

Hopewell Horizon Inc

2681 Milan Street
Eaton, PA 18045

John C. Lefgren, PhD
Economic History
Cell 484-548-3350
Email john.lefgren@gmail.com

March 13, 2021
Version 3

Preparation for
November Expedition 2021

Boring of 4-Inch Diameter
Soil Cores for Discovery of Ancient Habitation

Finding Fire Pit Charcoal with Radiocarbon Dates

Habitation from the First to the Fourth Centuries
on the West Bank of the Mississippi River at Montrose, Iowa

High Density of Charcoal Equals High Density of Habitation

Research Goals and Methods

Our November Expedition 2021 will focus on the discovery of ancient fire pits in 4 cornfields with an area of 100 acres. Since the earliest times of European settlement, these fields in Montrose, Iowa have been the source of ancient artifacts. We are searching for a measure of ancient habitation by discovering the locations of ancient fire pits. Our field work in November 2021 will be heavily influenced by the magnetic images that came from the SENSYS scans of November 2020.

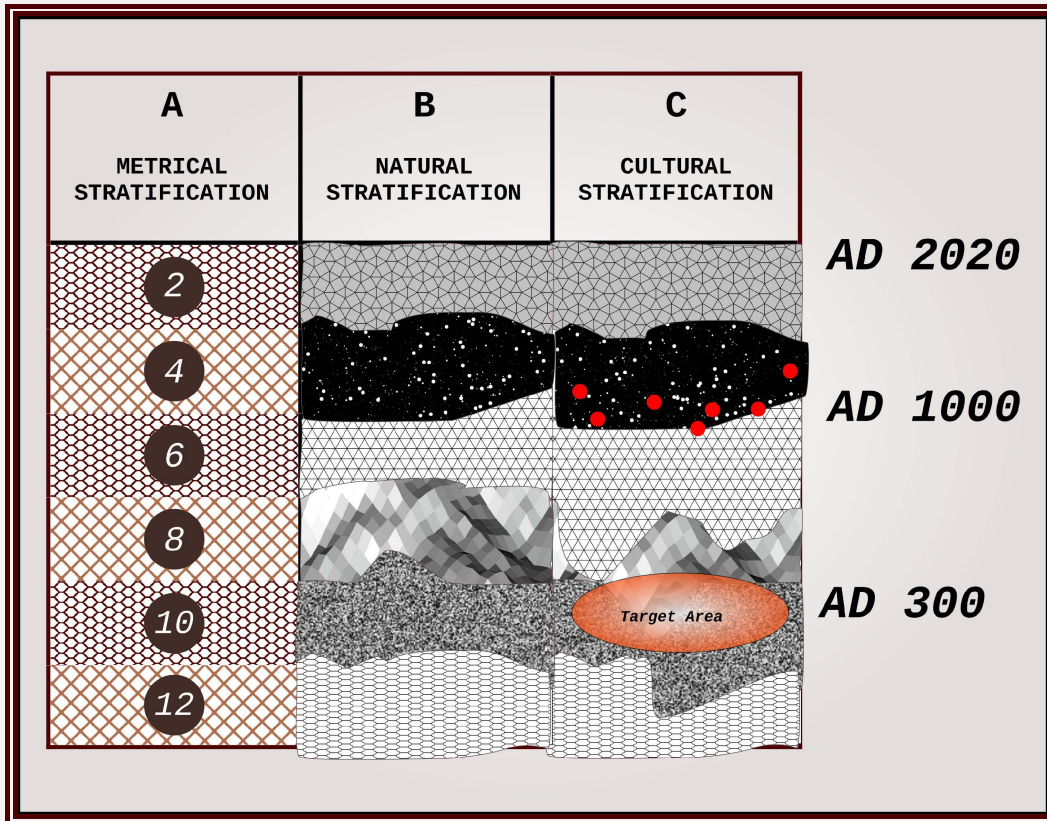


Figure 1 During the December 2020 Expedition, at the 4-foot stratification level, field workers recovered by hand drilling 100 pieces of ancient charcoal of which Vilnius Radiocarbon Laboratory certified 10 pieces from the 10th Century. The goal of the November Expedition 2021 is to recover and test older pieces of ancient charcoal from the 6-foot to 12-foot stratification levels. The above illustration shows the target area for this next expedition.

It has taken three years to prepare for the November Expedition 2021 to Montrose, Iowa. There have been more than 100 professionals who have helped us to advance to this point.

In November 2020, we finished the largest magnetometry survey in the history of North America. We surveyed in Montrose more than 200 acres of cornfields with the SENSYS MAGNETO® MX V3 from Germany. This machine is a large area magnetometer survey system. It has 16 fluxgate gradiometers on a trailer having a width of over 12 feet. Last year, with 14 professionals

in the field, we collected more than 20 billion data points within grids measured by one-quarter of an inch.

