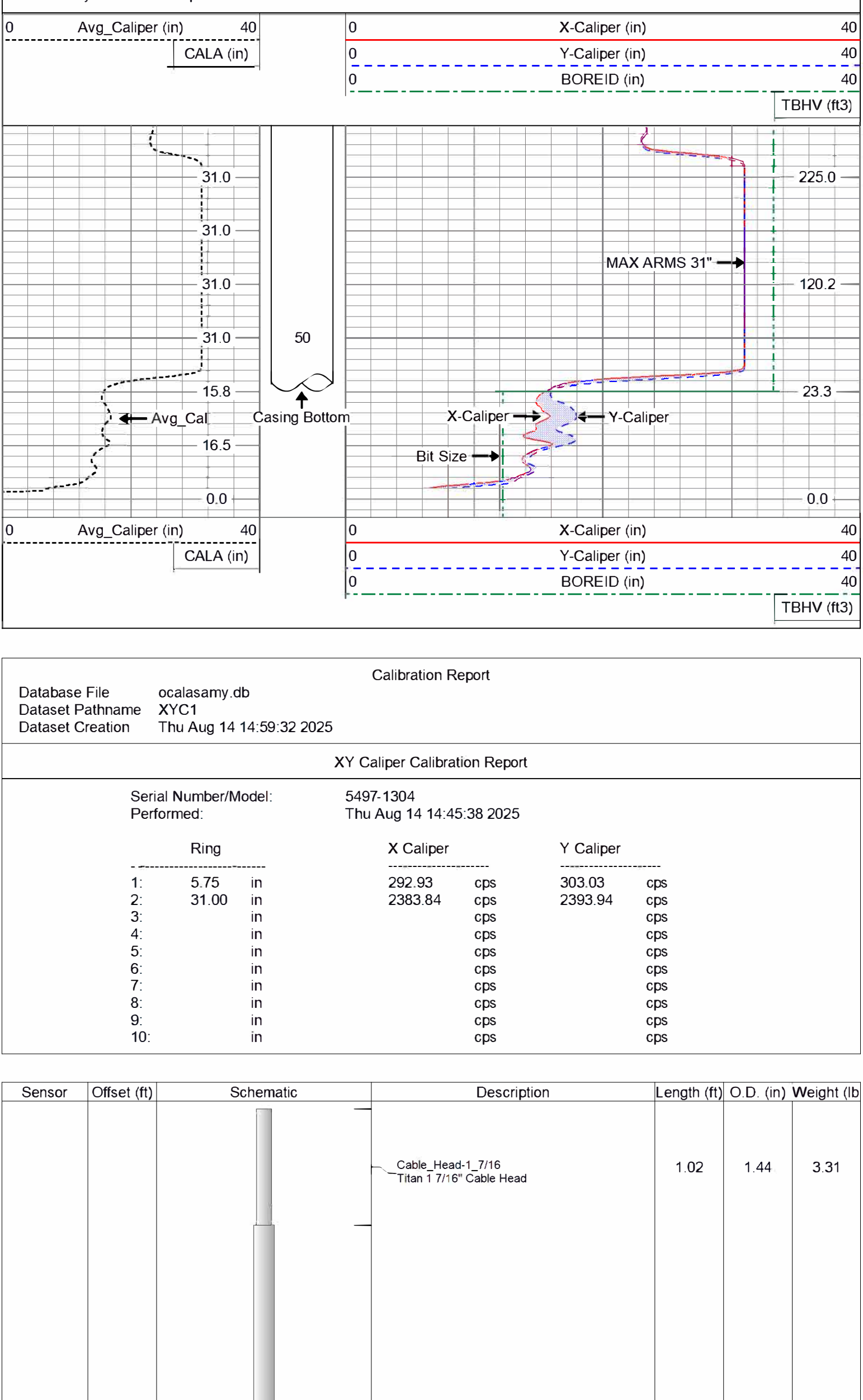
<<< Fold Here >>>

Comments

ALLWEBBS ENTERPRISES, INC.

