



# SEISMIC COMPLETION REPORT

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 51456 (03-2005)



Permit No. <b>97-0149</b>	
Shot Hole Operations <b>Shot Hole infill on Shell Lake Wildlife Refuge</b>	*Non-Explosive Operations <b>Vibrosels</b>

## SECTION 1

Geophysical Contractor <b>Quantum Geophysical, Inc.</b>	
Project Name and Number <b>Shell Lake-3D</b>	County(s) <b>Mountrail</b>
Township(s) <b>See Attachments-154N, 155N, 156N, 153N,</b>	Range(s) <b>See Attachments-89W, 90W, 88W</b>
Drilling and Plugging Contractors	
Date Commenced <b>December 11, 2007</b>	Date Completed <b>March 11, 2008</b>

## SECTION 2

First S.P. # <b>5173 1006</b>	Last S.P. # <b>5033 1122</b>												
Loaded Holes (Undetonated Shot Points) <b>One</b>													
S.P.#s	<b>5070-111</b>												
Charge Size	<b>5.5</b>												
Depth	<b>60</b>												
Reasons Holes Were Not Shot <b>Bad cap wire</b>													

## SECTION 3

Flowing Holes and/or Blowouts S.P.#s <b>N/A</b>
Procedure for Plugging Flowing Holes and/or Blowouts <b>N/A</b>
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.

\*Non-Explosive Operations - Complete Section 1 and Affidavit.

**AFFIDAVIT OF COMPLETION (GEOPHYSICAL CONTRACTOR)**

STATE OF Texas )

COUNTY OF Harris )

Before me, Pat Andrews, a Notary Public in and for the said

County and State, this day personally appeared David Bush

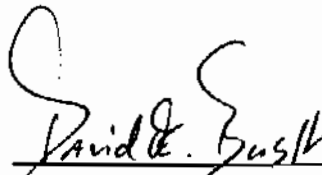
who being first duly sworn, deposes and says that (s)he is employed by Quantum Geophysical, Inc.

\_\_\_\_\_ , 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.



\_\_\_\_\_  
Geophysical Contractor Representative

Subscribed in my presence and sworn before me this 26 day of February, 2009.



Notary Public Patricia S. Andrews

My Commission Expires 03-20-2012

# Oil and Gas Division 970149

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



12/4/2008

JOHN VANCE  
GEOKINETICS USA, INC.  
1500 CITYWEST BLVD.  
HOUSTON, TX 77042

RE: See Attached List of Projects

Dear John:

According to our records, our office has not received a Completion Report or Affidavit of Completion for the attached list of projects. These reports are due thirty days after the completion of the project.

Furthermore, we require a letter confirming that all surface owners have been given 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).

Please submit the report, affidavit, and letter at your earliest convenience.

If you have any questions, feel free to contact our office.

Sincerely,



Richard A. Suggs  
Engineering Technician

List of Projects Missing a Completion Report, Affidavit of Completion, and Letter  
Confirming Surface Owner notification for  
GEOKINETICS USA, INC.

HALVORSON 3-D  
MOUNTRAIL COUNTY  
PERMIT NO. 970155

COMPLETION DATE: 8/30/2008

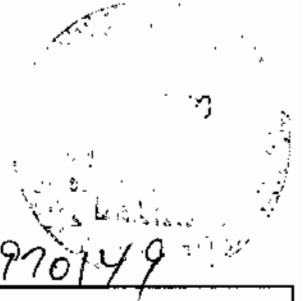
SHELL LAKE 3-D  
MOUNTRAIL COUNTY  
PERMIT NO. 970149

COMPLETION DATE: 3/29/2008



**AFFIDAVIT OF PLUGGING (HOLE PLUGGER)**

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 51457 (03-2005)



PERMIT NUMBER: 970149

**AFFIDAVIT OF PLUGGING (HOLE PLUGGER)**

STATE OF North Dakota )  
 )  
COUNTY OF Ward )

Before me, Sharleen Larson a Notary Public in and for the said  
County and State, this day personally appeared Rick Hovda

who being first duly sworn, deposes and says that (s)he is employed by  
R+P Insulation INC., that (s)he has read North Dakota

Century Code Section 38-08.1 and that the foregoing seismic project has been plugged in  
accordance with North Dakota Administrative Code Rule 43-02-12 and that the statements on  
the attached documents are true.

