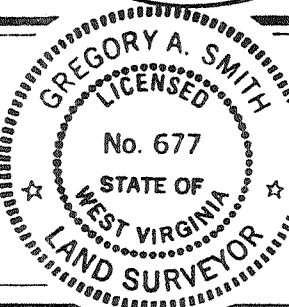


88.44 ACRES±
TOTAL



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.

L.L.S. 677 Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE SEPTEMBER 16, 19 93
OPERATORS WELL NO. SHOCK WELL NO. 1
API WELL NO. 47 - 033 - 3977
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 3080 (44-10)
PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 1029' SCALE 1" = 400'

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION



WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 1078' WATERSHED McKINNEY RUN OF HACKERS CREEK
DISTRICT GRANT COUNTY HARRISON QUADRANGLE WESTON 7.5' 415 C
SURFACE OWNER JACK SHOCK ET. UX. ACREAGE 42.04
ROYALTY OWNER Jack Shock LEASE ACREAGE 42.04 OF 88.44
PROPOSED WORK: LEASE NO. _____
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER _____
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BENSON
ESTIMATED DEPTH 5000'

WELL OPERATOR MIKE ROSS Inc. DESIGNATED AGENT MIKE ROSS
ADDRESS BOX 173 COALTON, WV. 26257 ADDRESS BOX 173 COALTON, WV. 26257

COUNTY NAME PERMIT

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

Well Operator's Report of Well Work

Farm name: SHOCK, JACK ETUX. Operator Well No.: J. SHOCK #1

LOCATION: Elevation: 1,078.00 Quadrangle: WESTON

District: GRANT County: HARRISON
Latitude: 700 Feet South of 39 Deg. 7 Min. 30 Sec.
Longitude 2350 Feet West of 80 Deg. 22 Min. 30 Sec.

Company: ROSS & WHARTON GAS CO., I
RT. 6, BOX 123
BUCKHANNON, WV 26201-0000

Agent: MIKE ROSS

Inspector: TIM BENNETT
Permit Issued: 09/30/93
Well work Commenced: 10/14/93
Well work Completed: 10/28/93
Verbal Plugging
Permission granted on:
Rotary x Cable _____ Rig
Total Depth (feet) 4715
Fresh water depths (ft) 1/2" at 40 ft.
1/2" at 290 ft.
Salt water depths (ft) None

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 30-33 ft.

| Casing & Tubing | Used in Drilling | Left in Well | Cement Fill Up Cu. Ft. |
|-----------------|------------------|--------------|------------------------|
| Size | | | |
| 8 5/8 in | 1817 ft. | 1817 ft. | 360 sk. |
| 4 1/2 in | | 4343 ft. | 230 sk. |
| | | | |
| | | | |
| | | | |

OPEN FLOW DATA

Producing formation Fifth, Balltown, Benson Pay zone depth (ft) 2018-4175
Gas: Initial open flow 50 MCF/d Oil: Initial open flow --- Bbl/d
Final open flow 750 MCF/d Final open flow --- Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 1400 psig (surface pressure) after 72 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.

MIKE ROSS, INC., DBA

For: ROSS & WHARTON GAS CO., INC.

Reviewed TMG
Recorded _____

By: Mike Ross
Date: November 9, 1993

NOV 23 1993

Fractured November 4, 1993

1st Stage - Perfs @ 4166-4172, 420 BBLs Water, 750 Gal. Acid
10,000 # 80/100 Sand, 28,000 # 20/40 Sand, 60,000 SCF N²

