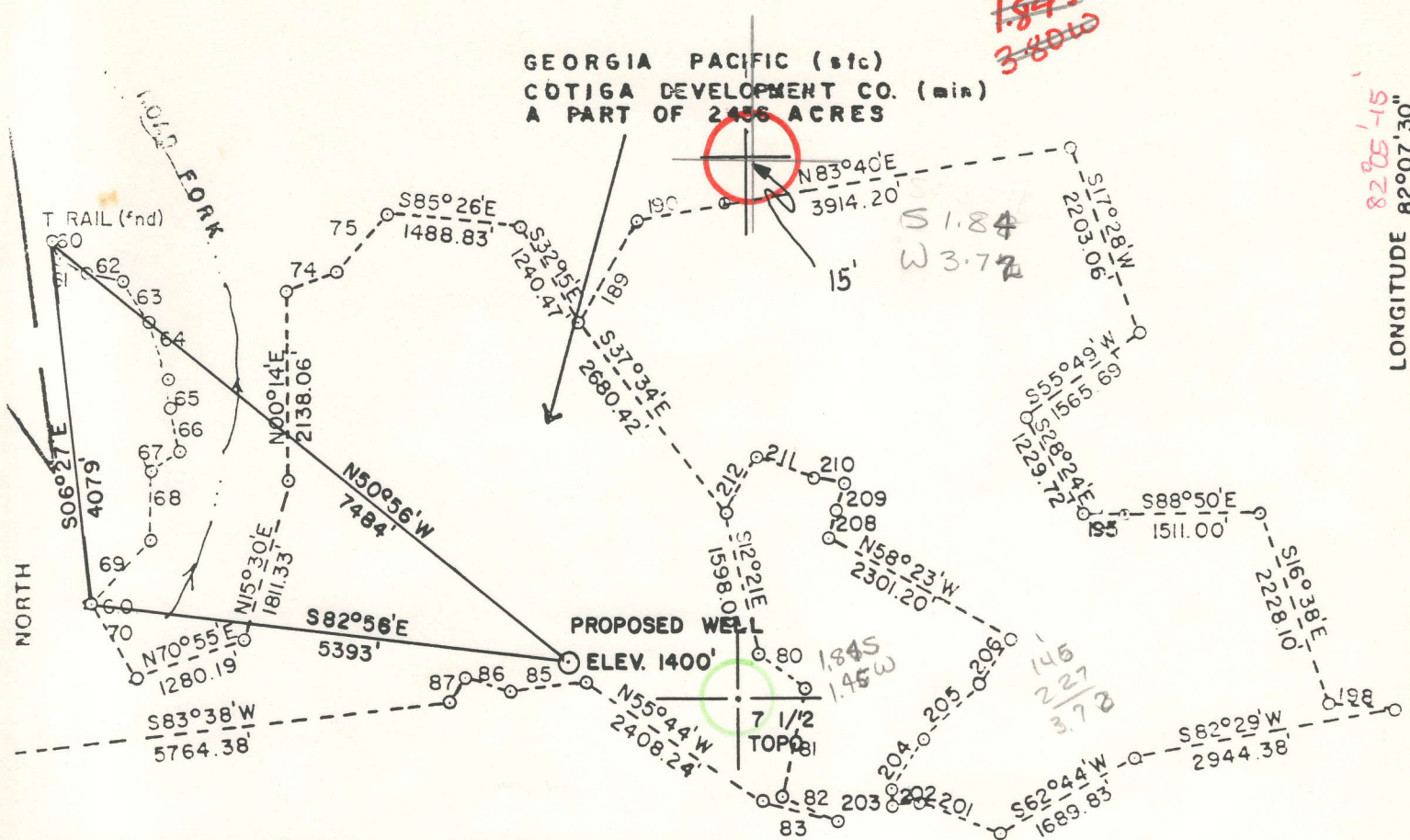


Plot *Card 23*

7650' LATITUDE 37° 50' 00"

LONGITUDE 82° 07' 30" 9700'



| | |
|------------|----------|
| 60=S26-36E | 233.12' |
| 61=S66-14E | 358.33' |
| 62=S79-27E | 395.30' |
| 63=S34-33E | 537.76' |
| 64=S17-30E | 683.36' |
| 65=S02-36E | 317.36' |
| 66=S12-01E | 491.26' |
| 67=S56-10W | 398.23' |
| 68=S01-03W | 741.78' |
| 69=S43-29W | 951.27' |
| 70=S29-19E | 985.79' |
| 74=N69-32E | 601.12' |
| 75=N39-31E | 835.37' |
| 80=S54-18E | 656.34' |
| 81=S12-31W | 1261.68' |

| | |
|-------------|----------|
| 82=S68-23E | 676.88' |
| 83=N75-37W | 868.74' |
| 85=S83-47W | 883.60' |
| 86=N70-32W | 528.67' |
| 87=S31-25W | 292.68' |
| 189=N33-34E | 1227.35' |
| 190=N79-24E | 981.70' |
| 196=S83-49E | 484.85' |
| 198=S83-52E | 758.07' |
| 201=N67-17W | 960.73' |
| 202=S87-5W | 309.02' |
| 203=N02-32E | 25.14' |
| 204=N35-37E | 670.23' |
| 205=N48-18E | 878.32' |
| 206=N36-07E | 644.87' |

| | |
|-------------|----------|
| 207=N58-23W | 2301.20' |
| 208=N16-45E | 330.00' |
| 209=N22-38E | 368.11' |
| 210=N76-40W | 383.15' |
| 211=N67-30W | 660.00' |
| 212=S27-32W | 746.08' |

