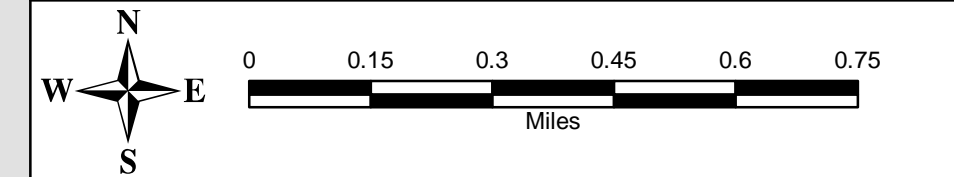


WESTHOPE 2017 2D

Equipment:	Wheeled	Receiver Interval:	n/a
Source:	Vibe	Source Interval:	n/a
Depth:	N/A	Receiver Spacing:	10m
Size:	N/A	Source Spacing:	30m
Source Points:	684	Receiver Points:	2004
Program Total:		Project Area:	

Survey Map Date: 1/18/17



Projection: UTM Zone 14 Datum: NAD83 Scale: 1:15,000

Legend

- Postplot_Source
- Postplot_Receiver
- Roads_State
- Roads_County
- PlowedRoads-Cat
- Waterline
- OHPL
- Ditch
- Fence
- <all other values>
- DE
- × FENCE
- G GATE
- OHPL
- TA
- WELLHEAD
- Comments
- WellsND-NAD83_UTM14
- <all other values>
- TieWell
- Y
- Cemetery
- Buildings
- Buffers_300'
- Parcels
- <all other values>
- Status
- NOTIFICATION SENT
- GOOD
- SIGNED NOTIFICATION
- NO PERMIT - SIGNED NOTIFICATION

Vehicle Hazards

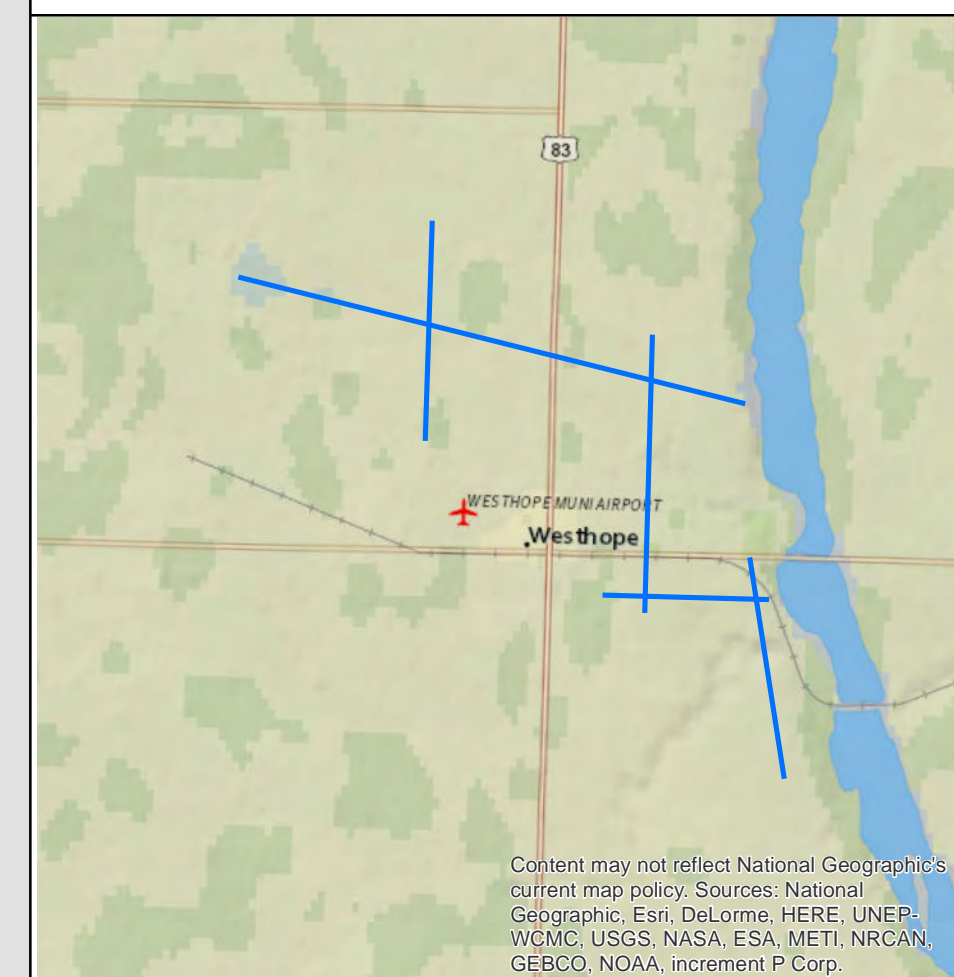
- × 1. No or narrow road shoulder
- × 2. Coulees
- × 3. Narrow bridges
- × 4. Steep hills
- × 5. Uncontrolled railway crossings
- × 6. Side hills
- 7. Icy approaches
- 8. Icy bridge decks
- 9. Roads subject to drifting
- 10. School bus stop
- × 11. Rough crossing on texas gates
- × 12. Blind curves
- × 13. Construction on traveled routes
- × 14. Blind hills
- × 15. Localized weather i.e. fog
- × 16. Wildlife
- × 17. Fences: bared wire & electric
- 18. Drainage ditches
- × 19. Local Traffic
- 20. Logging trucks

