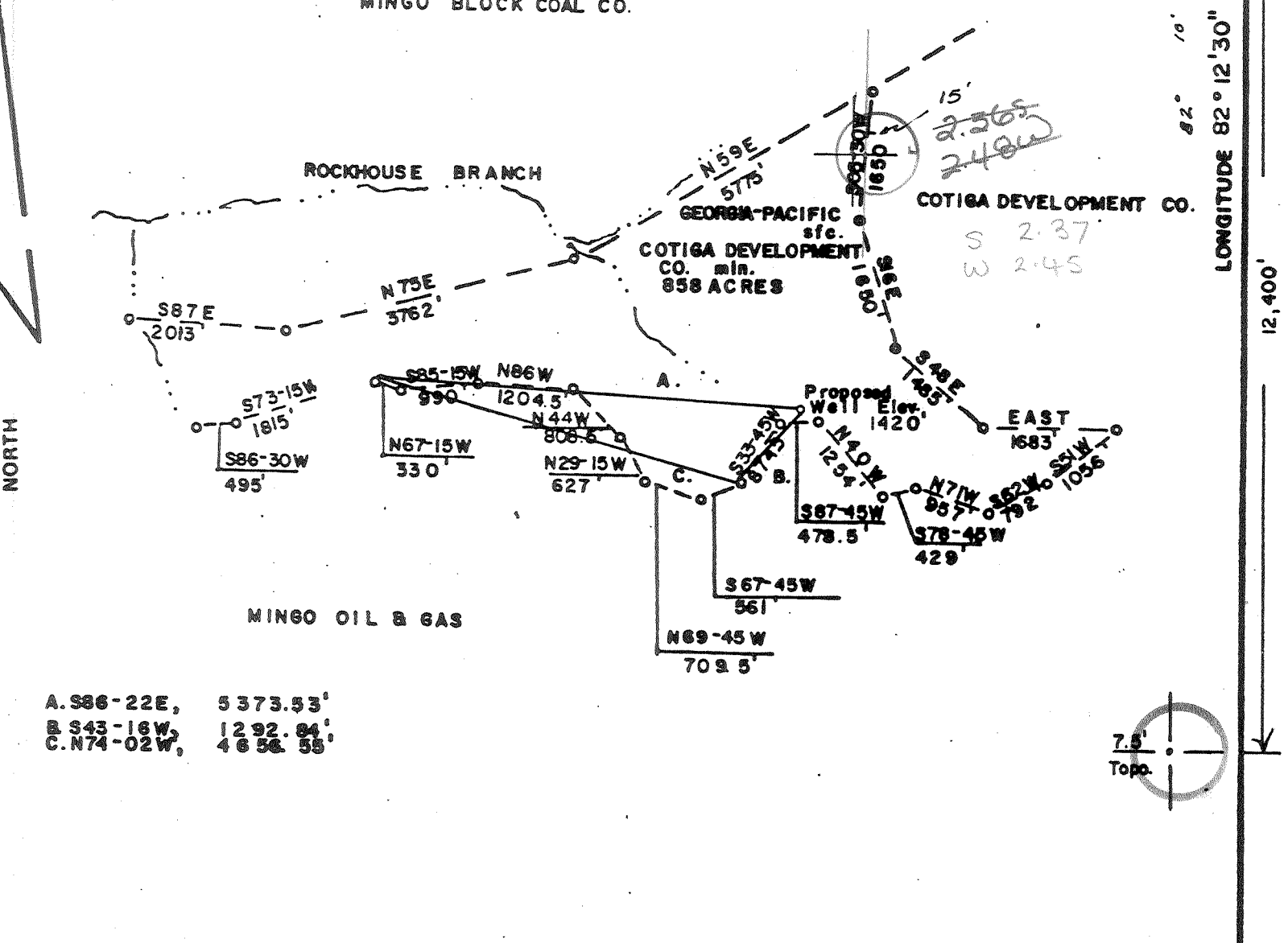


37 47 55
82 12 45

MINGO BLOCK COAL CO.



