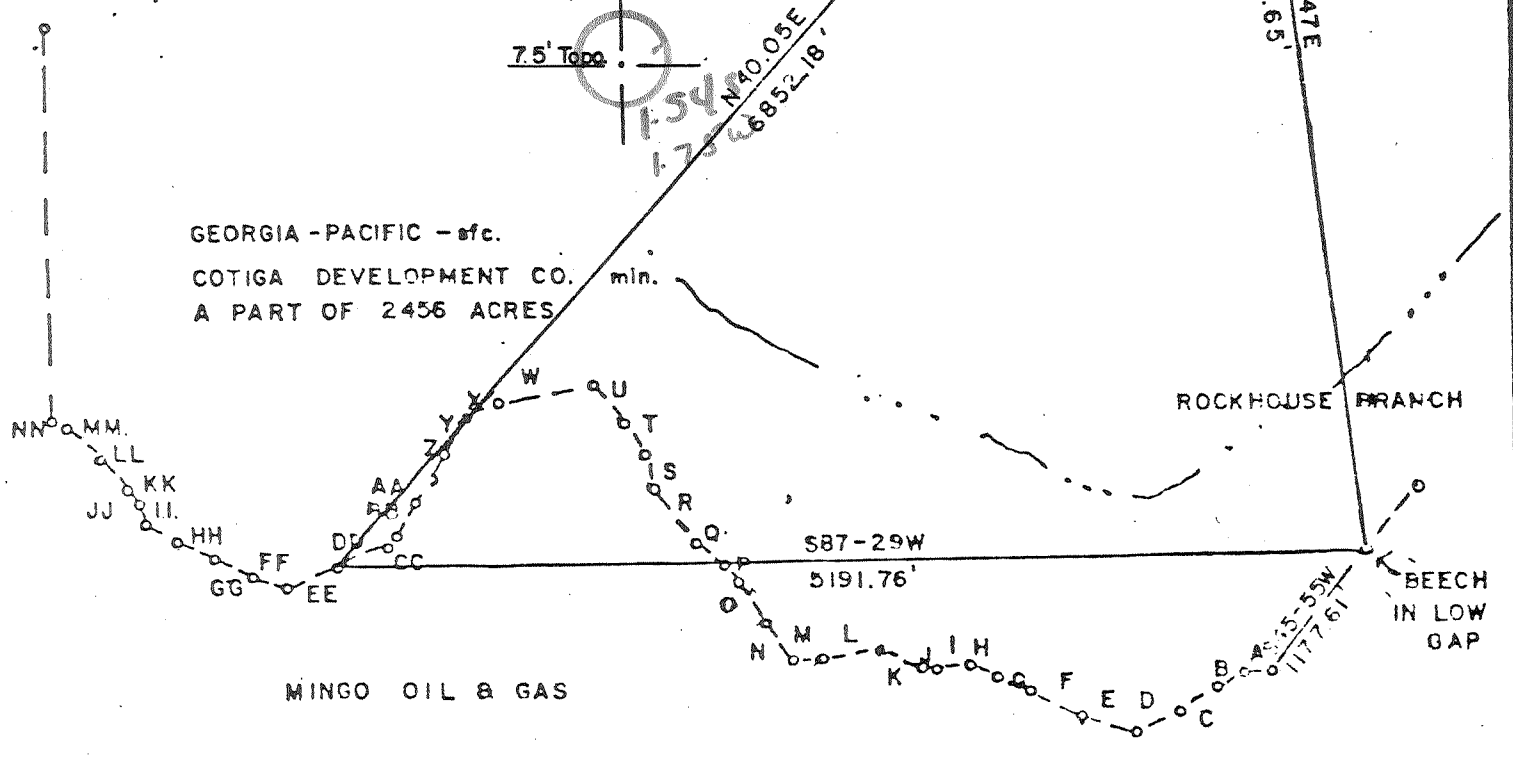


C.	S01-31W	757.30'	V.	S17-30W	430.36'
D.	N05-40W	292.84'	X.	S02-13W	150.79'
E.	N73-17W	283.17'	Y.	S20-16W	213.47'
F.	N63-04W	277.36'	Z.	S23-04W	135.81'
G.	N00-09W	167.90'	AA.	S85-58W	138.15'
H.	N65-40W	221.51'	BB.	S29-35W	157.77'
J.	S84-40W	180.85'	CC.	S46-18W	78.36'
J.	S78-42W	53.49'	DD.	S64-32W	276.03'
K.	N65-40W	721.51'	EE.	S67-38W	275.34'
L.	S78-41W	292.84'	FF.	N74-52W	194.96'
M.	N88-44W	133.48'	GG.	N60-52W	200.65'
N.	N38-22W	214.60'	HH.	E71-10W	198.92'
O.	N32-24W	258.93'	II.	N62-16W	179.96"
P.	N44-21W	92.18'	JJ.	N13-52W	111.13'
Q.	N52-47W	183.29'	KK.	N35-38W	88.74"
R.	N37-55W	334.04'	LL.	N40-44W	184.52'
S.	N16-57W	177.20'	MM.	N43-21W	201.61'
T.	N31-10W	161.42'	NN.	N64-10W	73.51'



GEORGIA - PACIFIC - etc.  
 COTIGA DEVELOPMENT CO.  
 A PART OF 2456 ACRES

