

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM TRACE FORK 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) Hayden D. Gordon  
 R.P.E. \_\_\_\_\_ L.L.S. 624

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

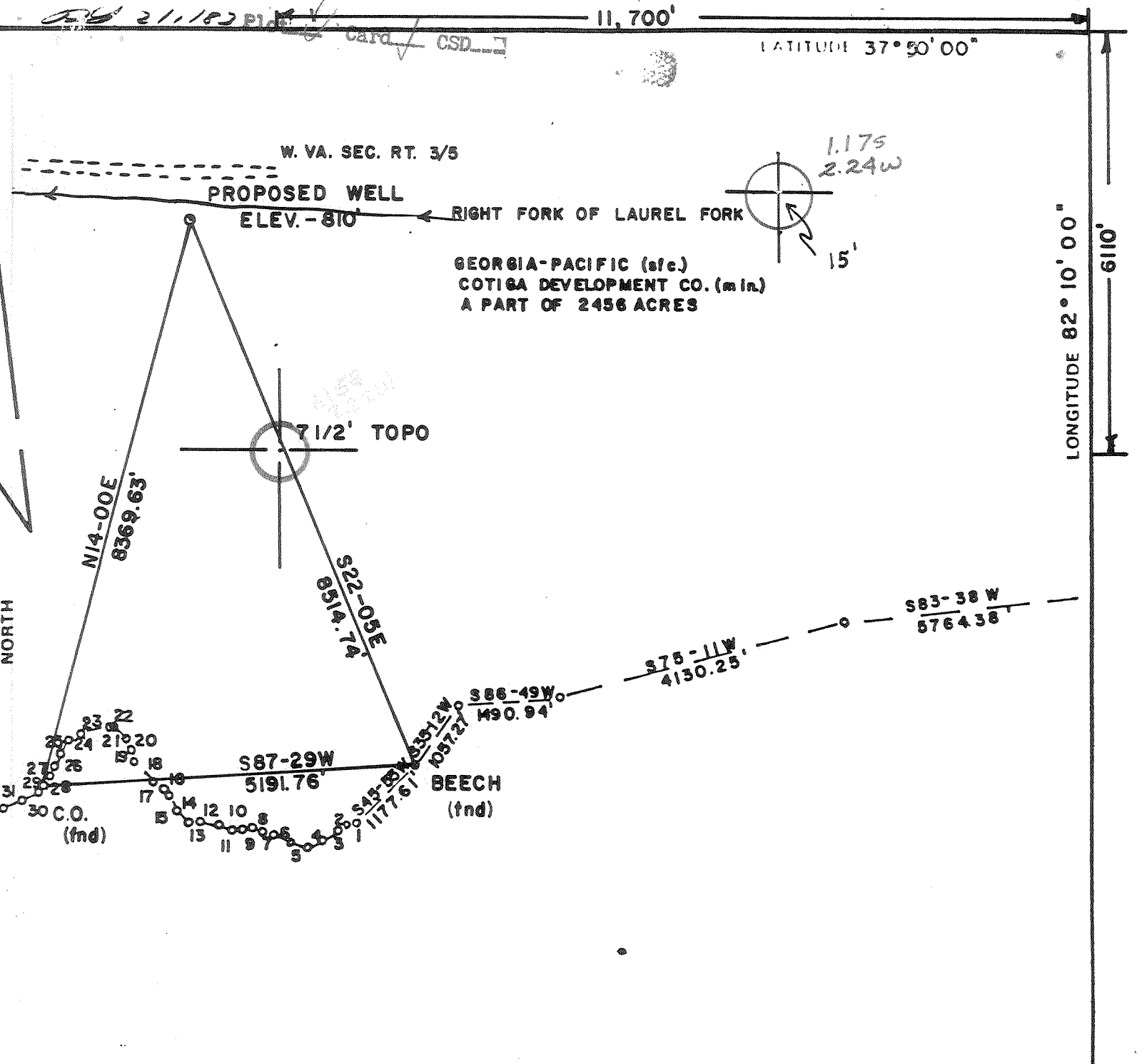
DATE JANUARY 28, 19 83  
 OPERATOR'S WELL NO. C-36  
 API WELL NO. 47-059-1042-Frac  
 STATE COUNTY PERMIT  
Formerly: Mingo-1009

