



**SUNDRY NOTICE**  
 INDUSTRIAL COMMISSION OF NORTH DAKOTA  
 OIL AND GAS DIVISION  
 600 EAST BOULEVARD DEPT 405  
 BISMARCK, ND 58505-0840  
 SFN 51458 (03-2003)



PERMIT # 970179  
~~790479~~

Project Name <b>Mac Tavish / Big Mac 3-D</b>
County <b>Bottineau &amp; Renville</b>
Supplemental Information <p>The project is being expanded by Geokinetics to include the following lands;          T.160n. R.83w: Sec. 18, 19, 20, 29, 30 &amp; 31.          T.160n. R.84w: Sec. 13, 14, 23, 24, 25, 26, 27, 34, 35 &amp; 36.          T.159n. R.83w: Sec. 6 &amp; 7.          T.159n. R.84w: Sec. 1, 2, 3, 11 &amp; 12.</p> <p>The project will use Vibroseis trucks as an energy source.</p> <p>Clients are: Ballantyne Oil &amp; Bayside Energy LLC.</p> <p>Contractors are: ECS Erickson Contract Survey</p> <p>Project is scheduled to start January 1, 2010 and to be completed by January 30, 2010.</p> <p><i>Total Square miles = 14.</i></p>

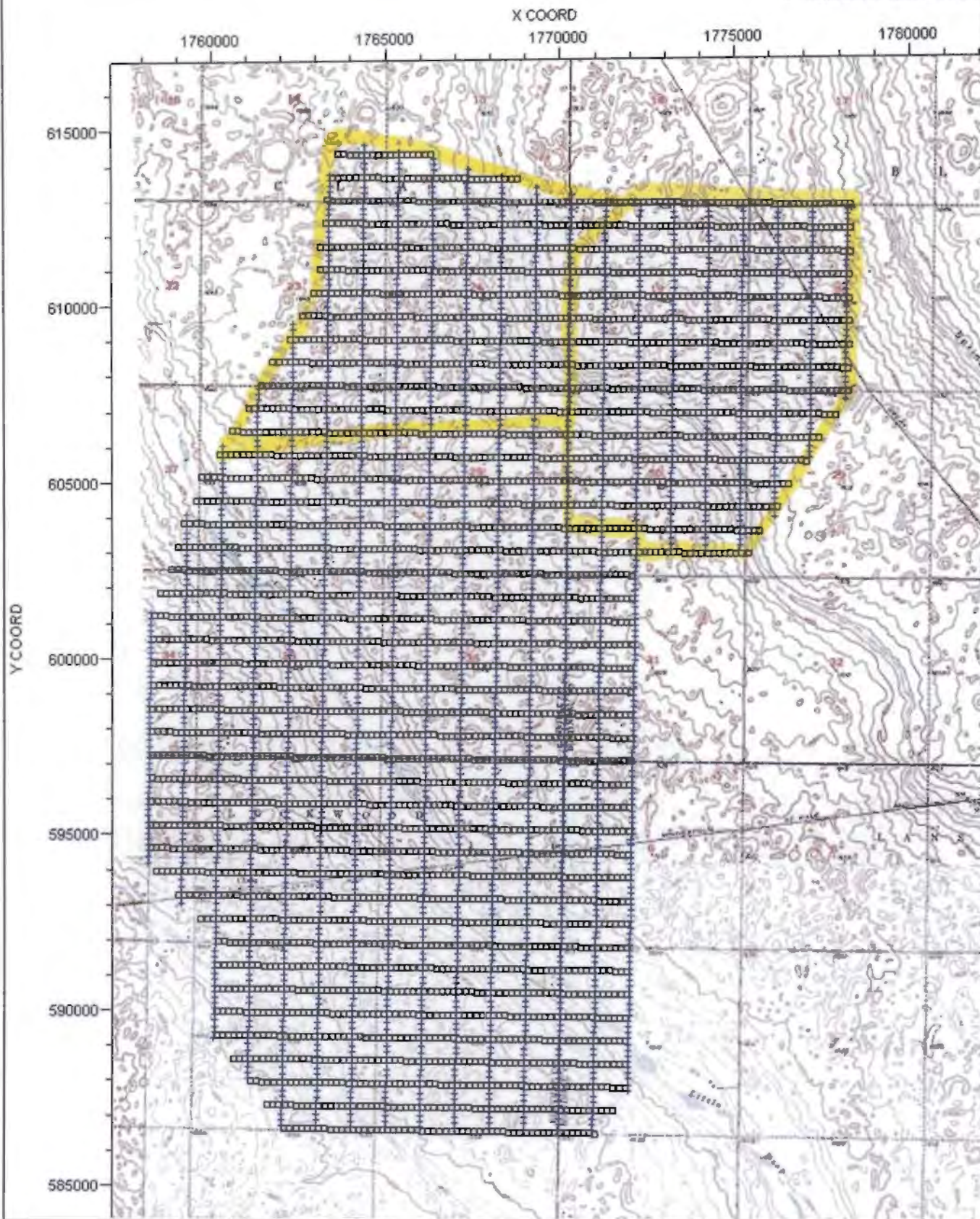
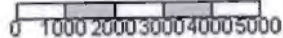
Company <b>Geokinetics USA, Inc</b>		
Address <b>1500 City West Blvd, Suite 800</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77042</b>
By <b>Jeff Lund</b> <i>[Signature]</i>	Date <b>December 30, 2009</b>	
Title <b>Contract Permit Agent</b>	Telephone Number <b>(612) 501-2164</b>	