With SENSYS, we identified magnetic anomalies that indicate the locations in the ground of hundreds of ancient fire pits on digital maps. In December 2020, we made 3.5-inch diameter cores at 24 spots that SENSYS scans had precisely identified. We drilled down by hand 4 feet, and from these spots we found more than 100 samples of ancient charcoal in the ground. We tested more than a dozen of these samples at the Vilnius Radiocarbon Laboratory, Northern Europe's leading Carbon-14 testing facility. We found at the 4-foot stratification pieces of charcoal that are more than 1,000 years old. We are now ready to move on to the next stage in our investigation.

In the November Expedition 2021, we will expand our search for evidence of ancient habitation in Montrose. The magnetic scans indicate that ancient fire pits are abundant. Using the exact coordinates from the SENSYS scans we will take soil cores with a machine at stratification of ten feet. The diameters of the cores of the soil will be 4 inches. We are working with a geotechnical engineering firm with seven offices near the Mississippi River. The engineers from these offices are the world's leading experts on the soils of Lee County, Iowa. We have contracted with them to drill from 50 to 60 holes in the ground that go down as much as 15 feet. In the fields and warehouses, we will have a research team of a dozen people to collect, sort, and analyze more than 750 feet of cores from the boring of the holes. We will take samples from 4 different cornfields.

In November 2021 we plan to separate and catalog more than 300 pieces of charcoal from fire pits that maybe as old as 2,000 years. We will clean and prepare from these many charcoal samples 60 bags for radiocarbon dating by scientists in the laboratory.

We are still at an early stage in our research. It is clear that the density of ancient fires correlates with the density of human habitation. We will preserve and catalog the 750-feet of the soil cores. We have more than 20 billion data points from the scanning of more than 200 acres. We invite scientists and historians to examine and analyze the facts.

The following pages give additional facts and figures that are part of our preparations for the November Expedition 2021. These details are essential, and we offer them to the world for evaluation.

Budget for November Expedition 2021

No.	Item	Amount
1	Bryan Bross, KLINGNER & ASSOCIATES, P.C., Burlington, Iowa (Geo-Tech Engineering Services). See attached letter for copy of line. Quote from letter: "Fifty (50) exploratory borings up to fifteen (15) feet are desired to search for archaeological artifacts from historic burn pits. Actual depth and locations of the borings will be directed by others. Split spoon samples will be obtained continuously between five (5) feet deep and fifteen (15) feet deep. No soil boring logs will be developed. We have estimated one (1) mobilization and up to five (5) days in the field with a track mounted drill rig and operator. In addition, it has been requested that a geological engineer be present for up to six (6) hours to observe the archaeological exploration activities. We estimate ten (10) borings per day for the production rate, but that could be more or less depending field conditions and standby time."	\$19,995
2	Professional archaeologist from Iowa, 4 days.	\$4,000
3	Food and lodging at Quality Inn, Fort Madison, Iowa, \$120 per day for 10 days for 12 volunteers. Volunteers offer 800 hours of services. They will pay for their travel expenses to Montrose, Iowa. The value of their contributions in service and time is estimated at \$70,000. For the most part, these volunteers have been involved earlier expeditions. They have more than 300 years of life-work experience. Many are highly trained professionals. They are critical to the success of the expedition. They will manage the collection, sorting, and cataloging of soil cores and charcoal samples. Their contributions of time and travel are outside the calculations of this budget.	\$16,800
4	Supplies for cataloging and storing 750 feet of soil cores.	\$4,500
5	Rental of storage and processing area, 10 days.	\$3,500
6	Radiocarbon dating of 50 samples of ancient charcoal taken from soil cores. Focus of samples will be from the stratification of a horizon that is under the ground from 5 to 15 feet. Vilnius Radiocarbon Laboratory rate for determining Carbon-14 dates is at \$300 per sample.	\$15,000
7	Payments to landowners for access to Fields #1, #5, #9, and #11.	\$5,000
8	Other Contingencies.	\$4,000
	Total	\$72,795



Figure 2 Locations of Field numbers from November 2020 SENSYS Scans. The November 2021 Expedition will take 50 - 70 Soil Cores (about 750 feet of borings) from Fields #1, #5, #9 and #11.

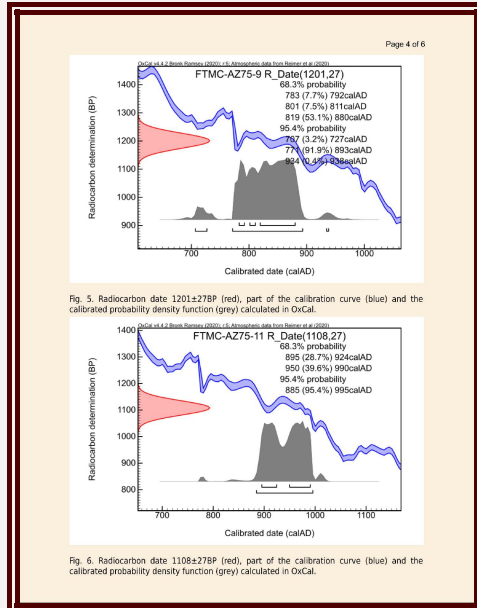


Figure 3 Vilnius Radiocarbon Laboratory Certification for 10th Century Charcoal from Montrose.