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS.") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 810' WATER SHED RIGHT FORK OF LAUREL FORK  
 DISTRICT HARDEE COUNTY MINGO  
 QUADRANGLE MYRTLE  
 SURFACE OWNER GEORGIA PACIFIC ACREAGE A PART OF 2456  
 OIL & GAS ROYALTY OWNER COTIGA DEVELOPMENT CO. LEASE ACREAGE A PART OF 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 DEVONIAN SHALE ESTIMATED DEPTH 5000'  
 WELL OPERATOR SENECA-UPSHUR PETINC. DESIGNATED AGENT JOSEPH HAGER  
 ADDRESS P.O. BOX 2048 ADDRESS P.O. BOX 2048

JAN 14 1985

0119  
 LONGITUDE 82° 10' 00"  
 MINGO 1042



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM TRACE FORK 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) Raymond D. Plonk  
 R.P.E. \_\_\_\_\_ L.L.S. 624

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

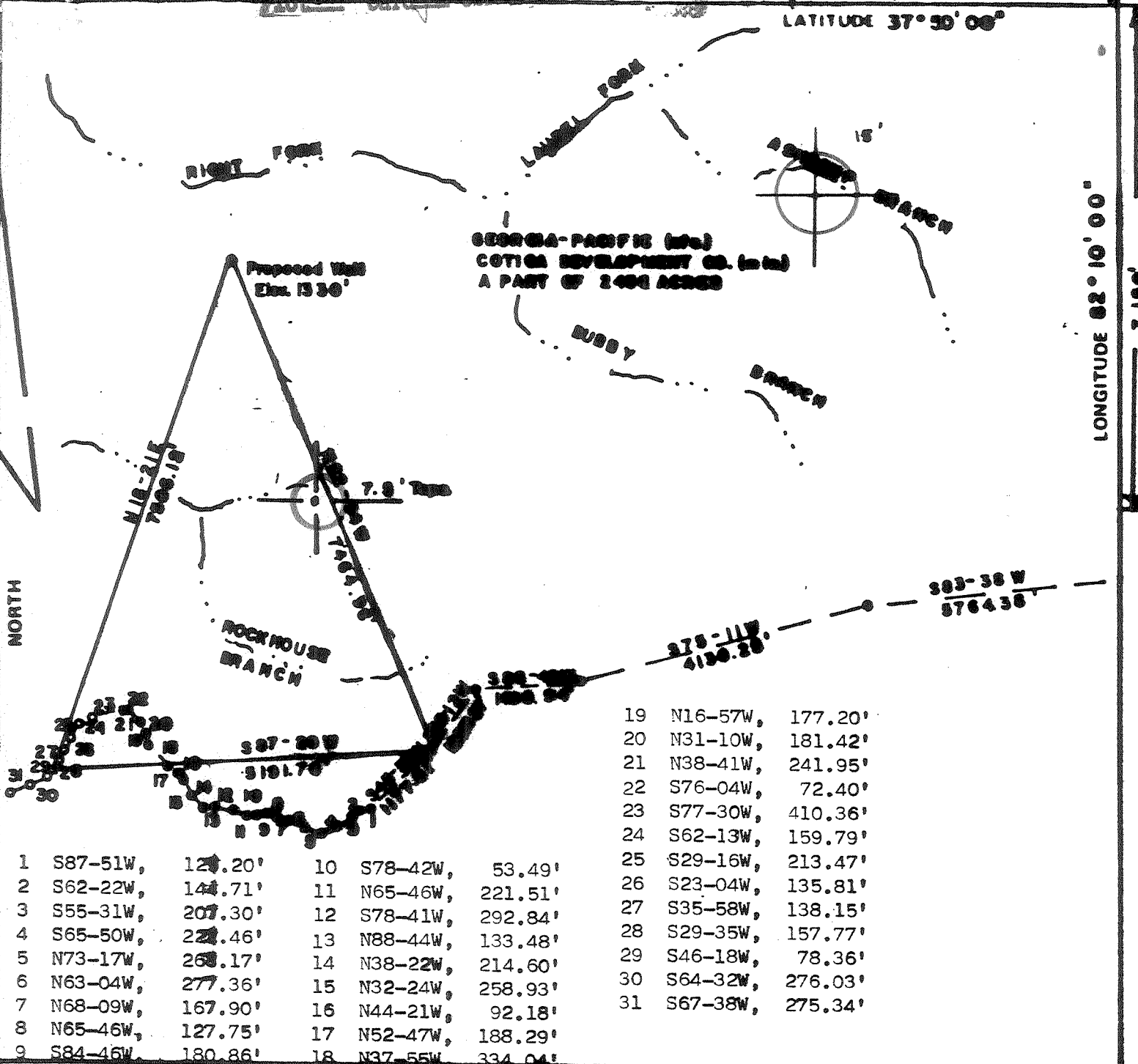
DATE JANUARY 28, 19 83  
 OPERATOR'S WELL NO. C-36  
 API WELL NO. 47-059-1042  
 STATE COUNTY PERMIT  
Formerly: Mingo-1009

