General Engineering Company
P.O. Box 340
916 Silver Lake Drive
Portage, WI 53901

608-742-2169 (Office)
608-742-2592 (Fax)
gec@generalengineering.net
www.generalengineering.net

Engineers • Consultants • Inspectors

March 20, 2017

Mr. Patrick Dowd
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

Re: Status Update: Potable Well Results
Wards Corner Garage
E3309 State Highway 154
Hillpoint, Wisconsin 53937
BRRTS No.: 03-57-001693
PECFA No. 53937-9717-09
GEC Project Number: 2-1015-395

Dear Mr. Dowd,

Attached is a Status Update for the potable well sampling associated with the Wards Corner Store property site, located at E3309 State Highway 154, Hillpoint, Wisconsin.

Please feel free to contact General Engineering Company with any questions at 608-742-2169.

Sincerely yours,

GENERAL ENGINEERING COMPANY

Beth A Erdman
Environmental Project Manager

Brian Youngwirth
Environmental Project Manager

c: Mr. Steven Muchow, Sauk County Highway Department

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916 Silver Lake Drive
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WARDS CORNER GARAGE

INTRODUCTION

General

General Engineering Company (GEC) is providing this report in response to the Wisconsin Department of Natural Resources (WDNR) December 1, 2016 request for additional information to achieve case closure for the Wards Corner Garage property, located at E3309 State Highway 154, Hillpoint, Sauk County, Wisconsin. The activities were performed at the request and authorization of Mr. Steven Muchow of the Sauk County Highway Department, the current owner of the property.

Purpose

The purpose of the work was to evaluate and confirm whether potable water has been impacted by petroleum as the result of the release from the former underground storage tank systems on the Wards Corner Garage property, E3309 State Highway 154, Hillpoint, Wisconsin.

Scope

The scope of the additional activities included: attempting to gain access to the three properties south of the Wards Corner Garage property, conducting potable well reconnaissance for the accessible potable well, collection and laboratory analysis of potable well samples, analysis of the data obtained, and preparation of this report.

Scope Summary

GEC reviewed the Sauk County Land Information Website for the three residences located south/southwest of the Wards Corner Garage Property. The research identified that the two residences to the south are located on one parcel with two addresses, S6556 and S6564 State Road 130, owned by Michael and Mariane Goetsch. The property located southwest, S6613 State Road 130 is owned by Mose Graber. Access agreements were sent to the owners of the properties. Mr. and Mrs. Goetsch granted access to the shared potable well on their property that services the entire parcel, including both residences. Multiple unsuccessful attempts were made to contact Mose Graber in an effort to gain access to his property to sample the potable well. In a January 19, 2017 email, WDNR directed GEC to sample the Goetsch well, where access was granted, and should impacts be detected, the WDNR would work with the local County Health Department to gain access to sample the Mose Graber potable well.

On January 18, 2017, GEC mobilized to the Goetsch property to sample the onsite potable well. At the time of the site visit, the potable well was identified to be located in the center of the driveway beneath the wind mill between the garage and barn. The approximate location is identified on Figure 1 in Appendix A. Mr. Goetsch confirmed the well is the only potable well on site and services the entire parcel including both residences and the barn. Based on GEC research of the WDNR Groundwater Well Construction Information Website, no well construction report for the Goetsch well is available; however Mr. Goetsch indicated that he believed the well to be approximately 150 feet deep.

Additionally during the initial site visit, Mr. Goetsch indicated that he owned the property north of the Wards Corner across State Highway 154 and that there is a well he uses to water cattle located beneath the wind mill on the property. That well is located just north of the Wards Corner Garage Site. Mr. Goetsch indicated that it was not in use during the winter months and is accessed by use of the wind mill in the summer. No well construction report is available for the well but Mr. Goetsch indicated he believed it to also be approximately 150 feet deep.