MAX ARMS 31"

Database File ocalasamy.db
Dataset Pathname XYC1
Presentation Format xyc_tbhvft3
Dataset Creation Thu Aug 14 14:59:32 2025
Charted by Depth in Feet scaled 1:240



Calibration Report

Database File ocalasamy.db
Dataset Pathname XYC1
Dataset Creation Thu Aug 14 14:59:32 2025

XY Caliper Calibration Report

Serial Number/Model: 5497-1304
Performed: Thu Aug 14 14:45:38 2025

	Ring		X Caliper		Y Caliper	
1:	5.75	in	292.93	cps	303.03	cps
2:	31.00	in	2383.84	cps	2393.94	cps
3:		in		cps		cps
4:		in		cps		cps
5:		in		cps		cps
6:		in		cps		cps
7:		in		cps		cps
8:		in		cps		cps
9:		in		cps		cps
10:		in		cps		cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31
			XY_CAL-1304 (5497) Comprobe XY CALIPER	8.17	2.00	60.00
XCAL	0.92					
YCAL	0.50					

Dataset: ocalasamy.db: field/well/run1/XYC1
Total length: 9.18 ft
Total weight: 63.31 lb
O.D.: 2.00 in

FINAL REPORT
GEOPHYSICAL INVESTIGATION
CITY OF OCALA WTP NO. 2 WELL 11&12 SITE
OCALA, FLORIDA

Prepared for All Webs Enterprises
Jupiter, FL

Prepared by GeoView Associates, Inc.
St. Petersburg, FL

August 11, 2025

Mr. Kyle Taylor
All Webs Enterprises
309 Commerce Way
Jupiter, FL 34458

Subject: Transmittal of Final Report for Geophysical Investigation
City of Ocala WTP No. 2 Well 11&12 Site
Ocala, Florida
GeoView Project Number 44086

Mr. Taylor,

GeoView Associates, Inc. (GeoView) is pleased to submit the final report that summarizes and presents the results of the geophysical investigation carried out at the above referenced site. Ground penetrating radar was used to help characterize near surface geological conditions at the project site. GeoView appreciates the opportunity to have assisted you on this project. If you have any questions or comments about the report, please contact us.

Sincerely,

GEOVIEW ASSOCIATES, INC.

Michael J. Wightman, P.G.
President
Florida Professional Geologist Number 1423

1.0 Introduction

A geophysical investigation was completed at the City of Ocala WTP No. 2 Well 11&12 Site located at 3744 S Pine Ave in Ocala, Florida. The investigation was completed on August 7, 2025. The investigation was completed in two areas. Area 1 consisted of an area with a recent sinkhole collapse that may have been associated with the drilling of a water production well which is not abandoned. Area 2 is in the area where another well is under construction. The locations of the study areas are provided on Figures 1, 2 and 3 (Appendix 1). Pictures of the two study areas are also provided in Appendix 1.

The investigation was performed using ground penetrating radar (GPR). The purpose of the geophysical investigation was to help characterize near-surface geological conditions and to identify subsurface features that may be associated with karst (sinkhole) activity.

2.0 Description of Geophysical Investigation

The GPR survey was completed across accessible areas of the site along a series of perpendicular transects spaced approximately 5 to 10 feet apart (Figure 1). The area around the collapse was roped off and was inaccessible. The southern portion of Area 1 was in the woods and access was limited. In Area 2 a drill rig and support equipment was present. GPR data was collected where accessible.

The GPR data was collected with a GSSI radar system with a 350 MHz antenna and a time range of 136 nanoseconds. This equipment configuration provided an estimated exploration depth of 10 to 25 ft below land surface (bls). The GPR data was digitally recorded for both analysis and archiving purposes.

The positioning of the GPR transect lines was recorded using an Emlid RS3 GPS system. A discussion of the limitations of the establishment of the survey grid is provided in Appendix A2.1. A description of the GPR technique and the methods employed for geological characterization studies is provided in Appendix A2.2.

3.0 Identification of Possible Sinkhole (Karst) Features Using GPR

The features observed on GPR data that are most commonly associated with karst features are:

- A downwarping of GPR reflector sets, that are associated with suspected lithological contacts, toward a common center. Such features typically have with a bowl or funnel shaped configuration and can be associated with a deflection of overlying sediment horizons caused by the migration of sediments into voids in the underlying limestone. If the GPR reflector sets are sharply downwarping and intersect, they can

create a “bow-tie” shaped GPR reflection feature, which often designates the apparent center of the GPR anomaly.

- A localized significant increase in the depth of the penetration and/or amplitude of the GPR signal response. The increase in GPR signal penetration depth or amplitude is often associated with either a localized increase in sand content at depth or decrease in soil density.
- An apparent discontinuity in GPR reflector sets, that are associated with suspected lithological contacts. The apparent discontinuities and/or disruption of the GPR reflector sets may be associated with the downward migration of sediments.

The greater the severity of these features or a combination of these features, the greater the likelihood that the identified feature is a sinkhole. It is not possible based on the GPR data alone to determine if an identified feature is an active karst-related geologic feature.