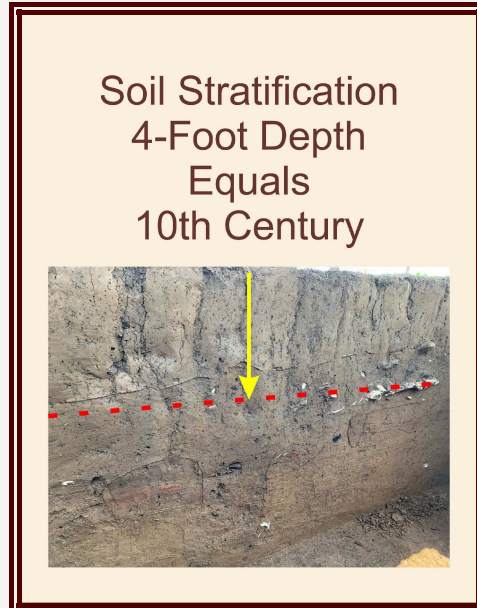


Figure 4 Soil Stratification at 4-Foot Depth Equals 10th Century in Montrose.



Figure 5 Field #1 - Temple Site - Raw Data on Digital Map.

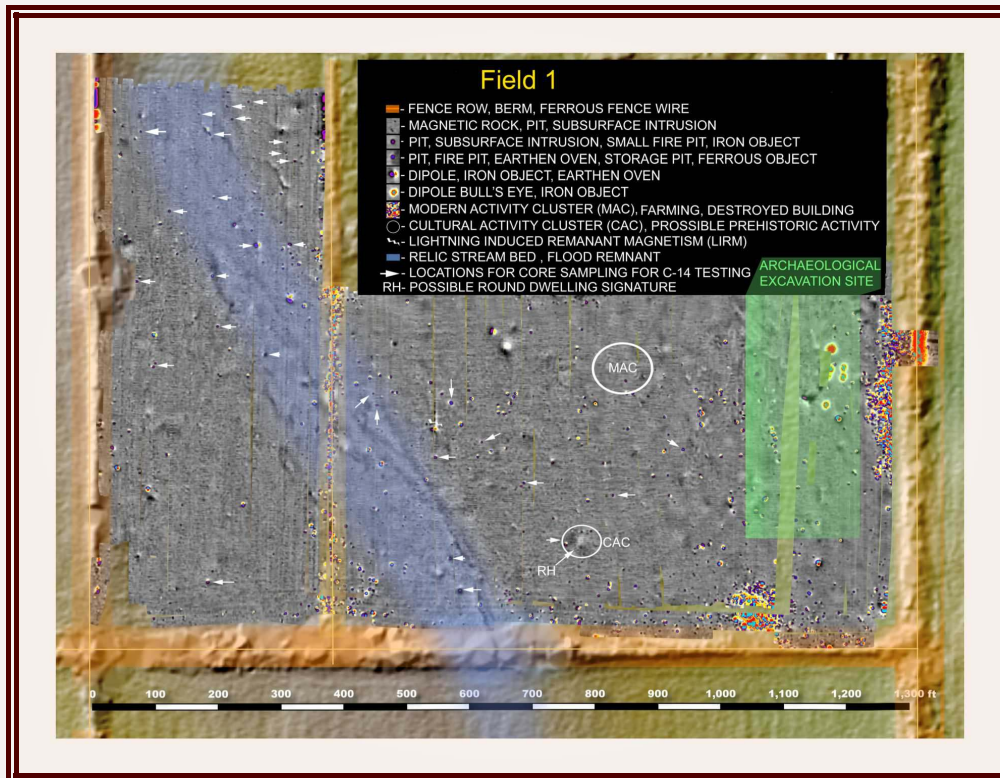


Figure 6 Field #1 - Temple Site - Comments on Locations.



Figure 7 Field #5 - Chatfield.