**FOR OFFICE USE ONLY**

Date Received <b>12/31/2009</b>
By <i>[Signature]</i>
Title <b>Mineral Resources Permit Manager</b>

Clay 3D preplot

3817.39 Feet per inch





# GEOPHYSICAL EXPLORATION PERMIT

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
 OIL AND GAS DIVISION  
 600 EAST BOULEVARD DEPT 405  
 BISMARCK, ND 58505-0840  
 SFN 51459 (02-2008)

1) a. Company <b>Geokinetics USA, Inc.</b>		Address <b>1500 City West Blvd. Ste 800, Houston, Texas 77042</b>	
Contact <b>David E. Bush</b>		Telephone <b>713-840-3380</b>	Fax <b>713-840-3395</b>
Surety Company <b>U.S. Specialty Insurance Company</b>		Bond Amount <b>\$50,000.00</b>	Bond Number <b>B004059</b>
2) a. Subcontractor(s) <b>Erickson Contract Surveying</b>		Address <b>Sidney, Montana 59270</b>	
b. Subcontractor(s)		Address	
c. Subcontractor(s)		Address	
3) Party Manager <b>Juan Trevino</b>		Address (local)	
4) Project Name or Line Numbers <b>Mac Tavish, Lemon Gulch, Big Mac 3D</b>			
5) Exploration Method (Shot Hole, Non-Explosive, 2D, 3D, Other) <b>Non Explosive 3D</b>			
6) Approximate Start Date <b>November 15, 2009</b>		Approximate Completion Date <b>November 15, 2010</b>	

**THE COMMISSION MUST BE NOTIFIED AT LEAST 24 HOURS IN ADVANCE OF COMMENCEMENT OF DRILL/PLUG OPERATIONS**

7) Location of Proposed Project - County <b>Renville, Bottineau,</b>					
Section(s), Township(s) & Range(s)	Section <b>13, 14, 23, 24, 25, 26</b>	T. <b>160</b>	R. <b>84</b>		
	Section <b>18, 19, 20, 29, 30</b>	T. <b>160</b>	R. <b>83</b>		
	Section <del><b>27, 28, 32, 33, 34,</b></del>	T. <del><b>163</b></del>	R. <del><b>86</b></del>		
	Section <del><b>4, 5</b></del>	T. <del><b>182</b></del>	R. <del><b>86</b></del>		
8) Size of Hole <b>3-D NA</b>	Amt of Charge <b>NA</b>	Depth <b>NA</b>	Source points per sq. mi. <b>198-6846</b>	No. of sq. mi. <b>4.79</b>	9) Must supply latitudes and longitudes of post-plot source and receiver points on an SD card.
Size of Hole <b>2-D</b>	Amt of Charge	Depth	Source points per ln. mi.	No. of ln. mi.	

10) Anticipated special drilling and plugging procedures?  
**NA**

11) Enclose a pre-plot map with proposed location of seismic program lines and powder mag.