Rick Hovda  
Hole Plugger Representative

Subscribed in my presence and sworn before me this 11 day of April, 2008.

Notary Public Sharleen Larson

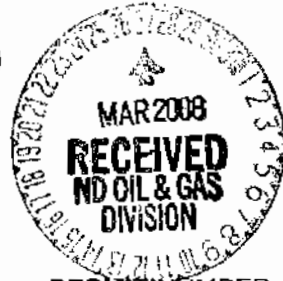
My Commission Expires \_\_\_\_\_

**SHARLEEN LARSON**  
Notary Public  
State of North Dakota  
My commission expires Oct 7, 2010



**AFFIDAVIT OF PLUGGING (HOLE PLUGGER)**

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 51457 (03-2005)



970149

PERMIT NUMBER: GEO-106

**AFFIDAVIT OF PLUGGING (HOLE PLUGGER)**

SHELL LAKE 3-D

STATE OF Montana )

COUNTY OF Richland )

Before me, Lori M. Obergfell a Notary Public in and for the said  
County and State, this day personally appeared Chuck Peterson

who being first duly sworn, deposes and says that (s)he is employed by  
Erickson contract surveying, that (s)he has read North Dakota  
Century Code Section 38-08.1 and that the foregoing seismic project has been plugged in  
accordance with North Dakota Administrative Code Rule 43-02-12 and that the statements on  
the attached documents are true.

Hole Plugger Representative

Subscribed in my presence and sworn before me this 25<sup>th</sup> day of March, 2008.

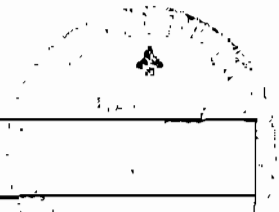
Notary Public: Lori M. Obergfell

My Commission Expires 10-10-2011



# GEOPHYSICAL EXPLORATION PERMIT

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
 OIL AND GAS DIVISION  
 600 EAST BOULEVARD DEPT 405  
 BISMARCK, ND 58505-0840  
 SFN 51459 (03-2005)



1) a. Company <b>Geokinetics USA, Inc.</b>		Address <b>1500 City West Suite 800 Houston, TX 77042</b>	
Contact <b>Bruce Fulker</b>		Telephone <b>(713)840-3380</b>	Fax <b>(713)850-7783</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 Contrat Surveying</b>		Address <b>111 5th SW Sidney, Mt 59270</b>	Telephone <b>(406)482-6606</b>
b. Subcontractor(s)		Address	Telephone
c. Subcontractor(s)		Address	Telephone
3) Party Manager <b>Peter Duncan</b>		Address	Telephone
4) Project Name or Line Numbers <b>Shell Lake 3D</b>			
5) Exploration Method (Shot Hole, Non-Explosive, 2D, 3D) <b>3D Vibroseis (Shot hole infill on Shell Lake Wildlife Refuge)</b>			
6) Approximate Drilling Start Date <b>December 26, 2007</b>		Approximate Completion Date <b>March 30, 2007</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>Mountrail</b>								
Section(s), Township(s) & Range(s)  <i>See Attached Pages</i>				Sec.	T.	R.		
				Sec.	T.	R.		
				Sec.	T.	R.		
				Sec.	T.	R.		
8) Size of Hole	Amt of Charge	Depth	Shots per Mi.(sq.mi.)	No. of Mi. (sq mi.)	Identifying Marks Used on Nonmetallic Plug			
<b>4 in</b>	<b>5.5 lbs</b>	<b>60 ft</b>	<b>144</b>	<b>131</b>	Geophysical ID	a. Plugger ID	b. Plugger ID	c. Plugger ID

9) Anticipated special drilling and plugging procedures?  
**None**

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

Signed <i>BU 24</i>	Title <b>VP Permit Permit Operations</b>	Date <b>December 13, 2007</b>
(This space for State office use)		Conditions of Approval if any  <i>See Attached Letter</i>
Permit No. <i>970149</i>	Approval Date <i>12/21/07</i>	
Approved by <i>[Signature]</i>		
Title <b>Mineral Resources Permit Manager</b>		
County Approval Sent <i>Mountrail County</i>		