4.0 Survey Results

Results of the GPR survey indicated the presence of two well-defined, relatively continuous sets of GPR reflectors at depth ranges of 1 to 3 ft bls and 10 to 15 ft bls. These reflector sets are most likely associated with some change in lithological conditions at these depth ranges.

The GPR reflector sets identified in the GPR investigation were continuous across the accessible areas of the project site. No significant downwarping or any type of lateral discontinuity was observed. Accordingly, based on the results of the GPR survey the following is concluded:

1) No indication of potential sinkhole activity was observed within the depth limits of the GPR signal (20 to 25 ft bls) collected across the project site.
2) Soils conditions appear to be consistent across the project site to the maximum depth of penetration of the GPR signal.
3) No significant downwarping of any soil horizons was observed within the GPR data collected near the recent sinkhole collapse and abandoned well. This would indicate that the collapse feature has near vertical walls within the depth range of the GPR signal.

An example of the GPR data collected near the collapse in Area 1 is provided in Appendix 1. A discussion of the limitations of the GPR technique in geological characterization studies is provided in Appendix 2.

APPENDIX 1
FIGURES AND EXAMPLE OF GPR DATA COLLECTED ACROSS THE PROJECT SITE

CITY OF OCALA WTP No. 2 WELL 11&12 SITE
3744 S PINE AVENUE
OCALA, FLORIDA

ALL WEBS ENTERPRISES
JUPITER, FLORIDA

PROJECT: 44086
DATE: 08/11/25

GeoView

FIGURE 1
SITE MAP SHOWING RESULTS OF GEOPHYSICAL INVESTIGATION

FDOT AERIAL 2023

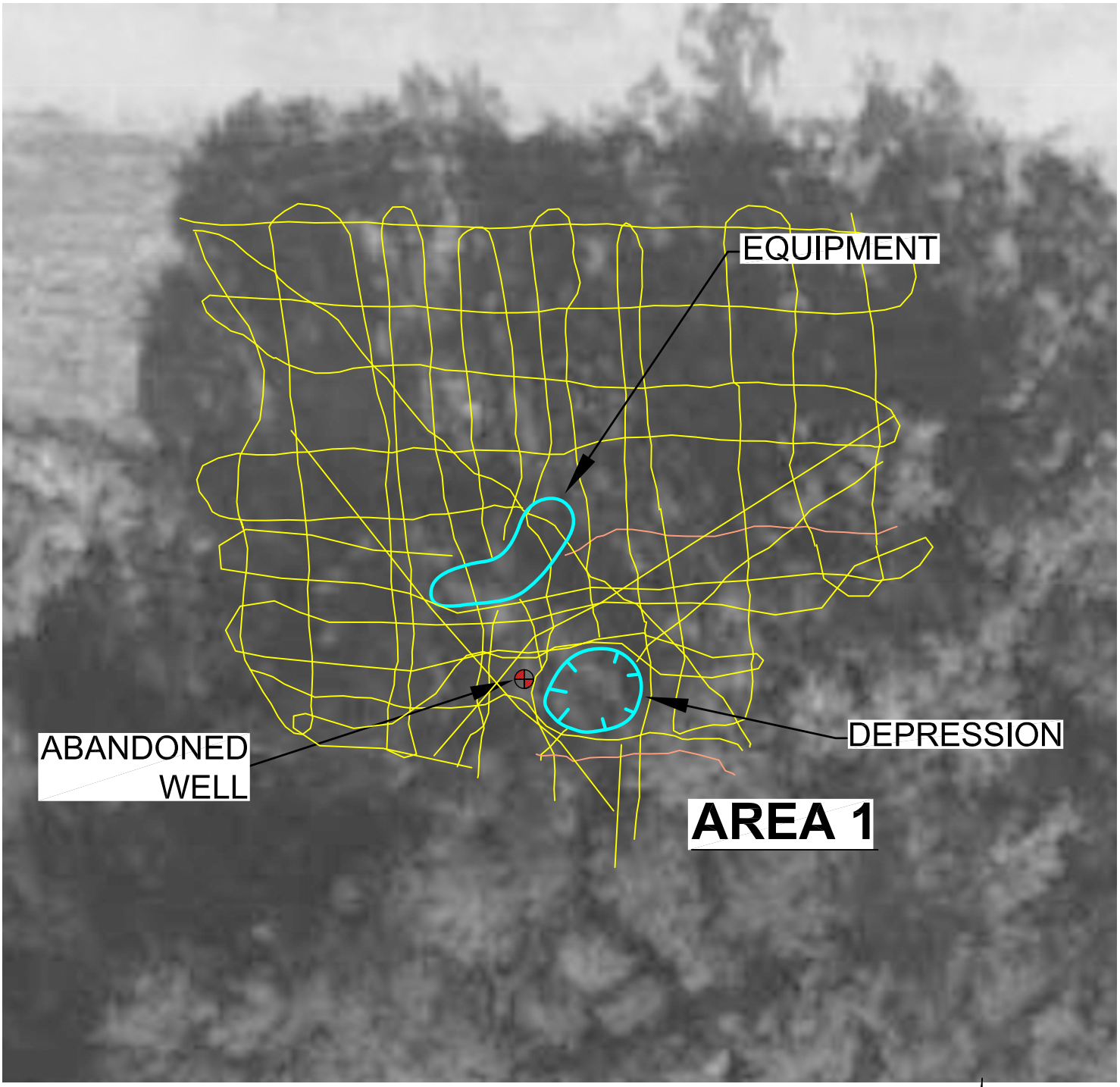
N

0 40'

SCALE: 1"=40' APPROXIMATE

EXPLANATION

GPR TRANSECTS



EXPLANATION

GPR TRANSECTS

N

0 20'