Hazards Pertinent to Both Vehicles and work on Foot

- × 1. Coulees
- × 2. Badger holes
- 3. Steep hills / cliffs
- 4. Open excavations
- 5. Drainage ditches
- 6. Thin ice
- 7. Poor footing & slippery conditions
- 8. Snags

Other General Hazards

- × 1. Fire(grass or forest fires)
- × 2. Dangerous animals bull, bears, etc
- × 3. H2S hazard
- 4. Hunting activity
- × 5. Footpath hazards: stumps, pokers, etc
- × 6. Buried power lines
- 7. High-watt radio / TV transmitters
- × 8. Bee / wasp nests
- 9. Buried pipeline
- × 10. Overhead power lines



Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP, WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

CARTOGRAPHY BY NORTHEAST DRAFTED BY S.WOJICHOVSKY



GEOPHYSICAL EXPLORATION COMPLETION REPORT - FORM GE 6A

INDUSTRIAL COMMISSION OF NORTH DAKOTA
 OIL AND GAS DIVISION
 600 EAST BOULEVARD DEPT 405
 BISMARCK, ND 58505-0840
 SFN 51456 (03-2011)

Permit No. #97-0276	
Shot Hole Operations n/a	*Non-Explosive Operations Vibroseis

SECTION 1

Geophysical Contractor PanAmerican Seismic Inc.	
Project Name and Number Westhope 2017 2-D	County(s) Bottineau
Township(s) 162N-163N	Range(s) 79W-80W
Drilling and Plugging Contractors N/A	
Date Commenced January 21, 2017	Date Completed January 27, 2017

SECTION 2

First S.P. #	Last S.P. #											
Loaded Holes (Undetonated Shot Points)												
S.P.#s												
Charge Size												
Depth												
Reasons Holes Were Not Shot												

SECTION 3

Flowing Holes and/or Blowouts S.P.#s
Procedure for Plugging Flowing Holes and/or Blowouts
<p>Include a 7.5 minute USGS topographic quadrangle map or a computer generated post-plot facsimile of the approximate scale displaying each individual shot hole, SP #, line #, and legal location.</p>

*Non-Explosive Operations - Complete Section 1 and Affidavit (Form GE 6B).



GEOPHYSICAL EXPLORATION AFFIDAVIT OF COMPLETION REPORT - FORM GE 6B
 INDUSTRIAL COMMISSION OF NORTH DAKOTA
 OIL AND GAS DIVISION
 600 EAST BOULEVARD DEPT 405
 BISMARCK, ND 58505-084C
 SFN 51456 (03-2011)

PERMIT NAME (Required): WEST HOPE 2017 2FD

PERMIT NUMBER: 97-0276

AFFIDAVIT OF COMPLETION (GEOPHYSICAL CONTRACTOR)

STATE OF NORTH DAKOTA)

COUNTY OF BOTTINEAU)

Before me, Kim Hunt, a Notary Public in and for the said

County and State, this day personally appeared Braeden Peters

who being first duly sworn, deposes and says that (s)he is employed by _____

PAN AMERICAN SEISMIC, that (s)he has read North Dakota

Century Code Section 38-08.1, that the foregoing seismic project has been completed in accordance with North Dakota Administrative Code Rule 43-02-12 and that the statements on the reverse side of this document are true.

