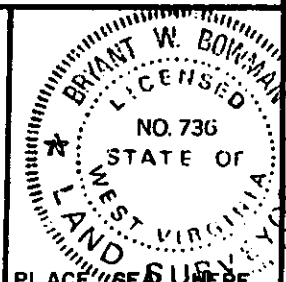


NO REFERENCES REQUIRED.  
WELL IS EXISTING.  
NO KNOWN WATER WELLS  
WITHIN 2000'.

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1"=1000'  
MINIMUM DEGREE OF  
ACCURACY 1/2500  
PROVEN SOURCE OF  
ELEVATION COPPER PLUG IN ROCK  
ELEVATION 2783.54

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) Dwight L. Souder  
R.P.E. \_\_\_\_\_ L.L.S. 736



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



DATE AUGUST 23, 2000  
OPERATOR'S WELL NO. LC-9  
API WELL NO.  
47 - 005 - 01578W  
STATE COUNTY PERMIT

Division of Environmental Protection  
Office of Oil & Gas

**CANCELLED**

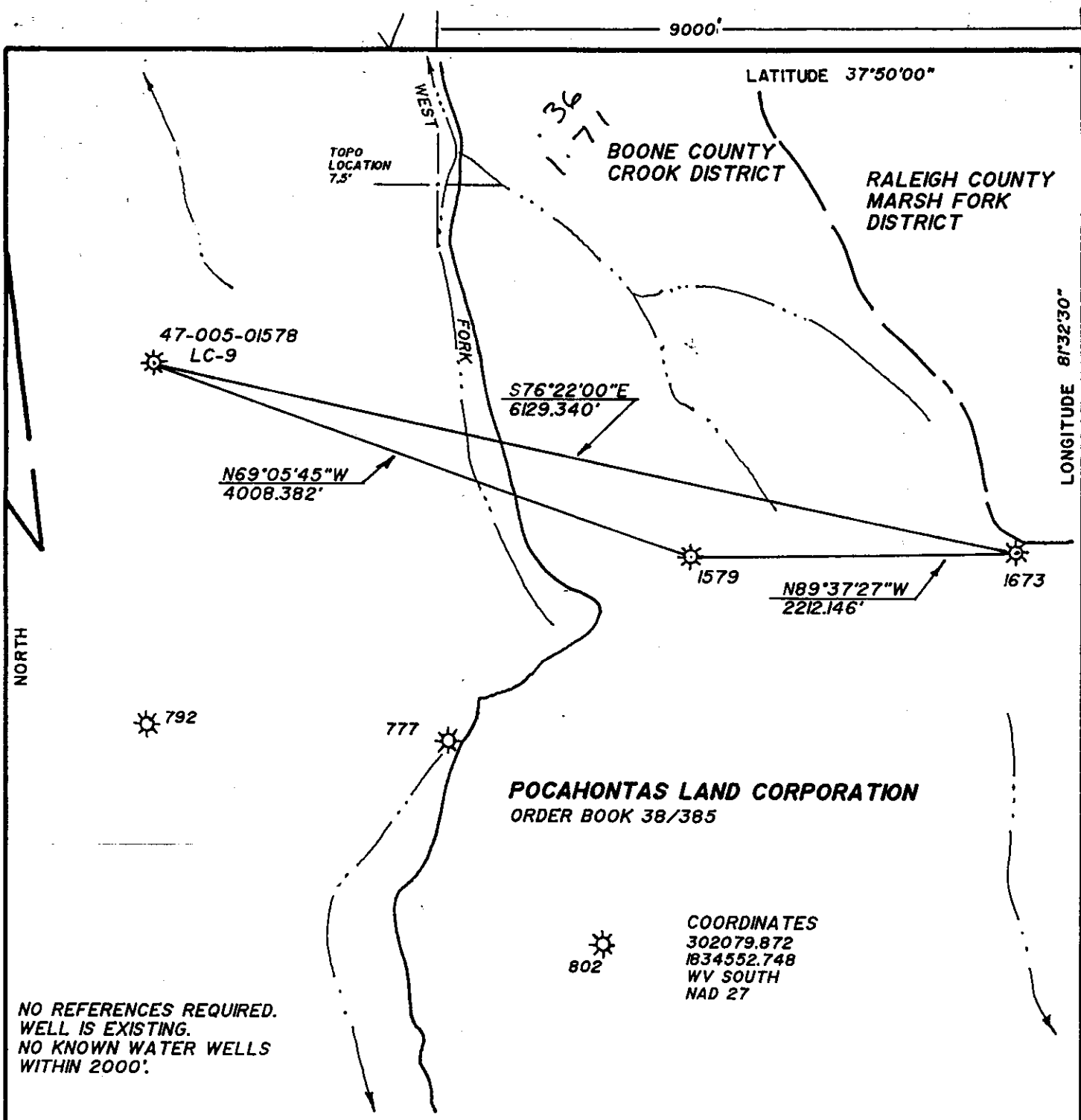
WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS", PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
LOCATION: ELEVATION 2652 WATER SHED WEST FORK  
DISTRICT CROOK COUNTY BOONE

