

3-11-83

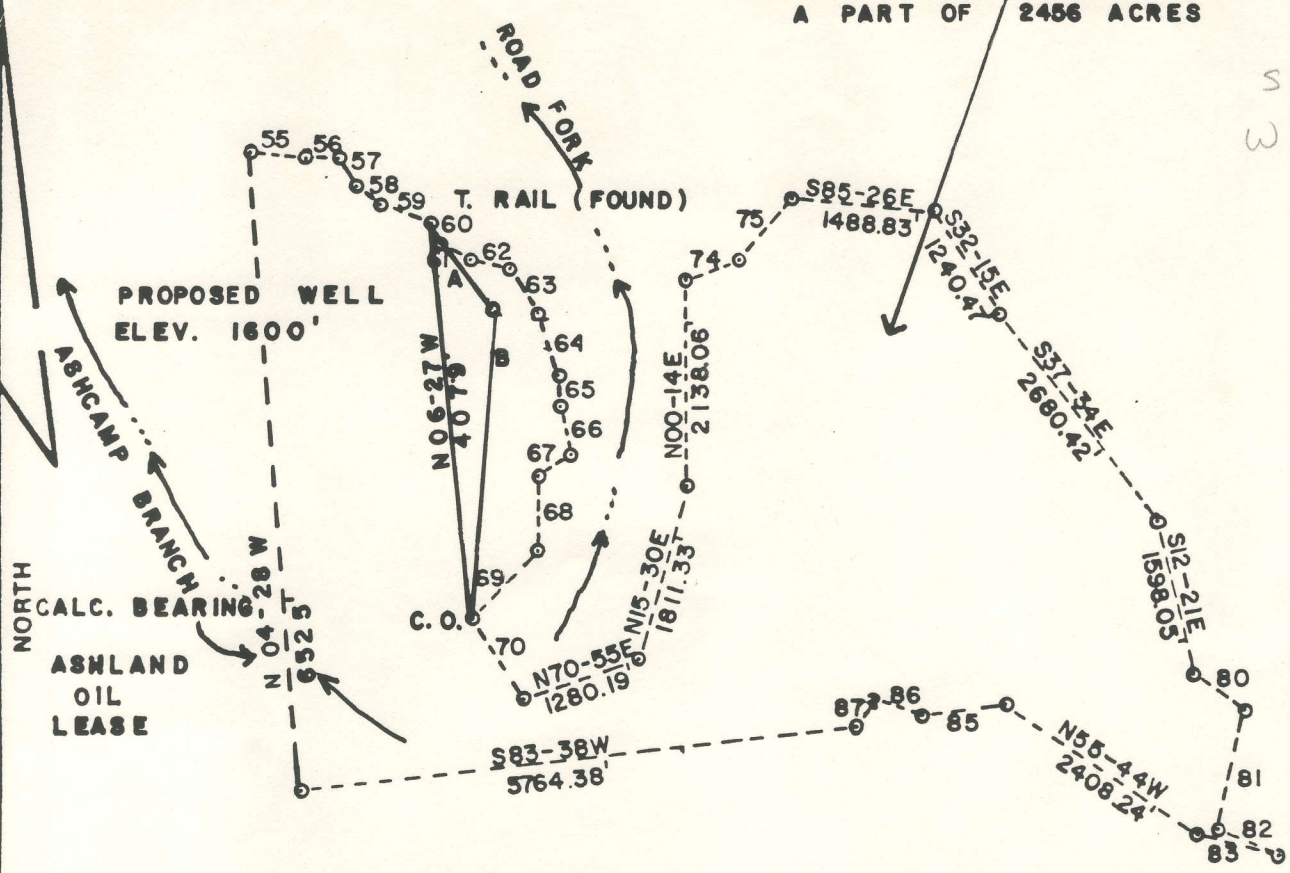
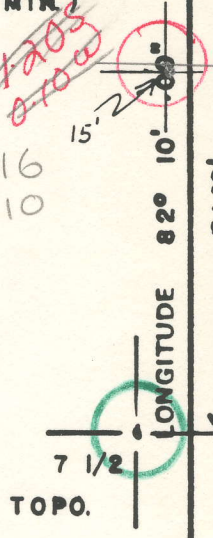
Plot Card CSD

LATITUDE 37° 50' 00"

A = S 38-26 E, 1151'  
B = S 04-40 W, 3163'

COTIGA DEVELOPMENT CO. (MIN.)  
GEORGIA PACIFIC (SFC.)  
A PART OF 2456 ACRES

S 1.16  
W 0.10



- 55=S84-23E, 576.91'
- 56=N88-55E, 309.69'
- 57=S38-34E, 335.65'
- 58=S47-51E, 297.79'
- 59=S72-41E, 570.52'
- 60=S26-36E, 233.12'
- 61=S66-14E, 358.33'
- 62=S79-27E, 395.30'
- 63=S34-33E, 537.76'
- 64=S17-30E, 683.36'
- 65=S02-36E, 317.36'
- 66=S12-01E, 491.26'

- 67=S56-10W, 398.23'
- 68=S01-03W, 741.78'
- 69=S43-29W, 951.27'
- 70=S29-19E, 985.79'
- 74=N69-32E, 601.12'
- 75=N39-31E, 835.37'
- 80=S54-18E, 656.34'
- 81=S12-31W, 1261.68'
- 82=S68-23E, 676.88'
- 83=N75-37W, 868.74'
- 85=S83-47W, 883.60'
- 86=N70-32W, 528.67'