SCALE: 1"=20' APPROXIMATE

GeoView

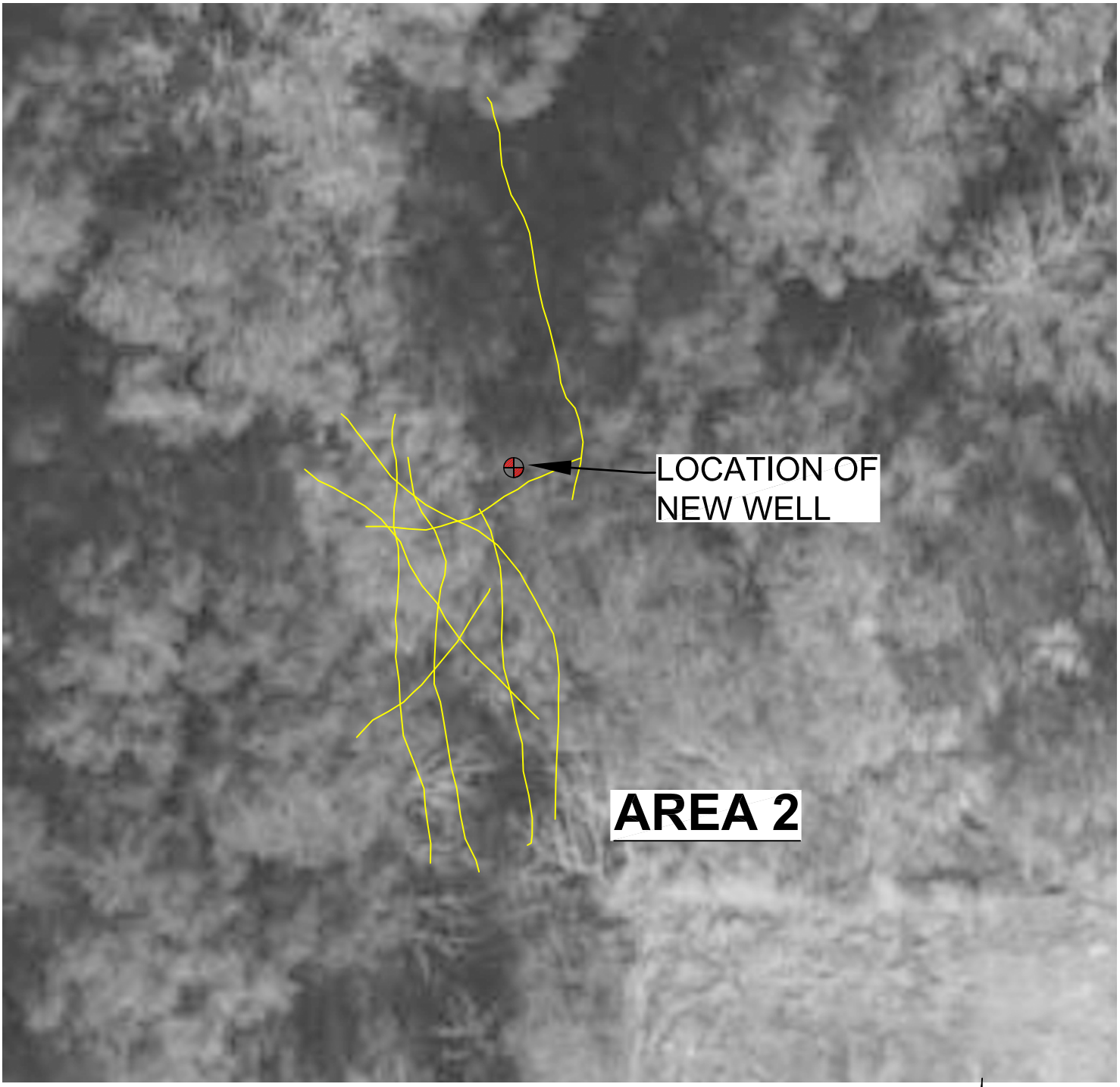
FIGURE 2

AREA 1 SITE MAP SHOWING RESULTS OF GEOPHYSICAL INVESTIGATION

CITY OF OCALA WTP No. 2 WELL 11&12 SITE
3744 S PINE AVENUE
OCALA, FLORIDA

ALL WEBS ENTERPRISES
JUPITER, FLORIDA

PROJECT: 44086
DATE: 08/11/25



EXPLANATION

GPR TRANSECTS

N

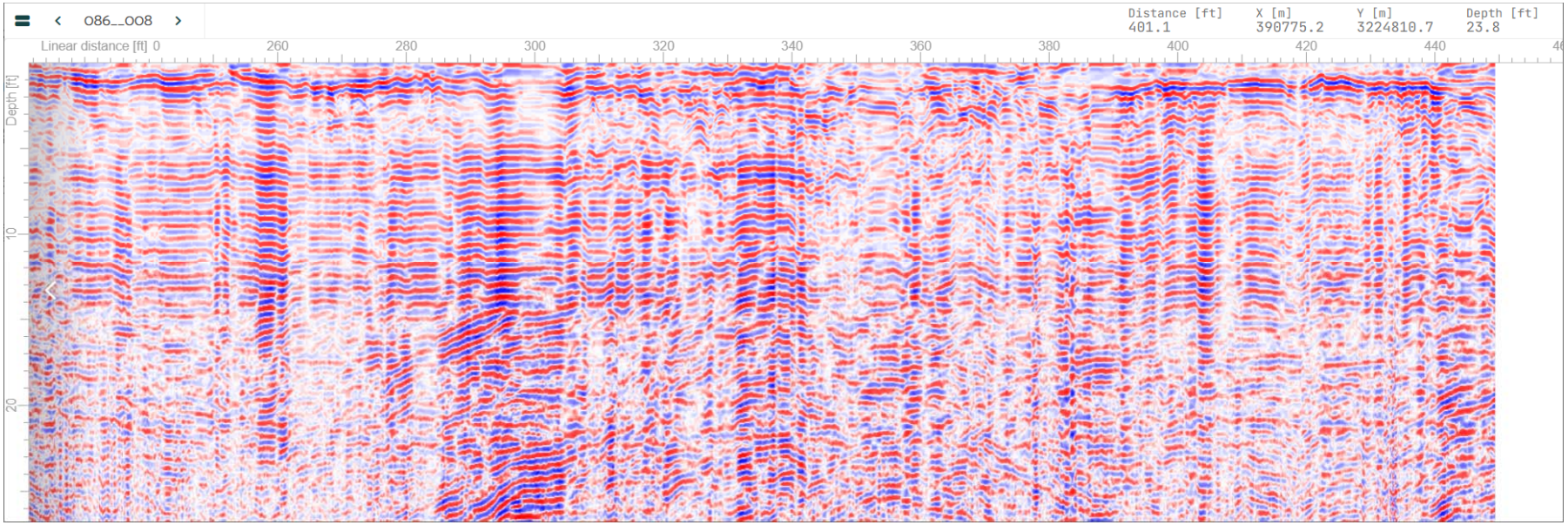
0 20'

SCALE: 1"=20' APPROXIMATE

GeoView	**FIGURE 3** AREA 2 SITE MAP SHOWING RESULTS OF GEOPHYSICAL INVESTIGATION	CITY OF OCALA WTP No. 2 WELL 11&12 SITE 3744 S PINE AVENUE OCALA, FLORIDA ALL WEBS ENTERPRISES JUPITER, FLORIDA PROJECT: 44086 DATE: 08/11/25

COLLAPSE ASSOCIATED WITH AREA 1

AREA 2 WITH DRILL RIG



GPR TRANSECT NEAR COLLAPSE IN AREA 1

APPENDIX 2
DESCRIPTION OF GEOPHYSICAL METHODS, SURVEY METHODOLOGIES AND LIMITATIONS

A2.1 On Site Measurements

A Emlid RS3 Global Positioning System (GPS) was used to provide the positioning information for the GPR data. This GPS system typically have sub-foot accuracy.