\*See Instructions On Reverse Side

<u>Township</u>	<u>Section</u>	<u>Range</u>
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154N	89W	1
154N	89W	2
154N	89W	3
154N	89W	4
154N	89W	5
154N	89W	6
154N	89W	7
154N	89W	8
154N	89W	9
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155N	89W	11
155N	89W	12



155N	89W	13
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153N	88W	21

<b>153N</b>	<b>88W</b>	<b>22</b>
<b>153N</b>	<b>88W</b>	<b>27</b>
<b>153N</b>	<b>88W</b>	<b>28</b>
<b>153N</b>	<b>88W</b>	<b>29</b>
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<b>153N</b>	<b>88W</b>	<b>31</b>
<b>153N</b>	<b>88W</b>	<b>32</b>
<b>153N</b>	<b>88W</b>	<b>33</b>
<b>153N</b>	<b>88W</b>	<b>34</b>



**December 12, 2007**

**North Dakota Industrial Commission  
Oil and Gas Division  
600 E Boulevard Ave, Dept 405  
Bismarck, ND 58505-0840**

**Attn: Mr. Todd Holweger**

**Re: Geokinetics USA, Inc.**

**Dear Mr. Holweger,**

**Enclosed please find Geokinetics USA, Inc., geophysical exploration permit application for the Shell Lake 3D.**

**In addition please find surety bond B004059 in the amount of \$50,000.00 to satisfy requirements of the North Dakota Industrial Commission, Oil and Gas Division covering geophysical operations in the State of North Dakota. Along with the bond for Geokinetics is an assumption of liability rider transferring liabilities that may be outstanding on bond number RLB0002817 in the name of Grant Geophysical to the Geokinetics bond. Grant Geophysical was purchased by Geokinetics September 1, 2006.**

**The Geophysical organizational report for Geokinetics USA, Inc. was sent separately on December 10, 2006.**

**If you have any questions or need additional information please contact me at (713) 840-3380.**

**Sincerely,**

A handwritten signature in black ink, appearing to be "BF 24".

**Bruce Fulker  
Vice President Permit Services  
North American Operations**

**Enclosures:**

# Oil and Gas Division

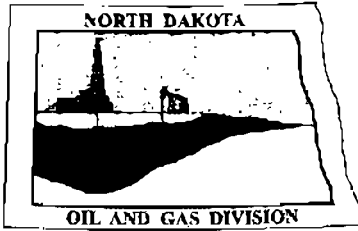
Lynn D. Helms - Director      Bruce L. Hicks - Assistant Director

**Department of Mineral Resources**

Lynn D. Helms - Director

**North Dakota Industrial Commission**

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



December 21, 2007

The Honorable Joan Hollekim  
Mountrail County Auditor  
P.O. Box 69  
Stanley, ND 58784

RE:    Geophysical Exploration  
       Permit #97-0149

Dear Ms. Hollekim:

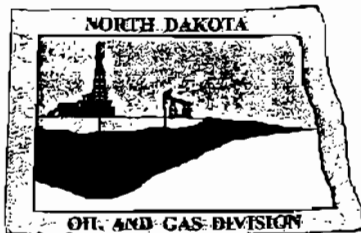
Pursuant to Section 38-08.1-04.2 of the North Dakota Century Code, please be advised that Geokinetics USA, Inc. was issued the above captioned permit on December 21, 2007 and will remain in effect for a period of one year. The entire permit can be viewed on our website at: <https://www.dmr.nd.gov/oilgas/seismic/seismicstats.asp>

Should you have any questions, please contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd L. Holweger", written in a cursive style.

Todd L. Holweger  
DMR 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)

December 21, 2007

Mr. Bruce Fulker  
Vice President Permit Services  
Geokinetics USA, Inc  
1500 CityWest Blvd.  
Suite 800  
Houston, TX 77042

RE: Shell Lake 3-D  
Geophysical Exploration Permit #97-0149  
Mountrail County

Dear Mr. Fulker:

Please be advised that we are in receipt of your Geophysical Exploration permit and it is conditionally approved; effective for one year from December 21, 2007. 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 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 an affidavit 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