

Point Key
○ Source Point
+ Receiver Point

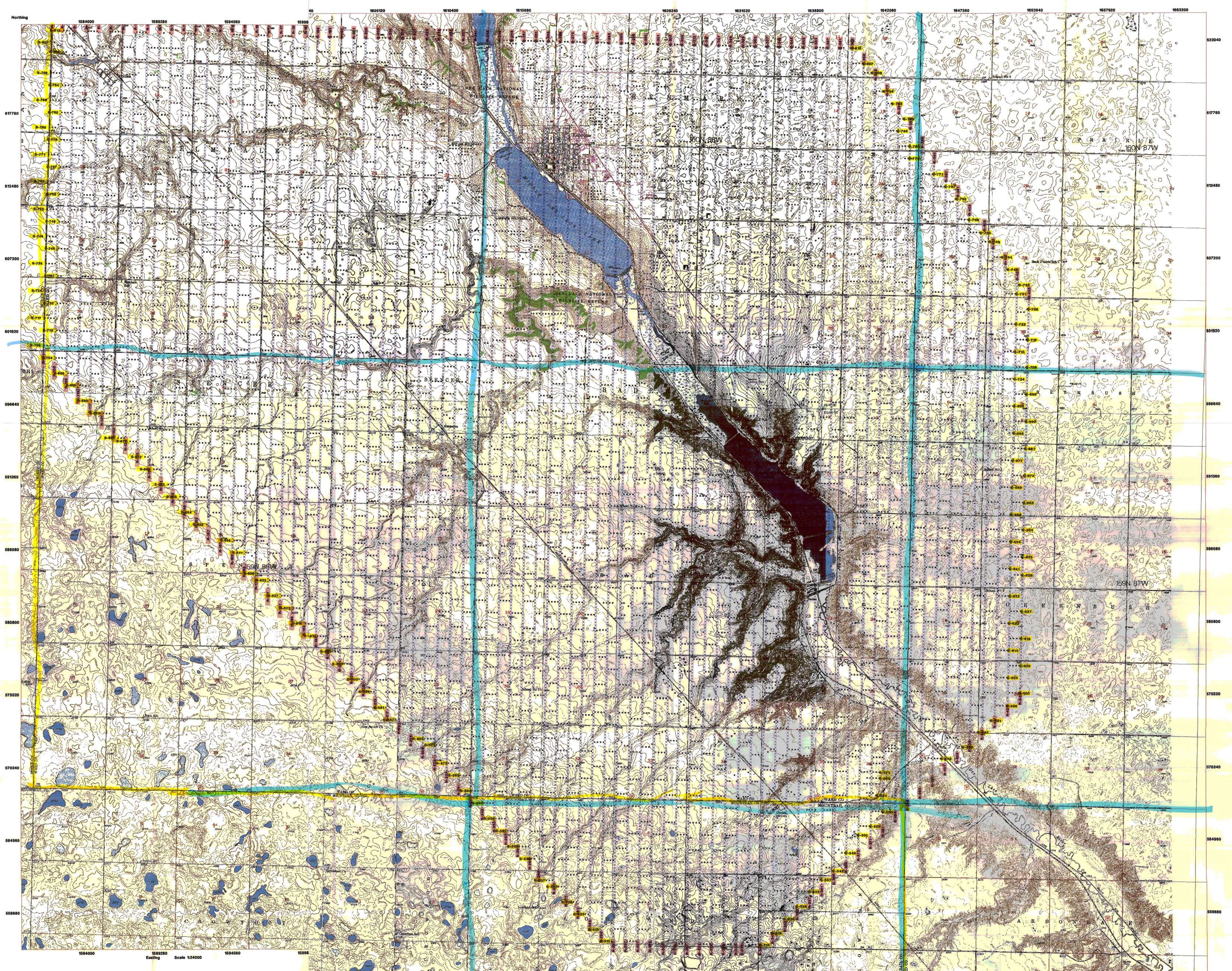


OXY Oxy Petroleum
Souris Valley 3D Project
Final Point Location Map

OXY Oxy Petroleum
Souris Valley
Final Point Location Map

OXY Oxy Petroleum
Souris Valley 3D Project
Final Point Location Map

North Dakota
Ward Co.



North
 0 600 1200
 Scale 1:24,000

Oxy Petroleum
 Souris Valley 3D Project
 'As Recorded' Final Survey Topo Basemap

Oxy Petroleum
 Souris Valley 3D Project
 'As Recorded' Final Survey Topo Basemap

Oxy Petroleum
 Souris Valley 3D Project
 'As Recorded' Final Survey Topo Basemap

Oxy Petroleum
 Souris Valley 3D Project
 'As Recorded' Final Survey Topo Basemap
 970031
 Schlumberger
 Geoco-Prints

NORTH DAKOTA INDUSTRIAL COMMISSION

OIL AND GAS DIVISION

Lynn D. Helms
DIRECTOR

<http://explorer.ndic.state.nd.us>

F.E. Wilborn
ASSISTANT DIRECTOR

October 16, 1998

Mr. Bob Morgan
GECO-Prakla
9900 W. Interstate 20
Midland, TX 79706

**RE: Completion Information
Souris Valley 3D
ND Permit No. 97-0031**

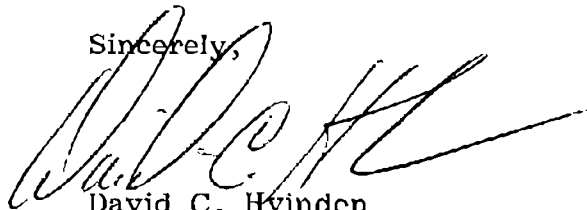
Dear Mr. Morgan:

Please be advised that pursuant to North Dakota Administrative Code Section 43-02-12-06 (enclosed) any person performing geophysical exploration shall file a seismic completion report within thirty days of completion of the project.

For your convenience I have enclosed a few copies of our seismic completion reports. Please complete and submit the report and affidavit along with the required post-plot map.

Should you have any questions with regard to this matter, feel free to contact our office.

Sincerely,



David C. Hvinden
Geophysical Regulation Supervisor

DCH/dh
enc.

2nd NOTICE 11-12-98 DCH



SEISMIC COMPLETION REPORT
 INDUSTRIAL COMMISSION OF NORTH DAKOTA
 OIL AND GAS DIVISION
 SFN 51458 (11-97)

600 E BOULEVARD AVE
 BISMARCK, ND 58505

| | |
|---|----------------------------|
| PERMIT NO.: 97-0031 | |
| SHOT HOLE OPERATIONS: <input checked="" type="checkbox"/> | *NON-EXPLOSIVE OPERATIONS: |

SECTION 1

| | |
|---|--|
| GEOPHYSICAL CONTRACTOR: GECO PRAXLA | |
| PROJECT NAME AND NUMBER: SOURLS VALLEY 3D, PROJ #: 310474 | COUNTY(S): WARD AND MOUNTRAIL COUNTY |
| TOWNSHIP(S): | RANGE(S): |
| DRILLING & PLUGGING CONTRACTORS: DAVE BONE DRILLING AND HOLE PLUGGING, EXPLORATION INC., DIAMOND M DRILLING, HELIPORTABLE DRILLING INC, NORTH RIVER EXPLORATION, TUMBLEWEED DRILLING AND HOLE PLUGGING | |
| DATE COMMENCED: | DATE COMPLETED: |

SECTION 2

| | |
|---|--------------|
| FIRST S.P. #: | LAST S.P. #: |
| LOADED HOLES (UNDETONATED SHOT POINTS) PLEASE FIND ATTACHED LIST NAMED SKIPPED POINTS | |
| S.P. #'s: | |
| CHARGE SIZE:: | |
| DEPTH: | |
| REASONS HOLES WERE NOT SHOT: | |

SECTION 3

| |
|--|
| FLOWING HOLES AND/OR BLOWOUTS: S.P.#'s FLOWING HOLES: 807/141, 735/158, 735/150, 740/212 (total of 4) BLOWOUTS: 699/118, 735/158, 767/177, 807/197, 771/269, 704/324, 591/374, 623/356, 681/342, 519/317, 591/374, 699/118 (total of 12) |
| PROCEDURE FOR PLUGGING FLOWING HOLES: AND/OR BLOWOUTS: FLOWING HOLES: A rubber bladder filled with air was put down the hole and this was cemented in. BLOWOUTS: Filled with bentonite |

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.

#970031

AFFIDAVIT OF COMPLETION (GEOPHYSICAL CONTRACTOR)

STATE OF NORTH DAKOTA)
)
COUNTY OF Ward and Mountrail)

Before me, Jackie Kerley, a Notary Public in and for the said County and State, this day personally appeared Scott Jotham who being first duly sworn, deposes and says that (s)he is employed by Schlumberger Geo-Pratte, 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.

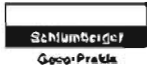


Scott A Jotham
Geophysical Contractor Representative

Subscribed in my presence and sworn before me this 5 day of January, 1999.

Notary Public Jackie Kerley

My Commission Expires May 20, 2000



Orv Petroleum - Squirly Valley 3D

Skipped Points

| Date | Line | Point | FFID | Reason | Depth of Source | Charge Size |
|--------|------|-------|-----------|--|-----------------|-------------|
| 16-Aug | 519 | 312 | 6922 | cap only | 90 FT | 5 LB |
| 17-Aug | 542 | 308 | 7044 | cap only | 60 FT | 5 LB |
| 24-Aug | 582 | 237 | 8200 | instrument error | 60 FT | 5 LB |
| 16-Aug | 587 | 314 | 8835 | bad cap | 50 FT | 5 LB |
| 27-Jul | 591 | 414 | 5006 | dead cap | 58 FT | 5 LB |
| 29-Jul | 605 | 394 | 5308-5309 | dead cap | 50 FT | 5 LB |
| 19-Aug | 608 | 285 | | skipped Aug 19 | 80 FT | 5 LB |
| 22-Aug | 614 | 285 | | no leads | 57 FT | 5 LB |
| 14-Aug | 618 | 319 | | skipped Aug 14 | 80 FT | 5 LB |
| 28-Jul | 623 | 411 | 5081-5082 | dead cap | 81 FT | 5 LB |
| 28-Jul | 627 | 407 | 5147 | cap only | 51 FT | 5 LB |
| 16-Aug | 641 | 306 | 8997 | bad cap | 40 FT | 5 LB |
| 14-Aug | 641 | 324 | | no leads or cap because farmer plowed them | 60 FT | 5 LB |
| 28-Jul | 641 | 412 | 5071-5072 | dead cap | 60 FT | 5 LBS |
| 14-Aug | 650 | 322 | | no leads or cap | 65 FT | 5 LB |
| 28-Aug | 654 | 175 | 8869 | dead cap | 60 FT | 2.2 LB |
| 28-Jul | 654 | 405 | 5131 | cap only | 58 FT | 5 LB |
| 27-Jul | 659 | 419 | 4938 | cap only | 60 FT | 5 LB |
| 27-Aug | 683 | 182 | | dead cap | 57 FT | 5 LB |
| 21-Aug | 677 | 274 | 7806 | dead cap | 60 FT | 5 LB |
| 31-Jul | 681 | 383 | 5488 | cap only | 80 FT | 2.2 LB |
| 28-Jul | 686 | 410 | 4886 | cap only | 60 FT | 5 LB |
| 24-Jul | 699 | 382 | 4549-4550 | dead cap | 60 FT | 5 LB |
| 24-Jul | 704 | 379 | 4552 | dead cap | 60 FT | 5 LB |
| 25-Jul | 704 | 396 | 4668-4870 | dead cap | 55 FT | 5 LB |
| 21-Jul | 731 | 355 | 4144 | recorded on same record as 749/353 | 60 FT | 5 LB |
| 22-Jul | 735 | 360 | 4184-4185 | dead cap | 60 FT | 5 LB |
| 8-Jun | 740 | 163 | 1000 | dead cap | 60 FT | 5 LB |
| 25-Jun | 740 | 241 | 2291-2292 | dead cap | 60 FT | 5 LB |
| 3-Jun | 744 | 117 | 302 | instrument error/lost record | 60 FT | 5 LB |
| 4-Jun | 744 | 127 | 424-426 | dead cap | 60 FT | 5 LB |
| 10-Jun | 744 | 184 | 1282 | dead cap | 52 FT | 5 LB |
| 26-Jul | 744 | 407 | 4784-4785 | dead cap | 55 FT | 5 LB |
| 3-Jun | 749 | 113 | 137-138 | dead cap | 30 FT | 5 LB |
| 21-Jul | 749 | 353 | 4144 | recorded on same record as 731/353 | 60 FT | 5 LB |
| 4-Jun | 758 | 131 | 436-438 | dead cap | 60 FT | 5 LB |
| 4-Jun | 758 | 132 | | leads broke down hole | 80 FT | 5 LB |
| 4-Jul | 758 | 283 | 2943-2944 | dead cap | 90 FT | 5 LB |
| 8-Jun | 762 | 152 | 790 | instrument error/lost record | 60 FT | 5 LB |
| 7-Jul | 767 | 338 | 3825 | dead cap | 80 FT | 5 LB |
| 11-Jun | 771 | 191 | 1418 | dead cap | 60 FT | 5 LB |
| 18-Jul | 771 | 343 | 3902 | instrument error | 60 FT | 5 LB |
| 4-Jun | 780 | 135 | | instrument error/lost record | 60 FT | 2.2 LB |
| 15-Jul | 780 | 325 | 3642 | cap only | 55 FT | 2.2 LB |
| 18-Jul | 780 | 341 | | bad leads | 60 FT | 5 LB |
| 21-Jul | 785 | 355 | 4115 | cap only | 50 FT | 5 LB |
| 4-Jun | 789 | 134 | 528&533 | dead cap | 60 FT | 5 LB |
| 7-Jun | 789 | 160 | 916&921 | dead cap | 60 FT | 5 LB |
| 12-Jul | 798 | 309 | 3350 | instrument error/lost record | 59 FT | 5 LB |
| 15-Jun | 807 | 222 | 1907-1908 | dead cap | 55 FT | 2.2 LB |
| 4-Jun | 812 | 139 | | instrument error/lost record | 60 FT | 2.2 LB |



**GEOPHYSICAL EXPLORATION PERMIT
 INDUSTRIAL COMMISSION OF NORTH DAKOTA
 OIL AND GAS DIVISION
 57N 51429 (11-97)**

1) Company: (A SUBSIDIARY OF SCHLUMBERGER) **GECO-PRAKLA (TECH. CORP)** Address: **9900 WEST INTERSTATE 20 MIDLAND TX 79706**

Contact: **BOB MORGAN** Telephone: **403 250-7300** Fax: **403-250-8444**
MARK O'BYRNE (915) 561-8484 (915) 561-8495

Surety Company: **LIBERTY MUTUAL INS.** Bond Amount: **\$50,000.00** Bond Number: **16-000-969**

2) a. Subcontractor(s): **NORTH RIVER DRILLING** Address: **316 - 7th AVE DICKINSON, N.D.** Telephone: **(701) 227-0309**

b. Subcontractor(s): **TUMBLEWEED DRILLING** Address: **10120 - 111 Ave SE. MINOT, N.D.** Telephone: **(701) 624-5617**

c. Subcontractor(s): **EXPLORATION DRILLING** Address: **RR #2 BOX 2150 SIDNEY, MONT.** Telephone: **(406) 482-3553**

3) Party Manager: **LES PEKNIK** Address: **FAN WAY VE MOTEL KENMARE, N.D 58746** Telephone: **(701) 385-3314**

4) Project Name or Line Numbers: **SOURIS VALLEY 3D**

5) Exploration Method (Shot Hole, Non-Explosive, 2D, 3D): **DYNAMITE 3D**

6) Approximate Drilling Start Date: **FEB. 19, 1998** Approximate Completion Date: **MAR. 15, 1998**

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

7) Location of Proposed Project - County: **WARD CO. N.D.**

| | | | |
|--|------|---------|----------|
| Sections, Townships & Range(s) SEE MAP FOR SPECIFICS | Sec. | T 158 N | R 87-89W |
| | Sec. | T 159 N | R 87-89W |
| | Sec. | T 160 N | R 87-89W |
| | 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 | | |
|------------------------|----------------|--------------|------------------------|----------------------|--|---------------|---------------|
| 3 1/2" DIAMETER | 5 LBS | 60 FT | 65 | 125 | Geophysical ID | a. Plugger ID | b. Plugger ID |
| | | | | | 5276P | | |

9) Anticipated special drilling and plugging procedures?
MAY NEED BUGGY MOUNT TOP DRIVE AUGER DRILL

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

Signed: **Bob Morgan** Title: **Project Manager** Date: **Feb. 16/98**

(This space for State office use) Approval Date: **3/11/98** Conditions of approval if any: **conditionally approved 2-17-98**

Geophysical Reg. Supervisor
David O. Hill
 Ward Co., Minn Co.

NORTH DAKOTA INDUSTRIAL COMMISSION

OIL AND GAS DIVISION

Wesley D. Norton
DIRECTOR

F.E. Wilborn
ASSISTANT DIRECTOR

March 16 ,1998

Mark O'Byrne
Geco-Prakla
Schulmberger Tech. Corp.
9900 W. Interstate 20
Midland, TX 79706

**RE: GEOPHYSICAL EXPLORATION PERMIT NO. 97-0031
Souris Valley 3D
Ward & Mountrail Counties**

Dear Mr. O'Byrne:

This letter will verify the approval of the above-captioned Geophysical Permit effective March 11, 1998.

Please feel free to contact Mr. David Hvinden, Geophysical Regulation Supervisor if you should have any questions.

Sincerely,


Marge Rixen
Legal Assistant

/mr

NORTH DAKOTA INDUSTRIAL COMMISSION

OIL AND GAS DIVISION

Wesley D Norton
DIRECTOR

F.E. Wilborn
ASSISTANT DIRECTOR

March 11, 1998

The Honorable Karen H. Eliason
Mountrail County Auditor
P.O. Box 69
Stanley, ND 58784

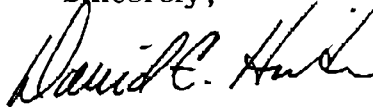
**RE: Geophysical Exploration
Permit #97-0031**

Dear Ms. Eliason:

Pursuant to Section 38-08.1-04.2 of the North Dakota Century Code, please be advised that Geco-Prakla/Schlumberger was issued the above captioned permit on February 17, 1998 and will remain in effect for a period of one year.

Should you have any questions, please contact our office.

Sincerely,



David C. Hvinden
Geophysical Regulation Supervisor

DCH/th

NORTH DAKOTA INDUSTRIAL COMMISSION

OIL AND GAS DIVISION

Wesley D. Norton
DIRECTOR

F.E. Wilborn
ASSISTANT DIRECTOR

March 11, 1998

The Honorable David Senger
Ward County Auditor
315 3rd Street Southeast
Minot, ND 58701

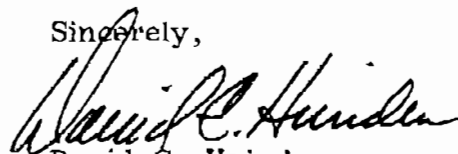
**RE: Geophysical Exploration
Permit #97-0031**

Dear Mr. Senger:

Pursuant to Section 38-08.1-04.2 of the North Dakota Century Code, please be advised that Geco-Prakla/Schlumberger was issued the above captioned permit on February 17, 1998 and will remain in effect for a period of one year.

Should you have any questions, please contact our office.

Sincerely,



David C. Hvinden
Geophysical Regulation Supervisor

DCH/th