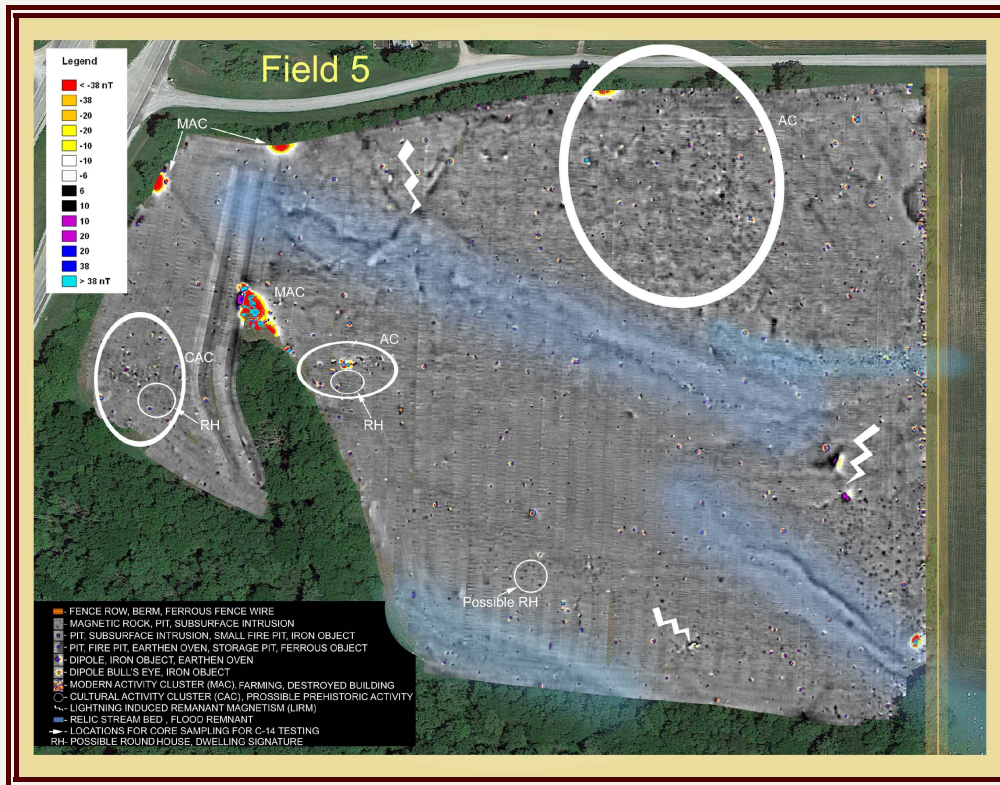


Figure 8 Field #5 - Chatfield - Locations and Comments.

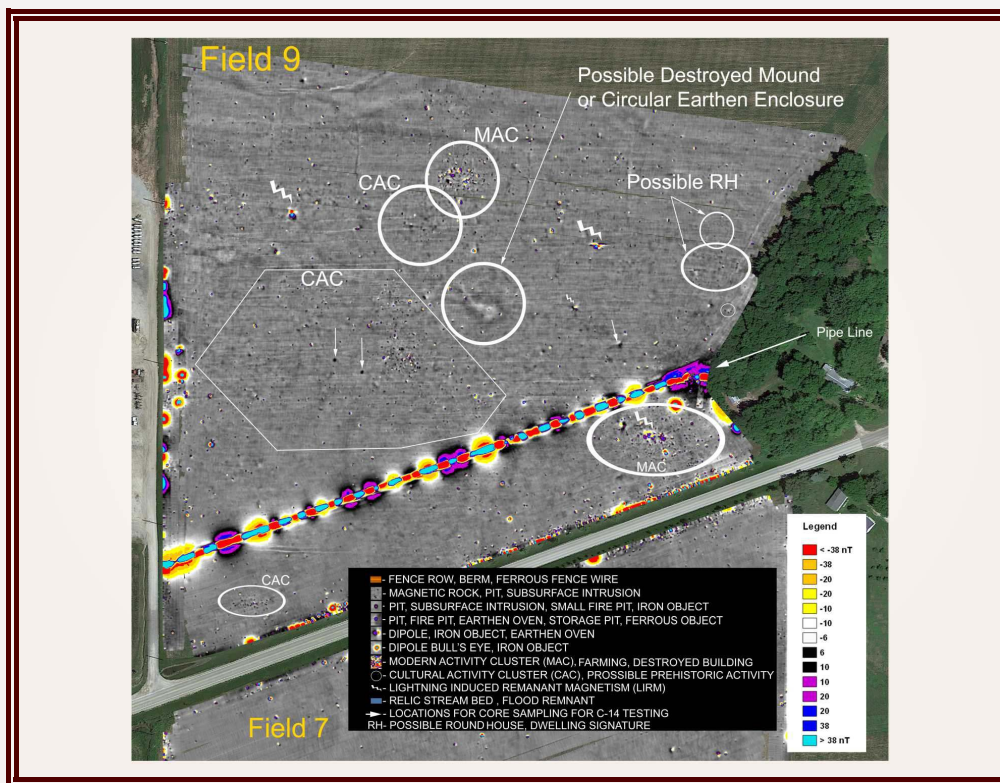


Figure 9 Field #7 - Chatfield - Comments on Locations.

