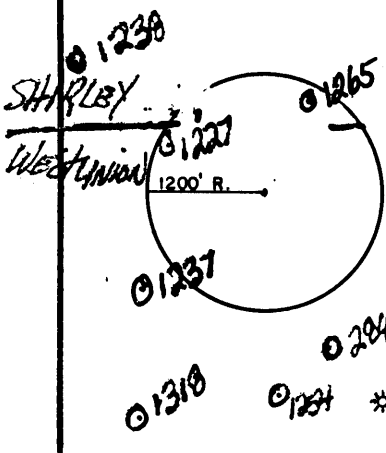
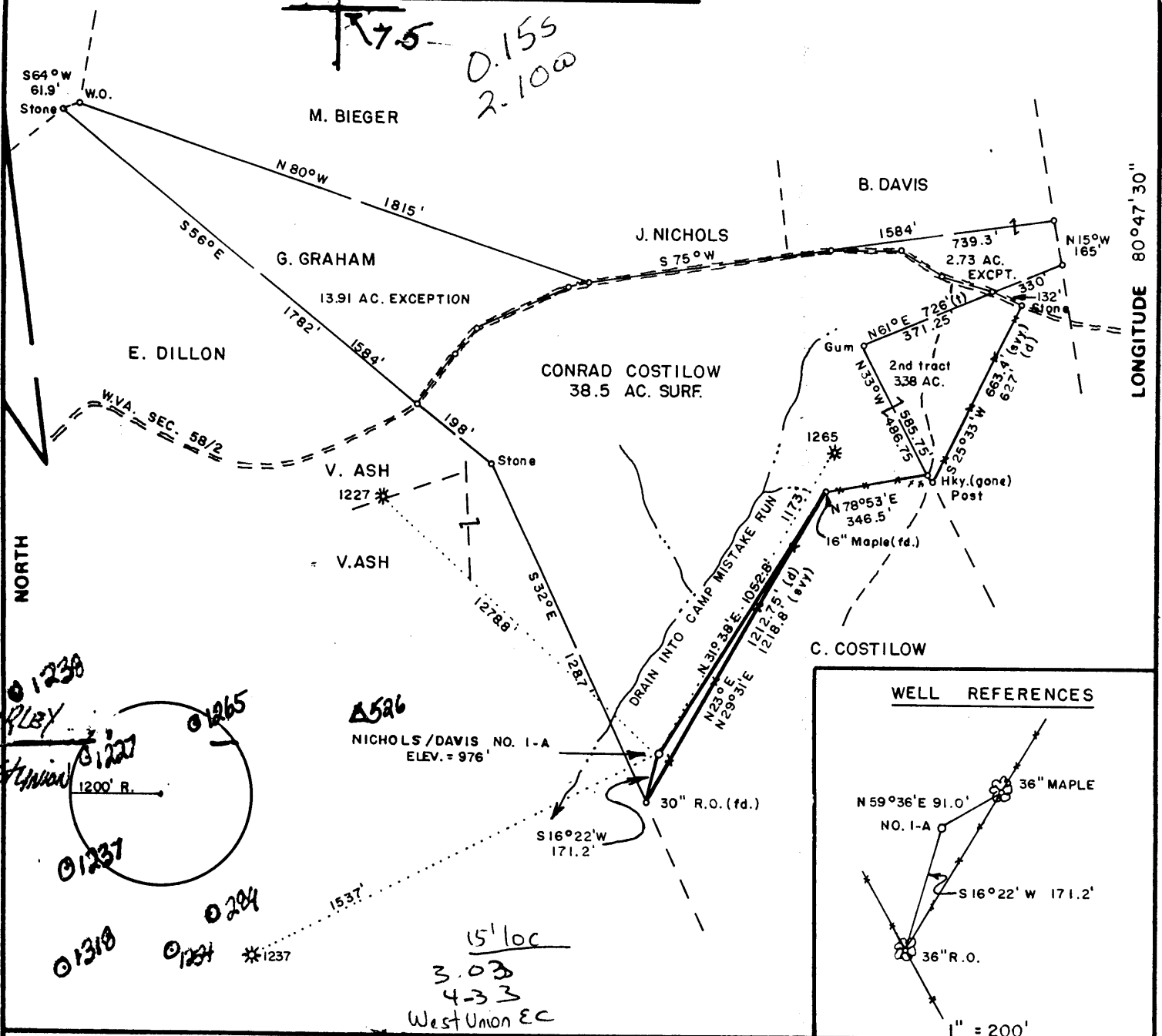