A2.2 Ground Penetrating Radar

Ground Penetrating Radar (GPR) consists of a set of integrated electronic components which transmits high frequency (200 to 1500 megahertz [MHz]) electromagnetic waves into the ground and records the energy reflected back to the ground surface. The GPR system consists of an antenna, which serves as both a transmitter and receiver, and a profiling recorder that both processes the incoming signal and provides a graphic display of the data. The GPR data can be reviewed as both printed hard copy output or recorded on the profiling recorder's hard drive for later review. GeoView uses Mala and GSSI GPR systems. Geological studies are typically conducted using a 200 to 500 MHz antenna.

A GPR survey is conducted along survey lines (transects), which are measured paths along which the GPR antenna is moved. Electronic marks are placed in the data by the operator at designated points along the GPR transects. These marks allow for a correlation between the GPR data and the position of the GPR antenna on the ground.

A GPR survey provides a graphic cross-sectional view of subsurface conditions. This cross-sectional view is created from the reflections of repetitive short-duration electromagnetic (EM) waves that are generated as the antenna is pulled across the ground surface. The reflections occur at the subsurface contacts between materials with differing electrical properties. The electrical property contrast that causes the reflections is the dielectric permittivity that is directly related to conductivity of a material. The GPR method is commonly used to identify such targets as underground utilities, underground storage tanks or drums, buried debris, voids, rebar or geological features.

The greater the electrical contrast between the surrounding materials (earth or concrete) and target of interest, the greater the amplitude of the reflected return signal. Unless the buried object is metal, only part of the signal energy will be reflected back to the antenna with the remaining portion of the signal continuing to propagate downward to be reflected by deeper features. If there is little or no electrical contrast between the target interest and surrounding earth materials it will

be very difficult if not impossible to identify the object using GPR.

The depth of penetration of the GPR signal is reduced as the antenna frequency is increased. However, as antenna frequency is increased the resolution of the GPR data is improved. Therefore, when designing a GPR survey a tradeoff is made between the required depth of penetration and desired resolution of the data. As a rule, the highest frequency antenna that will still provide the desired maximum depth of penetration should be used.

Depth estimates are determined by dividing the time of travel of the GPR signal from the ground surface to the top of the feature by the velocity of the GPR signal. The velocity of the GPR signal is usually obtained from published tables of velocities for the type and condition (saturated vs. unsaturated) of soils underlying the site. The accuracy of GPR-derived depths typically ranges from 20 to 40 percent of the total depth.

A2.3 Limitations

The analysis and collection of GPR data is both a technical and interpretative skill. The technical aspects of the work are learned from both training and experience. Having the opportunity to compare GPR data collected in numerous settings to the results from geotechnical studies performed at the same locations develops interpretative skills for karst studies.

The ability of GPR to collect interpretable information at a project site is limited by the attenuation (absorption) of the GPR signal by underlying soils. Once the GPR signal has been attenuated at a particular depth, information regarding deeper geological conditions will not be obtained. GPR data can only resolve subsurface features that have a sufficient electrical contrast between the feature in question and surrounding earth materials. If an insufficient contrast is present, the subsurface feature will not be identified.

GeoView can make no warranties or representations of geological conditions that may be present beyond the depth of investigation or resolving capability of the GPR equipment or in areas that were not accessible to the geophysical investigation.

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Fax: (813) 659-2709
Web: http://coleindustrial.com

QUOTE

Quote Date	Expires	Authorization	Salesperson	Cust #	Terms
8/15/25	8/22/25	KYLE TAYLOR	DAVID T	265700	NET 30 DAYS

Quote #	P.O. Number	Quoted By	Ship Via	Ppd/Col	Shipped From
02/067969	OCALA	DAVID T	OUR TRUCK	FFA	PLANT CITY, FLORIDA

Sold To
ALL WEBB'S ENTERPRISES INC
309 COMMERCE WAY
(561) 746-2079
JUPITER FL 33458

Ship To
ALL WEBB'S ENTERPRISES INC
JOB# 2510 (OCALA WELLS # 11 & 12)
3744 S PINE AVE
ATTN: KYLE (352) 875-7033
OCALA FL 34471

30" STD M&M USA

Quantity	Our Stock #/Description/Your Part #	Unit Price	UM	Extended Price
195	W45LB300DRL-USA 30" STD (.375) LSAW API5LB DRL USA	166.2600	FT	32,420.70

PRICES VALID UNTIL CLOSE OF BUSINESS TODAY

SubTotal	32,420.70
Freight	
Sales Tax	2,020.24
Quote Total	34,440.94

Thank you for the opportunity to quote.
Pricing based on all items ordered together.
All stock items are subject to prior sale.
Standard Cole Industrial terms in effect.
Any changes to the quote are subject to rebid.