QUADRANGLE PILOT KNOB, WV  
SURFACE OWNER POCAHONTAS LAND CORPORATION ACREAGE 7590±  
OIL & GAS ROYALTY OWNER PENN VIRGINIA OIL & GAS LEASE ACREAGE 34586±  
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) \_\_\_\_\_

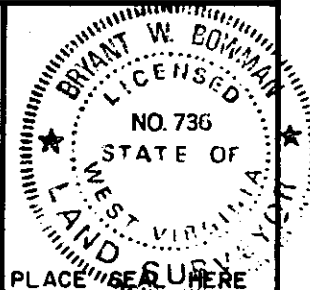
PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
TARGET FORMATION \_\_\_\_\_ ESTIMATED DEPTH \_\_\_\_\_  
WELL OPERATOR PENN VIRGINIA OIL & GAS CORP DESIGNATED AGENT MR. HARRY JEWEL  
ADDRESS PO BOX 387 ADDRESS PO BOX 460  
DUFFIELD, VA 24244-0387 RAVENCLIFF, WV 25913

BOB 1578W CANCEL



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=1000'  
 MINIMUM DEGREE OF ACCURACY 1/2500  
 PROVEN SOURCE OF ELEVATION COPPER PLUG IN ROCK  
 ELEVATION 2783.54

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) *Bryant W. Boyman*  
 R. P. E. \_\_\_\_\_ L. L. S. 736



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



DATE AUGUST 23, 2000  
 OPERATOR'S WELL NO. LC-9  
 API WELL NO. 47-005-01578W  
 STATE COUNTY PERMIT

Division of Environmental Protection  
 Office of Oil & Gas

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS", PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_)  
 LOCATION: ELEVATION 2652 WATER SHED WEST FORK  
 DISTRICT CROOK COUNTY BOONE  
 QUADRANGLE PILOT KNOB, WV

SURFACE OWNER POCAHONTAS LAND CORPORATION ACREAGE 7590±  
 OIL & GAS ROYALTY OWNER PENN VIRGINIA OIL & GAS LEASE ACREAGE 34586±  
 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 \_\_\_\_\_ ESTIMATED DEPTH \_\_\_\_\_  
 WELL OPERATOR PENN VIRGINIA OIL & GAS CORP. DESIGNATED AGENT MR. HARRY JEWEL SEP 22 2000  
 ADDRESS PO BOX 387 ADDRESS PO BOX 460  
 DUFFIELD, VA 24244-0387 RAVENCLIFF, WV 25913