Signed <i>David E. Bush</i>	Title <b>Permit Manager</b>	Date <b>October 15, 2009</b>
(This space for State office use)		Conditions of Approval if any  <i>See Attached Letter</i>
Permit No. <b>970179</b>	Approval Date <b>11/16/2009</b>	
Approved by <i>David L. Howe</i>	Title <b>Mineral Resources Permit Manager</b>	
County Approval Sent <b>Renville &amp; Bottineau</b>		



T160N R83W

T160N R84W

13 18 17 16  
 24 19 20 21  
 25 30 29 28  
 36 31 32 33

# Mac Tavish 3D Surface Map

October 15, 2009



**Area Of Interest**  
 Bottineau County  
 North Dakota  
 1944.80 Acres  
 2.67 Square Miles

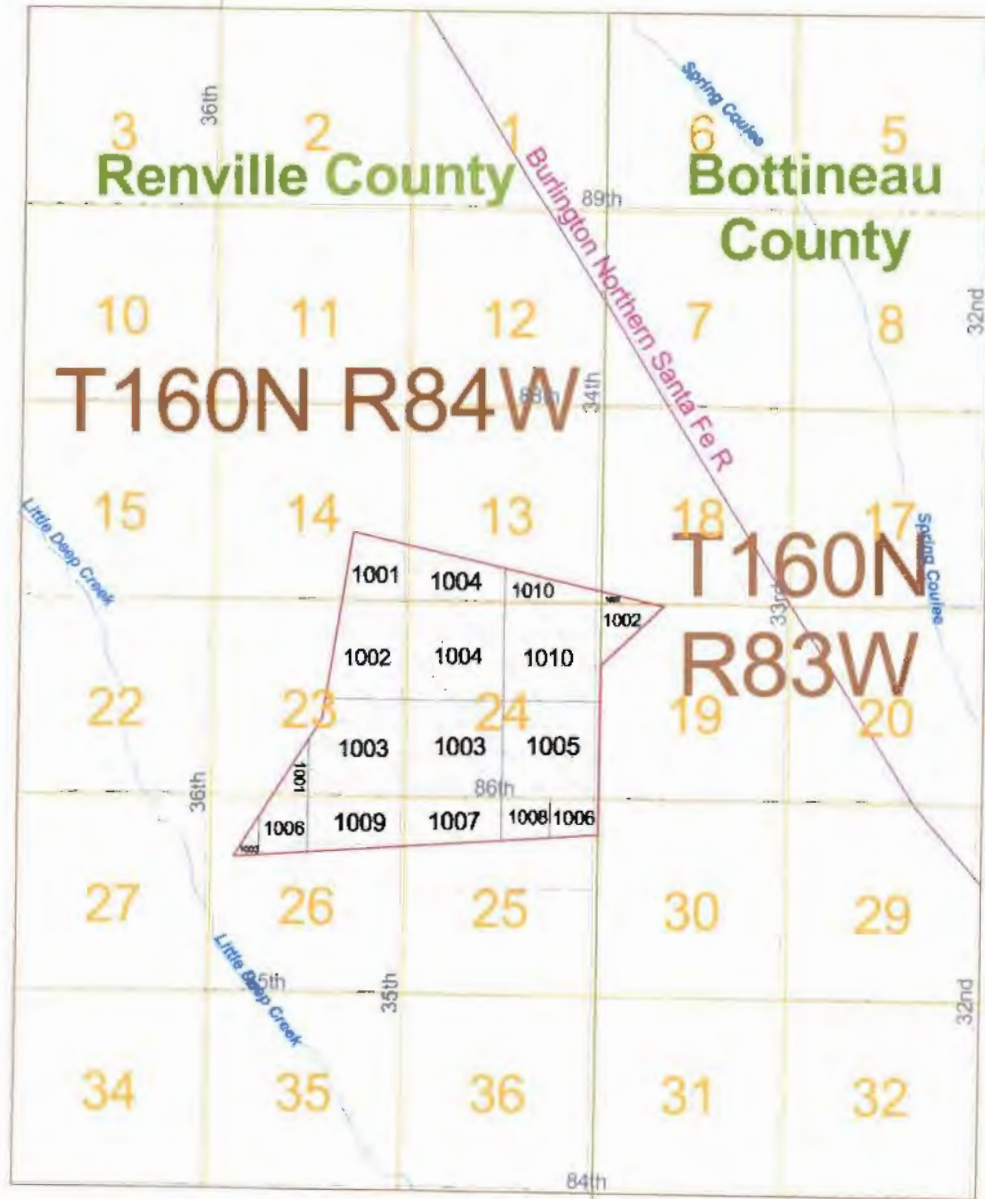


State Plane  
 North Dakota North  
 NAD 83  
 Scale - 1" = 1,000'

- Map Legend**
- Receiver Points
  - Source Points
  - Project Outline
  - Permitted
  - Conditional
  - Cable
  - Site Permit



This map has been carefully prepared from official records, maps, engineering data, photographs and other information, which is provided as a guide only. We accept no responsibility as to its completeness or accuracy, whether expressed or implied.