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 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) Hardee D. Hardee  
 R.P.E. \_\_\_\_\_ L.L.S. \_\_\_\_\_  
 Norton Survey & Consulting, Inc.

PLACE SEAL HERE

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



DATE MARCH 1, 19 82  
 OPERATOR'S WELL NO. C-35  
 API WELL NO. 47-059-1004-Rev.  
 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 1480 WATER SHED ROCKHOUSE BRANCH  
 DISTRICT HARDEE COUNTY MINGO  
 QUADRANGLE MYRTLE Norden 1st SW  
 SURFACE OWNER GEORGIA - PACIFIC LUMBER CO. ACREAGE 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) \_\_\_\_\_

APR 2 1982

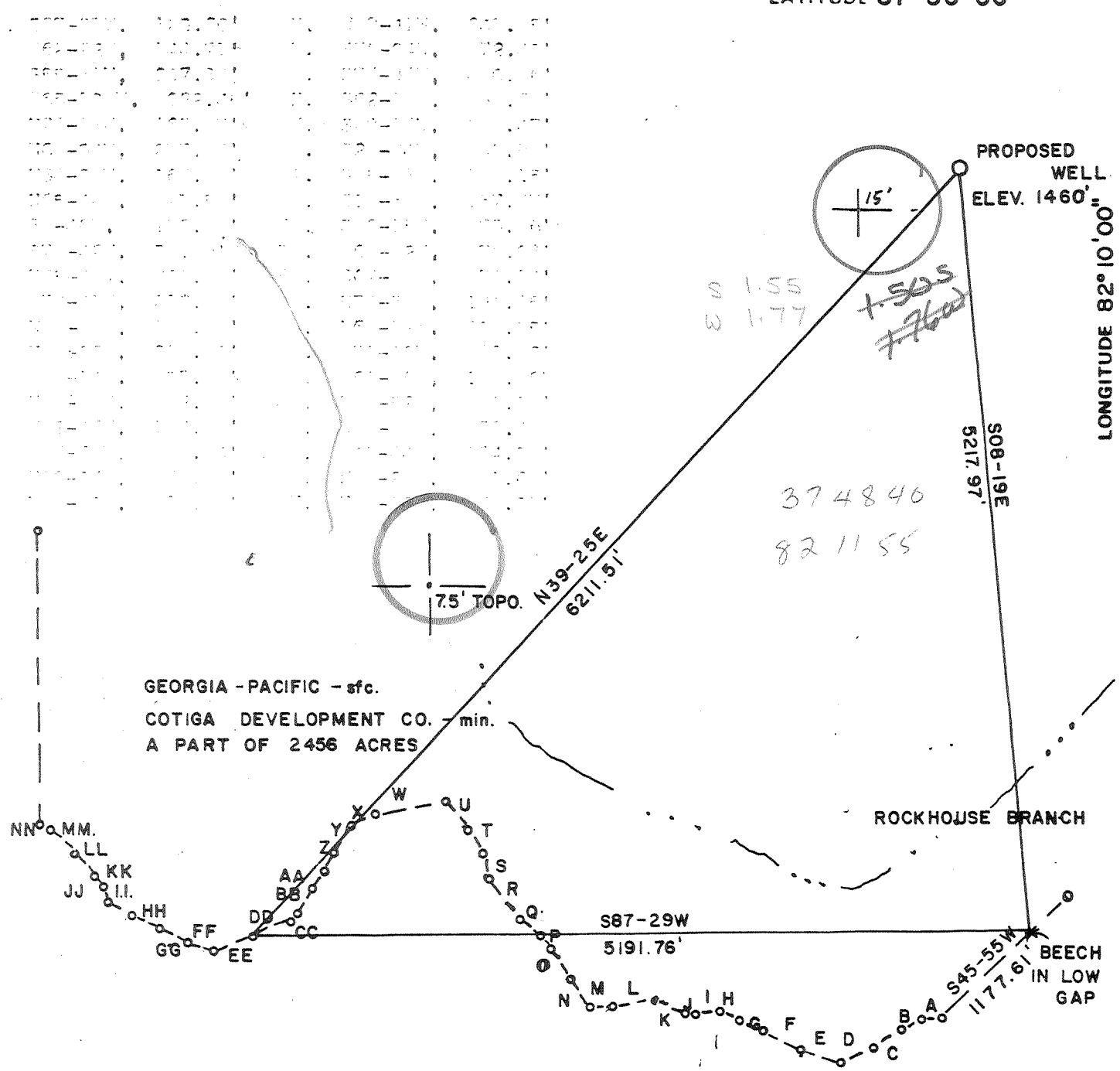
PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5000'  
 WELL OPERATOR SENCO - HEDBETH REGIONAL AGENT JOSEPH HAGER

