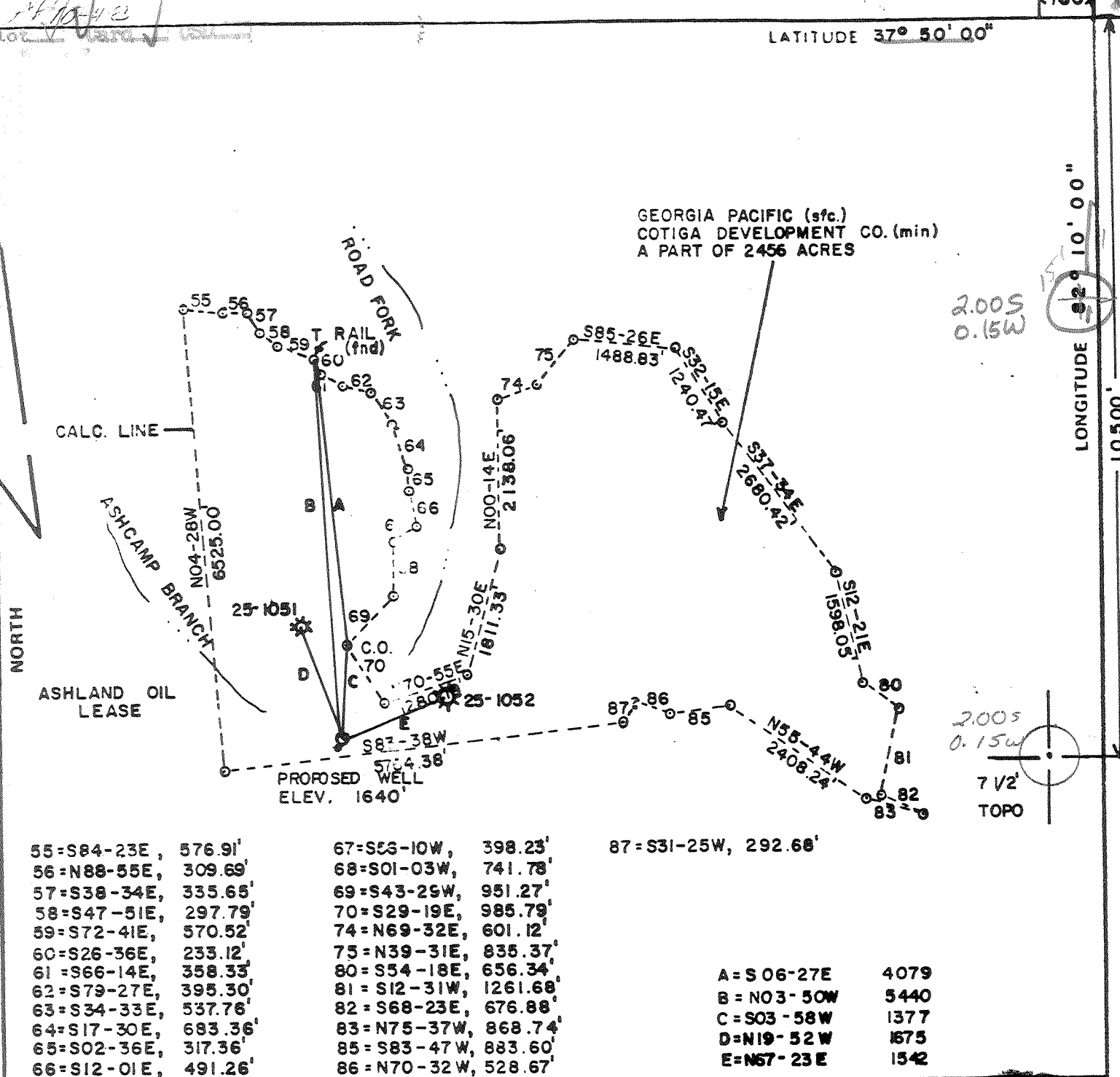


LATITUDE 37° 50' 00"

47803

LONGITUDE 82° 10' 00"



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=S53-10W, 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'

A=S 06-27E	4079
B=N03-50W	5440
C=S03-58W	1377
D=N19-52W	1575
E=N57-23E	1542

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) [Signature]  
 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)



DATE SEPTEMBER 19, 19 83  
 OPERATOR'S WELL NO. C-25  
 API WELL NO. \_\_\_\_\_  
47 - 059 - 1072  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

OCT 16 1983

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1640' WATER SHED RIFFE 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) DEEP WELL

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 5000' Dempsey School (368)  
 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

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IV-35  
(Rev 8-81)

