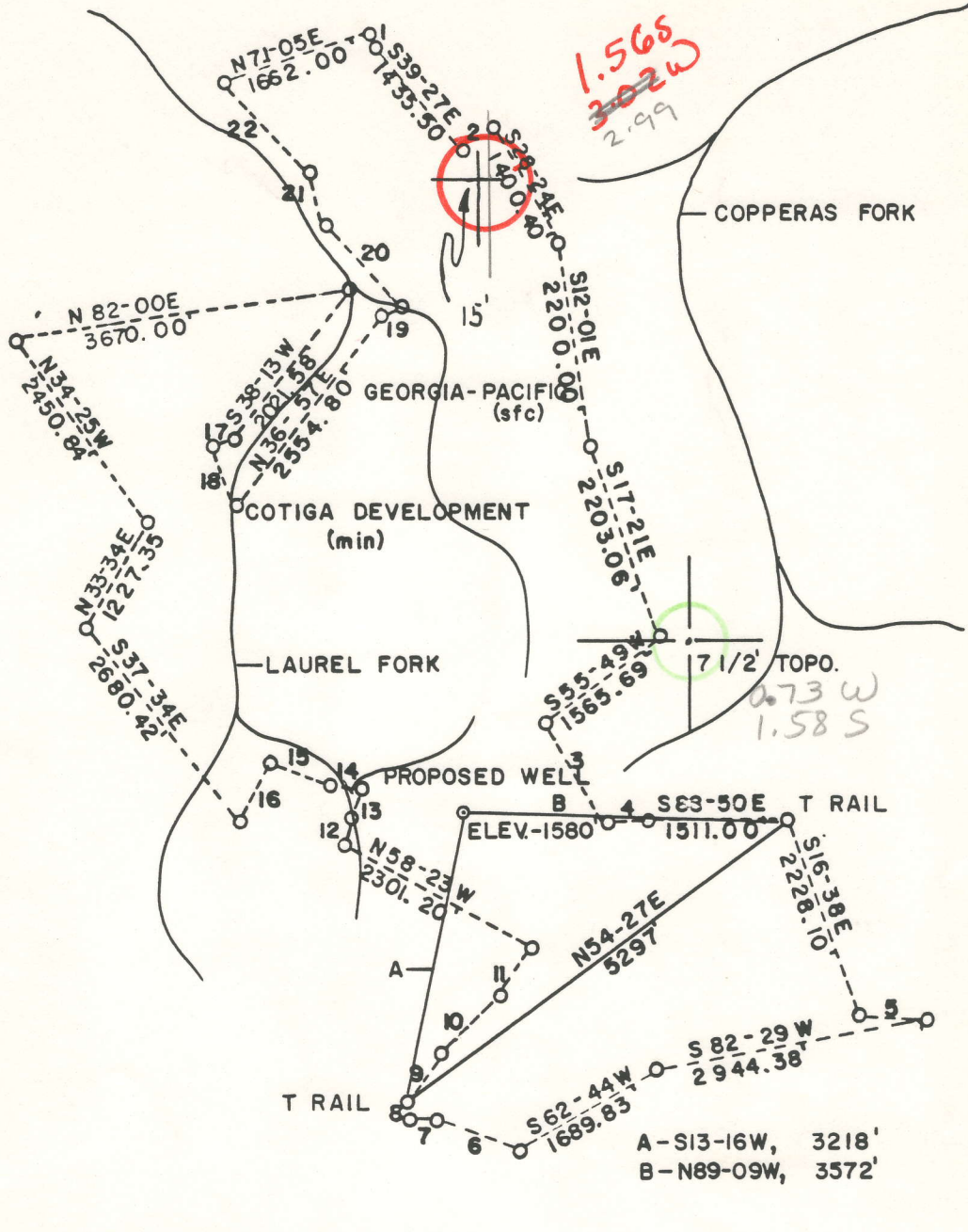


NORTH



FILE NO _____
 DRAWING NO _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION USGS BM TRACEFORK 665 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



(H) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM IV-E (878)



DATE MAY 19, 19 83
 OPERATOR'S WELL NO. C-71
 API WELL NO. _____
47 - 059 - 1065
 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 1580' WATER SHED LAUREL FORK
 DISTRICT HARDEE COUNTY MINGO
 QUADRANGLE MYRTLE Holden 15' SC
 SURFACE OWNER GEORGIA PACIFIC ACREAGE 1030'
 OIL & GAS ROYALTY OWNER COTIGA DEVELOPMENT CO. LEASE ACREAGE 1030'
 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 5200' 6-6 Dempsey School (368)
 WELL OPERATOR SENECA-UPSHUR PET. INC. DESIGNATED AGENT JOSEPH HAGER
 ADDRESS P.O. BOX 2048 DEEP WELL P.O. BOX 2048
FICKHANNON, W. VA. 26201 FICKHANNON, W. VA. 26201