All custom items are subject to 100% restock charge.
NO RETURNS PAST 30 DAYS

Hourly Equipment Ownership and Operating Expense

A15 AIR COMPRESSORS

A15 0.10 ROTARY SCREW

DOOSAN PORTABLE POWER

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
A15DP001	C185WDZ-T4F	AIR COMPRESSOR, 185 CFM, 100 PSI, TRAILER MTD (ADD HOSE)	$20,448	D-Off 49 HP		23

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$1.61	$0.12	**$1.73**	$7.83	$0.84	$0.06	$0.01	$1.58	**$10.31**	**$12.04**
Standby	$0.81	$0.12							**$0.93**	

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
A15DP002	HP375WCU-T4F	AIR COMPRESSOR, 375 CFM, 150 PSI, TRAILER MTD (ADD HOSE)	$56,680	D-Off 135 HP		44

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$4.51	$0.33	**$4.84**	$21.58	$2.31	$0.06	$0.01	$4.40	**$28.36**	**$33.20**
Standby	$2.26	$0.33							**$2.59**	

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
A15DP003	VHP400WCU-T4F	AIR COMPRESSOR, 400 CFM, 200 PSI, TRAILER MTD (ADD HOSE)	$66,113	D-Off 173 HP		52

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$5.26	$0.38	**$5.64**	$27.65	$2.96	$0.08	$0.01	$5.13	**$35.84**	**$41.48**
Standby	$2.63	$0.38							**$3.01**	

* - Adjustable Elements

Hourly Equipment Ownership and Operating Expense

C80 CRANES, HYDRAULIC, TRUCK MOUNTED

C80 0.02 26 TON THRU 65 TON

GROVE CRANES (MANITOWOC)

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
C80GV033	GMK3060-2	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 69 TON, 141' BOOM, 6X4X6	$1,031,236	D-On 355 HP		782

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$53.22	$5.53	**$58.75**	$58.44	$5.79	$7.24	$0.98	$44.55	**$116.99**	**$175.74**
Severe	$65.50	$5.61	**$71.11**	$77.29	$7.65	$20.02	$2.70	$58.75	**$166.41**	**$237.52**
Standby	$26.61	$5.53							**$32.14**	

LINK-BELT CONSTRUCTION EQUIPMENT CO.

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
C80LB009	HTC-8640 SL	CRANES, HYDRAULIC, TRUCK MTD, 40 TON, 110' BOOM, 8X4	$647,842	D-On 365 HP		655

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$33.92	$3.47	**$37.39**	$60.08	$5.95	$1.44	$0.19	$28.33	**$95.99**	**$133.38**
Severe	$41.75	$3.53	**$45.28**	$79.46	$7.87	$3.90	$0.53	$37.36	**$129.12**	**$174.40**
Standby	$16.96	$3.47							**$20.43**	

* - Adjustable Elements

Hourly Equipment Ownership and Operating Expense

D30 DRILLS, EARTH / AUGER (Add cost for drill steel, cutting edge wear, and crane when applicable)

D30 0.00 DRILLS, EARTH / AUGER (Add cost for drill steel, cutting ed

MOBILE DRILL

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main		Carrier	CWT
D30MR006	B-60 TRUCK	DRILL, EARTH / AUGER, MULTI-PURPOSE, 8" DIA, 250' DEPTH, W/45,000 GVW TRUCK (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	$417,528	D-Off 115 HP	D-Off 260 HP		130

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$30.97	$2.48	**$33.45**	$25.17	$2.70	$0.92	$0.12	$40.87	**$69.78**	**$103.23**
Standby	$15.49	$2.48							**$17.97**	

D35 DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)

D35 0.11 DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for

REICHDRILL

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
D35RL007	T-650-DII	DRILL, ROTARY BLASTHOLE, 5"-6 3/4" DIA, 35,000 LBS PULL BACK, TRUCK MTD, 200' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	$873,154	D-Off 540 HP	D-On 505 HP	600