DEC 12 1983

OIL & GAS DIVISION  
DEPT. OF MINES

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date December 2, 1983  
Operator's  
Well No. C-25  
Farm \_\_\_\_\_  
API No. 47 - 059 - 1072

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: 1640' Watershed Riffe Branch  
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 Georgia-Pacific  
ADDRESS 133 Teachtree St., N.E., Atlanta, GA  
MINERAL RIGHTS OWNER Cotiga Development Company  
ADDRESS 2nd Floor Rear, 14 E. Lancaster Ave. Paoli, Pennsylvania 19301  
OIL AND GAS INSPECTOR FOR THIS WORK Arthur  
St. Clair ADDRESS P.O. Box 157, Brenton, WV  
PERMIT ISSUED 10/13/83  
DRILLING COMMENCED 10/26/83  
DRILLING COMPLETED 11/7/83  
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"	1025	1025	500
9 5/8			
8 5/8	2532	2532	420
7			
5 1/2			
4 1/2		4968	175
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Marcellus Depth 5000 feet  
Depth of completed well 5023 feet Rotary X / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 170 feet; Salt \_\_\_\_\_ feet  
Coal seam depths: 141', 229', 336', 357', 1000' Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3482' feet  
Gas: Initial open flow Trace Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow 1043 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.

FOAM FRAC

DATE: 11/15/83  
 SAND: 200,000#  
 WATER: 790 BBLs. *Huron*  
 PERFS: 4188' - 4867' 30 .49 Perfs  
 NITROGEN: 19320 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	141	
Coal			141	144	
Sand & Shale			144	229	
Coal			229	232	
Sand & Shale			232	336	
Coal			336	341	
Sand & Shale			341	357	
Coal			357	362	
Sand & Shale			362	950	
Open Hole			950	953	
Sand & Shale			953	1000	
Coal			1000	1005	
Sand & Shale			1005	2482	
Big Lime			2482	2760	
Big Injun			2760	2796	
Sand & Shale			2796	2946	
Weir			2946	3030	
Sand & Shale			3030	3350	
Sudbury Shale			3350	3424	
Berea			3424	3482	
Gray Shale			3482	4254	
Brown Shale			4254	4840	
Marcellus			4840	<u>5023</u>	

T.D. Huron

5023  
 3482  
 2541

Onondaga at 5000' with elev = 1650' K.6.

(Attach separate sheets as necessary)

Seneca-Upshur Petroleum Company  
 Well Operator

By: *[Signature]*  
 Date: December 2, 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: September 21, 19 83  
 2) Operator's Well No. C-25  
 3) API Well No. 47 - 059 - 1072  
 State County Permit

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES, OIL AND GAS DIVISION  
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil  / Gas  /  
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow  )  
 5) LOCATION: Elevation: 1640' / Watershed: Riffe Branch  
 District: Hardee / County: Mingo / Quadrangle: Myrtle  
 6) WELL OPERATOR Seneca-Upshur Petroleum, Inc. / 7) DESIGNATED AGENT Joseph G. Hager  
 Address P.O. Box 2048 / Address P.O. Box 2048  
Buckhannon, West Virginia 26201 / Buckhannon, West Virginia 26201  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED / 9) DRILLING CONTRACTOR:  
 Name Arthur St. Clair / Name Little Swiss Drilling Company  
 Address P.O. Box 157 / Address P.O. Box 2048  
Brenton, West Virginia 24818 / Buckhannon, West Virginia 26201  
 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate   
 Plug off old formation  / Perforate new formation   
 Other physical change in well (specify) \_\_\_\_\_  
 11) GEOLOGICAL TARGET FORMATION, Marcellus  
 12) Estimated depth of completed well, 5000 feet  
 13) Approximate trata depths: Fresh, 580 feet; salt, 980 feet.  
 14) Approximate coal seam depths: 320 Is coal being mined in the area? Yes  / No

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15) 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	11 3/4"					740	740	To Surface	By Rule 15.05
Coal									Sizes
Intermediate	8 5/8"		23.00	X		2520	2520	To Surface	
Production	4 1/2"		23.00	X			5000	As Required	Depths set
Tubing								by Rule 15.01	
Liners									Perforations:
									Top Bottom

OIL & GAS DIVISION  
 DEPT. OF MINE

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-059-1072 / Date October 13, 19 83

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. 8) 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.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires October 13, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BB</u>	Agent: <u>[Signature]</u>	Plat: <u>[Signature]</u>	Casing: <u>[Signature]</u>	Fee: <u>6173</u>
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[Signature]  
 Administrator, Office of Oil and Gas