

# MarcellusGas.Org

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# pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NORTHWEST REGIONAL OFFICE

February 23, 2010

**CERTIFIED MAIL NO.** [REDACTED] **and via FACSIMILE**

Mr. Paul Aiello, President  
Aiello Brothers Oil and Gas, Inc.  
611 Interstate Parkway  
Bradford, PA 16701

Re: Order of the Department  
McKean County

Dear Mr. Aiello:

Enclosed please find an Order from the Department of Environmental protection issued to Schreiner Oil and Gas, Inc.

If you have any questions, please contact our office at 814.332.6860.

Sincerely,

S. Craig Lobins  
Regional Manager  
Oil and Gas Management

Enclosure

cc: Mr. Michael Schreiner, President (w/enclosure)

[REDACTED] (w/enclosure)  
[REDACTED] (w/enclosure)  
[REDACTED] (w/enclosure)  
[REDACTED] (w/enclosure)  
[REDACTED] (w/enclosure)  
[REDACTED] (w/enclosure)  
[REDACTED] (w/enclosure)  
[REDACTED] (w/enclosure)

C. Lobins (w/enclosure)  
A. Opredek (w/enclosure)  
R. Maykowski (w/enclosure)  
D. Duffy (w/enclosure)  
File (w/enclosure)

SCL:ACO:jb

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:

Schreiner Oil and Gas, Inc. : Violations of the Oil and Gas Act  
Wells in McKean County : and the Clean Streams Law  
:

ORDER

AND NOW, this 23<sup>rd</sup> day of February, 2010, the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department") has found and determined the following:

A. The Department is the agency with the duty and authority to administer and enforce the Oil and Gas Act, Act of December 19, 1984, P.L. 1140, *as amended*, 58 P.S. §§601.101-601.605 ("Oil and Gas Act"); The Clean Streams Law, Act of June 22, 1937, P.L. 1987, *as amended*, 35 P.S. §§691.1-691.1001 ("Clean Streams Law"); Section 1917-A of the Administrative Code of 1929, Act of April 9, 1929; P.L. 177, *as amended*, 71 P.S. §§510-17 ("Administrative Code"); and the rules and regulations promulgated thereunder ("Regulations").

B. Schreiner Oil and Gas, Inc. ("Schreiner") is an Ohio corporation engaged in various oil and gas exploration activities in Bradford and Corydon Townships, McKean County, Pennsylvania. Schreiner's business address is 7447 Arlington Avenue NW, Massillon, OH 44646.

C. Schreiner is the "owner" and "operator," as those terms are defined in Section 103 of the Oil and Gas Act, 58 P.S. §601.103, of 27 gas wells permitted by the Department and located in Bradford Township, McKean County. These 27 wells are listed in Exhibit A which is attached and incorporated herein ("the Wells").

D. From approximately July 2008, through February 2009, Schreiner drilled the Wells. During that time, no other person or entity was actively drilling gas wells within 3600 feet of the residences located along [REDACTED] and [REDACTED] in Bradford Township that are the subject of this Order.

E. On November 6, 2008, the Department inspected Well [REDACTED] and [REDACTED] and found that each of these Wells exceeded the maximum allowable casing seat pressure in violation of 25 Pa. Code §78.73(b). On November 13, 2008, the Department sent Schreiner a Notice of Violation Letter for these violations. As of the date of this Order, Schreiner has corrected these violations.

F. On March 3, 2009, the Department inspected Well [REDACTED] (second violation), and [REDACTED] and found that each of these Wells exceeded the maximum allowable casing seat pressure in violation of 25 Pa. Code §78.73(b). On March 20, 2009, the Department sent Schreiner a Notice of Violation for these violations. As of the date of this Order, Schreiner has corrected these violations.

G. In addition to the Wells, Schreiner was authorized under Permit No. [REDACTED] from the Department to drill Well [REDACTED] in Bradford Township, McKean County. Permit No. [REDACTED] expires on April 7, 2010. As of the date of this Order, Schreiner has not drilled Well [REDACTED]

H. Schreiner did not sample any residential drinking water supplies before it drilled the Wells.

I. After Schreiner drilled some of the Wells, the Department received complaints from persons residing along [REDACTED] and [REDACTED] in Bradford Township, McKean County that their drinking water supplies had been impacted.