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$53.31	$4.92	**$58.23**	$104.52	$15.14	$1.46	$0.20	$65.89	**$187.22**	**$245.45**
Standby	$26.66	$4.92							**$31.58**	

* - Adjustable Elements

Hourly Equipment Ownership and Operating Expense

D35 DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)

D35 0.12 DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel a

ATLAS COPCO WAGNER

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
D35WG001	T2W	DRILL, ROTARY BLASTHOLE, WATER WELL, 6"-24" DIA., 40,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	$870,916	D-On 425 HP		447

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$45.96	$4.86	**$50.82**	$85.76	$10.50	$1.96	$0.26	$56.83	**$155.32**	**$206.14**
Standby	$22.98	$4.86							**$27.84**	

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
D35WG002	TH60	DRILL, ROTARY BLASTHOLE, WATER WELL, 5"-20" DIA., 40,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	$887,572	D-On 600 HP		549

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$46.85	$4.95	**$51.80**	$121.07	$14.82	$1.96	$0.26	$57.93	**$196.04**	**$247.84**
Standby	$23.43	$4.95							**$28.38**	

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
D35WG003	TH60DH	DRILL, ROTARY BLASTHOLE, WATER WELL, 5"-20" DIA., 70,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	$959,120	D-On 600 HP		549

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$50.66	$5.35	**$56.01**	$121.07	$14.82	$1.96	$0.26	$62.64	**$200.75**	**$256.76**
Standby	$25.33	$5.35							**$30.68**	

* - Adjustable Elements

Hourly Equipment Ownership and Operating Expense

G10 GENERATOR SETS

G10 0.10 PORTABLE

NO SPECIFIC MANUFACTURER

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
G10XX018	120 KW TRLR MTD	GENERATOR SET, TRAILER MTD, 120 KW, 1P - 120/240V, 3P 120/208V, 3P 120/240V, 3P 277/480V	$87,577	D-Off 165 HP		82

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$9.79	$0.48	**$10.27**	$22.71	$2.08	$0.11	$0.01	$6.81	**$31.73**	**$42.00**
Severe	$11.19	$0.49	**$11.68**	$30.04	$2.76	$0.33	$0.04	$9.08	**$42.26**	**$53.94**
Standby	$4.90	$0.48							**$5.38**	

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
G10XX042	2KW PORTABLE	GENERATOR SET, PORTABLE, 2KW, 1P, 120V	$866	Gas 2.7 HP		1

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$0.10	$0.00	**$0.10**	$0.62	$0.06	$0.00	$0.00	$0.07	**$0.74**	**$0.84**
Severe	$0.11	$0.00	**$0.11**	$0.80	$0.07	$0.00	$0.00	$0.09	**$0.96**	**$1.07**
Standby	$0.05	$0.00							**$0.05**	

* - Adjustable Elements

Hourly Equipment Ownership and Operating Expense

L50 LOADERS / BACKHOE, WHEEL TYPE

L50 0.00 LOADERS / BACKHOE, WHEEL TYPE

CASE CORPORATION

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
L50CS007	580 SUPER N	LOADER / BACKHOE, WHEEL, 1.29 CY FRONT END BUCKET, 12.7 CF BACKHOE BUCKET, 14.5' MAX DIGGING DEPTH, 4X4	$150,883	D-Off 95 HP		191

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$11.57	$0.90	**$12.47**	$10.12	$4.02	$0.81	$0.11	$12.85	**$27.90**	**$40.37**
Severe	$18.33	$0.95	**$19.28**	$14.34	$5.69	$2.73	$0.37	$21.61	**$44.74**	**$64.02**
Standby	$5.79	$0.90							**$6.69**	

SourceTag	Model	Equipment Description	Value TEV 7/1/2019	Engine Horsepower and Fuel Type Main	Carrier	CWT
L50CS008	590 SUPER N	LOADER / BACKHOE, WHEEL, 1.50 CY FRONT END BUCKET, 12.7 CF BACKHOE BUCKET, 15.5' MAX DIGGING DEPTH, 4X4	$165,917	D-Off 110 HP		206

Condition	Depreciation*	FCCM*	Total Ownership	Fuel*	FOG	Tire Wear	Tire Repair	Repair	Total Operating	Total Hourly Rate
Average	$12.62	$0.99	**$13.61**	$11.72	$4.65	$1.17	$0.16	$14.04	**$31.73**	**$45.34**
Severe	$19.98	$1.04	**$21.02**	$16.61	$6.59	$3.99	$0.54	$23.61	**$51.35**	**$72.37**
Standby	$6.31	$0.99							**$7.30**	

* - Adjustable Elements