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 810' WATER SHED RIGHT FORK OF LAUREL FORK  
 DISTRICT HARDEE COUNTY MINGO  
 QUADRANGLE MYRTLE Holden 15' SW  
 SURFACE OWNER GEORGIA PACIFIC ACREAGE A PART OF 2456  
 OIL & GAS ROYALTY OWNER COTIGA DEVELOPMENT CO. LEASE ACREAGE A PART OF 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 6-6 Demsey School (318)  
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5000' FEB 14 1983  
 WELL OPERATOR SENECA-UPSHUR PET INC. DESIGNATED AGENT JOSEPH HAGER 0000 4/1/83 SPD  
 ADDRESS P.O. BOX 2048 ADDRESS P.O. BOX 2048 44 BUS Bercent Bedford  
BUCKHANNON, W. VA. 26201 BUCKHANNON, W. VA. 26201

LATITUDE 37° 50' 00"

LONGITUDE 82° 10' 00"



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM TRACE FORK  
688 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]  
 REGISTERED SURVEYOR, STATE OF W. VA. L.S. 624

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-B (8-78)



DATE JANUARY 27, 19 82  
 OPERATOR'S WELL NO. C# 36  
 API WELL NO. \_\_\_\_\_  
47 - 059 - 1009  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

*Cancelled*

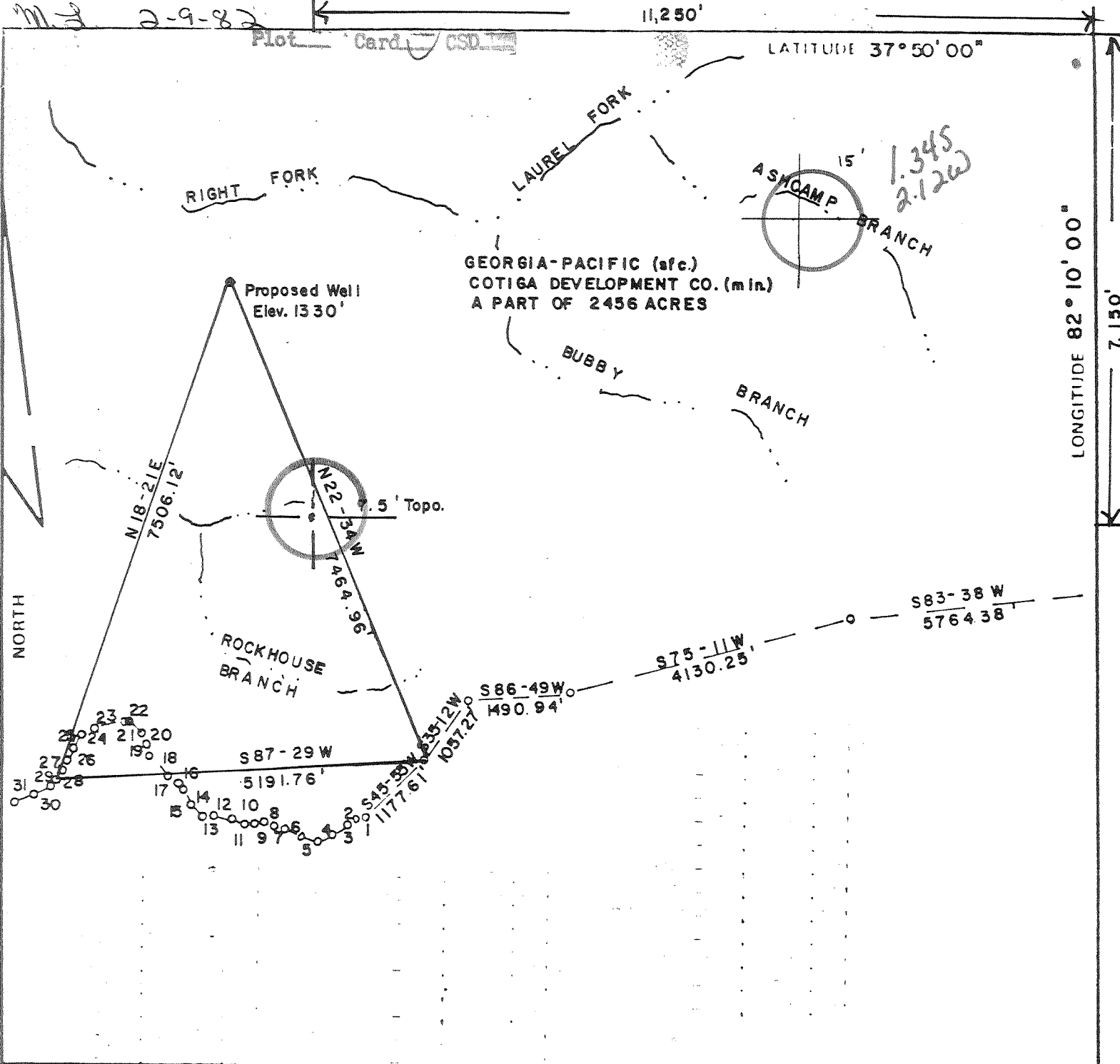
WELL TYPE: OIL \_\_\_ GAS ✓ LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION ✓ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1330 WATER SHED RIGHT FORK OF LAWRENCE FORK  
 DISTRICT HARDY COUNTY MINGO  
 QUADRANGLE MYRTLE  
 SURFACE OWNER GEORGIA PACIFIC ACREAGE A PART OF 2400  
 OIL & GAS ROYALTY OWNER COTTON DEVELOPMENT CO. LEASE ACREAGE A PART OF 2400  
 LEASE NO. \_\_\_\_\_

