



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF
 ACCURACY 1" IN 200'
 DATE OF SURVEY _____
 LOCATION USGS AT MT. CALVARY
 CHURCH = 1922'

I 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 REGU-
 LATIONS SUSCEPT AND PRESCRIBED BY THE DEPART-
 MENT OF MINES
 (Signature)
 R.P.E. _____ L.S. 028254E (PA)

PLACE SEAL HERE

(FOR REPRODUCTION OF
 WELLS UNDE THE STATES
 SURVEY MAPS
 FORM IV-6
 (8-78)



DATE MAY 22, 1981
 COUNTY'S WELL NO. 1-1854
 AREA ACRES _____
 47 061 0627
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL _____ GAS LIQUID INJECTION _____ WATER INJECTION _____
 (IF "GAS") PRODUCTION STORAGE _____ REPLENISHMENT
 LOCATION ELEVATION 1815' WATER SHED COBUN CREEK
 DISTRICT CLINTON COUNTY MONONGALIA
 QUADRANGLE MORGANTOWN SOUTH Morgantown 15' 8C
 SURFACE OWNER T.J. JOHNSON HRS. ACRES 1400
 OIL & GAS ROYALTY OWNER T.J. JOHNSON HRS. LEASE ACREAGE 1400
 LEASE NO. 16414
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REEFILL _____ 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 DEVONIAN SHALE ESTIMATED DEPTH 5990'
 WELL OPERATOR CARNEGIE NATURAL GAS CO. DESIGNATED AGENT J.C. STEPHENSON, DIV. SUPT
 ADDRESS 3904 MAIN STREET ADDRESS P.O. BOX 387
 MUNHALL, PA., 15120 MANNINGTON, W. VA., 26582

4-4 SOUTH BURNS CHAPEL 313



IV-35
(Rev 8-81)

Date April 28, 1982
Operator's
Well No. 1-1854
Farm T. J. Johnson Heirs
API No. 47 - 061 - 0627

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 ___ /)

LOCATION: Elevation: 1815 Watershed Coburn Creek
District: Clinton County Monongalia Quadrangle Morgantown-South

COMPANY CARNEGIE NATURAL GAS COMPANY
ADDRESS 3904 MAIN ST., MUNHALL, PA. 15120
DESIGNATED AGENT J. C. Stephenson, Div. Supt.
ADDRESS PO Drawer No. 387, Mannington, WV 26582
SURFACE OWNER T.J. Johnson Heirs
ADDRESS PO Box 2266, Morgantown, WV 26505
MINERAL RIGHTS OWNER T.J. Johnson Heirs
ADDRESS PO Box 2266, Morgantown, WV 26505
OIL AND GAS INSPECTOR FOR THIS WORK William Blosser
ADDRESS Rt. #4 - Box 317 Fairmont, WV 26554
PERMIT ISSUED July 10, 1981
DRILLING COMMENCED October 10, 1981
DRILLING COMPLETED October 17, 1981
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.			
13-10"			
9 5/8			
8 5/8	536	536	150 sacks surface
7			
5 1/2			
4 1/2	5130	5130	660 sacks 3130'
3			
2			
Liners used			

RECEIVED

MAY - 3 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5990 feet
Depth of completed well 5971 feet Rotary x / Cable Tools _____
Water strata depth: Fresh _____ feet; Salt _____ feet
Coal seam depths: 55-60 Is coal being mined in the area? No

OPEN FLOW DATA
Commingled: 2nd Elk & Haverty 4506-5016
Producing formation Cedar Ck., Alexander, 1st Elk Pay zone depth 4051-4380 feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ Mcf/d 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
(If applicable due to multiple completion--)
2nd Kane & Riley; Warren, 3495-3863
Second producing formation Speechley & 1st Balltown Pay zone depth 2498-2750 feet
Gas: Initial open flow 53.7 Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow 73 Mcf/d Oil: Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure 410 psig (surface measurement) after 67 hours shut in

MAY 10 1982

(Continue on reverse side)
MAY 10 1982

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

Filled up to 5130'.

Perforations: 8 holes, 4506-5016. Fractured 2nd Elk and Haverly, 4506-4508, 5012-5016, 500 gals. HCL acid, 444 bbls. water, 10,000# 80/100 and 40,000# 20/40 sand.