The Goetsch potable water sample was collected from a spigot in the milking room of the barn prior to any type of treatment system. Prior to collection of the sample the water was allowed to run for approximately 10 minutes. Following collection, the sample was put on ice for transport to the laboratory where it was analyzed for the presence of volatile organic compounds (VOCs) using EPA drinking water method (542.2). Laboratory analytical results from the Goetsch potable well identified methyl tert-butyl ether (MTBE) at a concentration of 1.03J, below

the NR 140 standards and between the laboratory limits of detection and limits of quantitation. No other VOCs were detected above the laboratory limits of detection in the potable well sample.

As the result of the detection of MTBE, GEC staff remobilized to the Goetsch property on February 16, 2017 to collect a confirmation sample from the potable well. The sample was collected from the kitchen sink prior to any type of treatment system. Prior to collection of the sample, the water was allowed to run for approximately 90 minutes. Following collection, the sample was put on ice for transport to the laboratory where it was analyzed for the presence of petroleum volatile organic compounds (PVOCs). Laboratory analytical results from the second potable well sample did not identify any concentrations above the laboratory limits of detection. The results of the chemical analysis of the Goetsch potable water samples are summarized in the Groundwater Analytical Table in Appendix B. Laboratory analytical results and chain of custody forms are included in the Appendix C.

Following each visit to the Goetsch Property to sample the potable well, GEC staff mobilized to the neighboring Mose Graber property in an effort to make contact with the owner, to identify if they had a potable well and attempt to gain access to sample the potable well. At the time of both visits, no one was home.

CONCLUSIONS

Based on the analytical results from the potable well samples collected from the Goetsch Property, it appears that potable water to the south has not been impacted as the result of the petroleum release at the Wards Corner Garage Property. No groundwater contaminant concentrations were detected above the NR 140 standards during the two sampling events. The second potable well sample collected did not confirm the presence of low level MTBE detected during the initial potable well sampling event.

Additionally as the result of the excavation of approximately 867 tons of petroleum impacted soil from the former source area, any remaining contamination on the Wards Corner Garage property will continue to degrade over time. As a result, GEC recommends WDNR review the additional information provided in this letter report and move forward with the previously submitted request for case closure.

GENERAL COMMENTS

The investigative activities have been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, recommendations and opinions contained herein have been promulgated in accordance with generally accepted practice in similar fields. No other representations, expressed or implied, and no warranty or guarantee is included or intended in this report.

The conclusions presented in this report were formulated from the data obtained during the course of exploratory work on the site, which may result in a redirection of conclusions and interpretations where new information is obtained. The regulatory climate and interpretation may also have an effect on the outcome of the environmental investigation for this site. The information contained in this report may have an effect on the value of the property, and is considered confidential. Copies of this report will be submitted to others only with authorization from the client.

APPENDIX A

Figure 1 - Goetsch Potable Well

Legend

- Open Site (ongoing cleanup)
- Open Site Boundary
- Closed Site (completed cleanup)
- Closed Site Boundary
- Groundwater Contamination
- Soil Contamination
- Groundwater and Soil Contamination
- Dryclean Environmental Response Fund (DERF)
- Green Space Grant (2004-2009)
- Ready for Reuse
- Site Assessment Grant (2001-2009)
- State Funded Response
- Sustainable Urban Development Zone (S
- General Liability Clarification Letters
- Superfund NPL
- Voluntary Party Liability Exemption
- Rivers and Streams
- Open Water
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads

0.1 0 0.03 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

1: 1,980

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made aregarding accuracy, applicability for a particular use, completemenss, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/org/legal/

Note: Not all sites are mapped.

Notes

Red Dot: Approximate Location of Goetsch Potable Well

APPENDIX B

TABLE A.1
GROUNDWATER ANALYTICAL TABLE
WARD'S GARAGE
GEC PROJECT NUMBER 2-1015-395

Monitoring Well	NR 140		TW-1	Goetsch PW	
Sampling Date	ES	PAL	2/16/2016	1/18/2017	2/16/2017
VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)					
Benzene	5	0.5	<0.44	<0.39	<0.27
Ethylbenzene	700	140	<0.71	<0.32	<0.56
Methyl tert-butyl ether	60	12	<1.1	1.03J	<0.43
Toluene	1000	200	<0.44	<0.4	<0.33
1,2,4 -Trimethylbenzene	480	96	<1.6	<0.17	<0.56
1,3,5 -Trimethylbenzene			<1.5	<0.26	<0.58
Xylenes, -m, -p	10000	1000	<3.1	<1.04	<2.71
Xylenes, -o					