Plot Card CSD  
 5.5.2-6.81

9240' LATITUDE 37° 50' 00"

NORTH

LONGITUDE 82° 10' 00"



GEORGIA - PACIFIC - sfc.  
 COTIGA DEVELOPMENT CO. - min.  
 A PART OF 2456 ACRES

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 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) Haynes D. Porter  
 R.P.E. \_\_\_\_\_ L.L.S. \_\_\_\_\_  
*Norton Surveys + Consulting, Inc.*

PLACE SEAL HERE

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



DATE NOVEMBER 21, 1981  
 OPERATOR'S WELL NO. C-35  
 API WELL NO. \_\_\_\_\_  
47 - 059 - 1004  
 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 1460' WATER SHED ROCKHOUSE BRANCH  
 DISTRICT HARDEE COUNTY MINGO  
 QUADRANGLE MYRTLE Holden 15 520

SURFACE OWNER GEORGIA - PACIFIC LUMBER CO. ACREAGE 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) DEMPSEY SCH

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5000'  
 WELL OPERATOR SENECA-UPSHUR PET. DESIGNATED AGENT JOSEPH HAGER  
 ADDRESS PO BOX P BUCKHANNON, W. VA. ADDRESS PO BOX P BUCKHANNON, W. VA.



IV-35  
(Rev 8-81)

Date June 4, 1982  
Operator's  
Well No. C-35  
Farm \_\_\_\_\_  
API No. 47 - 059 - 1004

State of West Virginia  
Department of Mines  
Oil and Gas Division

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: 1460' Watershed Rockhouse Branch  
District: Hardee County Mingo Quadrangle Myrtle

COMPANY Seneca-Upshur Petroleum, Inc.  
ADDRESS P.O. Box 2048, Buckhannon, WV 26201  
DESIGNATED AGENT Seneca-Upshur Petroleum, Inc.  
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 24 Darby Road, Paoli, PA 19301  
OIL AND GAS INSPECTOR FOR THIS WORK Arthur  
St. Clair ADDRESS P.O. Box 157, Brenton, WV  
PERMIT ISSUED December 17, 1982  
DRILLING COMMENCED March 25, 1982  
DRILLING COMPLETED April 4, 1982  
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.	15	15	10
13-10"	951	951	450
9 5/8			
8 5/8	2466	2466	270
7			
5 1/2			
4 1/2		4758	175
3	<b>RECEIVED</b>		
2			
Liners used	JUN - 9 1982 OIL AND GAS DIVISION WV DEPARTMENT OF MINES		