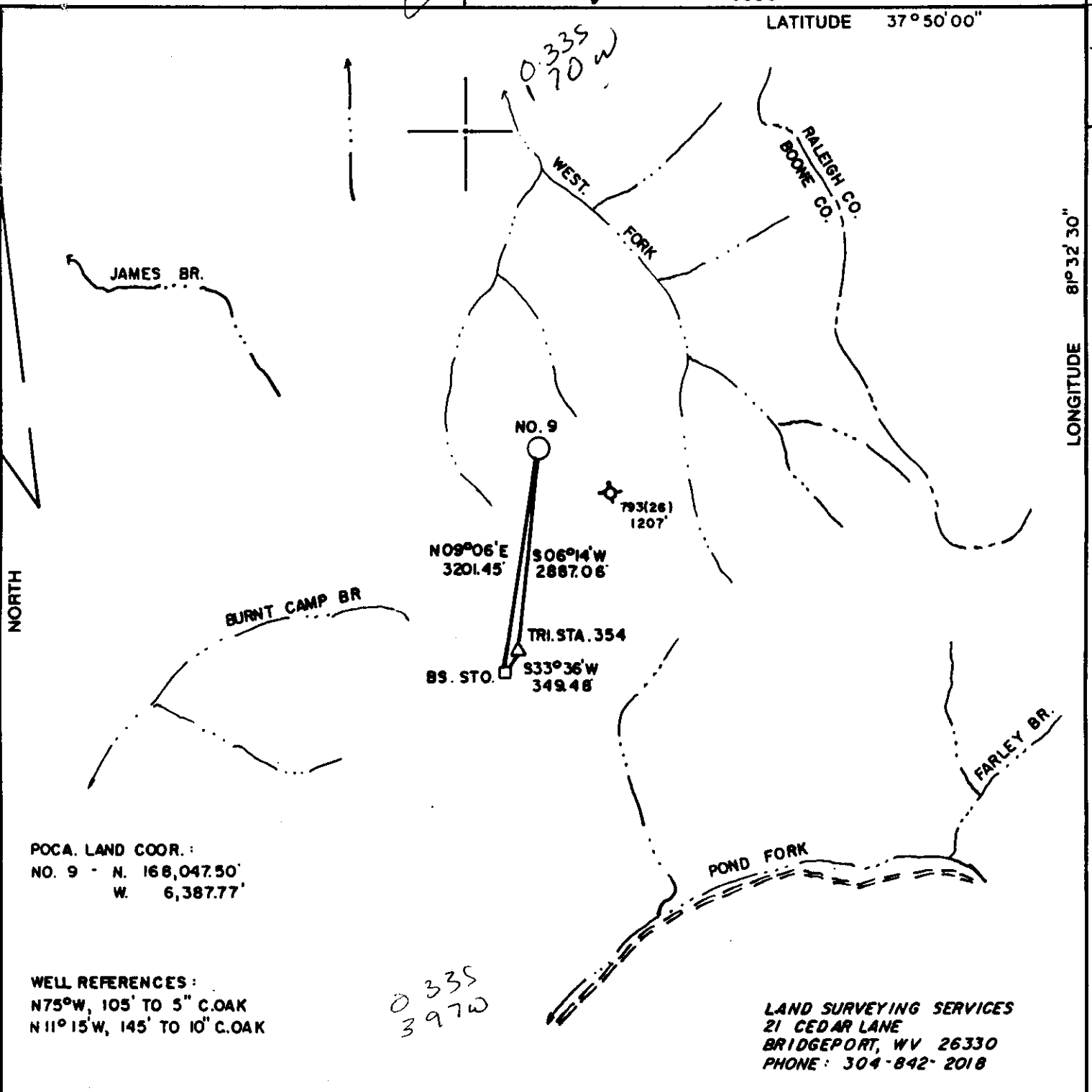
9030'

LATITUDE 37°50'00"

1791

LONGITUDE 81°22'30"

NORTH



POCA. LAND COOR.:  
 NO. 9 - N. 168,047.50'  
 W. 6,387.77'

WELL REFERENCES:  
 N75°W, 105' TO 5" C.OAK  
 N11°15'W, 145' TO 10" C.OAK

LAND SURVEYING SERVICES  
 21 CEDAR LANE  
 BRIDGEPORT, WV 26330  
 PHONE: 304-842-2018

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

|  |   |                     |
|--|---|---------------------|
| FILE NO. _____<br>DRAWING NO. _____<br>SCALE <u>1" = 2000'</u><br>MINIMUM DEGREE OF ACCURACY <u>1 in 2500</u><br>PROVEN SOURCE OF ELEVATION <u>EXIST. WELL 793-P</u><br><u>ELEV. - 2668'</u> | 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 ENERGY.<br>(SIGNED) _____<br>R.P.E. _____ L.L.S. <u>674</u><br><u>STEPHEN D. LOSH</u> | <br>PLACE SEAL HERE |
|--|---|---------------------|

