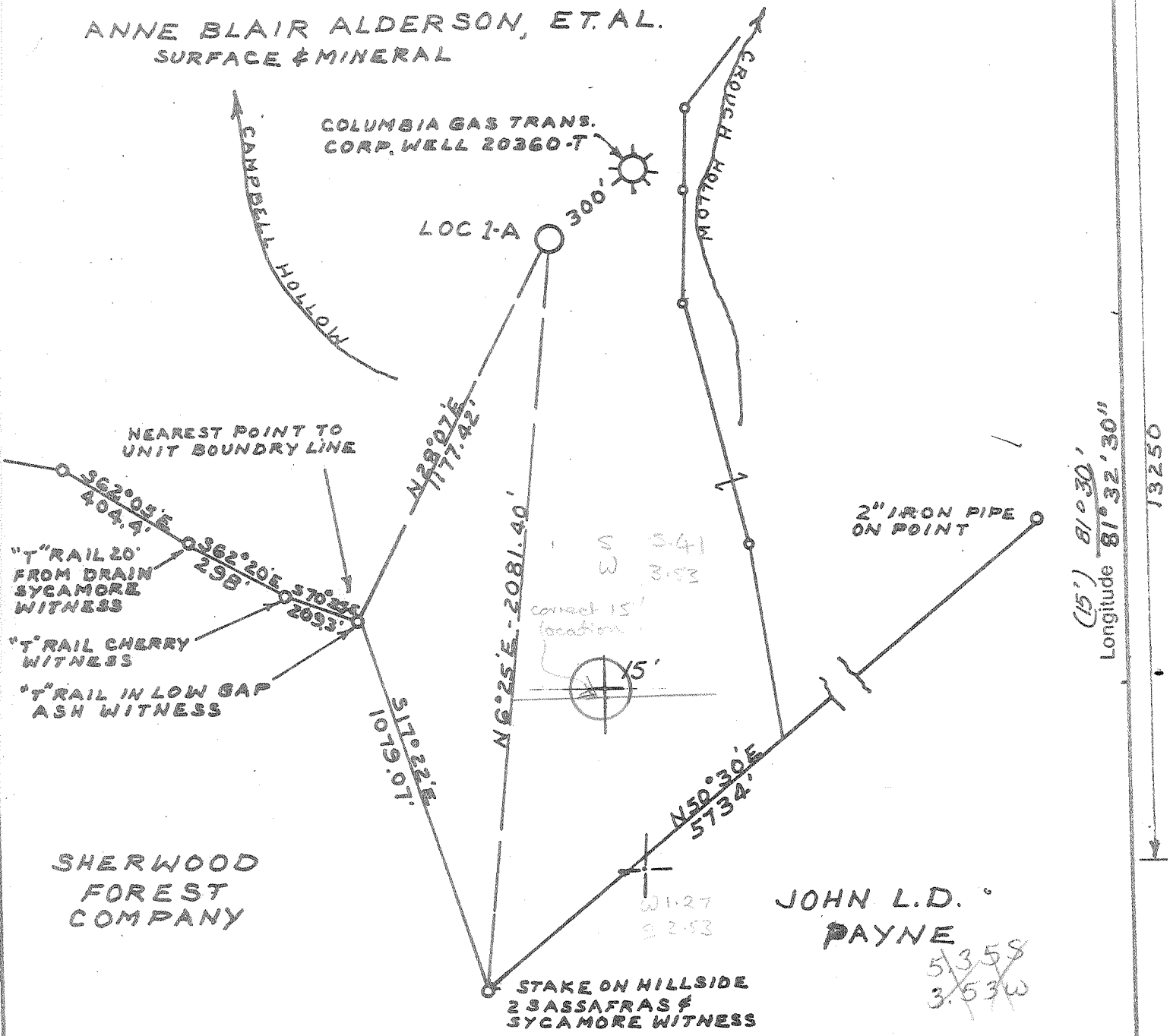


Latitude $38^{\circ}22'30''$
(15') $38^{\circ}25'$

ANNE BLAIR ALDERSON, ET AL.
SURFACE & MINERAL



BENCH MARK DESCRIPTION

U.S.G.S. DISC. IN TOP OF EAST END OF SOUTH ABUTMENT OF BRIDGE OVER ELK TWO MILE CREEK AT INTERSECTION OF ROUTE 114 & AIRPORT ROAD STAMPED R-96 1956-ELEVATION 611.931'