ES = Enforcement Standard
PAL = Preventive Action Limit
µg/L = micrograms per liter
NA = Parameter not analyzed
NE = NR 140 ES not established
J = Analyte detected above laboratory limit of detection
but below limit of quantitation.
Bold indicates analytical results above NR 140 ES

APPENDIX C

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

LYNN BRADLEY
GENERAL ENGINEERING
916 SILVER LAKE DRIVE
PORTAGE, WI 53901

Report Date *23-Feb-17*

Project Name WARDS GARAGE PW SAMPLE **Invoice #** E32484
Proiect #

Lab Code 5032484A
Sample ID PW-2
Sample Matrix Water
Sample Date 2/16/2017

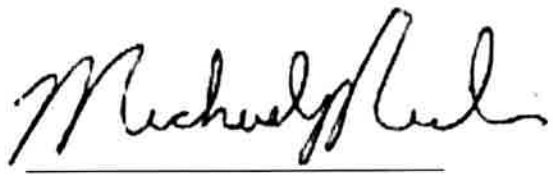
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC										
Benzene	< 0.27	ug/l	0.27	0.87	1	GRO95/8021		2/22/2017	TCC	1
Ethylbenzene	< 0.56	ug/l	0.56	1.77	1	GRO95/8021		2/22/2017	TCC	1
Methyl tert-butyl ether (MTBE)	< 0.43	ug/l	0.43	1.36	1	GRO95/8021		2/22/2017	TCC	1
Toluene	< 0.33	ug/l	0.33	1.06	1	GRO95/8021		2/22/2017	TCC	1
1,2,4-Trimethylbenzene	< 0.56	ug/l	0.56	1.78	1	GRO95/8021		2/22/2017	TCC	1
1,3,5-Trimethylbenzene	< 0.58	ug/l	0.58	1.84	1	GRO95/8021		2/22/2017	TCC	1
m&p-Xylene	< 1.1	ug/l	1.1	3.49	1	GRO95/8021		2/22/2017	TCC	1
o-Xylene	< 0.61	ug/l	0.61	1.92	1	GRO95/8021		2/22/2017	TCC	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



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Environmental Lab, Inc.

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920-830-2455 • FAX 920-733-0631

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Page ____ of ____

Sample Handling Request
____ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
____ Normal Turn Around

Lab I.D. #

Account No. :

Quote No.:

Project #: Sauk County, Hwy

Sampler: (signature)

Project (Name / Location): Ward's Garage PW Sample

Reports To: Lynn Brindley	Invoice To: SAME
Company General Engineering	Company
Address 916 Silver Lake Dr	Address
City State Zip Portage, WI 53926	City State Zip
Phone 608-742-2169	Phone
FAX 608-742-2592	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
503248A	PW-2	2/1/17	2:43		X		2	W	HCL

Analysis Requested | **Other Analysis**

DRO (Mod DRO Scp 95)	GRO (Mod GRO Scp 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS							PID/ FID
							X													

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Client

Temp. of Temp. Blank ____ °C On Ice: ✓

Cooler seal intact upon receipt: ✓ Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	4:15	2/17/17			

Received in Laboratory By: Time: 4:15 Date: 2/17/17

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

BRIAN YOUNGWIRTH
GENERAL ENGINEERING
916 SILVER LAKE DRIVE
PORTAGE. WI 53901

Report Date *27-Jan-17*

Project Name SAUK CTY, WARDS CORNER GARAGE **Invoice #** E32356
Proiect # 2-1015-395