Perforations: 14 holes, 4051-4380. Fractured Cedar Creek, Alexander and 1st Elk, 4051-4167, 4258-4301, 4374-4380, 500 gals. HCL acid, 504 bbls. water, 10,000# 80/100 and 50,000# 20/40 sand.

Perforations: 13 holes, 3495-3863. Fractured 2nd Kane and Riley, 3495-3502, 3650-3651, 3820-3863, 500 gals. HCL acid, 421 bbls. water, 10,000# 80/100 and 40,000# 20/40 sand.

Perforations: 14 holes, 2498-2750. Fractured Warran, Speechley and 1st Balltown, 2498-2501, 2537-2539, 2634-2635, 2740-2750, 500 gals. HCL acid, 474 bbls. water, 10,000# 80/100 and 50,000# 20/40 sand.

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		White	0	50	
Shale		Gray	50	55	
Coal		Black	55	60	
Shale		Gray	60	65	
Sand		White	65	130	
Shale		Gray	130	140	
Sandy Shale		Black	140	165	
Sand		Light brown	165	235	
Shale		Gray	235	240	
Sand		Brown	240	250	
Shale		Gray	250	260	
Shale		Black	260	280	
Sand		L. Brown	280	290	
Sand		Green	290	335	
Shale		Gray	335	345	
Red Rock		Red	345	360	
Shale		Gray	360	450	
Red Rock		Red	450	470	
Sand		Gray	470	565	
Shale		Gray	565	585	
Red Rock		Red	585	595	
Sandy Shale		Gray	595	635	
Lime		L. Brown	635	690	
Injun		Gray	690	740	
Red Rock		Red	740	745	
Sand		Gray-white	745	880	
Shale		Gray	880	910	
Sand		Brown	910	1060	
Shale		Gray	1060	1485	
Red Rock-Shale		Red-gray	1485	1500	
Shale		Gray	1500	1550	
Red Rock-Shale		Red-gray	1550	1650	
Sand and Shale		Brown-gray	1650	5730	
Shale		Brown	5730		
Total Depth:				5971	

(Attach separate sheets as necessary)

Carnegie Natural Gas Company

Well Operator

By: Kenneth L. Dunay, Geologist

Date: April 28, 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

DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED JUL 10 1981

TO THE DEPARTMENT OF MINES, Charleston, W. Va.

OIL & GAS DIVISION DEPT. OF MINES

DATE June 19, 1981
Company Carnegie Natural Gas Company
Address 3904 Main St., Marshall, Pa. 15120
Farm T. J. Johnson Acres 11.00
Location (waters) Coburn Creek
Well No. 1-1854 Elevation 1815'
District Clinton County Monongalia
Quadrangle Morgantown-South

Surface Owner T.J. Johnson Heirs
Address PO BOX 2266, Morgantown, WV 26505
Mineral Owner Same
Address
Coal Owner Upper Freeport Coal - Consolidation Coal Co.
Address Pittsburgh, Pa.
Coal Operator All other coal - Surface Owner
Address

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 3-14-82
Deputy Director - Oil & Gas Division

INSPECTOR William Blosser
TO BE NOTIFIED
ADDRESS Rt. #1, Box 317, Fairmont, WV 26554
PHONE 304-363-9105

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated Dec. 3 1937 by Mon Valley Coal & Lumber made to D.J. Carter and recorded on the 289 day of 195 in County, Book Page
NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address day before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address of Well Operator

Very truly yours,
(C Sign Name) Carnegie Natural Gas Company Div. Supt.
Well Operator
3904 Main Street
Marshall
Pennsylvania 15120
State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

47 - 061 - 0627 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by

BLANKET BOND

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME S. W. Jack Drilling Co. NAME J. C. Stephenson
 ADDRESS PO Box 48, Buckhannon, Wv 26201 ADDRESS PO Drawer No. 387, Mannington, Wv 26558
 TELEPHONE 304 - 472 - 9403 TELEPHONE 304 - 986 - 2060
 ESTIMATED DEPTH OF COMPLETED WELL: 5990 ROTARY CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION Devonian Shale
 TYPE OF WELL: OIL _____ GAS COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10 11-3/4"	30'		
9 - 5/8			
8 - 5/8		500'	To surface
7			
5 1/2			
4 1/2		5990'	2000 feet
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 300'
 IS COAL BEING MINED IN THE AREA? No BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified ~~twenty~~ four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title