- New Location
- Storage
- Drill Deeper
- Abandonment
- Re-Drill/Fracture

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by the rules and regulations of the oil and gas section of the mining laws of WEST VIRGINIA.
 Minimum degree of accuracy is one part in 200
 LAND SURVEYOR LICENSE N992 LEGG STAR ROUTE BOX
 549-B SISSONVILLE WVA 25320
 Signed C.J. Valley Jr.

H.D. WELLS OIL & GAS EXPLORATION Company & DEVELOPMENT INC.

Address P.O. BOX 1785 CHARLESTON WVA.
 Farm ANNA BLAIR ALDERSON, ET AL. TRUST.
 Lease _____ Acres 1289.75
 Well Farm No. _____ Ser. No. 1-A
 Elevation - Spirit Level 885.82' EC
 Quadrangle CHARLESTON EAST 7 1/2'
 Township or District MALDEN
 County KANAWHA
 Sec., Lot, Qr. _____ T _____ R _____
 Coordinates LONG 81°33'54" LAT 38°20'19"
 File No. Book 22 PAGE 45 Dwg. No. _____
 Date 5-7-77 Scale 1"=400'

WELL LOCATION MAP
STATE OF WEST VIRGINIA

(+) Denotes Values Of Well On United States Topographic Maps

KAN-2778

Scale 15' 7 1/2'

47-039

JUN 8 1977

Deepwell 5000 Oniskany & 6 BLUE CREEK (HACKBERRY BR.) 218



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

RECEIVED

OCT 24 1977

OIL & GAS DIVISION
DEPT. OF MINES

Rotary xxx Oil _____
Cable _____ Gas xxx _____
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind) _____

Quadrangle Charleston East

Permit No. Kan-2778

Company H. D. Wells Oil & Gas Exp. & Dev.
Address P.O. Box 1785 Charleston, W. Va.
Farm Alderson Acres 2.000
Location (waters) Crouch Hollow
Well No. 1-a Elev. 885.82
District Malden County Kanawha
The surface of tract is owned in fee by Same

Address Glanta Co. 1020 Battle Ave.
Mineral rights are owned by Same
Address Same

Drilling Commenced 7-29-77
Drilling Completed 8-10-77
Initial open flow 124,000 cu. ft. _____ bbls.
Final production Same cu. ft. per day _____ bbls.
Well open 52hrs hrs. before test 1400 RP.

| Casing and Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. (Sks.) |
|-------------------|------------------|--------------|-------------------------------|
| Size 20-16 | | | |
| Cond. 13-10" | 20 | 20 | |
| 9 5/8 | 300 | 300 | |
| 8 5/8 | 2250 | 2250 | |
| 7 | 4885 | 4885 | |
| 5 1/2 | | | |
| 4 1/2 | | | |
| 3 | | | |
| 2 | | | |
| Liners Used | | | |

Cir. back to Surface
500 ft. Fill up

Well treatment details:

Attach copy of cementing record.

Frac 80/100 Sand 20/40 Sand 800 lbs water Treating Pres. 4,000 lbs.
Breakdown Pres. 3300.00 lbs.

Coal was encountered at None Feet _____ Inches _____
Fresh water 40 Feet _____ Salt Water 1150 Feet _____
Producing Sand Orisk. Depth 4910

