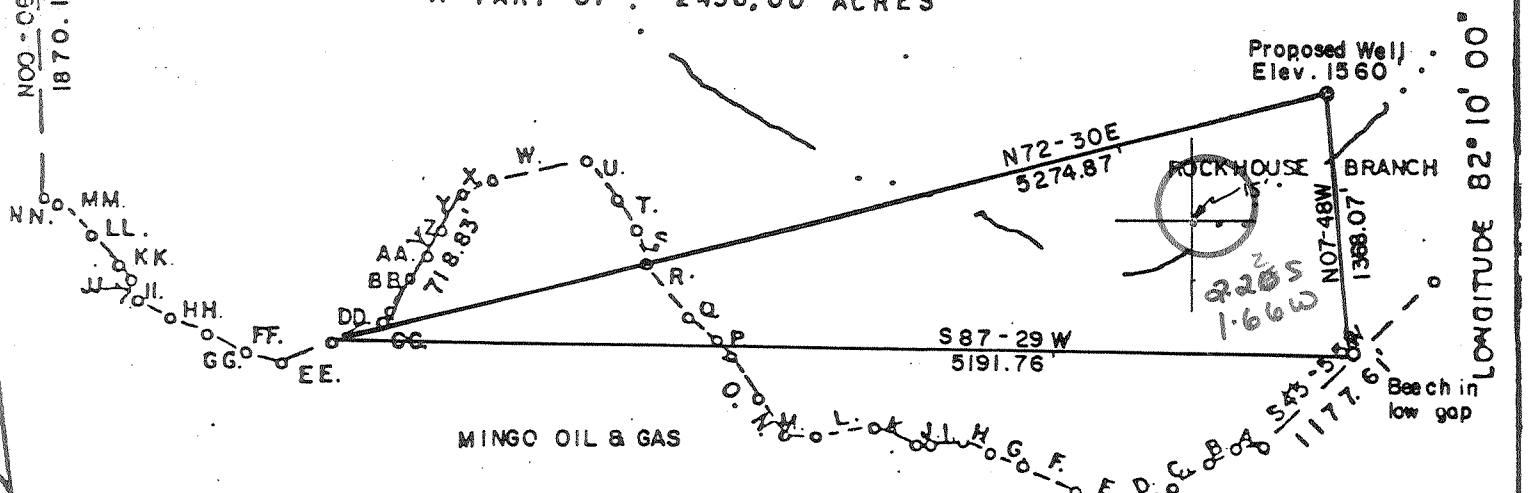


GEORGIA-PACIFIC etc.
COTIGA DEVELOPMENT CO. min.
A PART OF 2,456.00 ACRES



A.	S87-51W,	125.20'	Q.	N52-47W,	188.29'
B.	S62-22W,	144.71'	R.	N37-55W,	334.04'
C.	S55-01W,	207.30'	S.	N30-57W,	177.20'
D.	S65-50W,	222.46'	T.	N31-10W,	181.42'
E.	N72-17W,	268.17'	U.	N38-41W,	241.95'
F.	N63-04W,	277.36'	V.	S76-04W,	72.40'
G.	N68-09W,	167.90'	W.	S77-30W,	410.36'
H.	N65-16W,	127.75'	X.	S62-13W,	159.79'
I.	S64-16W,	180.86'	Y.	S29-16W,	213.47'
J.	S78-12W,	53.49'	Z.	S23-04W,	135.81'
K.	N65-16W,	221.51'	AA.	S35-14W,	136.15'
L.	S78-41W,	292.84'	BB.	S29-35W,	157.77'
M.	N68-14W,	133.48'	CC.	S46-18W,	78.36'
N.	N38-22W,	214.60'	DD.	S64-32W,	276.03'
O.	N32-21W,	258.93'	EE.	S67-36W,	275.34'
P.	N44-21W,	92.18'	FF.	N74-58W,	194.96'
MM.	N43-21W,	201.60'	GG.	N60-52W,	200.65'
NN.	N64-10W,	73.51'	HH.	N71-10W,	198.92'
			II.	N62-16W,	179.96'
			JJ.	N13-52W,	111.13'
			KK.	N35-38W,	89.44'
			LL.	N40-44W,	184.52'