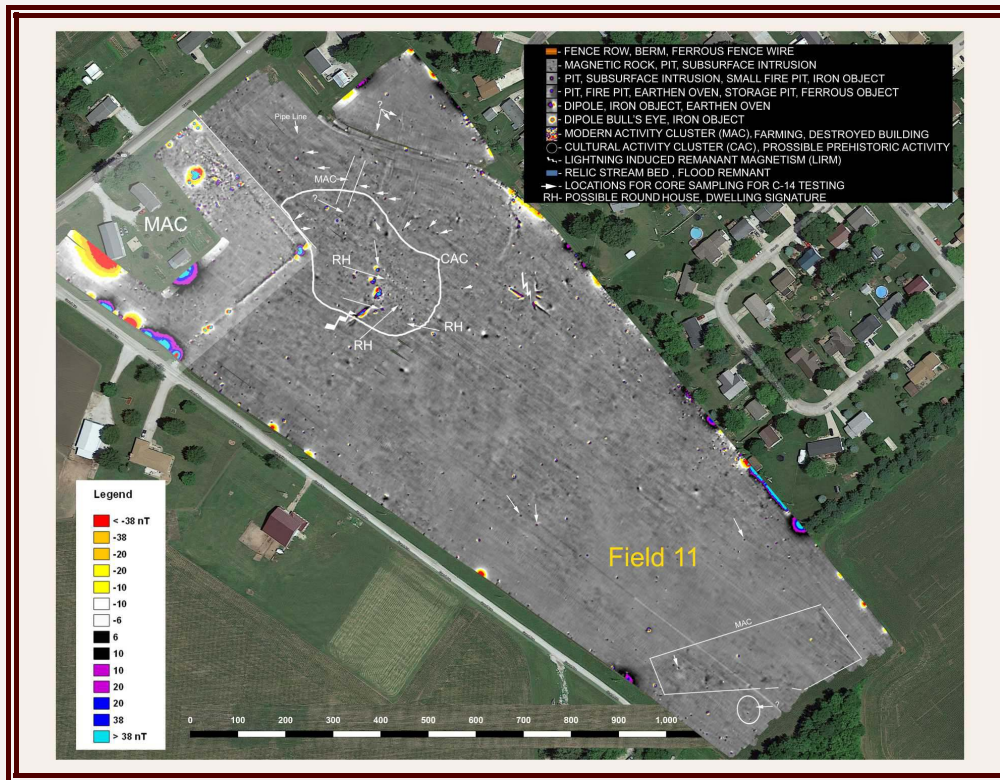


Figure 10 Field #11 - Schmitz -Comments on Locations.

Table

Selected Spots for Collection of Charcoal Samples
 from Field #5 Chatfield Property and Field #1 Temple
 Montrose, Iowa
 Prepared December 3, 2020 by John Lefgren

Spot	UTM EPSG:32616 Coordinates	Comments
A 1	633497.3835,4488389.8265	Figure 9. These spots were selected by Gorden Koneczek from SENSYS Germany on December 1, 2020.
A 2	633504.1871,4488385.8895	
A 3	633495.5685,4488371.5720	
A 4	633489.9726,4488364.5540	
A 5	633481.6628,4488357.1397	

Spot	UTM EPSG:32616 Coordinates	Comments
A 6	633170.7823,4488476.0012	Figure 10. Richard Moats identified these spots as part of a center of ancient cultural activity with a possible Round House. They are on the west side of Field #5 Chatfield.
A 7	633161.0726,4488472.1465	
A 8	633158.2112,4488456.2954	
A 9	633167.4765,4488456.2817	
A 10	633256.2270,4488479.0513	
A 11	633253.4960,4488477.4182	Figure 11. These spots are on the north side of Field #5 Chatfield and are locations of ancient fire pits.
A 12	633360.0206,4488571.1933	
A 13	633343.5193,4488557.4986	
A 14	633422.8072,4488554.7744	
A 15	633398.6944,4488531.8007	
A 16	632559.1962,4489894.1571	Figure 12. Richard Moats identified a possible Round House in this area. The spots are associated with that possibility.
A 17	632554.8907,4489893.8905	
A 18	632547.2535,4489887.3489	
A 19	632495.6763,4489865.5014	Figure 13. These spots are possible fire pits outside the perimeter of Field #1 Temple.
A 20	632518.3404,4489865.3881	
A 21	632440.3910,4489896.7631	
A 22	632526.5015,4489940.2416	