[Signature]
 Geophysical Contractor Representative

Subscribed in my presence and sworn before me this 27 day of January, 2017.



Notary Public [Signature]

My Commission Expires _____



Suite 300, 520 - 3rd Avenue SW, Calgary, AB T2P 0R3
Phone (403) 262-1541 Fax (403) 262-1568

Industrial Commission of North Dakota

April 18, 2017

Oil and Gas Division
600 East Boulevard Dept. 405
Bismarck, ND 58505-0840

Attn: Mr. Todd Holweger

**Re: Final Project Information
Westhope 2017 2D –Seismic Exploration
Project Bottineau County ND
Permit Number 97-0276**

Dear Mr. Holweger,

Please find attached the final project information for the above mentioned seismic exploration project.

We have included Completion report, Completion Affidavit, Post plots information as per specifications, GIS layers (NAD 83) in Shape and IMG formats, and the affidavit stating that the Geophysical Contractor has given all surface owners a copy of the Section and Chapter of the NDCC as stated in paragraph 4 of the Exploration permit.

If you have any questions concerning this matter, please do not hesitate to contact me at James.Switzer@Harbinger.ca or fax (403) 262-1568.

Best regards,

Harbinger Exploration Corp.


James Switzer
General Manager
403-262-1541

AFFIDAVIT

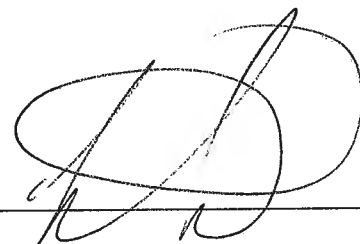
Canada)
Province of Alberta) S.S.
)

I, James Switzer, of Calgary, Alberta, Canada, MAKE OATH AND SAY THAT:

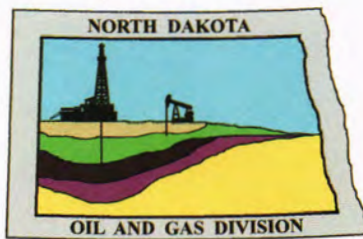
1. I, James Switzer, of Calgary, Alberta, Canada an approved agent of PanAmerican Seismic Inc., state that all landowners impacted by the Westhope 2017 2D seismic exploration program have been provided with a copy of Section 38-08.1-04.1 (Exploration Permit) and NDCC Chapter 38.11.1 (Oil and Gas Production Damage Compensation), per the requirement of Geophysical Exploration Permit # _____.

SWORN/AFFIRMED BEFORE ME,)
At Calgary)
Alberta, on)
This 22 day of February, 2016.)

A COMMISSIONER FOR OATHS AND FOR)
The Province of Alberta)




James Switzer

My Commission expires: Jun 26, 2018



Oil and Gas Division

Lynn D. Helms - Director Bruce E. Hicks - Assistant Director

Department of Mineral Resources

Lynn D. Helms - Director

North Dakota Industrial Commission

www.dmr.nd.gov/oilgas/

January 9, 2017

Mr. Mitchell Peters
Director
PanAmerican Seismic, Inc.
10700 Richmond Avenue,
Suite 105
Houston, TX 77042

RE: WESTHOPE 2017 2-D
GEOPHYSICAL EXPLORATION PERMIT #97-0276
BOTTINEAU COUNTY
NON EXPLOSIVE METHOD

Dear Mr. Peters:

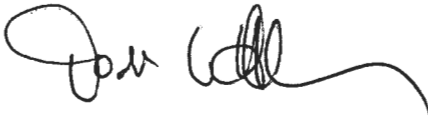
Please be advised that we are in receipt of your Geophysical Exploration permit application and it is conditionally approved; effective for one year from January 9, 2017. **PURSUANT TO NDAC 43-02-12-05 (DISTANCE RESTRICTION) non-explosive exploration method may not be conducted not less than 300 feet from a water well, building, underground cistern, pipelines, and flowing spring. In addition, pursuant to NDAC 43-02-12-06 (NOTIFICATION OF WORK PERFORMED), "The director is authorized to suspend operations of the entire geophysical project, or any portion thereof, if further activity will cause excessive damage to the surface of the land".** Review the following conditions for your permit:

1. A pre-program meeting with state seismic inspector Tom Torstenson is required. You must contact him at 701-290-1546 (cell) or 701-227-7436 at least 24 hours prior to any exploration operations. Also, a copy of the entire permit is required for all contractors at the pre-program meeting.
2. All variances for distance restrictions are to be furnished, and a pre-plot map displaying any source points that do not comply with the distance restriction rule must be supplied to the inspector.
3. The following information must be submitted within 30 days of the completion of the project by the Geophysical Company:
 - a. Completion Report,
 - b. Completion Affidavit,
 - c. Post Plot Map. It must show all water wells, buildings, underground cisterns, pipelines, and flowing springs that fall within the program area and within one half mile of the perimeter of the program.

- d. Must provide a GIS layer using NAD83 in an Esri shape file format and an Image file (.img) on a Flash Drive or email: ttorstenson@nd.gov with all source and receiver points,
 - e. Affidavit stating that the Geophysical Company has given all surface owner's a copy of the Section and Chapter of the NDCC as stated in paragraph 4. **(Received 1/9/2017)**
4. It is required that within seven days of initial contact between the permitting agent and the operator of the land, the permitting agent shall provide the operator of the land and each landowner owning land within one-half mile of the land on which geophysical exploration activities are to be conducted a written copy of NDCC Section 38-08.1-04.1 (Exploration Permit) and NDCC Chapter 38-11.1 (Oil and Gas Production Damage Compensation). The permitting agent shall file an affidavit with this office confirming compliance with such notification. For your convenience, a copy of both Sections are enclosed. **(Received 1/9/2017)**
 5. The permit agent shall notify the operator of the land at least seven days before commencement of any geophysical exploration activity, unless waived by mutual agreement of both parties. The notice must include the approximate time schedule and the location of the planned activity.
 6. Information regarding the location of water wells, springs, etc.; refer to the following ND State Water Commission Mapservice website, at: <http://mapservice.swc.state.nd.us/>
 7. The entire permit can be viewed, as well as the status of various seismic projects in the state, at: <https://www.dmr.nd.gov/oilgas/seismic/seismicstats.asp>

Should you have any questions regarding this matter, feel free to contact me at 701-328-8020, or Tom Torstenson at the number listed in paragraph 1.

Sincerely,



Todd L. Holweger
DMR Permit Manager



GEOPHYSICAL EXPLORATION PERMIT - FORM GE 1

INDUSTRIAL COMMISSION OF NORTH DAKOTA
 OIL AND GAS DIVISION
 600 EAST BOULEVARD DEPT 405
 BISMARCK, ND 58505-0840
 SFN 51459 (03-2011)

RECEIVED

DEC 28 2016

ND Oil & Gas Div.

1) a. Company PanAmerican Seismic Inc.		Address 10700 Richmond Avenue, Suite 105, Houston, Texas, 77042			
Contact Mitchell Peters		Telephone (403) 319-0922		Fax (403) 319-0933	
Surety Company Lexon Insurance Company		Bond Amount \$25,000.00		Bond Number 1119012	
2) a. Subcontractor(s)		Address		Telephone	
b. Subcontractor(s)		Address		Telephone	
3) Party Manager Braedon Peters		Address (local) Super 8 1007 11th Street East, Bottin		Telephone (local) (403) 969-5845	
4) Project Name or Line Numbers Westhope 2017 2D					
5) Exploration Method (Shot Hole, Non-Explosive, 2D, 3D, Other) Non-Explosive 2D					
6) Distance Restrictions (Must check all that apply)					
<input checked="" type="checkbox"/> 300 feet - NonExplosive - Distance setbacks apply to water wells, buildings, underground cisterns, pipelines, and flowing springs.					
<input type="checkbox"/> 660 feet - Shot Hole - Distance setbacks apply to water wells, buildings, underground cisterns, pipelines, and flowing springs.					
7) Size of Hole 3-D		Amt of Charge	Depth	Source points per sq. mi.	No. of sq. mi.
Size of Hole 2-D n/a		Amt of Charge n/a	Depth n/a	Source points per In. mi. 54	No. of In. mi. 12.86
8) Approximate Start Date January 10, 2017				Approximate Completion Date February 10, 2017	