| Formation | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|----------------|-------------|--------------|----------|-------------|-------------------|-----------|
| Sand | | Hard | 0 | 11 | | |
| Slate | | | 11 | 25 | | |
| Sand | | Hard | 25 | 40 | | water |
| Slate | | | 40 | 54 | | |
| Sand | | Hard | 54 | 120 | | |
| Slate | <u>Grey</u> | Hard | 120 | 300 | | |
| Sand | | Hard | 300 | 600 | | |
| Salt Sand | | Hard | 600 | 915 | | |
| Slate | | | 915 | 945 | | |
| Sand | | Hard | 945 | 1185 | | |
| Maxon Sand | | Hard | 1185 | 1285 | | |
| Slate & Shale | | | 1285 | 1355 | | |
| Little Lime | | | 1355 | 1385 | | |
| Pennel Cave | | | 1385 | 1395 | | |
| Big Lime | | | 1395 | 1545 | | |
| Big Injun | | | 1545 | 1580 | | |
| Slate & Shells | | | 1580 | 1795 | | water |
| Weir Sand | | | 1795 | 1850 | | |
| Slate & Shale | | | 1850 | 3240 | | |
| Light Shale | | | 3240 | 3300 | | |
| Slate & Shells | | | 3300 | 3500 | | |
| Shale | | | 3500 | 3775 | | |
| Slate | | | 3775 | 4370 | | |

(over)

* Indicates Electric Log tops in the remarks section.

| Formation | Color | Hard or Soft | Top Feet } | Bottom Feet | Oil, Gas or Water | * Remarks |
|------------------|-------|--------------|------------|-------------|-------------------|-----------|
| Shale | | | 4370 | 4650 | | |
| Slate | | | 4650 | 4760 | | |
| Black Shale | | | 4760 | 4790 | | |
| Corniferous Lime | | | 4790 | 4893 | | |
| Oriskany Sand | | | 4893 | 4910 | | |
| Total Depth | | | | 4920 | Gas | 124,000 |

4990
 986
 3704

Date Sept. 25, 19 77

APPROVED H. D. Wells, Owner

By H. D. Wells Pres.
 (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

MAY 19 1977

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE May 20 th, 1977

Surface Owner Anne Blair Alderson Etal.

Company H. D. Wells Oil & Gas Exp. Dev. Inc.

Address 1020 Peachtree Battle Ave, N.W.

Address P. O. Box 1785

Mineral Owner Atlanta Co. Same

Farm Anne Blair Alderson Acres 1289.75

Address Same

Location (waters) Crouch Hollow

Coal Owner Harry Paxton

Well No. 1-G Elevation 885.82

Address 910 Price St. Charleston, W.Va.

District Malden County Kanawha

Coal Operator None

Quadrangle Charleston, East

Address Same

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 9-19-77.

INSPECTOR TO BE NOTIFIED Martin Nichols
PH: 548-6993 ADDRESS Clendenin, W.Va.

[Signature]
Deputy Director - Oil & Gas Division

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 march 17 1977 by Farmout Agg. made to H. D. Wells Oil & Gas and recorded on the UNRECORDED 19 , in Kanawh County, Book 195 Page 536 9th. Day Feb. 1976
XXXXX 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 9th day May before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

H. D. Wells Oil & Gas Exp. & Dev

Very truly yours,

(Sign Name) [Signature]
Well Operator

P. O. Box 1785

Street

Charleston, W.Va.

City or Town

W. Va.

State

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

West Virginia Geological and Economic Survey
P O Box 879
Morgantown, W. Va. 26505

Address
of
Well Operator

BLANKET BOND

*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.

KAN-2778

PERMIT NUMBER

47-039

[Handwritten Signature]

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

PROPOSED WORK ORDER TO Drill DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Not known at present time NAME H. D. Wells
 ADDRESS _____ ADDRESS P. O. Box 1785
 TELEPHONE _____ TELEPHONE 346-2829
 ESTIMATED DEPTH OF COMPLETED WELL: 5,000 ROTARY xxxxx CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Orishany
 TYPE OF WELL: OIL _____ GAS xxxxxx 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 13 3/8 | 300 feet | 300 ft. | Back to Surface |
| 9 - 5/8 9 5/8 | 2150 feet - | 2150 ft. | 60 Sacks # centralizer |
| 8 - 5/8 | | | |
| 7 7" n--80 | 4900 feet | 4900 ft. | Float Coll. & Shoe |
| 5 1/2 | | | Cement Back to 9/58 |
| 4 1/2 | | | |
| 3 | | | Perf. Top |
| 2 | | | Perf. Bottom |
| Liners | | | Perf. Top |
| | | | Perf. Bottom |

APPROXIMATE FRESH WATER DEPTHS 65 FEET SALT WATER 1100 FEET
 APPROXIMATE COAL DEPTHS none
 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