David Sweeten
Sr. Environmental Project Manager
Direct Dial (713) 552-8941

5 Greenway Plaza, Suite 110 Houston, TX 77046-0521

November 24, 2017 Reference No. 085886

Mr. Jacob Hassan United States Environmental Protection Agency Region 5 77 W. Jackson Boulevard Chicago, Illinois 60604-3507 Send Via E-mail (hassan.jacob@epa.gov)

Dear Mr. Hassan:

Re: Monthly Progress Report – November 2017 EPA Docket No. RCRA-05-2017-0009 Cline Avenue Oil Spill Site - Gary, Indiana

This submission has been prepared in accordance with the Resource Conservation and Recovery Act (RCRA) Administrative Order on Consent for the Cline Avenue Oil Spill Site in Gary, Indiana (AOC – United States Environmental Protection Agency [U.S. EPA] Docket No. RCRA-05-2017-0009).

This report is organized to address routine reporting requirements set out in Sections V and VI of the Statement of Work (Attachment 1 of the AOC).

This report summarizes the activities conducted at the Site during the reporting period through November 30, 2017.

- a) Summary of Actions During the Reporting Period
  - Weekly booming, containment, and disposal operations in accordance with Paragraph 30a of the AOC.
     Attachment A presents the inspection forms
  - Vegetation clearing for additional LIF borings on October 5, 2017
  - Bathymetry of ditch completed October 5, 2017
  - Utility clearance for additional LIF borings on October 9, 2017
  - Additional LIF borings completed on October 10 and 11, 2017
  - Off-Site disposal of roll-off box contents on October 18, 2017
  - Installed one additional owl and one additional hawk plastic replica as enhancement to existing bird deterrent taping
- b) Plans, Reports, and Other Deliverables Completed During the Reporting Period
  - Submitted Quarterly Progress Report on October 12, 2017
- c) Summary of Problems and Planned Resolutions
  - Twice a week maintenance initiated in June was reduced to weekly maintenance in October, due to recent
    observations of minimal recovery of oil from the ditch. Weekly maintenance continued through November,
    and will continue going forward.

- d) Summary of Results of Sampling, Tests, and Other Data Received or Generated During The Reporting Period
  - Completed DART samples in the ditch sediments and DART results are presented in Attachment B (DART 1 to DART 15)
  - Completed additional LIF locations and LIF results are presented in Attachment C (TG-31 to TG-62)
- e) Anticipated Activities During the Next Reporting Period
  - Continue booming, containment, and disposal operations
  - Submittal of Focused Feasibility Study

## **Document Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions on the above, please do not hesitate to contact us.

Respectfully submitted,

Very truly yours,

GLENN SPRINGS HOLDINGS, INC.

David Sweeten, OXY Project Coordinator

DS/kf/3

cc: Todd Gmitro, EPA (Gmitro.Todd@epa.gov)
Michael Tomka (Michel.tomka@ghd.com)
Michael Beslow (beslow.mike@epa.gov)

## ATTACHMENT A

WEEKLY INSPECTION CHECKLISTS – OCTOBER and NOVEMBER 2017

November 23, 2017 Reference No. 085886 - 4 -

OCTOBER 2017 MAINTENANCE ACTIVITY CHECKLISTS

Completed By:		CTION CHECKLIS	•	DATE COMPLE	(MM)	<b>/5/2017</b> (DD)
Completed by.	John Hargens		Precipitation:	none	Temperature:	63 deg. F.
			Wind:	SE 3 mph	_	
1. PERSONNEL OF	N-SITE				<del>_</del>	
<u>Name</u>	Company	Hours on-Site		<u>Name</u>	Company	Hours on-Site
John Hargens	GHD	8.5	_	Ronald Nystrom	ER	3.0
Mike Sterrett	CML	2.5		Goratta Hall	ER	3.0
Luke McCarthy	CML	2.5	_	Steve Corning	GHD	7.5
Bernard Fulford	ER	3.0	_			
2. OVERALL SITE	INSPECTION		<del>-</del>			
N Does vegetation N Is there new even N Does disposal of the total of	rrent setup require m n within ditch require ridence of larger or no container need to be % of Disposal Co ons  SPECTION	e maintenance? If YE ew seeps? If YES, ind emptied? If YES, call ntainer Filled	S, schedule. icate where. 1-815-483-8478	to schedule waste pick-	Photo (before/after photo	x Dos)
5 <b>General Notes:</b>	•	ooms/pads removed , used 1 bag of Pom	-	# of new absorbe	nt booms/pads placed	d
	Replace 1 snare line	•	-	# of new absorbe	nt booms/pads placed	d x
General Notes:	Replace 1 snare line	•	-	# of new absorbe		x
4. SOUTH SEEP IN Y/N N Do curtains req	Replace 1 snare line  ISPECTION  uire replacement? If	used 1 bag of Pom	Poms.	# of new absorbe	Photo	x
4. SOUTH SEEP IN Y/N N Do curtains req	Replace 1 snare line  ISPECTION  uire replacement? If configuration effecti	yes # of sections?  ve at containing oil?	Poms. If NO, describe re	ecommended solution	Photo (before/after photo	x Dos)
General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming	Replace 1 snare line  ISPECTION  uire replacement? If configuration effecti  # of absorbent b	used 1 bag of Pom	of NO, describe re	ecommended solution	Photo	x Dos)
4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming	Replace 1 snare line  ISPECTION  uire replacement? If configuration effecti  # of absorbent b	yes # of sections?  ve at containing oil?  ooms/pads removed	of NO, describe re	ecommended solution	Photo (before/after photo	x Dos)
General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming 9 General Notes:	Replace 1 snare line  ISPECTION  uire replacement? If configuration effecti  # of absorbent b	yes # of sections?  ve at containing oil?  ooms/pads removed, used 2 bags of Pom	ons.  If NO, describe re	ecommended solution	Photo (before/after photo	x os)
General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming 9 General Notes:	Replace 1 snare line  ISPECTION  uire replacement? If configuration effecti  # of absorbent b  Replace 1 snare line	yes # of sections?  ve at containing oil?  ooms/pads removed, used 2 bags of Pom	ons.  If NO, describe re	ecommended solution	Photo (before/after photo	x Dos)
General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  9 General Notes:  5. OUTFALL TO G Y/N	Replace 1 snare line  ISPECTION  uire replacement? If configuration effecti  # of absorbent b  Replace 1 snare line	yes # of sections?  ve at containing oil?  ooms/pads removed, used 2 bags of Pom	ons.  If NO, describe re	ecommended solution	Photo (before/after photo  nt booms/pads placed	x Dos)
General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  9 General Notes:  5. OUTFALL TO G Y/N N Do curtains req	Replace 1 snare line  ISPECTION  uire replacement? If  configuration effecti  # of absorbent b  Replace 1 snare line  RAND CALUMET RIV	yes # of sections?  ve at containing oil?  ooms/pads removed, used 2 bags of Pom  ER INSPECTION	Poms.  If NO, describe results of the second	ecommended solution	Photo (before/after photo  nt booms/pads placed	x Dos)
4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  9 General Notes:  5. OUTFALL TO G Y/N N Do curtains req	Replace 1 snare line  ISPECTION  uire replacement? If  configuration effecti  # of absorbent b  Replace 1 snare line  RAND CALUMET RIV	yes # of sections?  ve at containing oil?  ooms/pads removed, used 2 bags of Pom  ER INSPECTION	Poms.  If NO, describe results of the second	ecommended solution  # of new absorbe	Photo (before/after photo  nt booms/pads placed	x Dos)
4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  9 General Notes:  5. OUTFALL TO G Y/N N Do curtains req	Replace 1 snare line  ISPECTION  uire replacement? If  configuration effecti  # of absorbent b  Replace 1 snare line  RAND CALUMET RIV	yes # of sections?  ve at containing oil?  ooms/pads removed, used 2 bags of Pom  ER INSPECTION  yes # of sections?  ve at containing oil?	Poms.  If NO, describe results of the second	ecommended solution  # of new absorbe	Photo (before/after photo  nt booms/pads placed	x os)
General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  9 General Notes:  5. OUTFALL TO G Y/N N Do curtains req Y Is the booming	Replace 1 snare line  ISPECTION  uire replacement? If configuration effecti  # of absorbent b Replace 1 snare line  RAND CALUMET RIV  uire replacement? If configuration effecti	yes # of sections?  ve at containing oil?  ooms/pads removed, used 2 bags of Pom  ER INSPECTION  yes # of sections?  ve at containing oil?	Poms.  If NO, describe response.  If NO, describe response.	ecommended solution  # of new absorbe	Photo (before/after photo  nt booms/pads placed  Photo (before/after photo	x Dos)