*See: Mingo-1042*

PROPOSED WORK: DRILL ✓ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REGRILL \_\_\_ 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 DEVONIAN SHALE ESTIMATED DEPTH 5000'  
 WELL OPERATOR SENeca-INDIAN PIPE DESIGNATED AGENT JAMES HAGER  
 ADDRESS P.O. BOX P ADDRESS P.O. BOX P  
BUCKHANNON, W. VA. 26201 BUCKHANNON, W. VA. 26201

FEB 14 1983



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM TRACE FORK 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. \_\_\_\_\_ L.L.S. 624  
**NORTON SURVEYS & CONSULTING, INC.**

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE JANUARY 27, 19 82  
 OPERATOR'S WELL NO. C# 36  
 API WELL NO. \_\_\_\_\_  
47 - 059 - 1009  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 1330' WATER SHED RIGHT FORK OF LAUREL FORK  
 DISTRICT HARDEE COUNTY MINGO  
 QUADRANGLE MYRTLE Holden 19 SW  
 SURFACE OWNER GEORGIA PACIFIC ACREAGE A PART OF 2456  
 OIL & GAS ROYALTY OWNER COTIGA DEVELOPMENT CO. LEASE ACREAGE A PART OF 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 DEVONIAN SHALE ESTIMATED DEPTH 5000'  
 WELL OPERATOR SENECA-UPSHUR PET. INC. DESIGNATED AGENT JOSEPH HAGER  
 ADDRESS P.O. BOX P BUCKHANNON, W. VA 26201 ADDRESS P.O. BOX P BUCKHANNON, W. VA 26201

MAR 01 1982

RECEIVED

MAR 18 1985



IV-35 (Rev 8-81)

OIL & GAS DIVISION DEPT. OF MINES State of West Virginia Department of Mines Oil and Gas Division

Date March 15, 1985 Operator's Well No. C-36 Farm API No. 47 - 059 - 1042-FRAC

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: 1330' 150' Watershed Right Fork of Laurel Fork District: Hardee County Mingo Quadrangle Myrtle

COMPANY Seneca-Upshur Petroleum Company 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 P.O. Box 1808, Augusta, Georgia, 30909 MINERAL RIGHTS OWNER Cotiga Development Company 2nd Floor, Rear, 14 E. Lancaster Ave. ADDRESS Paoli, PA 19301 OIL AND GAS INSPECTOR FOR THIS WORK Arthur St. Clair ADDRESS P.O. Box 157, Brenton, WV PERMIT ISSUED 1/10/85

Table with 4 columns: Casing & Tubing, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-16 Cond., 13-10", 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2, and Liners used.