Lab Code 5032356A
Sample ID GOETSCH PW
Sample Matrix Drinking Water
Sample Date 1/18/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Arsenic, Total	< 0.6	ug/l	0.6	1.8	1	3113B		1/20/2017	CWT	1
Organic										
VOC's										
Benzene	< 0.39	ug/l	0.39	1.25	1	524.2		1/26/2017	CJR	1
Bromobenzene	< 0.58	ug/l	0.58	1.84	1	524.2		1/26/2017	CJR	1
Bromodichloromethane	< 0.59	ug/l	0.59	1.89	1	524.2		1/26/2017	CJR	1
Bromoform	< 0.41	ug/l	0.41	1.29	1	524.2		1/26/2017	CJR	1
Bromomethane	< 0.45	ug/l	0.45	1.43	1	524.2		1/26/2017	CJR	4 7
Carbon Tetrachloride	< 0.43	ug/l	0.43	1.36	1	524.2		1/26/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	524.2		1/26/2017	CJR	1
Chloroethane	< 0.43	ug/l	0.43	1.37	1	524.2		1/26/2017	CJR	1
Chloroform	< 0.58	ug/l	0.58	1.87	1	524.2		1/26/2017	CJR	1
Chloromethane	< 0.45	ug/l	0.45	1.43	1	524.2		1/26/2017	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.67	1	524.2		1/26/2017	CJR	1
4-Chlorotoluene	< 0.22	ug/l	0.22	0.71	1	524.2		1/26/2017	CJR	1
Dibromochloromethane	< 0.33	ug/l	0.33	1.06	1	524.2		1/26/2017	CJR	1
Dibromomethane	< 0.83	ug/l	0.83	2.63	1	524.2		1/26/2017	CJR	1
1,4-Dichlorobenzene	< 0.26	ug/l	0.26	0.84	1	524.2		1/26/2017	CJR	1
1,3-Dichlorobenzene	< 0.26	ug/l	0.26	0.82	1	524.2		1/26/2017	CJR	1
1,2-Dichlorobenzene	< 0.3	ug/l	0.3	0.95	1	524.2		1/26/2017	CJR	1
Dichlorodifluoromethane	< 0.59	ug/l	0.59	1.87	1	524.2		1/26/2017	CJR	1
1,2-Dichloroethane	< 0.49	ug/l	0.49	1.54	1	524.2		1/26/2017	CJR	1
1,1-Dichloroethane	< 0.33	ug/l	0.33	1.04	1	524.2		1/26/2017	CJR	1
1,1-Dichloroethene	< 0.39	ug/l	0.39	1.25	1	524.2		1/26/2017	CJR	1
cis-1,2-Dichloroethene	< 0.39	ug/l	0.39	1.23	1	524.2		1/26/2017	CJR	1
trans-1,2-Dichloroethene	< 0.36	ug/l	0.36	1.14	1	524.2		1/26/2017	CJR	1
1,2-Dichloropropane	< 0.42	ug/l	0.42	1.34	1	524.2		1/26/2017	CJR	1
2,2-Dichloropropane	< 0.41	ug/l	0.41	1.31	1	524.2		1/26/2017	CJR	1

Project Name SAUK CTY, WARDS CORNER GARAGE **Invoice #** E32356
Proiect # 2-1015-395