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION USGS BM TRACEFORK 665, USGS MYRTLE QUAD

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
 (SIGNED) [Signature]
 R.P.E. [Signature] L.L.S. 624
Newton Surveys & Consulting, Inc.

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (878)



DATE MAY 2, 19 83
 OPERATOR'S WELL NO. C-61
 API WELL NO. _____
47 - 059 - 1057
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

JUN 27 1983

WELL TYPE OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION ELEVATION 1400' WATERSHED RIFFE BRANCH
 DISTRICT HARDEE COUNTY MINGO
 QUADRANGLE MYRTLE Holden 15' SC
 SURFACE OWNER GEORGIA PACIFIC ACREAGE 2456
 OIL & GAS ROYALTY OWNER COTIGA DEVELOPMENT CO. LEASE ACREAGE 2456
 LEASE NO. _____
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 5000' According to x-ray strat. DEEP WELL
 ADDRESS P.O. BOX 2048 BUCKHANNON, W.VA. 26201
 ADDRESS P.O. BOX 2048 66 Dempsey School BUCKHANNON, W.VA. 26201 (368)

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OCT 18 1984



IV-35 (Rev 8-81)

OIL & GAS DIVISION

DEPT. OF MINES State of West Virginia

Department of Mines Oil and Gas Division

Date September 26, 1983

Operator's

Well No. C-61

Farm

API No. 47 - 059 - 1057

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal / (If "Gas," Production X / Underground Storage / Deep / Shallow X /)

LOCATION: Elevation: 1400' Watershed Riffe Branch

District: Hardee County Mingo Quadrangle Myrtle

COMPANY Seneca-Upshur Petroleum, Inc.

ADDRESS P.O. Box 2048, Buckhannon, WV 26201

DESIGNATED AGENT Joseph G. Hager

ADDRESS P.O. Box 2048, Buckhannon, WV 26201

SURFACE OWNER Georgia-Pacific

ADDRESS 133 Teachtree St., N.E., Atlanta, GA

MINERAL RIGHTS OWNER Cotiga Development Co.

ADDRESS 2nd Flr. Rear, 14 East Lancaster Ave.

Paoli, PA 19301

OIL AND GAS INSPECTOR FOR THIS WORK Arthur St. Clair ADDRESS P.O. Box 157, Brenton, WV

PERMIT ISSUED June 24, 1983

DRILLING COMMENCED August 28, 1983

DRILLING COMPLETED September 8, 1983

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

| Casing & Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. |
|------------------|------------------|--------------|------------------------|
| Size 20-16 Cond. | 20 | 20 | 10 |
| 13-10" | 829 | 829 | 285 |
| 9 5/8 | | | |
| 8 5/8 | 2330 | 2330 | 500 |
| 7 | | | |
| 5 1/2 | | | |
| 4 1/2 | | 4782 | 175 |
| 3 | | | |
| 2 | | | |
| Liners used | | | |

GEOLOGICAL TARGET FORMATION Marcellus Depth 5000 feet

Depth of completed well 4868' feet Rotary X / Cable Tools

Water strata depth: Fresh 185 feet; Salt feet

Coal seam depths: 151', 662', 736', 799' Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3290' feet

Gas: Initial open flow Trace Mcf/d Oil: Initial open flow 0 Bbl/d

Final open flow 894 Mcf/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 2 hours

Static rock pressure 500 psig(surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

Second producing formation Pay zone depth feet

Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d

Final open flow Mcf/d Oil: Final open flow Bbl/d

Time of open flow between initial and final tests hours

Static rock pressure psig(surface measurement) after hours shut in

NOV 13 1984

(Continue on reverse side)



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DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

FOAM FRAC:

DATE: 9/16/83
 WATER: 870 BBLs.
 SAND: 210,000#
 PERFS: mostly Huron 4092'-4353' 33 .49"
 NITROGEN: 20,180 CCF

