



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
Stream Composite Sampling

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 a small stream that traverses a section of land owned by the U.S. Army Reserve 88th Readiness Division (Figure 1) that is bounded by County Road G on the north, County Road F on the south, County Road 6 on east and County Road 7 on the west side located in Saunders County, NE.

Data Collection

EA arrived at the site at 1430 hours to collect a composite sample on Wednesday March 3, 2021. The following activities were completed.

- Ms. Jennifer Allen with the U.S. Army Reserve 88th Readiness Division provided escort to access the Mead Local Training Area (LTA) where the stream is located.
- Met escort at west edge of property, reviewed sampling goals and safety for the field effort.
- A handheld submeter global positioning system (GPS) unit was preloaded with 10 sample points to aid in locating depositional areas.
- Navigated to stream bends using the handheld submeter GPS unit and investigated the area for a depositional area to collect an aliquot.
- At each sample point, an aliquot of approximately ½ cup of sediment was collected.
- Placed each aliquot in a stainless-steel bowl, mixed, and transferred to a zipper bag, labeled, and stored on ice.
- Actual sample points where surveyed using a handheld submeter GPS unit (Figure 1).
- Returned to Lincoln and place the sample in a freezer for preservation of the sample.
- On Thursday, March 4, 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. Overview of stream.



Photo 2. Stream segment.



Photo 3. Sample collection.



Photo 4. Sample aliquot.

DAILY QUALITY CONTROL REPORT

Project Manager: Dan Bigbee

Project: AH-En ON-Site

Date: 3 Mar 2021

S	M	T	W	TH	F	S
			X			

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

NDEQ Personnel on Site: None

Contractors on Site: K. Dixon, M. Wallman w/ EA

Visitors on Site: Jennifer Allen US Army Contractor - Escort to access property.

Work Performed: _____

collected composite sediment from unnamed creek drainage.

Drainage sampled from Hwy 66 / Co. Rd 7 or West to Co. Road 6 on East Saunders Co., NE.

10 - Aliquots collected, composited, sample collected and frozen, shipped to lab on 4 Mar 21.

GPS sample points

Project: ALT-En off-site Date: 3 Mar 21

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

None

Problems Encountered/Corrective Actions Taken:

None - Snow, Ice - Adjust sample location
to access sediment.

Downtime/Standby: None

Health and Safety Activities:

None

Special Notes:

None

By: KDif Date: 3 Mar 2021

COLLECTION FIELD SHEET

Project Name Att-En Off-Site
Sample Number off-site Sediment
Name and Address of Property Owner US Army 88th Readiness Division.
Sample Location Drainage Ditch Saunders, Co Between County Road 7 and 6.
Sample Media Sediment Sample Depth Surface - 0-2"
Well I.D. NA
Date Collected 3 Nov 21 Time Collected 1600 - 1700 hrs
Sampling Personnel K Dixon, M. Wolfman - EA
Sample QC Duplicate: Yes ☒ No ☐ Duplicate Sample No. NA

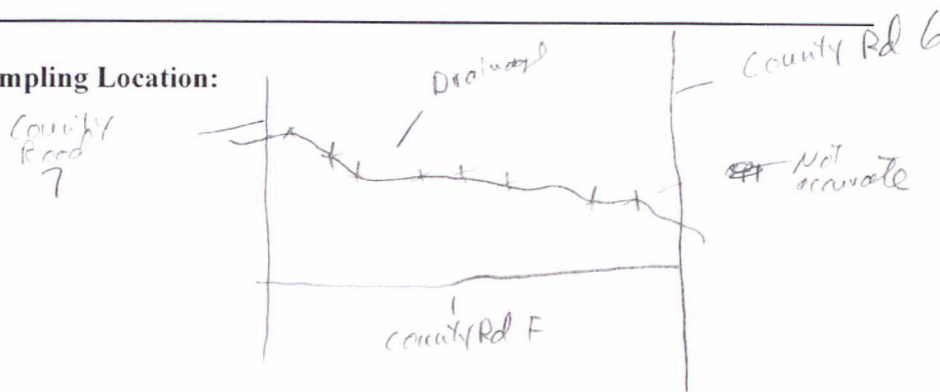
Field Measurements

Photo Ionization Detector Measurements: NApH NA Conductivity NA Temperature NA

Container	Sample Type	Preservative	Analysis Requested
1-Liter HD			
1-gal Zipper bag		Frozen	Pesticide Screens

Comments: 10 - subsamples collected, composited and sampled -

Site Sketch Showing Sampling Location:



Gregson, Wade

From: Bigbee, Dan <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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