Lab Code 5032356A
Sample ID GOETSCH PW
Sample Matrix Drinking Water
Sample Date 1/18/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,3-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	524.2		1/26/2017	CJR	1
trans-1,3-Dichloropropene	< 0.38	ug/l	0.38	1.22	1	524.2		1/26/2017	CJR	1
cis-1,3-Dichloropropene	< 0.23	ug/l	0.23	0.72	1	524.2		1/26/2017	CJR	1
1,1-Dichloropropene	< 0.44	ug/l	0.44	1.41	1	524.2		1/26/2017	CJR	1
Ethylbenzene	< 0.32	ug/l	0.32	1.03	1	524.2		1/26/2017	CJR	1
Hexachlorobutadiene	< 0.98	ug/l	0.98	3.12	1	524.2		1/26/2017	CJR	1
Isopropylbenzene	< 0.27	ug/l	0.27	0.87	1	524.2		1/26/2017	CJR	1
p-Isopropyltoluene	< 0.24	ug/l	0.24	0.77	1	524.2		1/26/2017	CJR	1
Methylene chloride	< 0.98	ug/l	0.98	3.13	1	524.2		1/26/2017	CJR	1
Methyl tert-butyl ether (MTBE)	1.03 "J"	ug/l	0.61	1.93	1	524.2		1/26/2017	CJR	1
Naphthalene	< 0.33	ug/l	0.33	1.05	1	524.2		1/26/2017	CJR	1
Styrene	< 0.39	ug/l	0.39	1.23	1	524.2		1/26/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.65	1	524.2		1/26/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.61	ug/l	0.61	1.95	1	524.2		1/26/2017	CJR	1
Tetrachloroethene	< 0.44	ug/l	0.44	1.39	1	524.2		1/26/2017	CJR	1
Toluene	< 0.4	ug/l	0.4	1.28	1	524.2		1/26/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.48	ug/l	0.48	1.51	1	524.2		1/26/2017	CJR	1
1,1,1-Trichloroethane	< 0.37	ug/l	0.37	1.18	1	524.2		1/26/2017	CJR	1
1,1,2-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	524.2		1/26/2017	CJR	1
Trichloroethene (TCE)	< 0.46	ug/l	0.46	1.45	1	524.2		1/26/2017	CJR	1
Trichlorofluoromethane	< 0.37	ug/l	0.37	1.18	1	524.2		1/26/2017	CJR	1
1,2,3-Trichloropropane	< 0.75	ug/l	0.75	2.39	1	524.2		1/26/2017	CJR	1
Trichlorotrifluoroethane	< 0.43	ug/l	0.43	1.36	1	524.2		1/26/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.17	ug/l	0.17	0.54	1	524.2		1/26/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.26	ug/l	0.26	0.82	1	524.2		1/26/2017	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.58	1	524.2		1/26/2017	CJR	1
m&p-Xylene	< 0.66	ug/l	0.66	2.12	1	524.2		1/26/2017	CJR	1
o-Xylene	< 0.38	ug/l	0.38	1.2	1	524.2		1/26/2017	CJR	1
Wet Chemistry										
General										
Coliform	< 1	mpn	1	1	1	9223b		1/20/2017	CWT	1
E-Coli	< 1	mpn	1	1	1	9223b		1/20/2017	CWT	1
Nitrate Nitrogen, Total	11.0	mg/l	0.08	0.25	1	4500B/F		1/19/2017	CWT	1

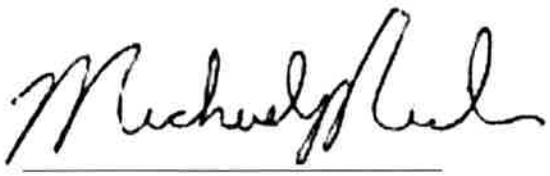
"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
4	The continuing calibration standard not within established limits.
7	The LCS not within established limits.

CWT denotes sub contract lab - Certification #445126660

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



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Synergy

Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
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Chain # NE 3185

Page ____ of ____

Sample Handling Request
____ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
____ Normal Turn Around

Lab I.D. #	
Account No.: GEC	Quote No.:
Project #: 2-1015-395	
Sampler: (signature) Beth A Eastman	
Project (Name / Location): Sauk County, Wards Corner Garage	
Reports To: GEC - Brian Youngworth	Invoice To:
Company General Engineering	Company
Address 916 Silver Lake Dr	Address
City State Zip Portage, WI 53901	City State Zip
Phone 608-742-2169	Phone
FAX	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
502396A	Goetsch Rd	1/18	2:45			N	2	DW	HCL
							1		None
							1		None
							1		HNO3

Analysis Requested

DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	Nitrates	Bacteria	Arsenic	PID/FID
											X			X	X	X	

Other Analysis

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Email Results to: Byoungworth@generalengineering.net

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Client

Temp. of Temp. Blank 4 °C On Ice: ✓

Cooler seal intact upon receipt: ✓ Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Beth A Eastman	8:24	1/19/17			

Received in Laboratory By: Brian Christensen Time: 8:23 Date: 1/19/17