# Big Mac 3D Surface Map

October 15, 2009



**Area of Interest**  
 Renville & Bottineau  
 Counties  
 North Dakota  
 2 Square Miles  
 1200.00 Acres

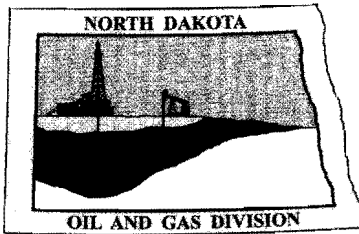
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State Plane  
 North Dakota North  
 NAD 83  
 Scale = 1" = 1,000'

Map Legend	
[Symbol]	Project Outline
[Symbol]	County Lines
[Symbol]	Section Lines
[Symbol]	Water
[Symbol]	Highway
[Symbol]	Proposed
[Symbol]	Existing
[Symbol]	Other





# 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.oilgas.nd.gov](http://www.oilgas.nd.gov)

November 16, 2009

Mr. David Bush  
Permit Manager  
Geokinetics USA, Inc  
1500 CityWest Blvd.  
Suite 800  
Houston, TX 77042

RE: Mac Tavish/Big Mack 3-D  
Geophysical Exploration Permit #97-0179  
Renville & Bottineau Counties

Dear Mr. Bush:

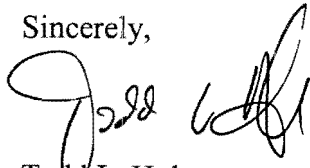
Please be advised that we are in receipt of your Geophysical Exploration permit and it is conditionally approved; effective for one year from November 16, 2009 **Note that this project is near a military installation; contact Captain Eric Dockter at (701) 240-7729.** Review the following conditions for your permit:

1. A pre-program meeting with state seismic inspector Tom Torstenson may be required. You must contact him at 701-290-1546 (cell) or 701-227-7436 at least 24 hours prior to any exploration operations.
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. SD card or email [ttorstenson@nd.gov](mailto:ttorstenson@nd.gov) with all source and receiver points,
  - e. Letter 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 5.
4. The following information must be submitted within 30 days of the completion of the project by the SUBCONTRACTOR(s) (when applicable):
  - a. Plugging Report
  - b. Plugging Affidavit

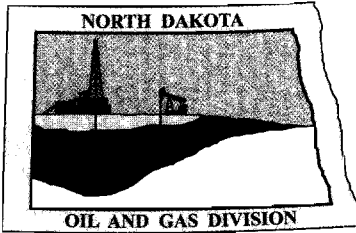
5. It is required that within seven days of initial contact between the permitting agent and the operator of the land, the permitting agent shall provide the operator of the land and each landowner owning land within one-half mile of the land on which geophysical exploration activities are to be conducted 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 a letter with this office confirming compliance with such notification. For your convenience, a copy of both Sections are enclosed.
6. 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.
7. Information for the locations of water wells, springs, etc.; refer to the following ND State Water Commission Mapservice website, at:  
<http://mapservice.swc.state.nd.us/>
8. 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  
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.oilgas.nd.gov](http://www.oilgas.nd.gov)

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November 16, 2009

The Honorable Mae Steich  
Bottineau County Auditor  
314 West 5<sup>th</sup>  
Bottineau, ND 58318-1204

RE: Geophysical Exploration  
Permit # 97-0179

Dear Ms. Steich:

Pursuant to Section 38-08.1-04.2 of the North Dakota Century Code, please be advised that Geokinetics USA Inc. was issued the above captioned permit on November 16, 2009 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>

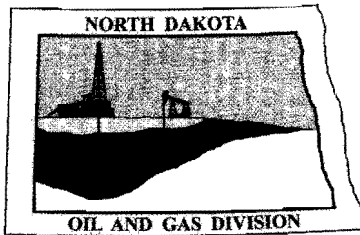
Should you have any questions, please contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd L. Holweger". The signature is stylized and cursive.

Todd L. Holweger  
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**

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November 16, 2009

The Honorable LeAnn Fisher  
Renville County Auditor  
P.O. Box 68  
Mohall, ND 58761

RE: Geophysical Exploration  
Permit # 97-0179

Dear Ms. Fisher:

Pursuant to Section 38-08.1-04.2 of the North Dakota Century Code, please be advised that Geokinetics USA Inc. was issued the above captioned permit on November 16, 2009 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

PERMIT # 970179  
MAC TAVISH - BIG MAC - CLAY 3-D  
POST PLOT MAP