GEOLOGICAL TARGET FORMATION Marcellus Depth 5000 feet  
Depth of completed well 4778 feet Rotary X / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh \_\_\_\_\_ feet; Salt \_\_\_\_\_ feet  
Coal seam depths: 225, 329, 399, 472, 820 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3366 feet  
Gas: Initial open flow Trace Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow 713 Mcf/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 2 hours  
Static rock pressure 625 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

JUN 22 1982

(Continue on reverse side)

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

DATE: 4/28/82 5/4/82  
 NITROGEN: 7980 SCF 9600 SCF  
 SAND: 90,000# 120,000#  
 WATER: 366 BBLs. 451 BBLs.  
 PERFS: 12 12

WELL LOG

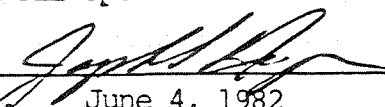
FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale			0	122	
Sand			122	225	
Coal			225	230	
Sand			230	238	
Sand & Shale			238	329	
Coal			329	334	
Sand & Shale			334	399	
Coal			399	404	
Sand & Shale			404	472	
Coal			472	477	
Sand & Shale			477	820	
Coal			820	827	
Sand & Shale			827	910	
Open Mine			910	914	
Shale			914	921	
Sand & Shale			921	2364	
Big Lime			2364	2642	
Big Injun			2642	2672	
Sand & Shale			2672	2826	
Weir			2826	2888	
Sand & Shale			2888	3232	
Sudbury Shale			3232	3286	
Berea			3286	3366	
Gray Shale			3366	4110	
Brown Shale			4110	4628	
Marcellus			4628	4778	T.D.

RHINESTREET  
830

Top of Onondaga 4777  
from gamma ray-density log

(Attach separate sheets as necessary)

Seneca-Ithaca Petroleum, Inc.  
Well Operator

By: 

Date: June 4, 1982

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-35  
Farm \_\_\_\_\_  
API # 47-059-1004  
Date December 1, 1981

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

DEC 2 1981

OIL AND GAS DIVISION  
DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil \_\_\_ / Gas X /  
(If "Gas", Production X / Underground storage \_\_\_ / Deep \_\_\_ / Shallow X /

LOCATION: Elevation: 1460' Watershed: Rockhouse Branch  
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 24 Darby Road Address \_\_\_\_\_  
Paoli, Pennsylvania 19301  
Acreage Part of 2,456.00

SURFACE OWNER Georgia-Pacific, Exchange Oil & Gas COAL OWNER(S) WITH DECLARATION ON RECORD:  
Address 1250 Poydras St., 24th Floor NAME Island Creek Coal Company  
New Orleans, Louisiana 70112 Address Pantsville, Kentucky 41240  
Acreage Part of 2,456.00 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

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed \_\_\_ / lease X / 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 X / 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:

WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
1013 WASHINGTON ST., E.  
CHARLESTON, WV 25311  
Telephone - 304/348-3092

BLANKET BOND

Seneca-Upshur Petroleum, Inc.  
Well Operator  
By: [Signature]  
Its: Vice 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  / Cable tools  /

Approximate water strata depths: Fresh,            feet; salt,            feet.

Approximate coal seam depths:           

Is coal being mined in this area: Yes  / No  /

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	Left in Well		
Conductor	16"				X	20	20	To Surface	Kinds
Fresh water									
Coal	11 3/4"			X		670	670	To Surface	Sizes
Intermed.	8 5/8"		20.00	X		2450	2450	To Surface	
Production	4 1/2"		10.50	X			5000	As Required	Depths set
Tubing								by Rule 15.01	
Liners								Perforations:	
								Top	Bottom

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, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 8-17-82

Fred B. Campbell  
Deputy Director - Oil & Gas Division

*Summary*

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 regularions.

Date:           , 19           .

By:           

Its: