

77-787/13/82

ward CSD

2,550'

LATITUDE 38° 40' 00"

FAUD BRADLEY, ET AL
(MINERAL)

WILLIAM JONES
(SURFACE)

DON BRADLEY

20744

1152
N.P.

X
FARM MAP

81° 15'
LONGITUDE 81° 17' 30"

STAKE NEAR FENCE, CALL OF BLACK OAK

STAKE NEAR FENCE, CALL OF SMALL HICKORY

N 27° 30' E
103'

STAKE IN FENCE CORNER

N 36° 09' E
206'

S 72° 30' E
718'

N 46° 00' W
662'

STAKE IN FENCE CORNER, LARGE MAPLE WITNESS.

N 40° 30' E
320'

S 80° 00' W
566'

FENCE CORNER, ELM WITNESS

CRANESNEST RUN

CO: 087 PMT: 3641

Loc Digitized from OGIS 7.5' Myler

QUAD: 444 DATE: 4-JUN-90

LAT: 38 40.0 Miles South: 0.83

LONG: 81 17.5 Miles West: 0.48

REVISED 5/25/82

1178
N.P.

FILE NO. 78-79

DRAWING NO. 20744-T

SCALE 1" = 400'

MINIMUM DEGREE OF ACCURACY 1 PART IN 200

PROVEN SOURCE OF ELEVATION U.S. GOV'T BM AT LOONEYVILLE EL. 769.70'

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. 99

PLACE SEAL HERE

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

FORM IV-6

(8-78) LAT: 38° 39' 15"
LONG: 81° 18' 02"



DATE 6-25, 19 81

OPERATOR'S WELL NO. 20744

API WELL NO. 47-087-3641

STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___

(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 852.35' WATER SHED CRANESNEST RUN

DISTRICT SMITHFIELD COUNTY ROANE

QUADRANGLE LOONEYVILLE, W.VA. Wadon 15' EC

SURFACE OWNER WILLIAM JONES ACREAGE 36

OIL & GAS ROYALTY OWNER FAUD BRADLEY LEASE ACREAGE 89

LEASE NO. 12351

PROPOSED WORK: DRILL X 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 BROWN SHALE ESTIMATED DEPTH 5400'

WELL OPERATOR COL. GAS TRANS. CORP. DESIGNATED AGENT J. R. HENNING

ADDRESS P.O. BOX 1273 ADDRESS SAME

CHARLESTON, W. VA. 25325 3-3 Anna Looneyville - (198)

JUL 26 1982

(Revised 3-81)



Well No. 20744
Farm Faud Bradley etal
API #47-087-3641
Date June 30, 1982

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: 852.35 Watershed: Cranesnest Run
District: Smithfield County: Roane Quadrangle: Looneville

WELL OPERATOR Columbia Gas Transmission Corp. DESIGNATED AGENT J. L. Weekley
Address P. O. Box 1273 Address P. O. Box 1273
Charleston, WV 25325 Charleston, WV 25325

OIL AND GAS ROYALTY OWNER Faud Bradley etal COAL OPERATOR Unoperated
Address 307 Beauty Street Address
Spencer, WV
Acreage 89

SURFACE OWNER William F. Jones COAL OWNER(S) WITH DECLARATION ON RECORD:
Address NAME Same as Royalty Owner
Address
Acreage

FIELD SALE (IF MADE) TO:
NAME
Address

OIL AND GAS INSPECTOR TO BE NOTIFIED:
NAME
Address
Telephone

COAL LESSEE WITH DECLARATION ON RECORD:
NAME None
Address

RECEIVED
JUL 18 1982

OIL & GAS DIVISION
DEPT. 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 5/4, 1914, to the undersigned well operator from

(If said deed, lease, or other contract has been recorded:)

Recorded on ____, 19 ____, in the office of the Clerk of County Commission of Roane County, West Virginia, in 25 Book at page 325. 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
1511 WASHINGTON ST., E.
CHARLESTON, WV 25311
Telephone - 304/348-3092

BLANKET BOND

Columbia Gas Transmission Corporation
Well Operator
By: J. L. Weekley
Its: Director, Drilling & Operations

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY: ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN)

Address

GEOLOGICAL TARGET FORMATION

Brown Shale

Estimated depth of completed well 5400 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

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New, Used), FOOTAGE INTERVALS (For Drill-ling, Left in Well), CEMENT FILL (UP OR SACKS, Cubic ft.), PACKERS (Kinds, Sizes, Depths set, 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 §22-4-3a 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,

ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY

APPROVED FOR drilling. THIS PERMIT SHALL EXPIRE

OPERATIONS HAVE NOT COMMENCED BY 3-15-83

BY [Signature]

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:

RECEIVED

MAY 25 1983



IV-35 (Rev 8-81)

OIL & GAS DIVISION DEPT. OF MINES

State of West Virginia

Department of Mines Oil and Gas Division

Date May 19, 1983 Operator's Well No. 20744 Farm Faud Bradley API No. 47 - 087 - 03641

JUN 06 1983

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: 856.10 Watershed Cranesnest Run District: Smithfield County Roane Quadrangle Looneyville

COMPANY Columbia Gas Transmission Corporation

ADDRESS 1700 MacCorkle Ave., Charleston, WV

DESIGNATED AGENT James L. Weekley

ADDRESS 1700 MacCorkle Ave., Charleston, WV

SURFACE OWNER William Jones

ADDRESS

MINERAL RIGHTS OWNER Columbia Gas Transmission

ADDRESS 1700 MacCorkle Ave., Charleston, WV

OIL AND GAS INSPECTOR FOR THIS WORK Homer Dougherty Linden Rt. Box 3-A Looneyville, WV 25259

PERMIT ISSUED 7-15-82

DRILLING COMMENCED 10-2-82

DRILLING COMPLETED 10-11-82

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

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-16, 11 3/4, 13-10, 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2, and Liners used.

GEOLOGICAL TARGET FORMATION Brown Shale Depth 5400 feet

Depth of completed well 5444 feet Rotary X / Cable Tools

Water strata depth: Fresh 81, 1370 feet; Salt feet

Coal seam depths: 927-932, 1053-1056 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Rhinestreet + Huron Devonian Shale Pay zone depth 5400-4242 feet

Gas: Initial open flow N/A Mcf/d Oil: Initial open flow Bbl/d

Final open flow 418 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 6 hours

Static rock pressure 950 psig (surface measurement) after 72 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

ROANE - 5671

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

Perforated Devonian Shale 10-21-82 from 5400, 5381, 5324, 5306, 5296, 5284, 5237, 5173, 5127, 5103, 5078, 5061, 5019, 4943, 4895, 4812, 4638, 4632, 4623, 4602, 4590, 4434, and 4242'

Fractured Brown Shale 10-26-82 with 1500 gallons Hcl, 353 bbls. fluid, 875,000 Scf nitrogen, 80,000# 20-40 sand from 5014-5400'

Fractured Brown Shale 10-26-82 with 1500 gallons Hcl, 334 bbls. fluid, 70,000# 20-40 sand, 720,000 Scf. nitrogen from 4242-4942'

*Uuron - 4242-4812
Rhinstreet 4895-5400*

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Soil			0	3	
Red Rock, Sand & Shale			3	19	
Sand & Shale			19	120	Damp hole 81'
Red Rock			120	157	
Sand & Shale			157	264	
Sand			264	320	
Shale			329	346	
Sand			346	410	
Shale			410	444	
Sand			444	454	
Shale			454	511	
Sand & Shale			511	850	
Sand			850	927	
Coal			927	932	
Sand			932	1044	
Shale			1044	1053	
Coal			1053	1056	
Sand & Shele			1056	1288	
Sand			1288	1620	Damp hole 1370'
Big Lime			1620	1664	
Big Injun			1664	1764	
Shale			1764	2220	
Berea Sand			2220	2240	
Shale & Sand			2240	2250	
Brown Shale			2250		
DTD				5444'	
LTD				5430'	

*5444
2240
3204
2010 - Fr. Borehole Rhinstreet
33 Borehole*

*Onon @
5418-log-*

(Attach separate sheets as necessary)

COLUMBIA GAS TRANSMISSION CORPORATION

Well Operator

By: *J. Weckley* Director, Drilling & Operations

Date: May 23, 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 coal, encountered in the drilling of a well."