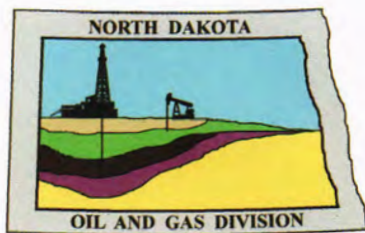
THE COMMISSION MUST BE NOTIFIED AT LEAST 24 HOURS IN ADVANCE OF COMMENCEMENT OF GEOPHYSICAL OPERATIONS

9) Location of Proposed Project - County Bottineau						
Section(s), Township(s) & Range(s)	Section 15, 16,17,21,22,23,24,26,35,36		T.	163N	R.	80W
	Section 6		T.	162N	R.	79W
	Section		T.		R.	
	Section		T.		R.	
	Section		T.		R.	
	Section		T.		R.	

I hereby swear or affirm that the information provided is true, complete and correct as determined from all available records. Date **12/16/16**

Signature 	Printed Name James Switzer	Title General Manager
Email Address(es) James.Switzer@Harbinger.ca		

(This space for State office use)		<p align="center">Permit Conditions</p> <p>* Permit in hand required at pre-program meeting with field inspector and be aware of all NDIC Rules and Regulations (i.e. distance restrictions).</p> <p>* See attached letter.</p>
Permit No. 97-8276	Approval Date 1/9/17	
Approved by 	Title Mineral Resources Permit Manager	



Oil and Gas Division

Lynn D. Helms - Director

Bruce E. Hicks - Assistant Director

Department of Mineral Resources

Lynn D. Helms - Director

North Dakota Industrial Commission

www.dmr.nd.gov/oilgas/

January 9, 2017

The Honorable LISA HERBEL
Bottineau County Auditor
314 West 5th
Bottineau, ND 58318-1204

RE: Geophysical Exploration
Permit # 97-0276

Dear Ms. HERBEL:

Pursuant to Section 38-08.1-04.2 of the North Dakota Century Code, please be advised that PANAMERICAN SEISMIC, INC. was issued the above captioned permit on January 9, 2017 and will remain in effect for a period of one year. The entire permit can be viewed on our website at: <https://www.dmr.nd.gov/oilgas/seismic/seismicstats.asp>

Should you have any questions, please contact our office.

Sincerely,

Todd L. Holweger
Mineral Resources Permit Manager



Harbinger Exploration Corp.

Calgary Office Suite 400, 440 – 2nd Avenue SW Calgary, Alberta Canada T2P 5E9 Tel: 403-262-1541 Fax: 403-262-1568

SENT VIA EMAIL/COURIER

December 16, 2016

Industrial Commission of North Dakota
Oil and Gas Division
600 East Boulevard Dept 405
Bismark, ND 58505-0840
Edmonton, AB T5K 2G8

Dear Mr. Todd Holweger:

Re: Request for Geophysical Exploration Permit
Geophysical Prospect: Westhope 2017 2D
Company: PanAmerican Seismic Inc.
Location: Bottineau County

Please find attached our request for a Geophysical Exploration Permit – Form GE 1 and required additional information. If you have any questions concerning this matter, please contact me at 403-262-1541.

Yours truly,

James Switzer, General Manager
Harbinger Exploration Corp.
James.Switzer@Harbinger.ca
/js
encl.



North Dakota Industrial Commission
 Department of Mineral Resources
 Oil & Gas Division

FORM GE 1

FILING AUTHORIZATION

COMPANY NAME: PanAmerican Seismic Inc.

ADDRESS: 10700 Richmond Avenue, Suite 105

CITY: Houston STATE: Texas ZIP: 77042

This form authorizes the person(s) listed below to submit a NDIC Geophysical Exploration Permit – Form GE 1 for approval on behalf of the designated company as listed above.

A new authorization will be required if any changes are to be made to the authorized individuals on the form.

The data submitted from the authorized individuals listed below have been checked and conform to the standards and procedures set forth by the NDIC Department of Mineral Resources.