J. In response to the complaints, the Department inspected water supplies that served residences located along [REDACTED] and [REDACTED] and determined that nine of the residential water supplies were affected by "pollution" as that term is defined in Section 1 of the Clean Streams Law, 35 P.S. §691.1.

K. 1. As of the date of this Order, Schreiner had restored or replaced seven of the nine affected residential water supplies with an alternative source of water adequate in quantity and

quality for the purposes served by the supply. The seven restored or replaced drinking water supplies serve the following residences:

| <u>Owners</u> | <u>Address</u>     |
|---------------|--------------------|
| [REDACTED]    | Bradford, PA 16701 |
| [REDACTED]    | Bradford, PA 16701 |
| [REDACTED]    | Bradford, PA 16701 |
| [REDACTED]    | Bradford, PA 16701 |
| [REDACTED]    | Bradford, PA 16701 |
| [REDACTED]    | Bradford, PA 16701 |
| [REDACTED]    | Bradford, PA 16701 |

2. This Order concerns, among other things, the continuing maintenance of the seven restored drinking water supplies identified in Paragraph K.I., above, and the actions necessary to address the ongoing pollution of the drinking water supplies that serve the residences located on [REDACTED] that are owned by [REDACTED] and by [REDACTED]

Pollution of the [REDACTED] Water Supply

L. [REDACTED] are adult individuals who reside at [REDACTED] [REDACTED] Bradford, PA 16701. A drilled well provided drinking water to the [REDACTED] residence ([REDACTED] Water Supply"), and this drinking water well was located near the Wells as identified in Exhibit A.

M. [REDACTED] informed the Department that he had collected samples from the [REDACTED] [REDACTED] Water Supply on July 24, 2008, and sent the samples to Microbac Labs. [REDACTED] provided the Department with copies of the analyses by Microbac Labs which identified that methane and ethane gas were not detected in the samples collected by [REDACTED] on July 24, 2008.

N. On October 27, 2008, the Department inspected the [REDACTED] Water Supply and found 4% combustible gas present in the headspace of the drinking water well. Sampling conducted by the Department during this inspection also confirmed the presence in the [REDACTED]

Water Supply of dissolved methane gas at a concentration of 8.16 milligrams per liter (“mg/l”), and the presence of dissolved ethane gas at a concentration of 1.49 mg/l.

O. In accordance with Section 208(b) of the Oil and Gas Act, 58 P.S. §601.208(b), the Department determined that the Water Supply was affected by “pollution” as that term is defined in Section 1 of the Clean Streams Law, 35 P.S. §691.1, and that Schreiner’s drilling activities at the Wells were responsible for the pollution to the Water Supply.

P. On February 3, 2009, Schreiner drilled a new drinking water well to serve the residence (Water Supply”), and soon thereafter plugged the old drinking water well that served as the Water Supply.

Q. On various dates from February 12, 2009, until February 4, 2010, the Department sampled the Water Supply before and after treatment. While no free gas was detected in the new drinking water well, trace amounts of dissolved methane and ethane gas were present in the water samples. The Department also found that, before treatment, the Water Supply contains total dissolved solids, chlorides, manganese, and iron above the maximum contaminant levels (“MCLs”) for each parameter allowed under the Pennsylvania Safe Drinking Water Act Regulations at 25 Pa. Code §109.202.

R. On or about April 27, 2009, Schreiner installed a water softener and reverse osmosis treatment system at the residence. The water softener treats the water in the entire residence. However, the reverse osmosis system only treats the water to the kitchen sink faucet in the residence.

S. On August 25, 2009 and February 4, 2010, the Department sampled the Water Supply after treatment by the water softener alone and after treatment by the water softener combined with the reverse osmosis system. The samples show that the water softener *combined*

with the reverse osmosis system treats the water provided to the kitchen sink faucet to below the MCLs for total dissolved solids, chlorides, manganese, and iron. However, the water softener *alone* does not provide sufficient treatment as shown by the fact that the water provided to the rest of the [REDACTED] residence contains total dissolved solids and chlorides at levels above the MCLs for those parameters.

T. On October 2, 2009, the Department issued a Notice of Violation to Schreiner regarding its failure to restore or replace the [REDACTED] Water Supply to levels below MCLs as described in Paragraph S, above.

Pollution of the [REDACTED] Water Supply

U. [REDACTED] are adult individuals who reside at [REDACTED] [REDACTED] Bradford, PA 16701. A drilled well provided drinking water to the [REDACTED] residence ([REDACTED] Water Supply"), and this drinking water well was located near the Wells as identified in Exhibit A.