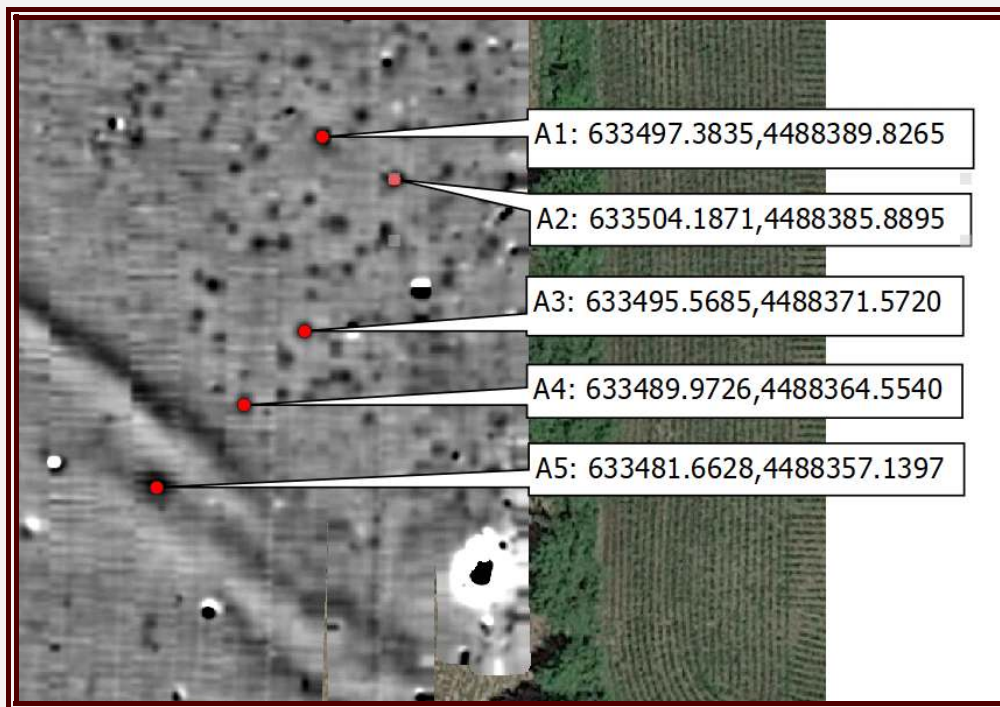


Figure 11 Field #5 Chatfield A1 - A5 - Spots selected by Gorden Konieczek from SENSYS on December 1, 2020.

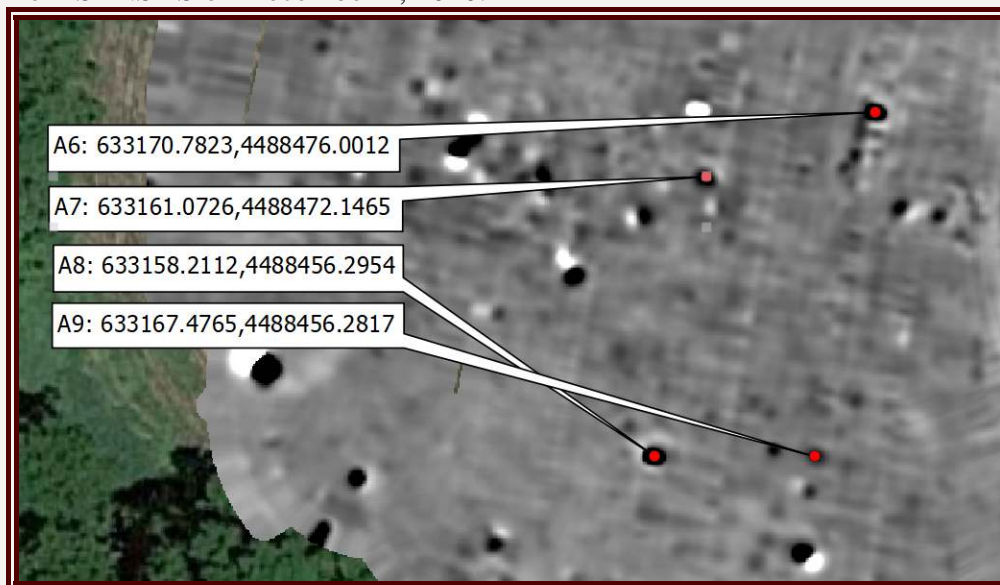


Figure 12 Field #5 Chatfield A6 - A9 - Richard Moats identified these spots as part of a center of ancient cultural activity with a possible Round House. They are on the west side of the Chatfield Lot.

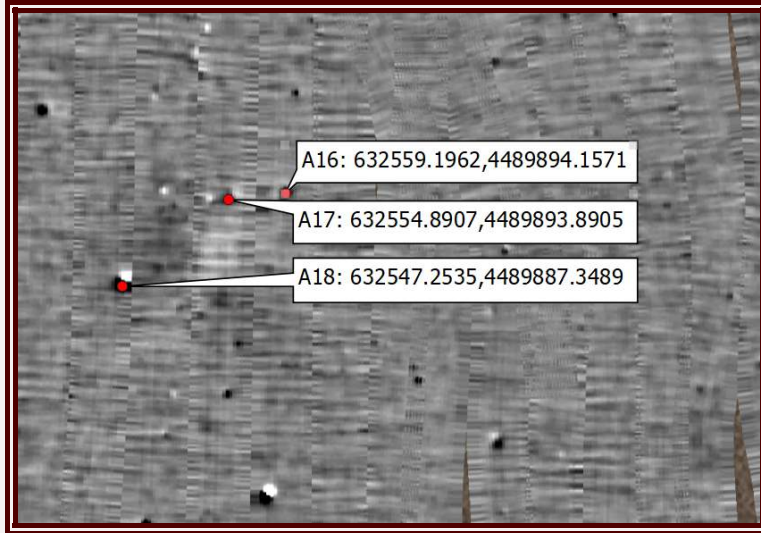


Figure 13 Field #1 Temple Lot : Richard Moats identified possible Round House in area.