CLINE AVENUE SITE	E - WEEKLY INSPEC	TION CHECKLIS	Т	DATE COMPI		<b>10/12/2</b> MM) (DD)	
Completed By:	John Hargens		Precipitation:	none	Temperat	ture: 55	deg. F.
			Wind:	E 5 mph			
1. PERSONNEL OF	N-SITE						
<u>Name</u>	Company	Hours on-Site	<u>!</u>	<u>Name</u>	Company	<u>.</u>	Hours on-Site
John Hargens	GHD	4.5	_				
Ronald Nystrom	ER	3.5	_				
Ron Hell	ER	3.5	<del>-</del>				
			-				
2. OVERALL SITE I Y/N N Is there new ev	ridence of unauthorize	d access, dumping,	or vandalism at				
the property? I	•						
H	rrent setup require ma	·	•				
N Does vegetation	n within ditch require	maintenance? If YE	S, schedule.				
N Is there new ev	ridence of larger or nev	w seeps? If YES, ind	icate where.				
Y Does disposal c	container need to be e	mptied? If YES, call	1-815-483-8478	to schedule waste pio	ck-up		
96	% of Disposal Con	tainer Filled					
<b>General Observatio</b>	ons .						
3. NORTH SEEP IN	NSPECTION				Photo	x	
Y/N					(before/after	photos)	
N Do curtains req	uire replacement? If y	es # of sections?					
Y Is the booming	configuration effective	e at containing oil?	If NO, describe r	 ecommended solutior	1		
_							
6	# of absorbent bo	oms/pads removed	d 6	# of new absorb	pent booms/pads	placed	
General Notes:	- Replace 1/2 snare line	-		_		•	
4. SOUTH SEEP IN	ISPECTION				Photo	l x l	
Y/N					(before/after		
	uire replacement? If y	es # of sections?					
Y Is the booming	configuration effective	e at containing oil?	If NO, describe r	— ecommended solutior	1		
ш -		_					
	# -£ -hh h -	<i>l</i> l		и - £		1	
14	Replace 2 snare lines,	oms/pads removed		# or new absort	pent booms/pads	piaced	
General Notes:	Treplace 2 share lines,	used 1 1/2 bags of	rom roms.				
•	RAND CALUMET RIVE	R INSPECTION			Photo	<u> </u>	
Y/N N Do curtains rog	uire replacement? If y	os # of sostions?			(before/after	μποτος)	
$\mathbf{H}$			16 N O . 1 . 11				
y is the booming	configuration effective	e at containing oil?	IT NO, describe r	ecommended solutior	1		
0	# of absorbent booms	s/pads removed	0	# of new absorb	pent booms/pads	placed	
General Notes:	- Replace 1/2 snare line	•		_	٠,		
	.,						

Completed By: John Hargens Pro					<b>10/19/2017</b> MM) (DD)	
Completed By:	John Hargens		Precipitation:	none	Temperature:	68 deg. F.
			Wind:	NNE 5 mph		
1. PERSONNEL OF	N-SITE					
<u>Name</u>	Company	<b>Hours on-Site</b>		<u>Name</u>	<u>Company</u>	Hours on-Sit
John Hargens	GHD	4.5	_	-		
Ronald Nystrom	ER	2.5	_			
Grant Cumming	ER	3.5	_			
Garrett Hall	ER	2.5	_			
N the property? I' N Does bird deter N Does vegetatio N Is there new ev N Does disposal c	rent setup require man n within ditch require idence of larger or nev	intenance/repair? I maintenance? If YES w seeps? If YES, indi mptied? If YES, call tainer Filled	f Yes explain. S, schedule. icate where. 1-815-483-8478	to schedule waste pick	с-ир	
	uire replacement? If y				Photo (before/after photo	x os)
Y/N N Do curtains req	uire replacement? If y configuration effective	e at containing oil?	l4	ecommended solution # of new absorbe		os)
N Do curtains req Y Is the booming	uire replacement? If y configuration effective  # of absorbent bo Replace 1/2 snare line	e at containing oil?	l4		(before/after photo	d x
Y/N N Do curtains req Y Is the booming  4 General Notes:  SOUTH SEEP IN Y/N N Do curtains req	uire replacement? If y configuration effective # of absorbent bo Replace 1/2 snare line  ISPECTION  uire replacement? If y configuration effective e lines	e at containing oil?  oms/pads removed e, used 1 bag of Por  ves # of sections? e at containing oil?  oms/pads removed	I 4 m Poms.	# of new absorbe	(before/after photo	d x os)
Y/N N Do curtains req Y Is the booming  4 General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming Replace 2 snare 8 General Notes:	uire replacement? If y configuration effective  # of absorbent bo Replace 1/2 snare line  ISPECTION  uire replacement? If y configuration effective e lines  # of absorbent bo	e at containing oil?  oms/pads removed e, used 1 bag of Por  ves # of sections? e at containing oil?  oms/pads removed oms.	I 4 m Poms.	# of new absorbe	ent booms/pads place Photo (before/after photo	d x os)
M Do curtains req  Y Is the booming  4  General Notes:  4. SOUTH SEEP IN  Y/N  N Do curtains req  Y Is the booming  Replace 2 snare  8  General Notes:  5. OUTFALL TO GI  Y/N  N Do curtains req	uire replacement? If y configuration effective  # of absorbent bo Replace 1/2 snare line  ISPECTION  uire replacement? If y configuration effective e lines  # of absorbent bo Used 1 bag of Pom Po  RAND CALUMET RIVE	e at containing oil?  oms/pads removed e, used 1 bag of Por  ves # of sections?  e at containing oil?  oms/pads removed oms.  R INSPECTION  ves # of sections?	I 4 m Poms.  If NO, describe re	# of new absorbe	Photo (before/after photo (before/after photo	d x os)







CLINE AVENUE SITE	- WEEKLY INSPEC	CTION CHECKLIST	Γ	DATE COMPL	ETED: 10 (MM)			
Completed By:	Greg Wesley		Precipitation:	N/A	Temperature:	42-! deg. F.		
			Wind:	SE 8 mph	<del>_</del>			
1. PERSONNEL ON	I-SITE							
<u>Name</u>	<b>Company</b>	<b>Hours on-Site</b>		<u>Name</u>	<u>Company</u>	Hours on-Site		
Greg Wesley	GHD	3	_			_		
Ronald Nystrom	ER	3	_			_		
Grant Cumming	ER	3	_					
Robert Gilmartin	ER	2.5	_					
N the property? If N Does bird deter N Does vegetation N Is there new ev N Does disposal co  15  General Observation  3. NORTH SEEP IN Y/N N Do curtains req	rent setup require man within ditch require idence of larger or ne ontainer need to be e % of Disposal Corns Boom configurations  ISPECTION  uire replacement? If	maintenance/repair? If YE waseeps? If YES, ind mptied? If YES, call ntainer Filled on effective with respective with respective.	f Yes explain. S, schedule. icate where. 1-815-483-8478 spect to containi	to schedule waste pic	Photo (before/after phot	х		
6 <b>General Notes:</b>		ooms/pads removed		<del>_</del>	ent booms/pads place aannel to prevent agair			
·	uire replacement? If	· —	If NO, describe re	 ecommended solution	Photo (before/after phot	os)		
Replace 2 snare  8  General Notes:		ooms/pads removed with 1 bag of Pom		# of new absorb	ent booms/pads place	d		
Y/N N Do curtains req Y Is the booming	wire replacement? If configuration effectives # of absorbent boom	yes # of sections? re at containing oil?	If NO, describe re	 ecommended solution # of new absorb	Photo (before/after phot			
General Notes:	Replace 1/2 snare lin	es with 0 bags of Po	m Poms					

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NOVEMBER 2017 MAINTENANCE ACTIVITY CHECKLISTS

CLINE AVENUE SITE	- WEEKLY INSPEC	TION CHECKLIS	Γ	DATE COMPLE	TED: 1 (MM)	<b>1/2/2017</b> (DD)
Completed By:	John Hargens		Precipitation:	0.3 inch	Temperature:	50 deg. F.
			Wind:	NNW 1 mph	_	
1. PERSONNEL OF	N-SITE				<del>_</del>	
<u>Name</u>	<u>Company</u>	Hours on-Site		<u>Name</u>	<u>Company</u>	Hours on-Site
John Hargens	GHD	3.5	_			
Ronald Nystrom	ER	2.5	_			
Garret Hill	ER	2.5	_			
Robert Gilmaster	ER	2.5	_			
N the property? If N Does bird deter N Does vegetation N Is there new ev N Does disposal of 25 General Observation 3. NORTH SEEP IN Y/N N Do curtains req	rrent setup require main within ditch require ridence of larger or new ontainer need to be erwhole of Disposal Confiner setup of Disposal Setup of Disposal Confiner setup of Disposal Confiner setup of Disposal Confiner setup of Disposal Confiner setup of Disposal Setup of Disposal Confiner	intenance/repair? I maintenance? If YE v seeps? If YES, ind mptied? If YES, call tainer Filled  res # of sections?	f Yes explain. S, schedule. icate where. 1-815-483-8478	to schedule waste pick	-up Photo (before/after phot	x x
8 <b>General Notes:</b>	# of absorbent boo Replace 1/2 snare line	oms/pads removed L. Used 1/2 bags of	-	# of new absorbe	nt booms/pads place	ed
4. SOUTH SEEP IN	ISPECTION				Photo	x
$\mathbf{H}$	uire replacement? If y configuration effective		If NO, describe r	 ecommended solution	(before/after phot	cos)
8 <b>General Notes:</b>	# of absorbent boo Replace 2 snare lines.	oms/pads removed Used 1.5 bags of P	-	# of new absorbe	nt booms/pads place	ed
Y/N N Do curtains req	RAND CALUMET RIVER uire replacement? If y configuration effective	res # of sections?	If NO, describe r	 ecommended solution	Photo (before/after phot	cos)
0 <b>General Notes:</b>	# of absorbent booms Replace 1/2 snare line		0	# of new absorbe	nt booms/pads place	ed

CLINE AVENUE SITE	- WEEKLY INSPE	CTION CHECKLIS	Т	DATE COMPLE	<b>TED 11</b> (MM)	<b>/9/2017</b> (DD)
Completed By:	John Hargens		Precipitation:	none	Temperature:	42 deg. F.
			Wind:	WSW 12 mph	_	
1. PERSONNEL OF	N-SITE				_	
<u>Name</u>	<u>Company</u>	Hours on-Site		<u>Name</u>	Company	Hours on-Site
John Hargens	GHD	4	_			
Mike Hall	ER	3	_			
Garret Hall	ER	3	_			
Robert Gilmastia	ER	3	_			
2. OVERALL SITE I	NSPECTION					
N Does vegetation N Is there new ev N Were there bird	rrent setup require many mithin ditch require idence of larger or needs in the ditch area, if ontainer need to be easy of Disposal Cor	maintenance? If YE w seeps? If YES, ind YES, indicate how remptied? If YES, call	S, schedule. icate where. nany.	to schedule waste pick-	up	
<b> </b>	uire replacement? If	· —	If NO, describe r	 ecommended solution	Photo (before/after photo	x os)
10 General Notes:	# of absorbent bo Replace 1/2 snare lin	ooms/pads removed e. Used 1 bags of po	-	# of new absorber	nt booms/pads place	d
4 COLITH SEED IN	ICDECTION				Dlt -	TT
4. <u>SOUTH SEEP IN</u> Y/N	ISPECTION				Photo (before/after photo	x x
N Do curtains req	uire replacement? If configuration effective		If NO, describe r	 ecommended solution		
13 General Notes:	# of absorbent bo Replace 2 snare lines	ooms/pads removed , use 1 bags of Pom	-	<del>_</del>	nt booms/pads place	d
5. OUTFALL TO GI	RAND CALUMET RIVE	R INSPECTION			Photo	x
Y/N N Do curtains req	uire replacement? If	yes # of sections?	If NO, describe r	 ecommended solution	(before/after photo	
3 General Notes:	# of absorbent boom Replace 1/2 snare lin	•	3	# of new absorber	nt booms/pads place	d

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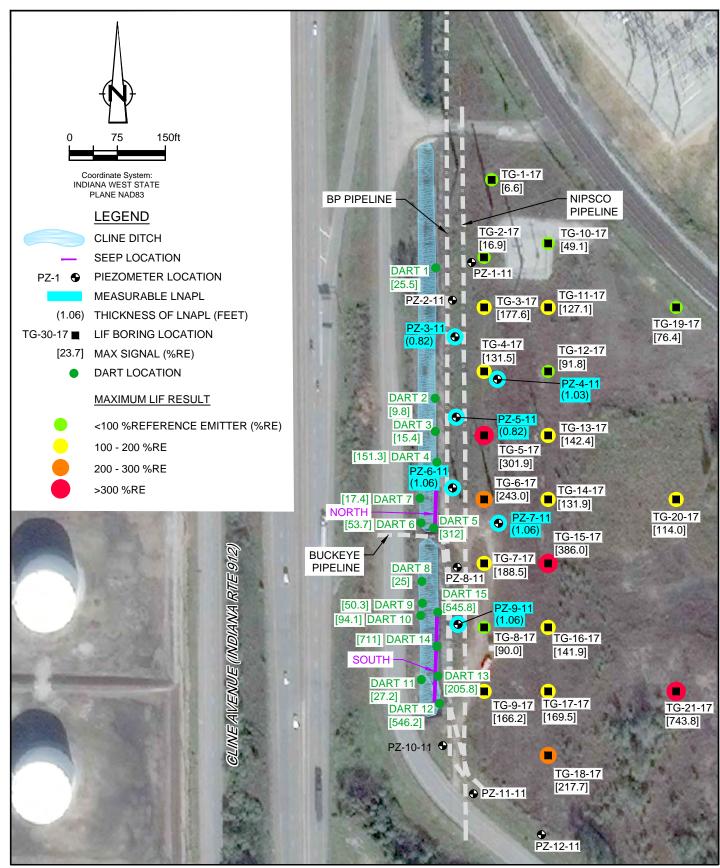
Completed By: Andrew Krein		EEKLY INSPECTION CHECKLIST DATE			ATE COMPLETED 11/16 (MM) (DI	
Completed By:	Andrew Krein		Precipitation:	none	Temperature:	36 deg. F.
			Wind:	NW 12 mph	<u>-</u>	
1. PERSONNEL ON	I-SITE				_	
<u>Name</u>	<u>Company</u>	Hours on-Site		<u>Name</u>	Company	Hours on-Site
Andrew Krein	GHD	3				
Ronald Nystrom	ER	2.5				
Justin Stoltmon	ER	2.5				
Michael Hall	ER	2.5				
2. OVERALL SITE I	NSPECTION					
N the property? If N Does bird deter N Does vegetation N Is there new ev N Were there bird	rent setup require n n within ditch requir idence of larger or n ds in the ditch area, i	naintenance/repair? e maintenance? If Y ew seeps? If YES, ind f YES, indicate how emptied? If YES, ca	If Yes explain. ES, schedule. dicate where. many.	3 to schedule waste pick	k-up	
General Observation	<u></u>					
General Observatio	<u></u>					
3. <u>NORTH SEEP IN</u> Y/N		f yes # of sections?			Photo (before/after photo	x os)
3. NORTH SEEP IN Y/N N Do curtains req	SPECTION  uire replacement? I  configuration effect	ve at containing oil	13	<del>_</del>		os)
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes:	SPECTION  uire replacement? I  configuration effect  # of absorbent b  Replace 1 snare line	ve at containing oil	13	# of new absorbe	(before/after photo	os)
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes:	SPECTION  uire replacement? I  configuration effect  # of absorbent b  Replace 1 snare line	ve at containing oil	13	# of new absorbe	(before/after photo	x
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes: 4. SOUTH SEEP IN Y/N N Do curtains req	spection  uire replacement? I  configuration effect  # of absorbent b  Replace 1 snare line  SPECTION  uire replacement? I	nooms/pads remove  b. Used 1 1/2 bags of	13 f pom poms in co	# of new absorbe	(before/after photo	x
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes: 4. SOUTH SEEP IN Y/N N Do curtains req	wire replacement? It configuration effects  # of absorbent to the Replace 1 snare line  SPECTION  wire replacement? It configuration effects	nooms/pads remove  b. Used 1 1/2 bags of	13 f pom poms in co	# of new absorbed	(before/after photo	x os)
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming	# of absorbent? If the second	f yes # of sections?	13 F pom poms in co	# of new absorbed	Photo (before/after photo	x os)
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming	# of absorbent? If the second	f yes # of sections?	13 F pom poms in co	# of new absorbed	Photo (before/after photo	x os)
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13  General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  13  General Notes:	# of absorbent? If the second	f yes # of sections?  five at containing oil?	13 F pom poms in co	# of new absorbed	Photo (before/after photo	x os)
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13  General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  13  General Notes:	# of absorbent? If the configuration effect is a solution of the configuration of the configuration effect is a solution of the configuration of the configu	f yes # of sections?  five at containing oil?	13 F pom poms in co	# of new absorbed	Photo (before/after photo	x x
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes: 4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes: 5. OUTFALL TO GE Y/N	# of absorbent? If the configuration effect is a solution of the configuration of the configuration effect is a solution of the configuration of the configu	f yes # of sections?  five at containing oil?  f yes # of sections?  five at containing oil?  fooms/pads remove hes, used 2 bags of I	13 F pom poms in co	# of new absorbed	Photo (before/after photo)	x x
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13  General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  13  General Notes:  5. OUTFALL TO GE Y/N N Do curtains req	# of absorbent become replacement? If a configuration effects with the replacement in the replacement? If a configuration effects with the replacement in the replace	f yes # of sections?  f yes # of sections?  fooms/pads remove  five at containing oil?  fooms/pads remove  fives, used 2 bags of the sections?  f yes # of sections?	13 Pom Poms.	# of new absorbed	Photo (before/after photo)  Photo (before/after photo)  Photo (before/after photo)	x os)
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13  General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  13  General Notes:  5. OUTFALL TO GE Y/N N Do curtains req	# of absorbent become replacement? If a configuration effects with the replacement in the replacement? If a configuration effects with the replacement in the replace	f yes # of sections?  fooms/pads remove  fooms/pads	13 Pom Poms.	# of new absorbed llection area	Photo (before/after photo)  Photo (before/after photo)  Photo (before/after photo)	x os)
3. NORTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes:  4. SOUTH SEEP IN Y/N N Do curtains req Y Is the booming  13 General Notes:  5. OUTFALL TO GE Y/N N Do curtains req Y Is the booming	# of absorbent become a	f yes # of sections?  five at containing oil?  fyes # of sections?  five at containing oil?  fyes # of sections?  fyes # of sections?  fyes # of sections?  five at containing oil?  five at containing oil?	13 Pom poms in co  2 If NO, describe  13 Pom Poms.	# of new absorbed llection area	Photo (before/after photo)  Photo (before/after photo)  Photo (before/after photo)  One of the photo of the photo)  Photo of the photo	x os)







