



EA Engineering, Science,  
and Technology, Inc., PBC

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## Technical Memorandum

**DATE:** March 26, 2021

**TO:** Wade Gregson, Nebraska Department of Environment and Energy (NDEE)

**FROM:** Dan Bigbee

**SUBJECT:** Task Assignment TA-21-08A/B/C  
Alt-En Ethanol Plant – Environmental Sampling Support  
IIS Number: 84069, Program ID: Fast Track  
Mead Public Park Composite Sampling

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### *Project Description*

EA Engineering, Science, and Technology, Inc., PBC (EA) provided Fast Track/On-Call Environmental Sampling Support associated with the Alt-En Ethanol Plant. EA collected a composite sample from the Mead Public Park (Figure 1) located northeast of the intersection of East 1<sup>st</sup> Street and North Elm Street in the Village of Mead, Saunders County, NE.

### *Data Collection*

EA arrived at the site at 1730 hours to collect a composite sample on Friday, February 26, 2021. The following activities were completed.

- Surveyed the park to determine boundaries and grid system configuration.
- Gridded the public park to provide 18 gridded sample points and 3 biased sample points to account for paved and roofed areas to collect aliquots for a composite sample. A total of 21 aliquots were collected for a composite sample.
- At each sample point, an aliquot of soil was collected by hand probe to a depth of approximately 2 inches.
- Composited the aliquots in a stainless-steel bowl, mixed, and then transferred to a zipper bag, labeled, and stored on ice.
- Sample locations were surveyed using a handheld submeter global positioning system (GPS) unit.
- Returned to Lincoln and placed the sample in a freezer for preservation of the sample.
- On Monday, March 1, 2021, the sample was placed in a shipping cooler with fresh ice, chain-of-custody, sealed, and shipped via overnight courier to South Dakota Agricultural Laboratories, Brookings, SD for analyses of agricultural chemicals.

### *Attachments*

Attachments to this Technical Memorandum include:

- Photographic Log, and
- Collection Field Sheets.



*Figure 1*





***Photographs***



Photo 1. Collection of an aliquot.



Photo 2. Overview of public park.



Photo 3. Sample location near roofed area.



Photo 4. Sample aliquots prior to compositing.



DAILY QUALITY CONTROL REPORT

Project Manager: Dan Bigbee

Project: Alt-En Off-site

Date: 26 Feb 2021

S	M	T	W	TH	F	S
					X	

Weather	Bright Sun	Clear	Overcast	Rain	Snow
Temp	To 32	32-50 X	50-70	70-85	>85
Wind	Still X	Moderate	High	Gusty	
Humidity	Dry X	Moderate	Humid		

NDEQ Personnel on Site: None -

Contractors on Site: Kent Dixon and Mitch Wallman - EA

Visitors on Site: None -

Work Performed: \_\_\_\_\_

Traveled to Mead, NE and collected surficial soil cores  
~1-2 inches below ground surface AT Mead Public Park

21 - subsamples collected and composited, and Frozen  
at EA.

Samples shipped to Lab for analyses.

GPS - all sample locations.

Project: ATL-En OAR-site Date: 26 Feb 2021

Quality Control Activities (including field calibration and duplicate samples collected): \_\_\_\_\_

-None-

Problems Encountered/Corrective Actions Taken: \_\_\_\_\_

Ground Frozen, Effort to get soil core

Downtime/Standby: \_\_\_\_\_

None

Health and Safety Activities: \_\_\_\_\_

Cold, Wet snow, Public Park.

Special Notes: \_\_\_\_\_

None

By: K. Duff Date: 26 Mar 2021

## COLLECTION FIELD SHEET

Project Name Alt-En OAA-siteSample Number City ParkName and Address of Property Owner Mead, Ne City ParkSample Location City Park - Northeast of N. Elm St and W 1<sup>st</sup> St intersectionSample Media Soil Sample Depth 0-2 inches below groundWell I.D. NADate Collected 26 Feb 2021 Time Collected 1900 hrsSampling Personnel K. Dixon M. WallmanSample QC Duplicate: Yes ☒ No ☐ Duplicate Sample No. NA

## Field Measurements

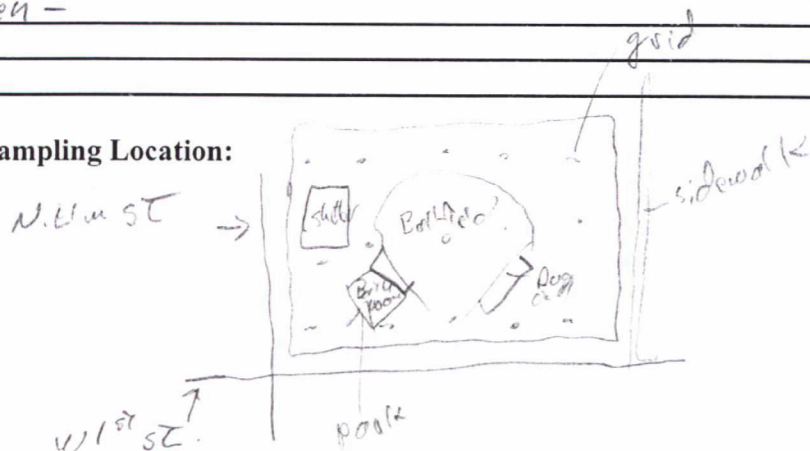
Photo Ionization Detector Measurements: NApH — Conductivity — Temperature —

Container	Sample Type	Preservative	Analysis Requested
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21-core samples - collected	Composited	Sample collected at	
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Comments: Ground frozen -

Site Sketch Showing Sampling Location:



## Gregson, Wade

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**From:** Bigbee, Dan <[dbigbee@eaest.com](mailto:dbigbee@eaest.com)>  
**Sent:** Friday, March 26, 2021 11:10 AM  
**To:** Gregson, Wade  
**Cc:** Felix, Mike  
**Subject:** Alt-En Ethanol Plant – Environmental Sampling Support - Trip Reports  
**Attachments:** Alt-en Ethanol - Mead Public Park Composite Sampling - Trip Report.pdf; Alt-en Ethanol - Pond Composite Sampling - Trip Report.pdf; Alt-en Ethanol - Stream Composite Sampling - Trip Report.pdf

Wade,

Please find attached the Alt-En Ethanol Plant – Environmental Sampling Support trip reports.

Thanks!

Dan

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