|   |  |   |
|---|--|---|
| <b>STATE OF WEST VIRGINIA</b><br>DEPARTMENT OF ENERGY<br><b>OIL AND GAS DIVISION</b>  |  | DATE <u>JUNE 25</u> , 19 <u>93</u><br>OPERATOR'S WELL NO. <u>LOUP CK. NO. 9</u><br>API WELL NO. _____ |
| WELL TYPE: OIL ___ GAS <u>X</u> LIQUID INJECTION ___ WASTE DISPOSAL ___<br>(IF "GAS,") PRODUCTION <u>X</u> STORAGE ___ DEEP ___ SHALLOW <u>X</u>  |  |   |
| LOCATION: ELEVATION <u>2644'</u> WATERSHED <u>WEST FORK</u><br>DISTRICT <u>CROOK</u> COUNTY <u>BOONE</u>  |  |   |
| QUADRANGLE <u>PILOT KNOB 7.5 min. Bald Knob SE</u>  |  |   |
| SURFACE OWNER <u>POCAHONTAS LAND CORP.</u> ACREAGE <u>7590.28</u><br>OIL & GAS ROYALTY OWNER <u>LOUP CK. COLLIERY CO.</u> LEASE ACREAGE <u>34586.60</u>   |  |   |
| PROPOSED WORK: DRILL <u>X</u> 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 ___ <span style="float: right;">JUL 23 1993</span>  |  |   |
| TARGET FORMATION <u>WEIR/Berea</u> ESTIMATED DEPTH <u>4400' - 4100'</u><br>WELL OPERATOR <u>UMC PETROLEUM CORP.</u> DESIGNATED AGENT <u>GREG SHOCKLEY</u><br>ADDRESS <u>P.O. DRAWER 1738</u> ADDRESS <u>P.O. DRAWER 1738</u><br><u>CLARKSBURG, WV 26302-1738</u> <u>CLARKSBURG, WV 26302-1738</u> |  |   |

COUNTY NAME  
 PERMIT

6-6 Man-Oceana (266)

RECEIVED

Division of Environmental Protection

WR-35

NOV 15 93

API # 47-005-01578

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: POCAHONTAS LAND CORP. Operator Well No. LOUP CREEK # 9

LOCATION: Elevation: 2644.00 Quadrangle: Pickens

District: Crook County: Boone  
Latitude: 1790 Feet South of 37 Deg. 50 Min. 0 Sec.  
Longitude 9030 Feet West of 81 Deg. 32 Min. 30 Sec.

Company: UMC PETROLEUM CORPORATION  
P.O. DRAWER 1738  
CLARKSBURG, WV 26301-1738

| Casing & Tubing Size | Used in Drilling | Left in Well | Cement Fill up Cu. Ft. |
|----------------------|------------------|--------------|------------------------|
| 20"                  | 16'              | 16'          |                        |
| 11 3/4"              | 1304'            | 1304'        | 767                    |
| 8 5/8"               | 2037'            | 2037'        | 637                    |
| 4 1/2"               |                  | 4810'        | 391                    |
|                      |                  |              |                        |

Agent: GREGORY A. SHOCKLEY

Inspector: RODNEY G. DILLON  
Permit Issued: 07/22/93  
Well work Commenced: 10/18/93  
Well Work Completed: 10/28/93  
Verbal Plugging

Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 4850'  
Fresh Water depths (ft) 121', 510', 1890'

Salt water depths (ft) \_\_\_\_\_

None Reported

Is coal being mined in area (Y/N)? N

Coal Depths (ft): 105-108', 175-178', 240-244', 473-476', 503-505', 585-589', 618-621', 884-887', 903-906', 995-1000', 1019-1028, 1220-1227' (open), 1239-1242'.

OPEN FLOW DATA

Gordon 4748-4753'  
Berea 4558-4564'  
Weir 4235-4246'  
Producing formation Big Lime Pay zone depth (ft) 3738-4000'  
Gas: Initial open flow - 0 MCF/d Oil: Initial open flow - 0 Bbl/d  
Final open flow\* 150 MCF/d Final open flow - 0 Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure \* 600 psig (surface pressure) after 24 Hours

\* Co-mingled

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: UMC Petroleum Corporation

By: Gregory A. Shockley DISTRICT MANAGER

Date: 11-9-93

TM6

DEC 1 1993

RECEIVED  
 FORM WW-2  
 Division of Environmental Protection

005-1578  
 Issued 7/22/93  
 Expires 7/22/95  
 Page 3 of 8

17562

JUL 06 93  
 Permit Office of Oil & Gas

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

4587

① 546

- 1) Well Operator: UMC Petroleum Corporation (50410)
- 2) Operator's Well Number: Loup Creek #9 3) Elevation: 2644'
- 4) Well type: (a) Oil  / or Gas  /  
 (b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /
- 5) Proposed Target Formation(s): Berea 395
- 6) Proposed Total Depth: 4800 feet
- 7) Approximate fresh water strata depths: None (From 47-005-0793)
- 8) Approximate salt water depths: 1046' (?) (From 47-005-0793)
- 9) Approximate coal seam depths: 969', 1204' (From 47-005-0793)
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 11) Proposed Well Work: To drill and stimulate new well.
- 12)