WELL LOG

| FORMATION | COLOR | HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS |
|---------------|-------|--------------|----------|-------------|---|
| | | | | | Including indication of all fresh and salt water, coal, oil and gas |
| Sand | | | 0 | 151 | |
| Coal | | | 151 | 155 | |
| Sand & Shale | | | 155 | 225 | |
| Sand | | | 225 | 662 | |
| Coal | | | 662 | 664 | |
| Sand & Shale | | | 664 | 736 | |
| Coal | | | 736 | 742 | |
| Sand & Shale | | | 742 | 799 | |
| Coal | | | 799 | 802 | |
| Sand & Shale | | | 802 | 2205 | |
| Salt Sand | | | 2205 | 2260 | |
| Little Lime | | | 2260 | 2344 | |
| Big Lime | | | 2344 | 2622 | |
| Big Injun | | | 2622 | 2638 | |
| Sand & Shale | | | 2638 | 2774 | |
| Weir | | | 2774 | 2830 | |
| Sand & Shale | | | 2830 | 3170 | |
| Sudbury Shale | | | 3170 | 3230 | |
| Berea | | | 3230 | 3290 | |
| Gray Shale | | | 3290 | 4120 | |
| Brown Shale | | | 4120 | 4690 | |
| Marcellus | | | 4690 | 4868 | |
| | | | | | T.D. |
| | | | | | GR-D.W. Neal top Huron 4131 top Tawa 4400 top Rhure. 4695 top Onon 4853 |
| | | | | | 4868 3290 1578 |
| | | | | | Onondaga @ T.D. |

(Attach separate sheets as necessary)

Seneca-Upshur Petroleum Company
Well Operator

By:
 Date: September 26, 1983

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic



1) Date: May 24, 1983
 2) Operator's Well No. C-61
 3) API Well No. 47 - 059 - 1037
 State 47 County Myrtle Permit

DRILLING CONTRACTOR:

Little Swiss Drilling Co.
Buckhannon, WV 26201

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil / Gas /
 B (If "Gas", Production X / Underground storage / Deep / Shallow X /)
- 5) LOCATION: Elevation: 1400' Watershed: Piffa Branch
 District: Hardee County: Mingo Quadrangle: Myrtle
- 6) WELL OPERATOR Seneca-Uphar Petroleum, Inc. 11) DESIGNATED AGENT Joseph G. Hager
 Address P.O. Box 2048 Address P.O. Box 2048
Buckhannon, West Virginia 26201 Buckhannon, West Virginia 26201
- 7) OIL & GAS ROYALTY OWNER Cotiga Development Company 12) COAL OPERATOR Mingo
 Address 4th Floor Room, 14 E. Lancaster Ave. Address
Poole, Pennsylvania 19301
2436
- 8) SURFACE OWNER Georgia-Pacific 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Address P.O. Box 1808 Name
Augusta, Georgia 30609 Address Falmouthville, Kentucky 41240
2436 Name
 Address
- 9) FIELD SALE (IF MADE) TO:
 Address
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Address
 Address P.O. Box 137
Buckhannon, West Virginia 26201
- 15) PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate /
 Plug off old formation / Perforate new formation /
 Other physical change in well (specify)
- 16) GEOLOGICAL TARGET FORMATION,
- 17) Estimated depth of completed well, feet
- 18) Approximate water strata depths: Fresh, feet; salt, 740 feet.
- 19) Approximate coal seam depths: Is coal being mined in the area? Yes / No X

20) CASING AND TUBING PROGRAM

| CASING OR TUBING TYPE | SPECIFICATIONS | | | | | | FOOTAGE INTERVALS | | CEMENT FILL-UP OR SACKS (Cubic feet) | PACKERS |
|-----------------------|----------------|-------|----------------|----------|----------|--------------|-------------------|-------------------|--------------------------------------|---------|
| | Size | Grade | Weight per ft. | New | Used | For drilling | Left in well | | | |
| Conductor | <u>16</u> | | | | <u>X</u> | <u>25</u> | <u>25</u> | <u>70 Surface</u> | Kinds | |
| Fresh water | | | | | | | <u>50</u> | <u> </u> | Sizes | |
| Coal | | | | | | | | <u> </u> | Depths set | |
| Intermediate | <u>8 5/8</u> | | <u>23.00</u> | <u>X</u> | | <u>2180</u> | <u>2180</u> | <u>70 Surface</u> | Perforations: | |
| Production | <u>4 1/2</u> | | <u>23.00</u> | <u>X</u> | | | <u>3200</u> | <u>70 Surface</u> | Top | |
| Tubing | | | | | | | | <u>70 Surface</u> | Bottom | |
| Liners | | | | | | | | <u>70 Surface</u> | | |

- 21) EXTRACTION RIGHTS
 Check and provide one of the following:
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)
- 22) ROYALTY PROVISIONS
 Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No
- If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.
- 23) Required Copies (See reverse side.)
 24) Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

Notary: Cradley K. Lutz Signed:
 My Commission Expires June 6, 1983 Its:
Notary for the State of West Virginia.

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-059-1037 Date June 24, 1983

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector. (Refer to No. 10) Prior to the construction of roads, locations and pits for any permitted work.** In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

Permit expires February 24, 1984 unless drilling is commenced prior to that date and prosecuted with due diligence.

| | | | | |
|-----------------------|------------------------|-----------------------|-------------------------|----------------------|
| Bond: <u> </u> | Agent: <u> </u> | Plat: <u> </u> | Casing: <u> </u> | Fee: <u> </u> |
|-----------------------|------------------------|-----------------------|-------------------------|----------------------|

Administrator, Office of Oil and Gas