DRILLING COMMENCED DRILLING COMPLETED w/d comp. 3/5/85 IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

GEOLOGICAL TARGET FORMATION Depth feet Depth of completed well 3100' feet Rotary / Cable Tools Water strata depth: Fresh feet; Salt feet Coal seam depths: Is coal being mined in the area?

OPEN FLOW DATA Producing formation Bedford (Pay zone) udu Pay zone depth 2661 feet Gas: Initial open flow Trace Mcf/d Oil: Initial open flow 0 Bbl/d Final open flow 160 Mcf/d Oil: Final open flow 0 Bbl/d Time of open flow between initial and final tests 2 hours Static rock pressure 300 psig (surface measurement) after 24 hours shut in (If applicable due to multiple completion--)

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

FRAC

DATE:

3/05/85

WATER:

253 BBLs.

SAND:

60,000#

NITROGEN:

10,180 CCF

PERFS:

2661' - 2671'

16 .39 Perfs

*Seneca Bedford*

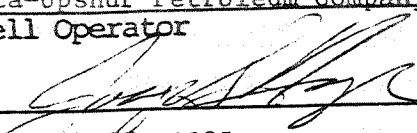
WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas

(Attach separate sheets as necessary)

Seneca-Upshur Petroleum Company  
Well Operator

By:



Date: March 15, 1985

Note: Regulation 2.02(i) provides as follows:  
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

IV-35  
(Rev 8-81)



JUN 27 1983

Oil & GAS DIVISION  
DEPT Date June 23, 1983

State of West Virginia  
Department of Mines  
Oil and Gas Division

Operator's Well No. C-36  
Farm \_\_\_\_\_  
API No. 47 - 059 - 1042

JUL 05 1983

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: 1330' 830' Watershed Right Fork of Laurel Fork  
District: Hardee County Mingo Quadrangle Myrtle

COMPANY Seneca-Upshur Petroleum Company  
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 P.O. Box 1808, Augusta, Georgia 30909  
MINERAL RIGHTS OWNER Cotiga Development Co.  
ADDRESS 2nd Floor Rear, 14 E. Lancaster Ave.,  
Paoli, PA 19301  
OIL AND GAS INSPECTOR FOR THIS WORK Arthur  
St. Clair ADDRESS P.O. Box 157, Brenton, WV  
PERMIT ISSUED February 10, 1983  
DRILLING COMMENCED April 24, 1983  
DRILLING COMPLETED May 4, 1983

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.	17	17	10
13-10"	124	124	100
9 5/8			
8 5/8	1731	1731	350
7			
5 1/2			
4 1/2		4004	175
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Marcellus Depth 5,000 feet  
Depth of completed well 4088' feet Rotary x / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 71 feet; Salt \_\_\_\_\_ feet  
Coal seam depths: 11, 172, 257, 1298 Is coal being mined in the area? No

OPEN FLOW DATA  
Producing formation Huron Devonian Shale Pay zone depth 2700' feet  
Gas: Initial open flow Trace Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow 1245 Mcf/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 2 hours  
Static rock pressure 525 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

(Continue on reverse side)

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

FOAM FRAC

DATE: 6/8/83  
 WATER: 873 BBLS.  
 SAND: 240,000#  
 NITROGEN: 21,680 CCF  
 PERFS: 3320' - 3799' *Huron* 24 .49" Perfs

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Top Soil			0	11	
Coal			11	13	
Sand			13	71	
Sand & Shale			71	115	
Sand			115	172	
Coal			172	176	
Sand & Shale			176	257	
Coal			257	260	
Sand & Shale			260	325	
Coal			325	329	
Sand & Shale			329	875	
Sand			875	1057	
Sand & Shale			1057	1100	
Sand			1100	1298	
Coal			1298	1301	
Sand			1301	1600	
Sand & Shale			1600	1678	
Big Lime			1678	1956	
Big Injun			1956	1990	
Sand & Shale			1990	2150	
Weir			2150	2210	
Sand & Shale			2210	2546	
Sudburry Shale			2546	2612	
Sand & Shale			2612	2630	
Berea			2630	2700	
Gray Shale			2700	3390	
Brown Shale			3390	3920	
Marcellus			3920	4088	T.D. <i>Huron</i>

*from log: #PS*  
 2586  
 2602  
 3422  
 3662  
 3777  
 3954

4088  
 2700  
 1388

(Attach separate sheets as necessary)

*top of Onondaga 4083*  
*from gamma ray - density log*

Seneca-Upshur Petroleum, Inc.  
 Well Operator  
 By: *[Signature]*  
 Date: June 23, 1983

Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."