CASING AND TUBING PROGRAM

| TYPE         | SPECIFICATIONS |       |                | FOOTAGE INTERVALS |              | CEMENT            |
|--------------|----------------|-------|----------------|-------------------|--------------|-------------------|
|              | Size           | Grade | Weight per ft. | For drilling      | Left in well | Fill-up (cu. ft.) |
| Conductor    | 20"            | N/A   |                | 40'               | 40'          | Hand CTS          |
| Fresh Water  | 13 3/8"        | H-40  | 48#            | 200'              | 200'         | CTS               |
| Coal         |                |       |                |                   |              |                   |
| Intermediate | 8 5/8"         | J-55  | 32#            | 2200'             | 2200'        | CTS               |
| Production   | 4 1/2"         | J-55  | 10.5#          |                   | 4800'        | 200 cu. ft.       |
| Tubing       |                |       |                |                   |              |                   |
| Liners       |                |       |                |                   |              |                   |

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

For Division of Oil and Gas Use Only

048/13  
 Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond Smith  Agent

Office of Oil & Gas

1) Date: June 30, 1993  
2) Operator's well number  
Loup Creek #9  
3) API Well No: 47 - 005 - 1578  
State - County - Permit

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

|   |   |
|---|---|
| 4) Surface Owner(s) to be served:           | 5) (a) Coal Operator:                           |
| (a) Name <u>Pocahontas Land Corporation</u> | Name <u>Eastern Associated Coal Corporation</u> |
| Address <u>P. O. Box 1517</u>               | Address <u>P. O. Box 1233</u>                   |
| <u>Bluefield, WV 24701</u>                  | <u>Charleston, WV 25324</u>                     |
| (b) Name _____                              | (b) Coal Owner(s) with Declaration              |
| Address _____                               | Name _____                                      |
| (c) Name _____                              | Address _____                                   |
| Address _____                               | Name _____                                      |
| Address _____                               | Address _____                                   |
| 6) Inspector <u>Richard S. Campbell</u>     | (c) Coal Lessee with Declaration                |
| Address <u>P. O. Box 163</u>                | Name <u>Same</u>                                |
| <u>Hamlin, WV 25523</u>                     | Address _____                                   |
| Telephone (304)- <u>824-5828</u>            | 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 8 on the above named parties, by:

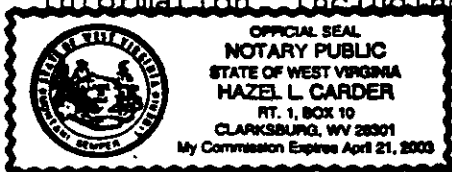
- \_\_\_\_\_ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_\_ Publication (Notice of Publication attached)

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 UMC Petroleum Corporation (50410)  
By: Gregory A. Shockley  
Its: District Manager / Designated Agent  
Address P. O. Drawer 1738  
Clarksburg, WV 26302  
Telephone (304) 624-9653



Subscribed and sworn before me this 30th day of June, 19 93

Hazel L. Carder Notary Public  
My commission expires April 21, 2003

Perforated Gordon at 4748' - 4753' with 12 shots. Broke down with 500 gals. 15% HCL. Fraced with 75 quality foam and 30,000# 20/40 sand. Break = 2360#, AIR = 6.25 BPM & 10,800 Scfm N<sub>2</sub>, ATP = 1240#, ISIP = 1170#.

Perforated Berea at 4558' - 4564' with 12 shots. Broke down with 500 gals. 18% HCL. Fraced with 75 quality foam and 30,000# 20/40 sand. Break = 1960#, AIR = 6.25 BPM & 12,600 Scfm N<sub>2</sub>, ATP = 1600#, ISIP = 1520#.

Perforated Weir at 4235' - 4246' with 12 shots. Broke down with 500 gals. 18% HCL. Fraced with 75 quality foam and 30,000# 20/40 sand. Break = 1510#, AIR = 6.25 BPM and 11,000 Scfm N<sub>2</sub>, ATP = 1500#, ISIP = 1400#.