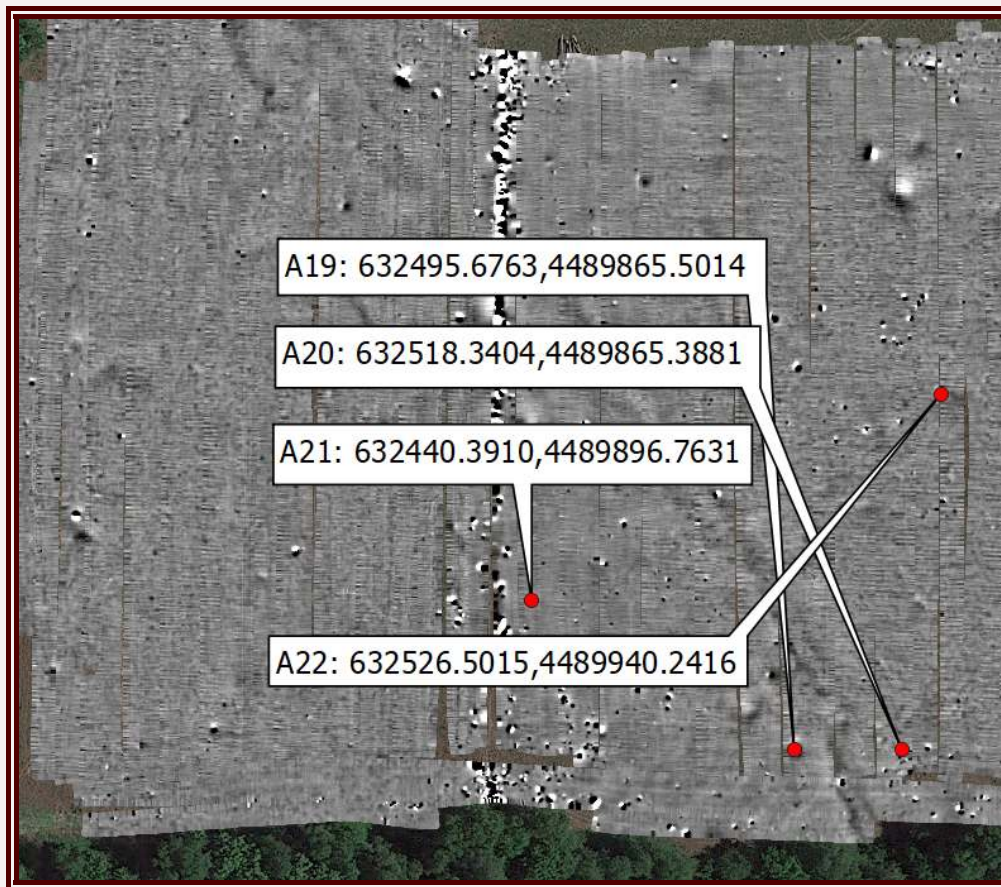


Figure 14 Field #1 Temple: These spots are possible fire pits outside the perimeter of the Zarahemla Temple Site.



Figure 15 In March 2021 the testing laboratory confirmed that this piece of charcoal is older than 1,000 years. Here is the charcoal just as it came up 4 feet from the ground in Field #5 in Montrose, Iowa in December 2020.



Figure 16 With the aid of a machine it is possible to bore in one day as many as 12 soil cores down to depths of 15 feet, i.e. up to 180 feet of borings per day.



Figure 17 The split spoon sampler is a tube split into two equal halves lengthwise. The two halves are locked together during the sampling activities and released to retrieve the samples. At bottom end of the sampler sits a driving shoe. This is what cuts into the soil and provides the sample that goes up into the tube.



Figure 18 Soil cores from the ground within stratification layers from 1st to 4th Centuries. Scientists from the testing laboratory will determine radiocarbon dates for pieces of charcoal that came from ancient fire pits. A high frequency of charcoal will confirm a high density of habitation.