37 48 05
82 11 50

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) *Walter A. Norton*
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)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE JANUARY 7, 1982
OPERATOR'S WELL NO. C-32
API WELL NO. 47-059-1006
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
LOCATION: ELEVATION 1560' WATER SHED ROCKHOUSE BRANCH
DISTRICT HARDEE COUNTY MINGO
QUADRANGLE MYRTLE *Norden 15' SW*
SURFACE OWNER GEORGIA PACIFIC ACREAGE A Part of 2,456
OIL & GAS ROYALTY OWNER COTIGA DEVELOPMENT CO. LEASE ACREAGE A Part of 2,456

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) *DEMPSE SCH.*

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5000' *DEEP WELL BREEDER CR*
WELL OPERATOR SENECA-UPSHUR PET INC. DESIGNATED AGENT JOSEPH HAGER
ADDRESS P.O. BOX P BUCKHANNON W Va 26201
FEB 22 1982



IV-35
(Rev 8-81)

Date June 4, 1982
Operator's
Well No. C-32
Farm _____
API No. 47 -059 - 1006

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: 1560' 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 January 27, 1982
DRILLING COMMENCED February 12, 1982
DRILLING COMPLETED February 23, 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"			
9 5/8			
8 5/8	2538	2538	500
7			
5 1/2			
4 1/2		4847	175
3			
2	RECEIVED		
Liners used	JUN - 9 1982		
	OIL AND GAS DIVISION WV DEPARTMENT OF MINES		

GEOLOGICAL TARGET FORMATION Marcellus Depth 5000 feet
Depth of completed well 4882 feet Rotary x / Cable Tools _____
Water strata depth: Fresh 85 feet; Salt _____ feet
Coal seam depths: 112, 246, 335, 433, 793, Is coal being mined in the area? No
876

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3456 feet
Gas: Initial open flow Trace Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 696 Mcf/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 2 hours
Static rock pressure 580 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

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

DATE:	5/12/82	5/19/82
NITROGEN:	8800 SCF	7950 SCF
SAND:	90,000#	98,000 SCF #
WATER:	372 BBLs.	437 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	112	
Coal			112	116	
Sand & Shale			116	246	
Coal			246	250	
Sand & Shale			250	335	
Coal			335	340	
Sand & Shale			340	433	
Coal			433	437	
Shale & Sand			437	793	
Coal			793	796	
Sand & Shale			796	876	
Coal			876	880	
Sand			880	1160	
Sand & Shale			1160	1789	
Dark Shale			1789	1843	
Sand & Shale			1843	2130	
Salt Sand			2130	2235	
Sand & Shale			2235	2305	
Gray Shale			2305	2315	
Salt Sand			2315	2352	
Sand & Shale			2352	2425	
Big Lime			2425	2703	
Big Injun			2703	2742	
Sand & Shale			2742	2904	
Weir			2904	2968	
Sand & Shale			2968	3310	
Sudbury Shale			3310	3368	
Berea			3368	3456	
Gray Shale			3456	4200	
Brown Shale			4200	4728	
Marcellus		<i>PHINE STREET</i>	4728	4882	T.D. <i>Onondaga at 4876'</i> <i>(with elev = 1570 KB)</i>

(Attach separate sheets as necessary)

Seneca-Upshur Petroleum, Inc.

Well Operator

By:

[Signature]

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 those encountered in the drilling of a well."



Well No. C-32
Farm _____
API # 47 - 059 - 1006
Date January 11, 1982

STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS - 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: 1560' 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

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

JAN 12 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 X / other contract ___ / dated Aug. 1, 1979, to the undersigned well operator from Cotiga Development Company.

(If said 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
1613 WASHINGTON ST., E.
CHARLESTON, WV 25311
Telephone - 304/348-3092

BLANKET BOND

Seneca-Upshur Petroleum, Inc.
Well Operator
By: [Signature]
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, 80 feet; salt, 2300 feet.
Approximate coal seam depths: 320
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 Drill-ling	Left in Well		
Conductor	16"					30	30	To Surface	Kinds
Fresh water									
Coal									Sizes
Intermed.	8 5/8"		23.00	X		2370	2370	To Surface	
Production Tubing	4 1/2"		23.00	X			4850	As Required	Depths set 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 9-27-82.

J. E. Huggins
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 regularations.

Date: _____, 19____.

By: _____

Its: _____