Perforated Big Lime at 3738' - 4000' with 12 shots. Acidized with 6,500 gals. 18% HCL and 101,000 Scf N<sub>2</sub>. Break = 1670#, AIR = 5.3 BPM, ATP = 1950#, ISIP = 2150#.

| Formation   | Color | Hard or Soft | Top  | Bottom  | Oil, Gas<br>Or Water | Depth | Remarks     |
|-------------|-------|--------------|------|---------|----------------------|-------|-------------|
| Sub         |       |              | 0    | 10      |                      |       |             |
| Sand        |       |              | 10   | 105     |                      |       |             |
| Coal        |       |              | 105  | 108     |                      |       |             |
| Sd & Sh     |       |              | 108  | 175     | Water                | 121'  | Damp        |
| Coal        |       |              | 175  | 178     |                      |       |             |
| Sh & Sd     |       |              | 178  | 240     |                      |       |             |
| Coal        |       |              | 240  | 244     |                      |       |             |
| Sd & Sh     |       |              | 244  | 473     |                      |       |             |
| Coal        |       |              | 473  | 476     |                      |       |             |
| Sh & Sd     |       |              | 476  | 503     |                      |       |             |
| Coal        |       |              | 503  | 505     |                      |       |             |
| Sh & Sd     |       |              | 505  | 585     | Water                | 510'  | 3" stream   |
| Coal        |       |              | 585  | 589     |                      |       |             |
| Sh & Sd     |       |              | 589  | 618     |                      |       |             |
| Coal        |       |              | 618  | 621     |                      |       |             |
| Sd & Sh     | Grey  |              | 621  | 884     |                      |       |             |
| Coal        | Black |              | 884  | 887     |                      |       |             |
| Sd & Sh     | Grey  |              | 887  | 903     |                      |       |             |
| Coal        | Black |              | 903  | 906     |                      |       |             |
| Sd & Sh     | Grey  |              | 906  | 995     |                      |       |             |
| Coal        | Black |              | 995  | 1000    |                      |       |             |
| Sd & Sh     | Grey  |              | 1000 | 1019    |                      |       |             |
| Coal        | Black |              | 1019 | 1028    |                      |       |             |
| Sd & Sh     | Grey  |              | 1028 | 1220    |                      |       |             |
| Coal        | Black | Soft         | 1220 | 1227    |                      |       |             |
| Sd & Sh     | Grey  |              | 1227 | 1239    |                      |       |             |
| Coal        | Black | Soft         | 1239 | 1242    |                      |       |             |
| Sd & Sh     |       |              | 1242 | 1883    |                      |       |             |
| Salt Sand   | Grey  | Hard         | 1883 | 2740    | Water                | 1890' | 2" stream   |
| Shale       |       |              | 2740 | 2785    |                      |       |             |
| Princeton   |       |              | 2785 | 2863    |                      |       |             |
| Shale       |       |              | 2863 | 2928    |                      |       |             |
| Avis        |       |              | 2928 | 3068    |                      |       |             |
| Shale       |       |              | 3068 | 3195    |                      |       |             |
| Avis        |       |              | 3195 | 3232    |                      |       |             |
| Maxon       |       |              | 3232 | 3330    |                      |       |             |
| Sd & Sh     |       |              | 3330 | 3365    |                      |       |             |
| Maxon       |       |              | 3365 | 3376    |                      |       |             |
| Sd & Sh     |       |              | 3376 | 3620    |                      |       |             |
| Little Lime |       |              | 3620 | 3676    |                      |       |             |
| Shale       |       |              | 3676 | 3718    |                      |       |             |
| Big Lime    |       |              | 3718 | 4026    | Gas                  | 3750' | 150 MCF/Day |
| Sd & Sh     |       |              | 4026 | 4150    |                      |       |             |
| Weir        |       |              | 4150 | 4313    | Gas                  | 4311' | 68 MCF/Day  |
| Shale       |       |              | 4313 | 4521    |                      |       |             |
| Coffee Sh   |       |              | 4521 | 4550    |                      |       |             |
| Berea       |       |              | 4550 | 4565    |                      |       |             |
| Sh & Sd     |       |              | 4565 | 4748    | Gas                  | 4600' | 150 MCF/Day |
| Gordon      |       |              | 4748 | 4806    |                      |       |             |
| Shale       |       |              | 4806 | 4850 TD | Gas                  | 4850' | 162 MCF/Day |

DF - 404  
DFT - 419

27521