V. On March 16, 2009, the Department inspected the [REDACTED] Water Supply and found 40% combustible gas present in the headspace of the drinking water well. Sampling conducted by the Department during this inspection also confirmed the presence in the [REDACTED] [REDACTED] Water Supply of dissolved methane gas at a concentration of 14.0 mg/l, and the presence of dissolved ethane gas at a concentration of 4.42 mg/l.

W. In accordance with Section 208(b) of the Oil and Gas Act, 58 P.S. §601.208(b), the Department determined that the [REDACTED] Water Supply was affected by "pollution" as that term is defined in Section 1 of the Clean Streams Law, 35 P.S. §691.1, and that Schreiner's drilling activities at the Wells were responsible for the pollution to the [REDACTED] Water Supply.

X. By May 31, 2009, Schreiner drilled a new drinking water well to supply the [REDACTED] residence ([REDACTED] Water Supply”).

Y. On various dates from June 3, 2009, until February 2, 2010, the Department sampled the [REDACTED] Water Supply before and/or after treatment. While no free gas was detected in the new drinking water well, dissolved methane and ethane gas were present in the water samples, but at levels lower than in the samples taken from the old drinking water well on March 16, 2009. The Department also found that, like the [REDACTED] Water Supply, before treatment the [REDACTED] Water Supply had contained total dissolved solids, chlorides, manganese, and/or iron at levels above the MCLs for each parameter allowed under the Pennsylvania Safe Drinking Water Act Regulations at 25 Pa. Code §109.202.

Z. On or about July 27, 2009, Schreiner installed a water softener and a reverse osmosis treatment system at the [REDACTED] residence. The water softener treats all of the water in the [REDACTED] residence. However, the reverse osmosis system only treats the water to the kitchen sink faucet in the [REDACTED] residence.

AA. On various dates from August 20, 2009, until February 2, 2010, the Department sampled the [REDACTED] Water Supply after treatment by the water softener and after treatment by the water softener combined with the reverse osmosis system. The samples show that the water softener *combined* with the reverse osmosis system treats the water provided to the kitchen sink faucet to below the MCLs for total dissolved solids, chlorides, manganese, and iron. However, the water softener *alone* does not provide sufficient treatment as shown by the fact that the water provided to the rest of the [REDACTED] residence contains total dissolved solids at levels above the MCL for that parameter.



AB. On October 19, 2009, the Department issued a Notice of Violation to Schreiner regarding its failure to restore or replace the [REDACTED] Water Supply to levels below MCLs as described in Paragraph AA, above.

Violations for Failure to Restore/Replace Water Supplies and Unpermitted Water Pollution

AC. Section 208(a) of the Oil and Gas Act, 58 P.S. §601.208(a), requires well operators who affect a public or private water supply by pollution or diminution to “restore or replace the affected water supply with an alternative source of water adequate in quantity or quality for the purpose served by the supply.”

AD. The Regulations at 25 Pa. Code §78.51(d), require that an “operator shall affirmatively demonstrate to the Department’s satisfaction that the quality of the restored or replaced water supply to be used for human consumption is at least equal to the quality of the water supply before it was affected by the operator. If the quality of the water before it was affected by the operator cannot be affirmatively established, the operator shall demonstrate that the concentrations of substances in the restored or replaced water supply do not exceed the primary and secondary MCLs established under §109.202 (relating to State MCLs, MRDLs and treatment technique requirements).”

AE. The Regulations at 25 Pa. Code §78.51(f), state that “the oil or gas well operator’s duty to replace or restore a water supply includes providing plumbing, conveyance, pumping or auxiliary facilities necessary for the surface landowner or water purveyor to utilize the water supply.”

AF. Because it contains total dissolved solids and chlorides above the MCLs for these parameters, Schreiner has not restored or replaced the drinking water that serves the *entire* [REDACTED]

residence with an alternative source of water adequate in quantity and quality for the purposes served by the supply.

AG. Because it contains total dissolved solids above the MCL for that parameter, Schreiner has not restored or replaced the drinking water that serves the *entire* [REDACTED] residence with an alternative source of water adequate in quantity and quality for the purposes served by the supply.