IV-35
(Rev 8-81)

Rev
3/21/84
FERC



State of West Virginia
Department of Mines
Oil and Gas Division

Date January 23, 1984
Operator's
Well No. C-71
Farm _____
API No. 47 - 059 - 1065

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: 1580' Watershed 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 Cotiga Development Company
2nd Floor Rear, 14 E. Lancaster Ave.
ADDRESS Paoli, Pennsylvania 19301
MINERAL RIGHTS OWNER Georgia-Pacific
ADDRESS 133 Treachtreet St., N.E., Atlanta, GA
OIL AND GAS INSPECTOR FOR THIS WORK Arthur
St. Clair ADDRESS P.O. Box 157, Brenton, WV
PERMIT ISSUED 6/24/83
DRILLING COMMENCED 10/30/83
DRILLING COMPLETED 11/7/83

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.	20	20	10
13-10"	1123	1123	390
9 5/8			
8 5/8	2530	2530	420
7			
5 1/2			
4 1/2		4012	175
3			
2			
Liners used			

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

GEOLOGICAL TARGET FORMATION Marcellus Depth 5200 feet
Depth of completed well 5072 feet Rotary X / Cable Tools _____
Water strata depth: Fresh 500 feet; Salt 1725 feet
Coal seam depths: 277', 444', 580', 986', 1094' Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Devonian Shale Pay zone depth 3468 feet
Gas: Initial open flow Trace Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 880 Mcf/d Oil: Final open flow 0 Bbl/d
Time of open flow between initial and final tests 2 hours
Static rock pressure 595 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 24 1986

(Continue on reverse side)

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

FOAM FRAC:

DATE: 1/5/84

WATER: 783 BBLs.

SAND: 210,000#

PERFS: 4310' - 4937' 30 .49 Perfs

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	83	
Sand & Shale			83	166	
Sand			166	185	
Sand & Shale			185	224	
Sand			224	277	
Coal			277	292	
Sand			292	444	
Coal			444	446	
Sand & Shale			446	500	
Shale			500	546	
Sand			546	580	
Coal			580	590	
Sand & Shale			590	922	
Mine			922	932	
Sand & Shale			932	986	
Coal			986	988	
Shale			988	1094	
Coal			1094	1098	
Shale			1098	1163	
Sand & Shale			1163	2145	
Shale & Red Rock			2145	2185	
Sand & Shale			2185	2442	
Little Lime			2442	2452	
Red Rock & Shale			2452	2492	
Big Lime			2492	2770	
Big Injun			2770	2819	
Sand & Shale			2819	2954	
Weir			2954	3004	
Sand & Shale			3004	3355	
Sudbury Shale			3355	3410	
Berea			3410	3468	
Gray Shale			3468	4280	
Brown Shale			4280	4896	
Marcellus			4896	5072	T.D.

GR log from 1590' KB

395 3396
401 3400
810 4318

822 4600
825 4720
830 4899
461 5060

(Attach separate sheets as necessary)

Seneca-Upshur Petroleum Company
Well Operator

By: 

Date: January 23, 1984

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."



1) Date: May 24, 1983
 2) Operator's Well No. C-71
 3) API Well No. 47 - 059 - 1065
 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 X / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: 1530' Watershed: Laurel Fork
 District: Harvey County: Mingo Quadrangle: Myrtle
- 6) WELL OPERATOR Seneca-Upshur Petroleum, Inc. 11) DESIGNATED AGENT Joseph G. Lager
 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 2nd Floor Rear, 14 E. Lancaster Ave. Address _____
Paoli, Pennsylvania 19301
 Acreage 1030
- 8) SURFACE OWNER Georgia-Pacific 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Address P.O. Box 1808 Name Island Creek Coal Company
Augusta, Georgia 30909 Address Paintsville, Kentucky 41240
 Acreage 1030
 Name _____
 Address _____
- 9) FIELD SALE (IF MADE) TO:
 Address _____
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Arthur St. Clair
 Address P.O. Box 157
Brenton, West Virginia 24818
- 14) COAL LESSEE WITH DECLARATION ON RECORD:
 Name None
 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, 5200 feet
- 18) Approximate water strata depths: Fresh, 5204 feet; salt, 920 feet.
- 19) Approximate coal seam depths: 320 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	16"				X	20	20	to surface	Kinds
Fresh water									
Coal									Sizes
Intermediate	8 5/8"		23.00	X		2450	2450	to surface	
Production	4 1/2"		23.00	X			5200	as required	Depths set
Tubing								by Rule 15.0	
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.
 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: Charles R. Tuten

Signed: Joseph G. Lager

My Commission Expires June 6, 1988
 for the State of West Virginia.

Its: Vice President

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-059-1065 Date June 14 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 _____ unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
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Administrator, Office of Oil and Gas