## ATTACHMENT B DART INVESTIGATION RESULTS



Source: CM LAVOIE & ASSOCIATES, INC., SURVEY DATED JULY 27, 2017 (INDIANA WEST NAD83, NAVD88). AERIAL IMAGE BY TERRASERVER, 0.5m RESOLUTION, 2016-10-23



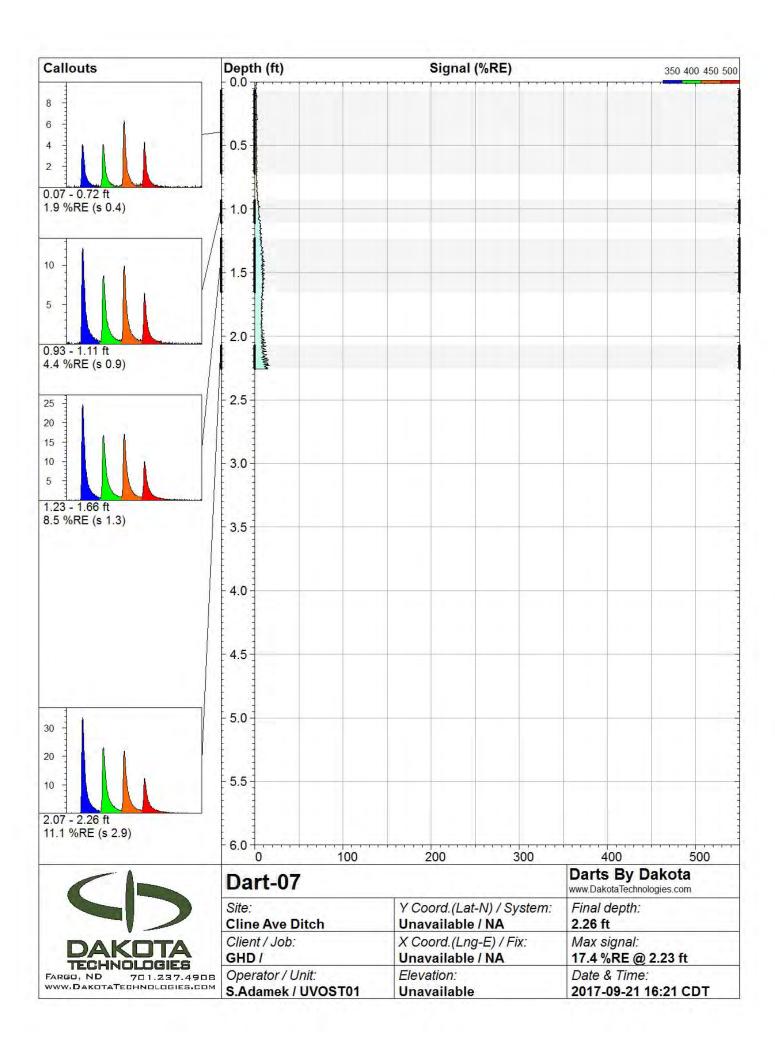
CLINE AVENUE OIL SPILL SITE GARY, INDIANA

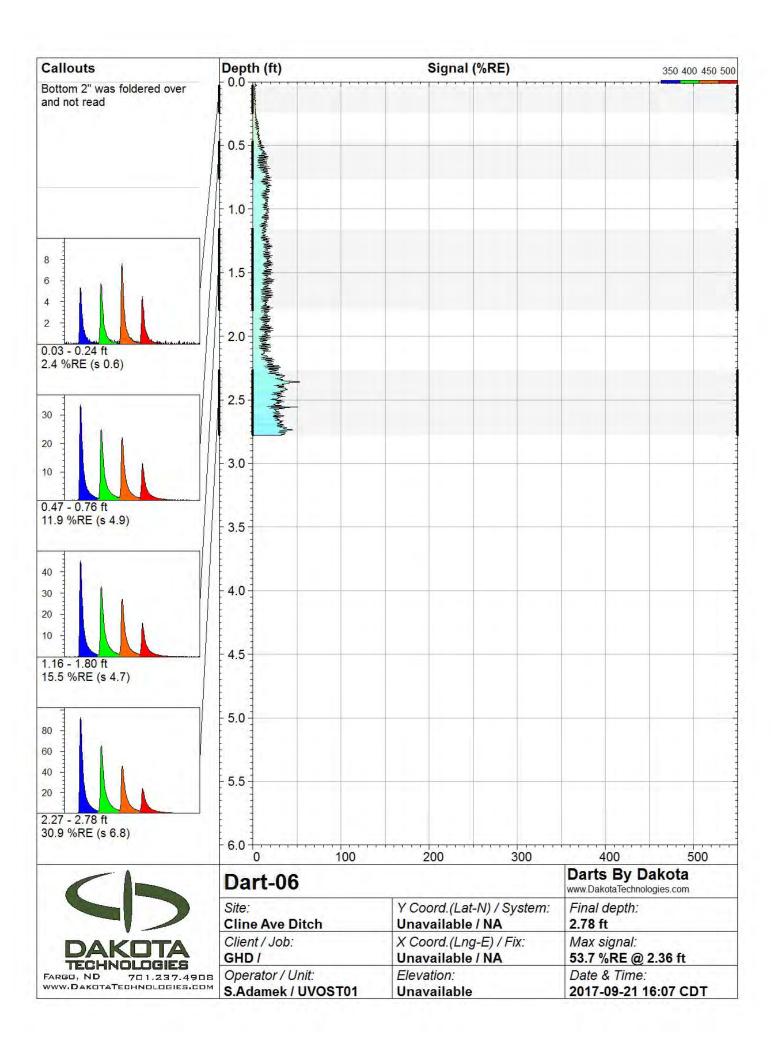
85886-D21105 Sep 27, 2017

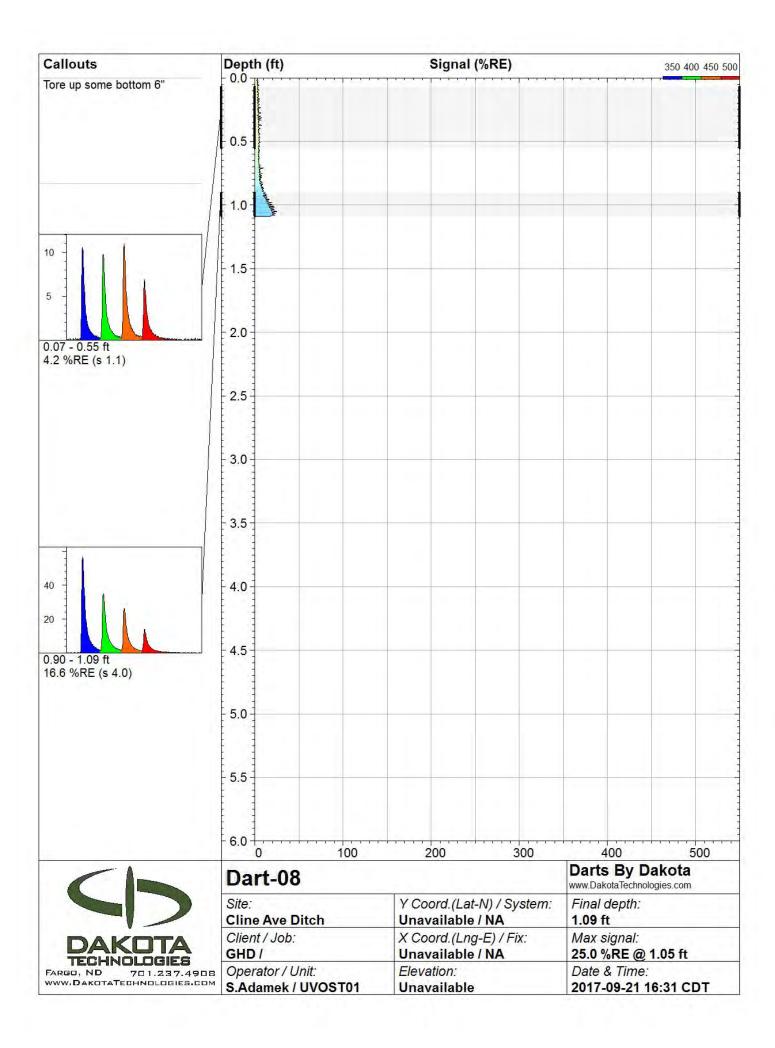
DART SAMPLE LOCATIONS

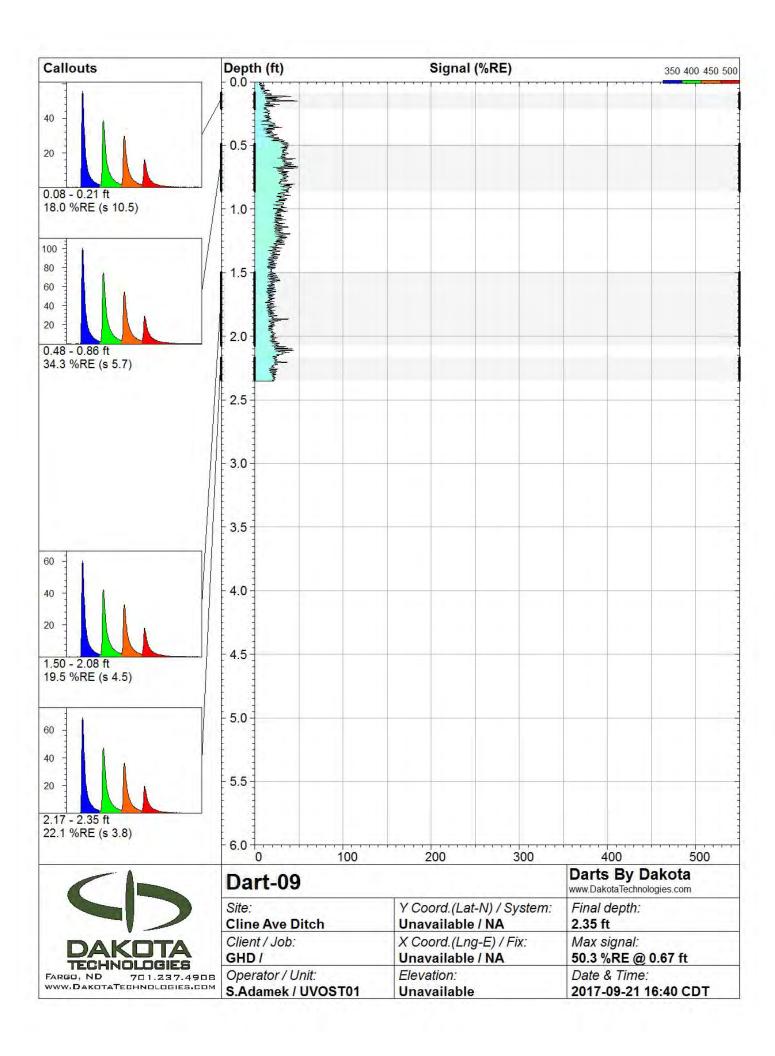
FIGURE 1

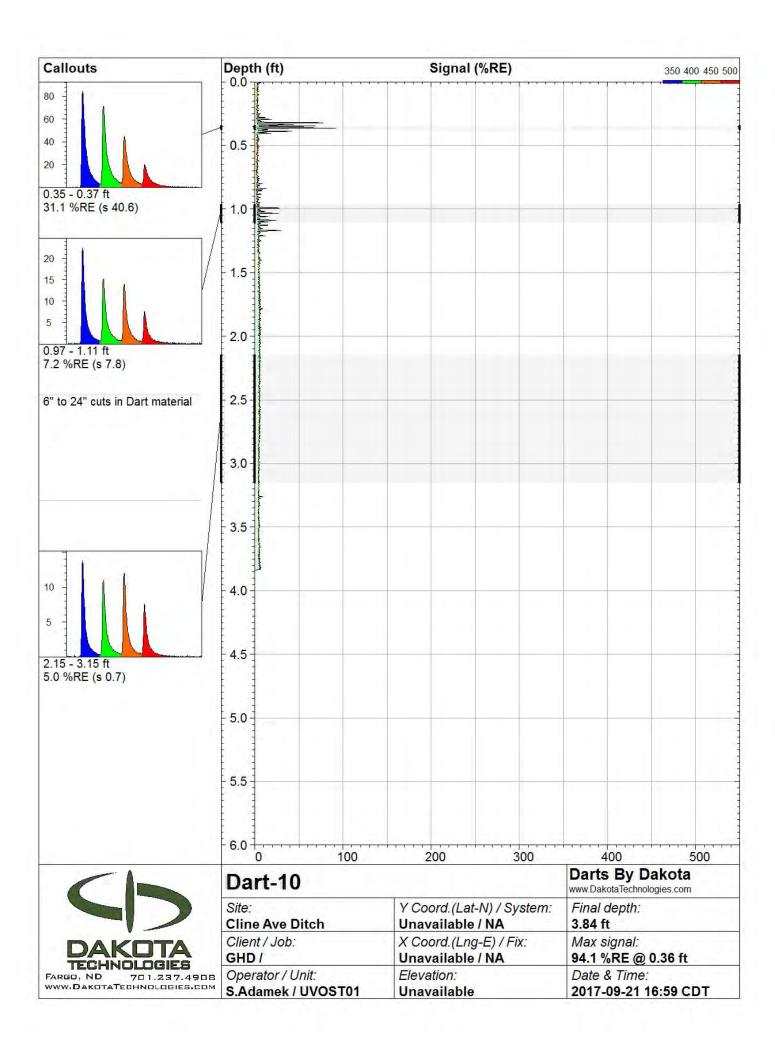
WEST SIDE OF DITCH, DART RESULTS

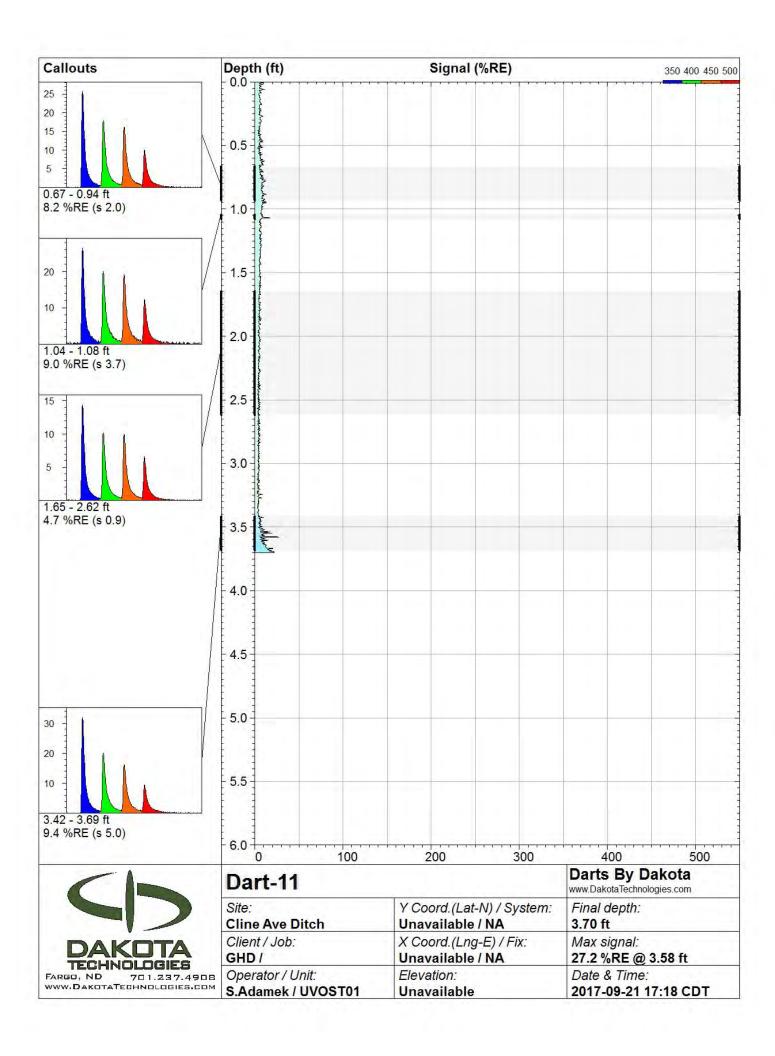




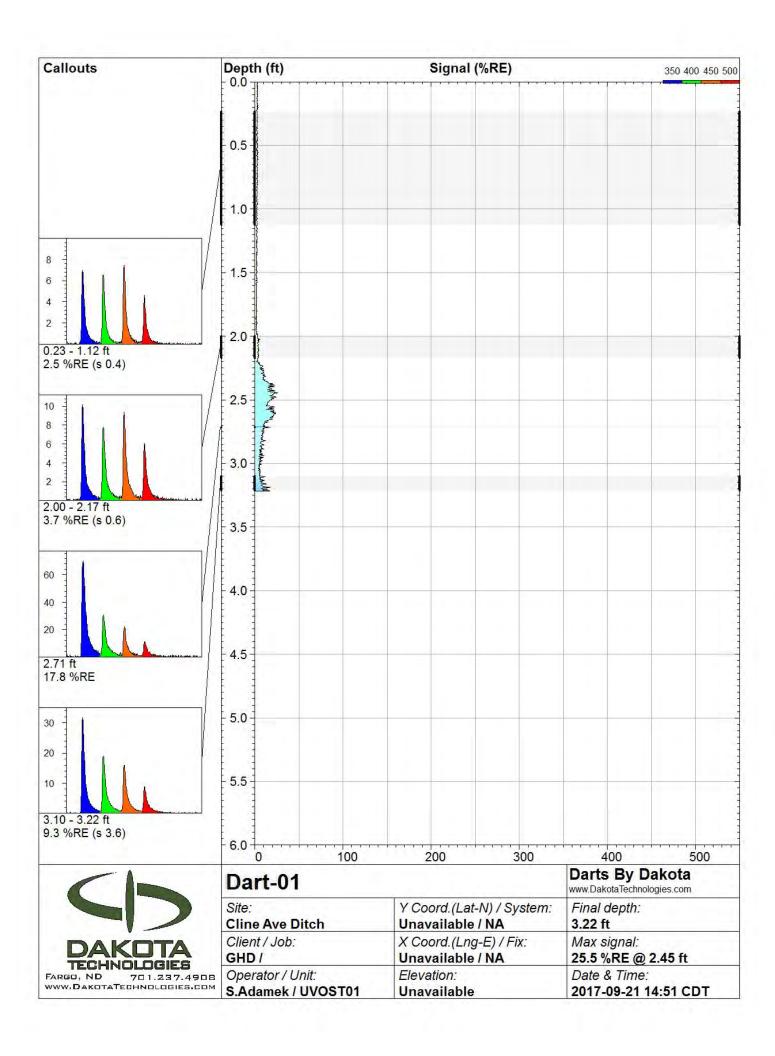


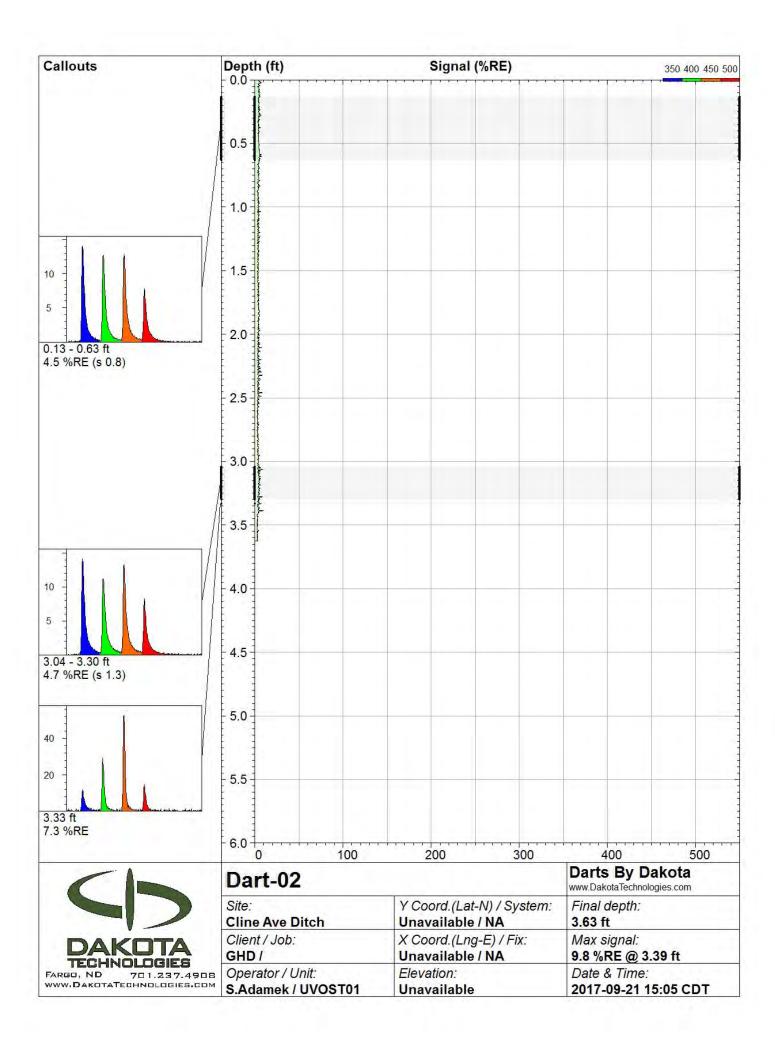


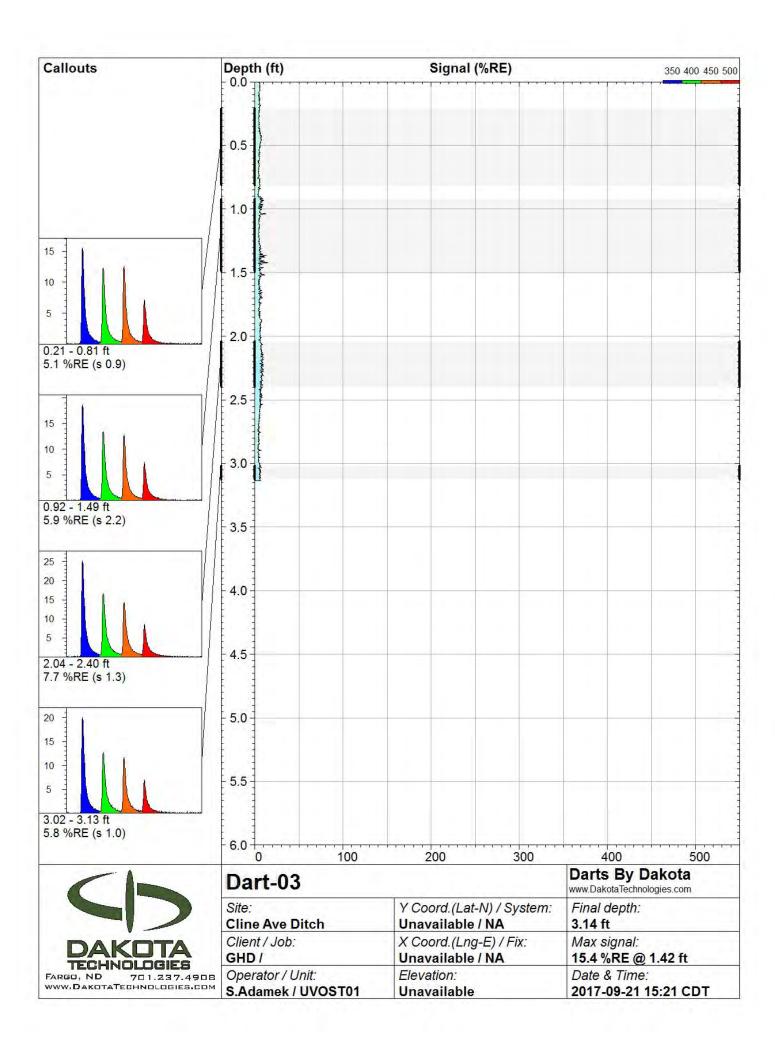


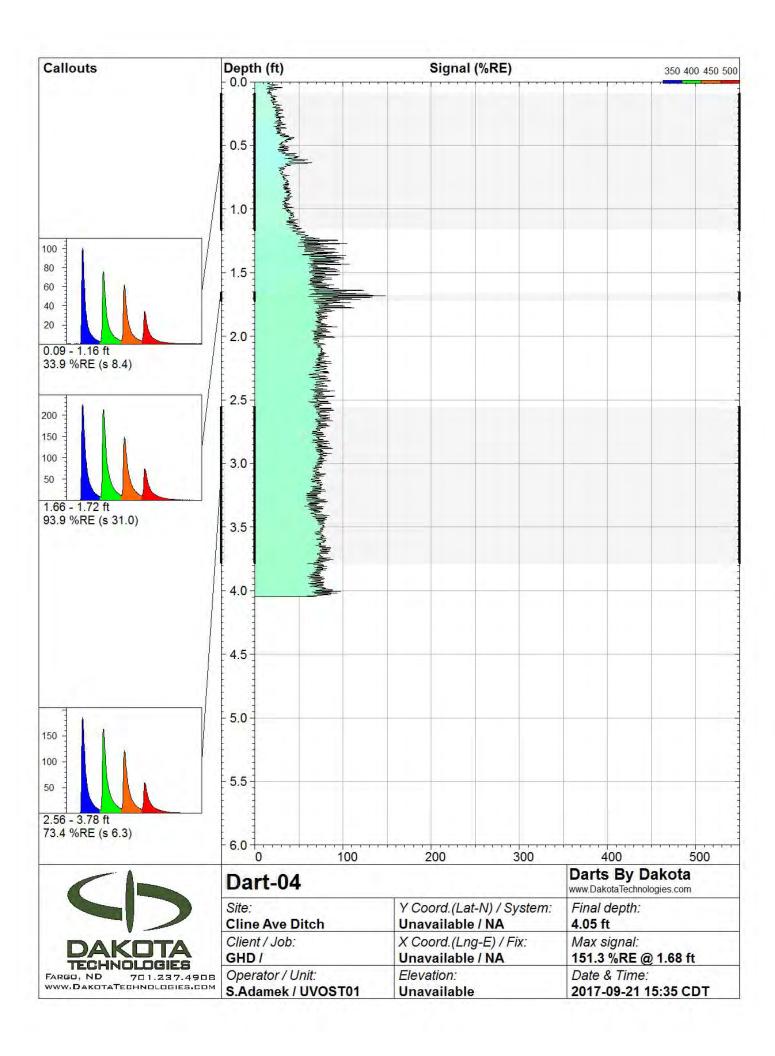


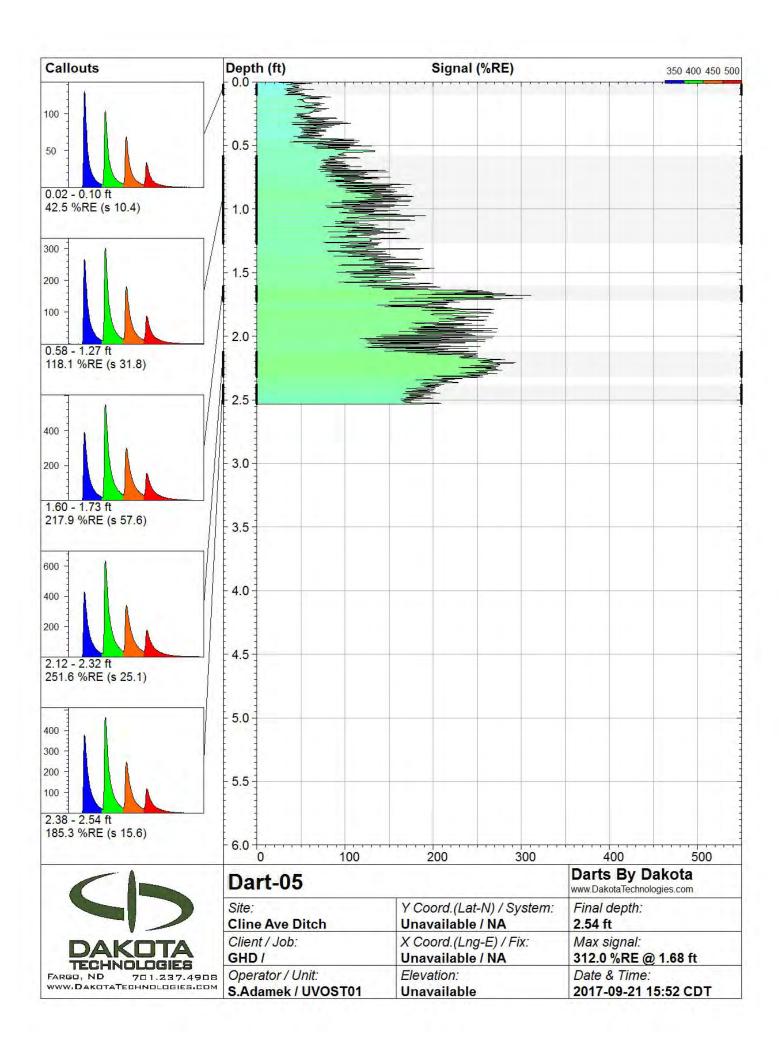
EAST SIDE OF DITCH, DART RESULTS

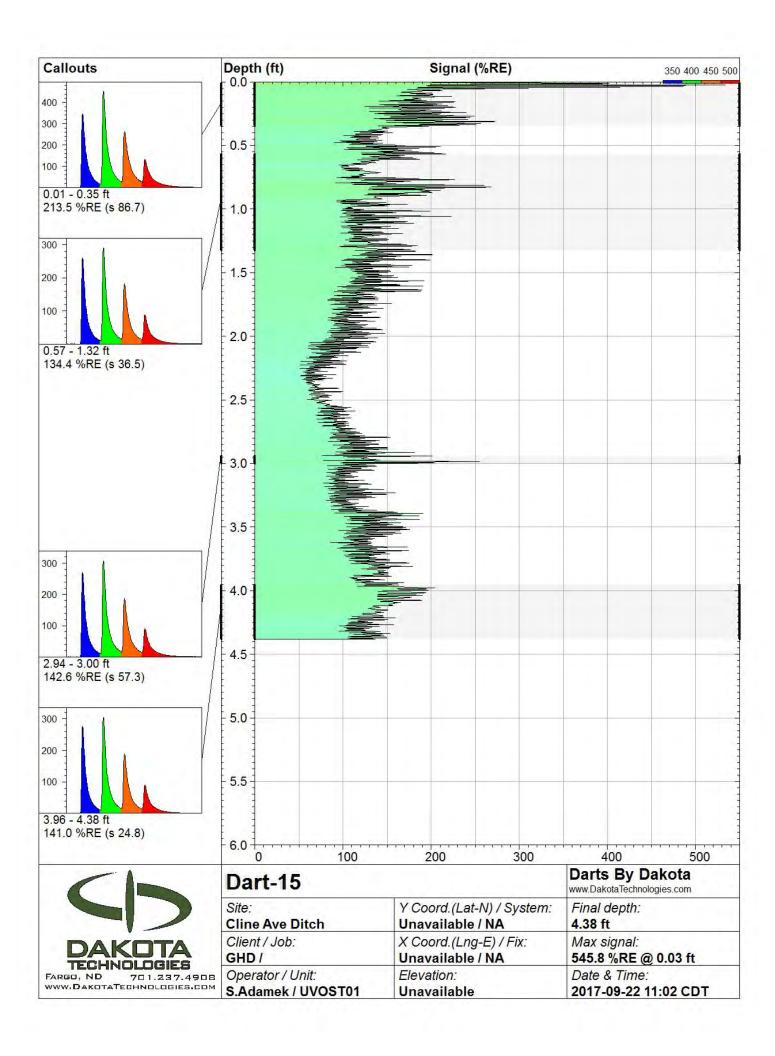


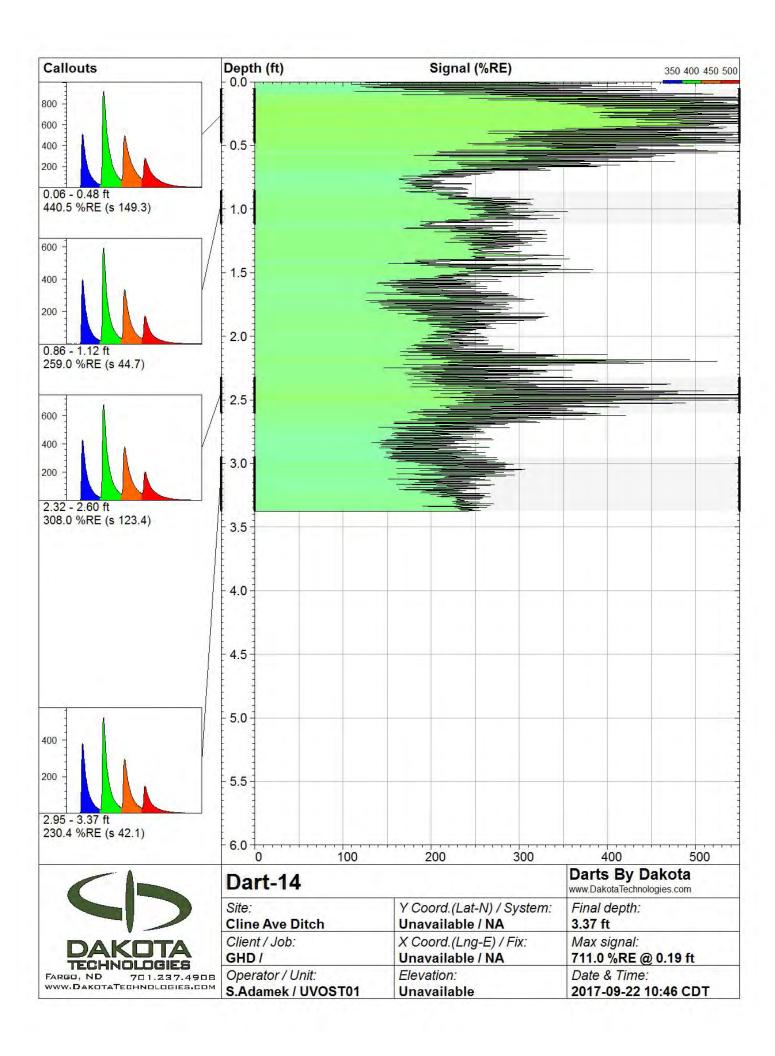


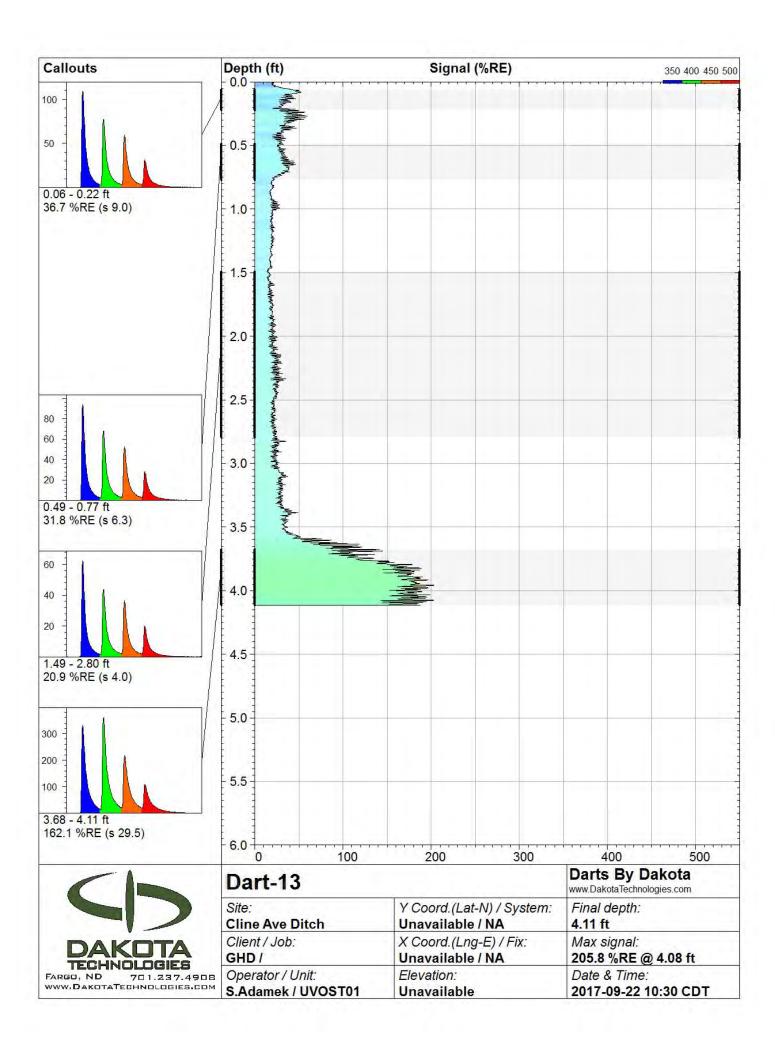


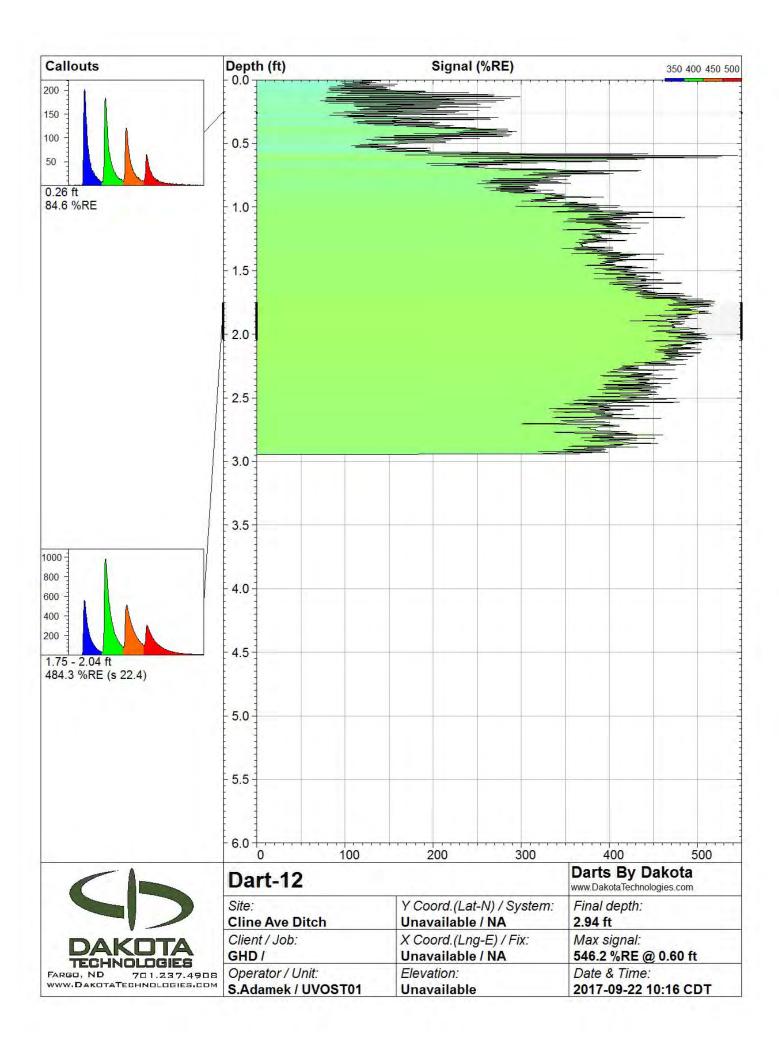




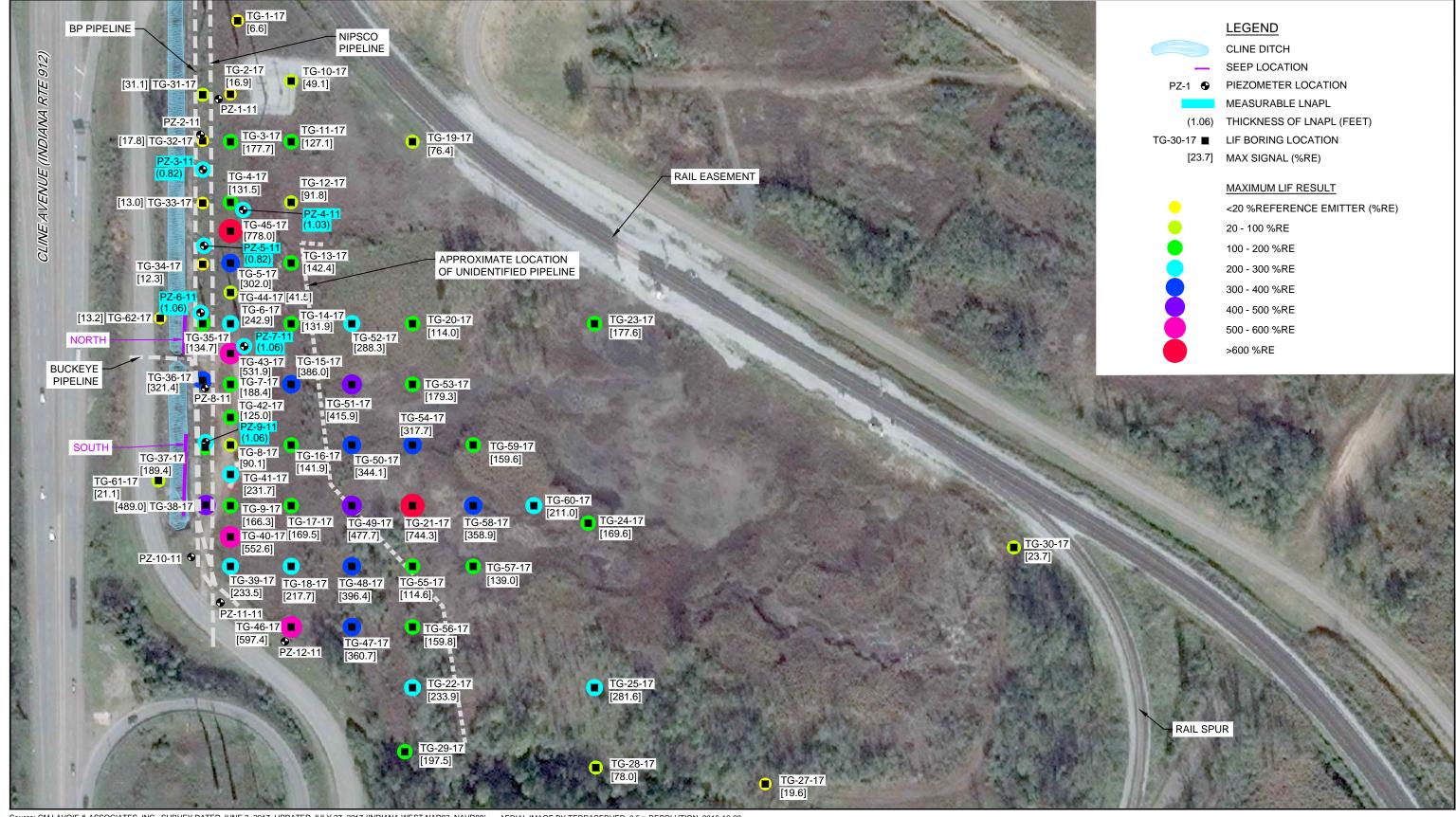




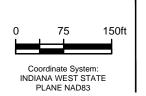




## ATTACHMENT C LIF INVESTIGATION RESULTS



Source: CM LAVOIE & ASSOCIATES, INC., SURVEY DATED JUNE 2, 2017, UPDATED JULY 27, 2017 (INDIANA WEST NAD83, NAVD88). AERIAL IMAGE BY TERRASERVER, 0.5m RESOLUTION, 2016-10-23.







CLINE AVENUE OIL SPILL SITE GARY, INDIANA

85886-D21105 Oct 13, 2017

LIF BORING LOCATIONS