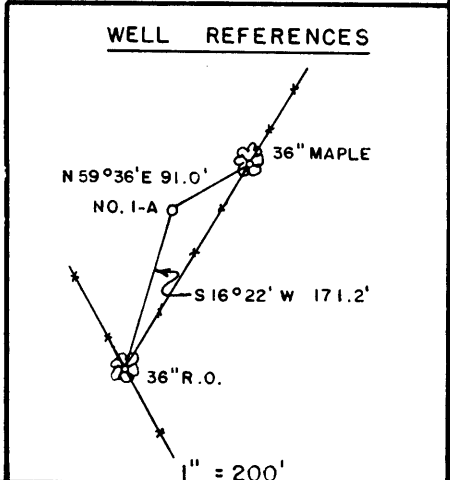
# NICHOLS / DAVIS LEASE 38.5 AC. ±

LATITUDE 39° 22' 30"



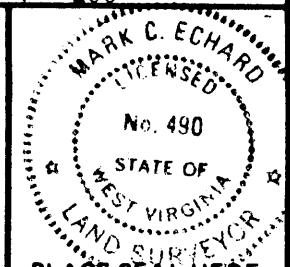
526  
 NICHOLS / DAVIS NO. 1-A  
 ELEV. = 976'

15' loc  
 3.03  
 4-3-3  
 West Union EC



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION JCT. ROADS 2700' ±  
 NE OF LOC. ELEV. = 1038'

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.  
*Mark C. Echard*  
 (SIGNED) MARK C. ECHARD  
 R.P.E. \_\_\_\_\_ L.L.S. 490



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



DATE JUNE 26, 1990  
 OPERATOR'S WELL NO. NICHOLS/DAVIS NO. 1-A  
 API WELL NO. 47-095-1405  
 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 976' WATER SHED CAMP MISTAKE RUN  
 DISTRICT CENTERVILLE COUNTY TYLER  
 QUADRANGLE West Union 7.5  
 SURFACE OWNER CONRAD COSTILOW ACREAGE 35.12 of 38.5  
 OIL & GAS ROYALTY OWNER CONRAD COSTILOW, et al LEASE ACREAGE 38.5  
 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 BIG INJUN ESTIMATED DEPTH 2200' ±  
 WELL OPERATOR D.A.C. DESIGNATED AGENT MR. KENNETH MASON  
 ADDRESS P.O. BOX 99 ADDRESS P.O. BOX 99  
ALMA, W.VA. 26320 ALMA, W.VA. 26320

JUL 20 1990

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Division of Oil and Gas  
AUG 29 90  
Permitting  
Oil and Gas Section

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: COSTILOW, CONRAD Operator Well No.: NIC/DAVIS #1-A  
LOCATION: Elevation: 976.00 Quadrangle: WEST UNION  
District: CENTERVILLE County: TYLER  
Latitude: 900 Feet South of 39 Deg. 22Min. 30 Sec.  
Longitude 11050 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: DRILLING APPALACHIAN CORP  
P. O. BOX 99  
ALMA, WV 26320-0099

Agent: KENNETH R. MASON

Inspector: GLEN P. ROBINSON  
Permit Issued: 07/11/90  
Well work Commenced: 7/19/90  
Well work Completed: 7/23/90  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary XX Cable \_\_\_\_\_ Rig  
Total Depth (feet) 2136  
Fresh water depths (ft) 55  
Salt water depths (ft) 455; 1693  
Is coal being mined in area (Y/N)? N  
Coal Depths (ft): NA

| Casing & Tubing Size | Used in Drilling | Left in Well | Cement Fill Up Cu. Ft. |
|----------------------|------------------|--------------|------------------------|
| 9 5/8                | 175              | 175          | 65 sks                 |
| 7                    | 1830             | 1830         | 270 sks                |
|                      |                  |              |                        |
|                      |                  |              |                        |
|                      |                  |              |                        |

OPEN FLOW DATA

Producing formation Big TNSUN Pay zone depth (ft) 1948-2032  
Gas: Initial open flow 682 MCF/d Oil: Initial open flow - Bbl/d  
Final open flow 492 MCF/d Final open flow - Bbl/d  
Time of open flow between initial and final tests 11 Hours  
Static rock Pressure 125 psig (surface pressure) after 18 Hours  
Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
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 pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: DRILLING APPALACHIAN CORP.