LONGITUDE 82° 12' 30"

12,400'

NORTH

- A. S86-22E, 5373.53'
- B. S43-16W, 1292.84'
- C. N74-02W, 4658.55'



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) Haynes W. Holden
 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-8 (8-78)



DATE NOV. 9, 1981
 OPERATOR'S WELL NO. C 28
 API WELL NO. _____
47 - 059 - 0998
 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 1420' WATER SHED ROCKHOUSE BRANCH
 DISTRICT HARDEE COUNTY MINGO
 QUADRANGLE MYRTLE Holden's SW
 SURFACE OWNER GEORGIA-PACIFIC ACREAGE 858
 OIL & GAS ROYALTY OWNER COTIGA DEVELOPMENT CO. LEASE ACREAGE 858
 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) _____
 DEC 16 1981

PLUG AND ABANDON CLEAN OUT AND REFLUG
 TARGET FORMATION: DEVONIAN SHALE *Marcellus* DEPTH 5000'
 WELL OPERATOR: SENECA INDUSTRIES PET, INC.
 P.O. BOX P
 6-6 Dempsey School (368)
 JOSEPH HAGER
 Deep wells



IV-35
(Rev 8-81)

Date August 12, 1982
Operator's
Well No. C-28
Farm _____
API No. 47 - 059 - 0998

RECEIVED State of West Virginia
Department of Mines
Oil and Gas Division

AUG 13 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES
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: 1420' 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, GA 30909

MINERAL RIGHTS OWNER Cotiga Development Company
ADDRESS 25 Darby Road, Paoli, PA 19301

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

PERMIT ISSUED 11/30/81
DRILLING COMMENCED 12/16/81
DRILLING COMPLETED 1/3/82

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.	17	17	10
13-10"			
9 5/8			
8 5/8	2425	2425	450
7			
5 1/2			
4 1/2		4676	160
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Marcellus Depth 5000 feet

Depth of completed well 4744 feet Rotary X / Cable Tools _____

Water strata depth: Fresh 126 feet; Salt _____ feet

Coal seam depths: 171, 206, 252, 345 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3362 feet

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

Final open flow 793 Mcf/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 2 hours

Static rock pressure 540 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) AUG 23 1982

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

DATE:	5/25/82	6/1/82
NITROGEN:	8000 SCF	9150 SCF
WATER:	378 BBLs.	451 BBLs.
SAND:	90,000#	120,000#
PERFS:	12 <u>4441'-4644'</u>	12 <u>4150'-4275'</u>

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	171	
Coal			171	176	
Sand			176	206	
Coal			206	210	
Sand			210	252	
Coal			252	258	
Sand			258	345	
Coal			345	348	
Sand & Shale			511	1547	
Sand			1547	1645	
Shale			1645	1743	
Salt Sand			1743	1765	
Sand & Shale			1765	2133	
Sand			2133	2308	
Big Lime			2308	2586	
Big Injun			2586	2662	
Sand & Shale			2662	2812	
Weir			2812	2880	
Sand & Shale			2880	3218	
Sudburry Shale			3218	3265	
Berea			3265	3362	
Gray Shale			3362	3988	
Brown Shale			3988	4580	
Marcellus-Huron			4580	4744	T.D.

Top of Cambria
4740 from
gamma ray - density log

(Attach separate sheets as necessary)

Seneca-Upshur Petroleum, Inc.
Well Operator

By: *[Signature]*
Date: August 12, 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."



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: 1420 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 25 Darby Road Address _____
Paoli, Pennsylvania 19301
Acreage 858.00

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 858.00

FIELD SALE (IF MADE) TO:
NAME _____
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
NAME _____
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

NOV 13 1981

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 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: Stephen T. Leger
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 X / Cable tools /
Approximate water strata depths: Fresh, feet; salt, feet.
Approximate coal seam depths:
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	Left in Well		
Conductor	16"				X	30	30	To Surface	Kinds
Fresh water									
Coal									Sizes
Intermed.	8 5/8"		20.00	X		2450	2450	To Surface	
Production Tubing	4 1/2"		10.50	X			5000	As Required by Rule 15.01	Depths set
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 7-30-82.


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: _____