AH. Schreiner's failure to adequately restore or replace the drinking water that serves the *entire* [REDACTED] residence and that serves the *entire* [REDACTED] residence constitutes violations of Section 208(a) of the Oil and Gas Act, 58 P.S. §601.208(a), and 25 Pa. Code §78.51(d); constitutes unlawful conduct pursuant to Section 509 of the Oil and Gas Act, 58 P.S. §601.509; a public nuisance pursuant to Section 502 of the Oil and Gas Act, 58 P.S. §601.502; and subjects Schreiner to civil penalty liability pursuant to Section 506 of the Oil and Gas Act, 58 P.S. §601.506.

AI. The fresh groundwater supplying the [REDACTED] Water Supply and the [REDACTED] Water Supply are "waters of the Commonwealth" as that term is defined in Section 1 of the Clean Streams Law, 35 P.S. §691.1.

AJ. Methane and ethane gases produced as a result of Schreiner's drilling activities at the Wells and that migrated/entered into fresh groundwater are "industrial wastes" and "pollution" as those terms are defined in Section 1 of the Clean Streams Law, 35 P.S. §691.1.

AK. The unpermitted migration/entrance of industrial wastes and pollution from Schreiner's drilling activities at the Wells into waters of the Commonwealth violates Sections 301, 307, 401, and 402 of the Clean Streams Law, 35 P.S. §§691.301, 691.307, 691.401, and 691.402; is contrary to the requirements of 25 Pa. Code §78.73(a); constitutes unlawful conduct pursuant to Section 611 of the Clean Streams Law, 35 P.S. §691.611, and Section 509 of the Oil and Gas Act, 58

P.S. §601.509; constitutes a public nuisance pursuant to Section 401 of the Clean Streams Law, 35 P.S. §691.401, and Section 502 of the Oil and Gas Act, 58 P.S. §601.502; and subjects Schreiner to civil penalty liability pursuant to Section 605 of the Clean Streams Law, 35 P.S. §691.605, and Section 506 of the Oil and Gas Act, 58 P.S. §601.506.

**Prevention of Further Gas Migration**

AL. On May 7, 2009, the Department met with Schreiner and requested that it equip all of the Wells with a sufficient string of intermediate or production casing on a packer to prevent the migration/entrance of gas or fluids from those Wells into sources of fresh groundwater and to prevent pollution or diminution of fresh groundwater in accordance with Section 207 of the Oil and Gas Act, 58 P.S. §601.207, and 25 Pa. Code §78.73(a).

AM. As of the date of this Order, Schreiner has equipped all of the Wells with such intermediate or production casing on a packer except for Well [REDACTED] and [REDACTED]

**Abandoned Wells**

AN. Section 210(a) of the Oil and Gas Act, 58 P.S. §601.210(a), requires an operator to plug a well upon abandonment unless the Department has granted inactive status for such well pursuant to Section 204 of the Oil and Gas Act, 58 P.S. §601.204.

AO. Schreiner is the "owner" and "operator," as those terms are defined in Section 103 of the Oil and Gas Act, 58 P.S. §601.103, of 15 gas wells permitted by the Department and located in Bradford and Corydon Townships, McKean County. These 15 wells are "Abandoned Wells" as that term is defined in Section 103 of the Oil and Gas Act, 58 P.S. §601.103, because they have not been produced for at least the past 12 months and/or are missing the equipment necessary for production, and they have not been granted inactive status pursuant to Section 204 of the Oil and Gas Act, 58

P.S. §601.204. The Abandoned Wells are listed in Exhibit B which is attached and incorporated herein.

AP. On December 12, 2009, and February 10, 2010, the Department sent Notices of Violation to Schreiner regarding the Abandoned Wells. As of the date of this Order, Schreiner has neither plugged the Abandoned Wells nor obtained inactive status for the Abandoned Wells.

AQ. Schreiner's failure to plug and/or obtain inactive status for the Abandoned Wells is a violation of Section 210(a) of the Oil and Gas Act, 58 P.S. §601.210(a); constitutes unlawful conduct pursuant to Section 509 of the Oil and Gas Act, 58 P.S. §601.509; and subjects Schreiner to civil penalty liability pursuant to Section 506 of the Oil and Gas Act, 58 P.S. §601.506.

**Failure to Submit Well Records**

AR. Schreiner did not submit well records to the Department within 30 days of cessation of drilling Well Nos. [REDACTED] and [REDACTED] the [REDACTED] well, and the [REDACTED] well. On December 12, 2009, and February 10, 2010, the Department sent Notices of Violation to Schreiner regarding these well records.

AS. As of the date of this Order, the Department has received the required records for the drilled wells listed in Paragraph AR, above.

AT. Schreiner's failure to submit well records to the Department within 30 days of cessation of drilling is a violation of Section 212(b) of the Oil and Gas Act 58 P.S. §601.212(b); constitutes unlawful conduct pursuant to Section 509 of the Oil and Gas Act, 58 P.S. §601.509; and subjects Schreiner to civil penalty liability pursuant to Section 506 of the Oil and Gas Act, 58 P.S. §601.506.

## ORDER

NOW, THEREFORE, pursuant to Sections 208(b) and 503 of the Oil and Gas Act, 58 P.S. §§601.208(b) and 601.503, Section 610 of the Clean Streams Law, 35 P.S. §691.610, Section 1917-A of the Administrative Code, 71 P.S. §§510-17, and 25 Pa. Code §78.51(c), the Department hereby ORDERS that:

1. Schreiner shall not begin the drilling of Well [REDACTED] until it has satisfied all of its obligations under Paragraphs 2-6, below.
2. Schreiner shall continue to take all actions necessary to maintain the drinking water supplies that serve the seven residences identified in Paragraph K.1., above, in compliance with Section 208 of the Oil and Gas Act, 58 P.S. §601.208, and 25 Pa. Code §78.51.
3. a. Within ten (10) days of the date of this Order, Schreiner shall submit to the Department, in writing, a "Permanent Restoration Plan" to provide the entire [REDACTED] residence and the entire [REDACTED] residence each with a water supply that complies with all of the requirements of Section 208 of the Oil and Gas Act, 58 P.S. §601.208, and 25 Pa. Code §78.51.
  - b. The Permanent Restoration Plan shall specifically identify the schedule and all of the corrective actions that Schreiner shall take and agreements/contracts that Schreiner shall enter into, as necessary, to implement and complete the Permanent Restoration Plan within thirty (30) days of the date of the Department's approval of the Plan. Such corrective actions and agreements/contracts may include, among other things: installation and operation of a water softener *combined with* a reverse osmosis system such that the constituents in the water throughout the [REDACTED] residence and throughout the [REDACTED] residence are at levels that do not exceed the primary and secondary MCLs established under 25 Pa. Code §109.202; providing all plumbing, conveyance, pumping, or auxiliary facilities necessary for the [REDACTED] and the [REDACTED] to utilize

their permanent water supplies; obtaining all necessary contracts/agreements with the [REDACTED] and the [REDACTED] for Schreiner to pay for any increased operating and maintenance costs for each water supply; and/or connection of the [REDACTED] residence and the [REDACTED] residence to a permitted public water supply; and

c. Upon approval by the Department, Schreiner shall implement the approved Permanent Restoration Plan in accordance with the approved schedule, and Schreiner complete all actions under the approved Permanent Restoration Plan within thirty (30) days of the date of the Department's approval of the Plan.

4. Within sixty (60) days of the date of this Order, Schreiner shall equip Well Nos. [REDACTED] [REDACTED] with a sufficient string of intermediate or production casing on a packer to prevent the migration/entrance of gas or fluids from those Wells into sources of fresh groundwater and to prevent pollution or diminution of fresh groundwater in accordance with Section 207 of the Oil and Gas Act, 58 P.S. §601.207, and 25 Pa. Code §78.73(a).

5. Within five days of completing all of the requirements, Schreiner shall notify the Department, in writing, of its compliance with Paragraph 4, above.

6. a. Within sixty (60) days of the date of this Order, Schreiner shall apply for and obtain inactive status for the Abandoned Wells pursuant to Section 204 of the Oil and Gas Act, 58 P.S. §601.204, and/or shall fully-plug the Abandoned Wells in accordance with Section 210 of the Oil and Gas Act, 58 P.S. §601.210, and 25 Pa. Code §78.91;

b. For any Abandoned Well that is granted inactive status, Schreiner shall comply with all monitoring and other requirements under Section 204 of the Oil and Gas Act, 58 P.S. §601.204, for each Well;

c. For any Abandoned Well that is plugged in accordance with Section 210 of the Oil and Gas Act, 58 P.S. §601.210, and 25 Pa. Code §78.91, within fifteen (15) days after such plugging, Schreiner shall submit to the Department Form 5500-FM-OG006, "Certificate of Well Plugging" for each plugged Well; and

d. Within nine months after plugging each Abandoned Well, Schreiner shall remove all production or storage facilities, supplies and equipment, and shall restore the Abandoned Well site in accordance with Sections 206(d)-(e) of the Oil and Gas Act, 58 P.S. §§601.206(d)-(e).