The authorized individual(s) will ensure that the company, as listed above, and party manager receive a copy of the approved Form GE 1

<u>Authorized Individuals</u>	<u>E-Mail Address</u>	<u>Phone Number</u>
James Switzer	James.Switzer@Harbing	403-262-1541
William Bevan	wbevan@northeastssurve	814-853-8054
Bill Peterson	petersonseismic@yahoo	989-858-0455

Company Authorized Signature: [Signature] Date: Feb 22/2016

Printed Name: MITCHELL PETERS Title: DIRECTOR

Phone: 713 537 9116 Email Address: m.peters@panamgeo.com

Witness Signature: [Signature] Date: Feb 22/2016

Witness Printed Name: Braeden Peters



WESTHOPE 2017 2D

PROPOSAL

LICENSEE:	TBA	GEO NO.:	
LICENSE NO.:	TBA	NTS MAPSHEETS:	
PERMITEE:	TBA	EQUIPMENT:	
PERMIT NO.:	TBA	ENERGY SOURCE:	
		MAP DATE:	Sunday, December 18, 2016

PROGRAM SUMMARY

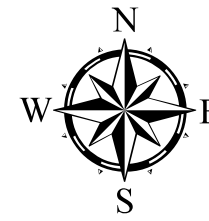
LINE TYPES	LINE TYPES	LINE TYPES SUBTOTAL
CROSS COUNTRY		20.7 km
LANDS CLASSIFICATION SUBTOTAL		20.7 km

PROGRAM TOTAL: 20.7 km

1:25,000

0 0.5 1 Km

UTM ZONE	14
DATUM	NAD 83



MAP VERSION

VERSION	DESCRIPTION	DATE
1	Preliminary Plan	12/18/2016

Parameters

Receiver:

Type	single/spike
Active Traces	320
Patch (3D)	n/a
Roll in/out	yes
Stn Interval	10.00 m
Line Interval (3D)	n/a
Array	none
Center	on stn
Point Count	2075 pts
Kilometers	20.70 km
No. of Lines	5 Ins

Source:

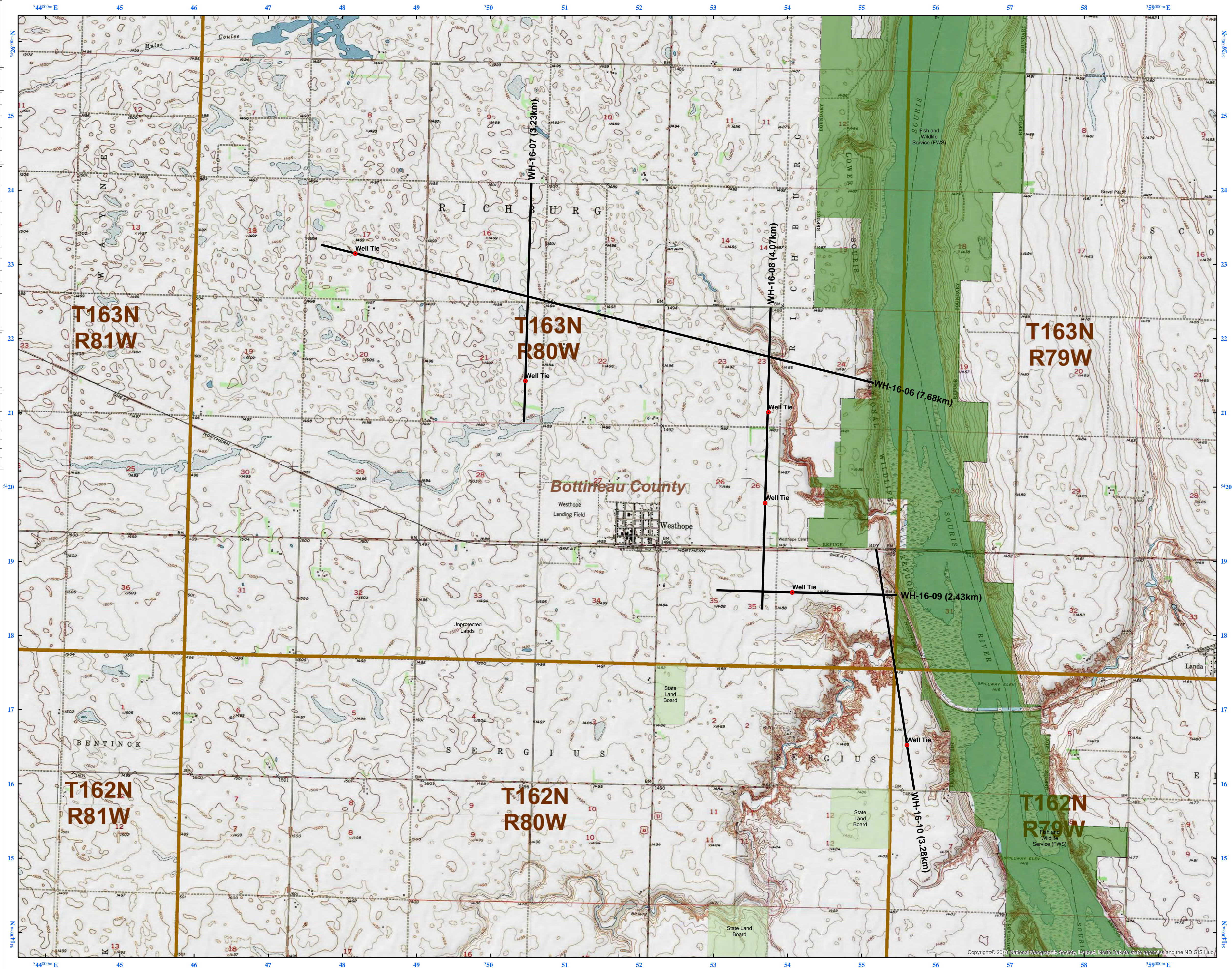
Type	Dual Vibrator
Effort	10 swps x 12 secs
Stn Interval	30.00 m
Line Interval (3D)	n/a
Array	2 over ?
Center	on stn
Point Count	710 pts
Kilometers	20.70 km
No. of Lines	5 Ins
Extra Source	2@BOL&EOL