March 10, 2021

Mr. John Lefgren, PhD
 Hopewell Presence Inc.
 2681 Milan Street
 Easton, PA 18045

RE: Exploratory Borings near Montrose, Iowa
 Proposal for Services

Dear Mr. Lefgren:

It was a pleasure to speak with you last week regarding the above referenced project. We understand that fifty (50) exploratory borings up to fifteen (15) feet are desired to search for archaeological artifacts from historic burn pits. Actual depth and locations of the borings will be directed by others. Split spoon samples will be obtained continuously between five (5) feet deep and fifteen (15) feet deep. No soil boring logs will be developed. We have estimated one (1) mobilization and up to five (5) days in the field with a track mounted drill rig and operator. In addition, it has been requested that a geological engineer be present for up to six (6) hours to observe the archaeological exploration activities. We estimate ten (10) borings per day for the production rate, but that could be more or less depending field conditions and standby time. Our rates are as follows:

Cost Item	Rate	Unit	Quantity	Total
Mobilization/Demobilization	\$2,050	LS	1	\$2,050
Soil Drilling with SS Sampling @ 2' intervals from 5' to 15'	\$19	FT	750	\$14,250
Soil Boring Abandonment	\$1	FT	750	\$750
Coordination/Documentation/Utility Locates/Project Admin.	\$153	HR	3	\$459
Per Diem	\$250	DAY	5	\$1,250
Senior Professional Engineer/Geologist Observation	\$200	HR	6	\$1,200
Standby Time (Waiting on Logger, access, determinations, obstructions, etc.)	\$250	HR	0	\$0
Total:				\$19,959

The fees for all the foregoing activities are estimated to be \$19,959. We require a 100% retainer payment in advance of scheduling the work, and this will be applied to the final invoice if the scope of work is increased prior to completion. However, actual costs will be invoiced on a time and expense basis. Our General Terms and Conditions are attached for reference. Please sign below and return a copy with full payment. As always, if you have any questions please do not hesitate to contact us.

Signature Authorization To Proceed _____ Title _____ Date _____

Sincerely,

KLINGNER & ASSOCIATES, P.C.

Bryan C. Bross
Digitally signed by Bryan C Bross
 DN: C=US, OU=Burlington Office, O=Klingner and Associates PC, CN=Bryan C Bross, Email=bross@klingner.com
 Reason: I agree to the terms defined by the placement of my signature in this document
 Location: Iowa
 Date: 2021-03-10 09:04:48

Bryan C. Bross, PE, RG
 Vice President

BCB/P:100000-PREPROJ/Hopewell Presence/20210310-jl-Trench-Prop.docx

Enclosure: General Terms and Conditions

Figure 19 Quotation from geo-technical engineering firm.



CENTER
FOR PHYSICAL SCIENCES
AND TECHNOLOGY

**Vilnius
Radiocarbon**

Performed by FTMC

Mass Spectrometry Laboratory

Saulėtekio ave. 3, LT-10222 Vilnius, Lithuania.
Mobile: +370 614 65313, E-mail: zilvinas.ezerinskis@ftmc.lt

To: **Hopewell Precence Inc.**

John Lefgren, PhD

12th March 2021

No. S-21-03-12-02

QUOTATION

for AMS radiocarbon dating services

Supplier	Center for Physical Sciences and Technology
Address	Saulėtekio av. 3, LT-10257 Vilnius, Lithuania
Responsible for quotation	Project Manager Julius Paužolis
Phone	+370 621 21424
E-mail	ams@ftmc.lt
Website	www.vilniusradiocarbon.com

Dear **Mr John Lefgren,**

Below are provided price quotation for AMS radiocarbon dating services. We sincerely hope this offer will meet your requirements and we remain at your service for any further question or request.

Item Description	Quantity	Unit price, USD ex VAT	Sum, USD ex VAT
1 AMS dating of different samples*	60	344,00	20640,00

TOTAL: 20640,00

Quantity discount: -3360,00

TOTAL after discount (seventeen thousand two hundred eighty USD): 17280,00

Figure 20 Quotation from radiocarbon laboratory.

Mass Spectrometry Laboratory

Saulėtekio ave. 3, LT-10222 Vilnius, Lithuania.
Mobile: +370 614 65313, E-mail: zilvinas.ezerinskis@ftmc.lt

*- the same rate is applied for all materials. Stable isotope analysis is not included into price. If needed such - d13C, d15N, C%, N%, C/N ratio will cost 18 USD ex VAT per sample additionally. AMS dating of **Cremated bone** cost 405 USD ex VAT.

**- this price quotation is valid until 31st December 2021

Terms and conditions:

Delivery Time	5 weeks after receiving sample and prepayment or better
Technology	Accelerated mass spectrometry (240kV Single Stage AMS of National Electrostatic Corporation, USA) measurement, including sample pre-treatment, collagen extraction (if needed), graphitization (Ionplus AGE3 system), calibration (OxCal) and report (in English).
Sample submission	Sample material will be destructed during analysis and not returned.
Terms of payment	Prepayment 50% in advance.
Country of origin	Lithuania (Europe Union)
Additional taxes	If a buyer is a taxable person with tax number then 0% VAT tax will be applied. If a buyer is not taxable person and do not have tax number then 21% VAT tax will be added to the given sum.

Thank you for contacting Vilnius Radiocarbon!

Sincerely Yours,

Julius Paužolis



Figure 21 Terms from radiocarbon laboratory.