Well No. C-36  
Farm 1009  
API # 47-059-  
Date January 28, 1982

STATE OF WEST VIRGINIA  
OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil  / Gas  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow  /  
LOCATION: Elevation: 1330 Watershed: Right Fork of Laurel Fork  
District: Hardee County: Mingo Quadrangle: Myrtle

WELL OPERATOR Seneca-Upshur Petroleum, Inc. DESIGNATED AGENT Seneca-Upshur Petroleum, Inc.  
Address P.O. Drawer P Address P.O. Drawer P  
Buckhannon, West Virginia 26201 Buckhannon, West Virginia 26201

OIL AND GAS ROYALTY OWNER Cotiga Development Company COAL OPERATOR None  
Address 25 Darby Road Address \_\_\_\_\_  
Paoli, Pennsylvania 19301  
Acreage Part of 2,456

SURFACE OWNER Georgia-Pacific COAL OWNER(S) WITH DECLARATION ON RECORD:  
Address P.O. Box 1808 NAME Island Creek Coal Company  
Augusta, Georgia 30909 Address Pantsville, Kentucky 41240  
Acreage Part of 2,456 NAME \_\_\_\_\_  
Address \_\_\_\_\_

FIELD SALE (IF MADE) TO:  
NAME \_\_\_\_\_  
Address \_\_\_\_\_

COAL LESSEE WITH DECLARATION ON RECORD:  
NAME None  
Address \_\_\_\_\_

OIL AND GAS INSPECTOR TO BE NOTIFIED:  
NAME Arthur St. Clair  
Address P.O. Box 157  
Brenton, West Virginia 24818  
Telephone 732-6227

**RECEIVED**  
**RECEIVED**  
JAN 29 1982  
FEB 8 - 1982  
OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed  / lease  / other contract  / dated Aug. 1, 1979, to the undersigned well operator from Cotiga Development Company.

(If deed, lease, or other contract has been recorded:)  
Recorded on \_\_\_\_\_, 19\_\_\_\_, in the office of the Clerk of County Commission of \_\_\_\_\_ County, West Virginia, in \_\_\_\_\_ Book at page \_\_\_\_\_. A permit is requested as follows:

PROPOSED WORK: Drill  / Drill Deeper  / Redrill  / Fracture or stimulate  / Plug off old formation  / Perforate new formation  / Other physical change in well (specify) \_\_\_\_\_

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after receipt of this Application by the Dept. 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 lessees on or before the day of the mailing or delivery of this Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

Seneca-Upshur Petroleum, Inc.  
Well Operator

WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
13 WASHINGTON ST., E.  
CHARLESTON, WV 25311  
Telephone - 304/348-3092

BLANKET BOND By: Joseph H. Hagg  
Its: President

(Revised 3-81)

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Little Swiss Drilling Company  
Address P.O. Drawer P  
Buckhannon, West Virginia 26201

GEOLOGICAL TARGET FORMATION Marcellus

Estimated depth of completed well 5000 feet. Rotary X / Cable tools      /  
Approximate water strata depths: Fresh, 80 feet; salt, 2300 feet.  
Approximate coal seam depths: 320  
Is coal being mined in this area: Yes      / No X /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL UP OR SACKS Cubic ft.	PACKERS
	Size	Grade	Weight per ft	New	Used	For Drilling		
Conductor	16"				X	20	20	To Surface Kinds
Fresh water								
Coal								Sizes
Intermed.	8 5/8"		23.00	X		2500	2500	To Surface
Production	4 1/2"		23.00	X			4800	As Required By Rule 15.01 Perforations: Top Bottom Depths set
Tubing								
Liners								

*NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22-4-2, (iii) Form IV-9, "Reclamation Plan" applicable to the reclamation required by Code §22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code §22-4-12a, and (v) if applicable, the consent required by Code §22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.*

*A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.*

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, this location is hereby approved for drilling.

This permit shall expire if operations have not commenced by 10-13-82.

  
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code §22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator      / owner      / lessee      / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date:     , 19     .