By: Kenneth Mason SEP 6 1990  
Date: 8/27/90

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Permitting  
Oil and Gas Section

GEOLOGICAL WELL RECORD DATA

WELL NAME: Nichols/Davis #1A

PERMIT NUMBER: 47-095-1405

|                  | TOP  | BOTTOM |            |
|------------------|------|--------|------------|
| SOIL             | 0    | 25     |            |
| BROKEN SAND      | 25   | 164    |            |
| SANDS AND SHALES | 164  | 1040   | salt water |
| BIG DUNKARD SAND | 1320 | 1410   |            |
| 1ST SALT SAND    | 1433 | 1510   |            |
| 2ND SALT SAND    | 1532 | 1641   |            |
| 3RD SALT SAND    | 1704 | 1765   |            |
| MAXON            | 1790 | 1810   |            |
| BIG LIME         | 1830 | 1902   |            |
| KEENER SAND      | 1906 | 1947   |            |
| BIG INJUN SAND   | 1948 | 2032   | SHOW GAS   |
| TD               | 2136 |        |            |

10944

Issued 7/11/90  
 095-1405  
 Expires 7/16/92  
 Page 3 of 5

FORM WW-2B

STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
 WELL WORK PERMIT APPLICATION

- 1) Well Operator: DRILLING APPALACHIAN CORPORATION
- 2) Operator's Well Number: Nichols/Davis #1-A 3) Elevation: 976'
- 4) Well type: (a) Oil  / or Gas  /  
 (b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /
- 5) Proposed Target Formation(s): Big Injun 371
- 6) Proposed Total Depth: 2200± feet
- 7) Approximate fresh water strata depths: 90'
- 8) Approximate salt water depths: 1500'
- 9) Approximate coal seam depths: \_\_\_\_\_
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 11) Proposed Well Work: Drill, perforate, stimulate new formation
- 12) \_\_\_\_\_

CASING AND TUBING PROGRAM

*New Well*

| TYPE             | SPECIFICATIONS |            |                | FOOTAGE INTERVALS         |              | CEMENT                           |
|------------------|----------------|------------|----------------|---------------------------|--------------|----------------------------------|
|                  | Size           | Grade      | Weight per ft. | For drilling              | Left in well |                                  |
| <i>OK 1/9/90</i> |                |            |                |                           |              |                                  |
| Conductor        | 16"            |            |                | 30"                       | 0"           |                                  |
| Fresh Water      |                |            |                |                           |              |                                  |
| Coal             | <i>9 7/8</i>   | <i>New</i> | <i>32.30</i>   | <i>Revised to 7/11/90</i> |              |                                  |
| Intermediate     | <i>10"</i>     |            | <i>32.75</i>   | 160'                      | 160'         | 38CSR18-11.2, 2.<br>38CSR18-11.3 |
| Production       | 7"             |            | 17#            | 1800'                     | 1800'        | 38CSR18-11.1                     |
| Tubing           |                |            |                |                           |              |                                  |
| Liners           |                |            |                |                           |              |                                  |

PACKERS : Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

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 JUL 10 1990

*5402  
19*

For Division of Oil and Gas Use Only DIVISION OF OIL & GAS  
 DEPARTMENT OF ENERGY

Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP

Plat *AW-9*  *AW-2B*  Bond *Blank sum*

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JUL 10 1990

Page 1 of 5  
Form WW2-A  
(09/87)  
File Copy

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

1) Date: July 9, 1990  
2) Operator's well number  
Nichols/Davis #1-A  
3) API Well No: 47 - 095 - 1405  
State - County - Permit

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:  
(a) Name Conrad Costilow  
Address 301 1/2 Louise Avenue  
West Union, WV 26456  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Glen Robinson  
Address Rt 1, #6 Mt. Pleasant  
Mineral Wells, WV 26150  
Telephone (304)- \_\_\_\_\_

5) (a) Coal Operator:  
Name ---  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 5 on the above named parties, by:  
\_\_\_\_\_ Personal Service (Affidavit attached)  
\_\_\_\_\_ Certified Mail (Postmarked postal receipt attached)  
\_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator DRILLING APPALACHIAN CORPORATION  
By: Kenneth R. Flanagan  
Its: President  
Address P. O. BOX 99  
ALMA, WV 26320  
Telephone (304) 758-4638

Subscribed and sworn before me this 9th day of July, 1990

My commission expires 1/28/97 Notary Public