2nd Stage - Perfs @ 3050-3068, 380 BBLs Water, 750 Gal. Acid
10,000 # 80/100 Sand, 30,000 # 20/40 Sand, 70,000 SCF N²

| | | | |
|--------------------|------|------|--|
| Sand and Shale | 0 | 30 | ½" Stream of H ₂ O @ 40 ft. |
| Coal | 30 | 33 | |
| Sand and Shale | 33 | 70 | |
| Red Rock | 70 | 118 | |
| Sand and Shale | 118 | 525 | |
| Sand | 525 | 682 | |
| Black Shale | 682 | 698 | |
| Sandy and Shale | 698 | 963 | |
| Sand | 963 | 1100 | |
| Red Rock and Shale | 1100 | 1202 | |
| Little Lime | 1202 | 1250 | |
| Big Lime | 1250 | 1325 | |
| Injun | 1325 | 1425 | |
| Sandy Shale | 1425 | 1615 | |
| Gantz Sand | 1615 | 1660 | |
| Sandy Shale | 1660 | 1818 | |
| Gordon Sand | 1818 | 1844 | |
| Sandy Shale | 1844 | 2018 | |
| Fifth Sand | 2018 | 2056 | Show of gas |
| Sandy Shale | 2056 | 2155 | |
| Bayard Sand | 2155 | 2170 | |
| Sandy Shale | 2170 | 3050 | |
| Balltown Sand | 3050 | 3070 | Show of gas |
| Sandy Shale | 3070 | 4160 | |
| Benson Sand | 4160 | 4175 | Show of gas |
| Sandy Shale | 4175 | 4530 | |
| Alexander Sand | 4530 | 4580 | |
| Sandy Shale | 4580 | 4715 | TD |

26981

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

18042

- 1) Well Operator: MIKE ROSS INC. 4096 43225 (C) 670
- 2) Operator's Well Number: Jack Shock No. 1 3) Elevation: 1078
- Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- Proposed Target Formation(s): Benson 435
- Proposed Total Depth: 5000 feet
- Approximate fresh water strata depths: 50, 125
- Approximate salt water depths: None
- Approximate coal seam depths: None
- Does land contain coal seams tributary to active mine? Yes / No /
- Proposed Well Work: DRILL & STIMULATE NEW WELL

CASING AND TUBING PROGRAM

| TYPE | SPECIFICATIONS | | | FOOTAGE INTERVALS | | CEMENT |
|--------------|----------------|-------|----------------|-------------------|--------------|------------------------------------|
| | Size | Grade | Weight per ft. | For drilling | Left in well | |
| Conductor | 11 3/4 | | 42 | 20' | | |
| Fresh Water | | | | | | |
| Coal | | | | | | |
| Intermediate | 8 5/8 | ERW | 20 | 1000' | 1000' CTS | 38 CSR 18-11.3 38 CSR 18-11.2.2 |
| Production | 4 1/2 | | 10.5 | | 4600' | 38 CSR 18-11.1 |
| Tubing | | | | | | |
| Liners | | | | | | |

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

5/42/20

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Surety Agent
(Type)

RECEIVED

Page 1 of _____
Form WW2-A
(09/87)

Division of
Environmental Protection

SEP 30 1993

Submitting
of Oil & Gas

- 1) Date: September 23, 1993
- 2) Operator's well number
JACK SHOCK NO. 1
- 3) API Well No: 47 - 033 - 3977
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 Jack Shock et ux
Address Rt. 1, Box 22
Jane Lew, WV
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name None
Address _____
 - (b) Coal Owner(s) with Declaration
Name None
Address _____
 - Name None
Address _____
 - (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Tim Bennett
Address 737 Karl Street
Weston, WV 26452
Telephone (304)- 269-6167

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 _____ on the above named parties, by:

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

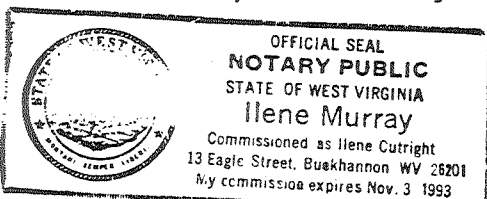
I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

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 MIKE ROSS INC., DBA ROSS & WHARTON GAS CO.

By: James V. Ross
Its: President
Address Box 173
Coalton, WV 26257
Telephone (303) 472-4289



Subscribed and sworn before me this 23rd day of September, 1993

Ilene Murray Notary Public

My commission expires November 3, 1993