By:     

Its:

FILE COPY  
**RECEIVED**



1) Date: December 20, 1984  
 2) Operator's Well No. C-36  
 3) API Well No. 47 - 059 - 1042 - FRAC  
 State County Permit

DEC 28 1984

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES, OIL AND GAS DIVISION  
 APPLICATION FOR A WELL WORK PERMIT

- OIL & GAS DIVISION**  
**DEPT. OF MINES**
- 4) WELL TYPE: A Oil  / Gas   
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow )
- 5) LOCATION: Elevation: 1330' / Watershed: Right Fork of Laurel Fork  
 District: Hardee / County: Mingo / Quadrangle: Myrtle
- 6) WELL OPERATOR Seneca-Upshur Petroleum Company 7) DESIGNATED AGENT Joseph G. Hager  
 Address P.O. Box 2048 / Address P.O. Box 2048  
Buckhannon, WV 26201 44450 / Buckhannon, WV 26201
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Arthur St. Clair 9) DRILLING CONTRACTOR: Name N/A  
 Address P.O. Box 157 / Address \_\_\_\_\_  
Brenton, WV
- 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate   
 Plug off old formation  / Perforate new formation   
 Other physical change in well (specify) See attached letter
- 11) GEOLOGICAL TARGET FORMATION, Bedford
- 12) Estimated depth of completed well, 4088 feet
- 13) Approximate strata depths: Fresh, 71 feet; salt, \_\_\_\_\_ feet.
- 14) Approximate coal seam depths: 11', 172', 257', 1298' Is coal being mined in the area? Yes  / No
- 15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	
Conductor	16"				X	17	17	10 Sacks
Fresh water	11 3/4"					124	124	100 Sacks
Coal								
Intermediate	8 5/8"		23.00	X		1731	1731	350 Sacks
Production	4 1/2"		23.00	X			4004	175 Sacks
Tubing								
Liners								

**RECEIVED**  
 OIL & GAS DIVISION  
 DEPT. OF MINES  
 JAN 10 1984  
 Bottom

**OFFICE USE ONLY**  
**DRILLING PERMIT**

Permit number 47-059-1042-FRAC Date January 10, 1985

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. 8) 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.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires January 10, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>138</u>	<u>MH</u>	<u>MH</u>	<u>MH</u>	<u>6723</u>

Margaret J. Hesse  
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location. File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.



1) Date: January 28, 19 83  
2) Operator's Well No. C-36  
3) API Well No. 47 - 038 - 1042  
State \_\_\_\_\_ County \_\_\_\_\_ 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 X /  
B (If "Gas", Production \_\_\_\_\_ / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow X /)
- 5) LOCATION: Elevation: 1930' Watershed: Right Fork of Laurel Fork  
District: Mingo County: Mingo Quadrangle: Martie
- 6) WELL OPERATOR Seneca-Upshur 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 None  
Address 25 Dairy Road Address \_\_\_\_\_  
Paoli, Pennsylvania 19301
- 8) SURFACE OWNER Georgia-Pacific 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
Address P.O. Box 1808 Name Island Creek Coal Company  
August, Georgia 30909 Address Paineville, Kentucky 41240  
Acreage Part of 2,856 Name \_\_\_\_\_  
Address \_\_\_\_\_
- 9) FIELD SALE (IF MADE) TO:  
Address \_\_\_\_\_
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Arthur St. Clair 14) COAL LESSEE WITH DECLARATION ON RECORD:  
Address P.O. Box 157 Name None  
Brenton, WV 24813 Address \_\_\_\_\_
- 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, Marcellus
- 17) Estimated depth of completed well, 3,000 feet
- 18) Approximate water strata depths: Fresh, 320 feet; salt, 1800 feet.
- 19) Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes \_\_\_\_\_ / No \_\_\_\_\_

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	16"				X	20	20	To Surface	Kinds
Fresh water						120	120	875	
Coal									Sizes
Intermediate	8 5/8"		23.00	X		2000	2000	To Surface	
Production	4 1/2"		23.00	X			5000	As Permitted by Rule 15.01	Depths set
Tubing									
Liners									Perforations: Top Bottom

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. On File 059-1017
- 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: \_\_\_\_\_  
My Commission Expires June 6, 1988

Signed: [Signature]  
Its: Vice President

OFFICE USE ONLY

DRILLING PERMIT

Permit number \_\_\_\_\_

19 \_\_\_\_\_

Date

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 \_\_\_\_\_ unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee

[Signature]  
Administrator, Office of Oil and Gas