87=S31-25W, 292.68'

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=2000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM TRACEFORK 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) Wayne D. Pocher  
 R.P.E. \_\_\_\_\_ L.L.S. 624  
*Nocton Surveys & Consulting, Inc.*

PLACE SEAL HERE

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



DATE FEBRUARY 14, 19 83  
 OPERATOR'S WELL NO. C-55  
 API WELL NO. \_\_\_\_\_  
47 - 059 - 1047  
 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 1600' WATER SHED ASHCAMP BRANCH  
 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 \_\_\_  
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 5000'  
 WELL OPERATOR SENECA-UPSHUR PET. INC. DESIGNATED AGENT JOSEPH HAGER  
 ADDRESS P.O. BOX 2048 ADDRESS P.O. BOX 2048  
BUCKHANNON, W.VA. 26201 BUCKHANNON, W.VA. 26201

6-6 Dempsey School (368)  
MAR 14 1983



IV-35  
(Rev 8-81)

SEP 12 1983



Date August 11, 1983  
Operator's  
Well No. C-55  
Farm \_\_\_\_\_  
API No. 47 - 059 - 1047

AUG 15 1983

State of West Virginia  
Department of Mines  
Oil and Gas Division

OIL & GAS DIVISION  
DEPT. 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: 1600' Watershed Ashcamp Branch  
District: Hardee County Mingo Quadrangle Myrtle

COMPANY Seneca-Upshur Petroleum, Inc.  
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, GA 30909  
MINERAL RIGHTS OWNER Cotiga Development Co.  
ADDRESS 2nd Floor Rear, 14 E. Lancaster Ave. Paoi, PA 1930.  
OIL AND GAS INSPECTOR FOR THIS WORK Arthur St. Clair ADDRESS P.O. Box 157, Brenton, WV  
PERMIT ISSUED 3/11/83  
DRILLING COMMENCED 6/24/83  
DRILLING COMPLETED 6/30/83  
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.	20	20	10
13-10"			
9 5/8			
8 5/8	2994	2504	500
7			
5 1/2			
4 1/2		4865	175
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Marcellus Depth 5000 feet  
Depth of completed well 4904 feet Rotary x / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 820 feet; Salt 2440 feet  
Coal seam depths: 81' Is coal being mined in the area? No

*Huron see back*

OPEN FLOW DATA  
Producing formation Devonian Shale Pay zone depth 3400 feet  
Gas: Initial open flow Trace Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow 910 Mcf/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 2 hours  
Static rock pressure 670 psig (surface measurement) after 24 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation N/A 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: 7/26/83

WATER: 423 BBLS.

SAND: 210,000#

PERFS: 4098' - 4541' <sup>Huron</sup> 24 .49 Perfs

NITROGEN: 21840 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 & Shale			0	81	
Coal			81	85	
Sand & Shale			85	2420	
Big Lime			2420	2698	
Big Injun			2698	2732	
Sand & Shale			2732	2866	
Weir			2866	2930	
Sand & Shale			2930	3270	
Sudbury Shale			3270	3334	
Berea			3334	3400	
Gray Shale			3400	4150	
Brown Shale			4150	4720	
Marcellus			4720	4904	T.D.

Top of Onondaga 4893  
from gamma ray-density log

Huron  
4904  
3400  
1504

(Attach separate sheets as necessary)

Seneca-Upshur Petroleum, Inc.

Well Operator

By: 

Date: August 11, 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 ... encountered in the drilling of a well."





1) Date: February 21, 1983  
 2) Operator's Well No. C-55  
 3) API Well No. 47 - 959 - 1047  
 State \_\_\_\_\_ County \_\_\_\_\_ Permit \_\_\_\_\_

DRILLING CONTRACTOR:

Little Swiss Drilling Company  
P.O. Box 2048  
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: 1600 Watershed: Ascamp Branch  
 District: Marble County: Mingo Quadrangle: Myrtle
- 6) WELL OPERATOR Sensica-Opshur Petroleum, Inc. 11) DESIGNATED AGENT Joseph G. Payer  
 Address P.O. Box 2048 Address P.O. Box 2048  
Buckhannon, WV 26201 Buckhannon, WV 26201
- 7) OIL & GAS ROYALTY OWNER Cotiga Development Company 12) COAL OPERATOR None  
 Address 2nd Floor Rear, 14 East Lancaster Ave. Address \_\_\_\_\_  
Pooli, 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  
Augusta, Georgia 30909 Address Paintsville, Kentucky 41240  
 Acreage Part of 2,456 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 24918 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, 5000 feet
- 18) Approximate water strata depths: Fresh, 600 feet; salt, 1000 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									Sizes	
Coal									Depths set	
Intermediate	8 5/8"		23.00	X		2600	2600	To Surface	Perforations:	
Production	4 1/2"		23.00	X			5000	As Required	Top Bottom	
Tubing								by Rule 15.0		
Liners										

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: [Signature]

Signed: [Signature]

My Commission Expires June 6, 1988

Its: Vice President

OFFICE USE ONLY

DRILLING PERMIT

Permit number 47-959-1047

Date March 11, 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 November 11, 1983 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