Recording:

Sample Rate	1 ms
Record Length	3 sec

Commencement:

January 2017	
Fold @ 600 m	20.00
Fold @ 800 m	26.67
Fold @ 1000 m	33.33
Fold @ 1200 m	40.00
Fold @ 1400 m	46.67



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WESTHOPE 2017 2D

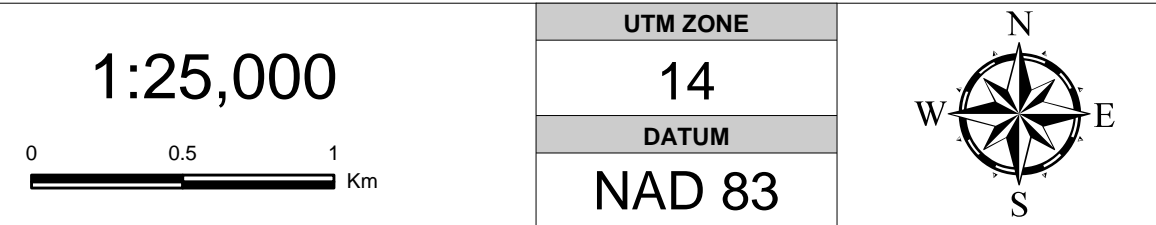
PROPOSAL

LICENSEE:	TBA	GEO NO:	
LICENSE NO:	TBA	NTS MAPSHEETS:	
PERMITEE:	TBA	EQUIPMENT:	
PERMIT NO:	TBA	ENERGY SOURCE:	
		MAP DATE:	Friday, December 2, 2016

PROGRAM SUMMARY

LINE TYPES	LINE TYPES SUBTOTAL
CROSS COUNTRY	20.7 km
LANDS CLASSIFICATION SUBTOTAL	20.7 km

PROGRAM TOTAL: 20.7 km



MAP VERSION

VERSION	DESCRIPTION	DATE
1	Preliminary Plan	12/2/2016

Parameters

Receiver:

Type	single/spike
Active Traces	320
Patch (3D)	n/a
Roll in/out	yes
Stn Interval	10.00 m
Line Interval (3D)	n/a
Array	none
Center	on stn
Point Count	2075 pts
Kilometers	20.70 km
No. of Lines	5 Ins

Source:

Type	Dual Vibrator
Effort	10 swps x 12 secs
Stn Interval	30.00 m
Line Interval (3D)	n/a
Array	2 over ?
Center	on stn
Point Count	710 pts
Kilometers	20.70 km
No. of Lines	5 Ins
Extra Source	2@BOL&EOL

Recording:

Sample Rate	1 ms
Record Length	3 sec

Commencement:

January 2017	
Fold @ 600 m	20.00
Fold @ 800 m	26.67
Fold @ 1000 m	33.33
Fold @ 1200 m	40.00
Fold @ 1400 m	46.67