7. In implementing this Order, Schreiner shall neither cause additional pollution to the waters of the Commonwealth nor affect by pollution or diminution any drinking water supply.

8. Correspondence with the Department. Schreiner shall submit all correspondence with the Department concerning this Order to the following address:

S. Craig Lobins  
Regional Manager  
Oil and Gas Management  
Department of Environmental Protection  
230 Chestnut Street  
Meadville, PA 16335-3481

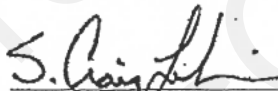
Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. §7514, and the Administrative Agency Law, 2 Pa.C.S.A. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of

practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

**IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.**

**IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD 717-787-3483 FOR MORE INFORMATION.**

**FOR THE COMMONWEALTH OF PENNSYLVANIA,  
DEPARTMENT OF ENVIRONMENTAL PROTECTION:**



---

S. Craig Lebins  
Regional Manager  
Oil and Gas Management  
Northwest Region





# EXHIBIT A

## SCHREINER WELLS

| WELL NUMBER | PERMIT NUMBER | DISTANCE TO [REDACTED] RESIDENCE (feet) | DISTANCE TO [REDACTED] RESIDENCE (feet) |
|-------------|---------------|---|---|
| 37          | [REDACTED]    | 3501.5                                  | 3551.4                                  |
| 38          | [REDACTED]    | 3177.6                                  | 3214.4                                  |
| 39          | [REDACTED]    | 3658.9                                  | 3688.5                                  |
| 40          | [REDACTED]    | 2709.8                                  | 2740.3                                  |
| 43          | [REDACTED]    | 2366.6                                  | 2371.6                                  |
| 44          | [REDACTED]    | 2864.0                                  | 2869.4                                  |
| 45          | [REDACTED]    | 3268.0                                  | 3254.7                                  |
| 46          | [REDACTED]    | 2821.7                                  | 2798.8                                  |
| 47          | [REDACTED]    | 2316.7                                  | 2291.7                                  |
| 48          | [REDACTED]    | 3022.2                                  | 2979.3                                  |
| 49          | [REDACTED]    | 2540.7                                  | 2493.9                                  |
| 50          | [REDACTED]    | 2050.7                                  | 2000.7                                  |
| 51          | [REDACTED]    | 1981.6                                  | 1900.8                                  |
| 61          | [REDACTED]    | 1571.7                                  | 1511.7                                  |
| 62          | [REDACTED]    | 1708.1                                  | 1684.9                                  |
| * 63        | [REDACTED]    | 1881.4                                  | 1892.7                                  |
| 64          | [REDACTED]    | 2241.3                                  | 2275.9                                  |
| 65          | [REDACTED]    | 2639.2                                  | 2689.7                                  |
| 66          | [REDACTED]    | 3079.3                                  | 3139.3                                  |
| 67          | [REDACTED]    | 1068.8                                  | 974.7                                   |
| 68          | [REDACTED]    | 1139.0                                  | 1110.7                                  |
| 69          | [REDACTED]    | 1385.7                                  | 1399.0                                  |
| * 70        | [REDACTED]    | 2158.2                                  | 2220.8                                  |
| * 71        | [REDACTED]    | 2618.2                                  | 2690.4                                  |
| * 72        | [REDACTED]    | 3113.6                                  | 3192.1                                  |
| 73          | [REDACTED]    | 1558.9                                  | 1463.6                                  |
| 74          | [REDACTED]    | 1677.7                                  | 1729.0                                  |

## EXHIBIT B

### SCHREINER ABANDONED WELLS

| WELL NUMBER    | PERMIT NUMBER |
|----------------|---------------|
| Warrant 3707 7 |               |
| Warrant 3707 1 |               |
| 37             |               |
| 38             |               |
| 40             |               |
| 43             |               |
| 44             |               |
| 45             |               |
| 46             |               |
| 47             |               |
| 48             |               |
| 49             |               |
| 50             |               |
| 51             |               |
| 74             |               |