

13,300'

LATITUDE 39° 05' 30"

4,800'

LONGITUDE 80° 17' 30"

*Amie 8000  
10/26/95*

CLYDE HARRIS  
109 AC

J. JAMES  
42 AC

R. GILLESPIE  
20 AC

ALICE LUZADER  
19 AC

TOPO  
LOC 7.5'

*0.90  
0.03*

N-80-13-W  
789.8

N-89-37-E  
515.6'

N-45-40-W  
1370.18'

S. SWEENEY  
34.5 AC

4227

O. LONG  
72 AC

3841

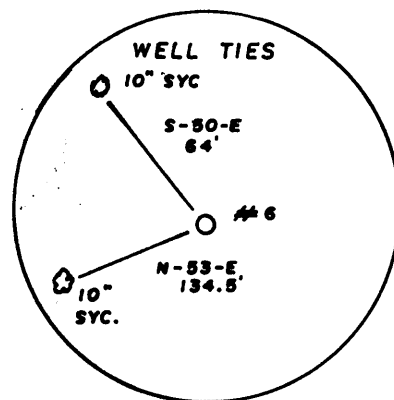
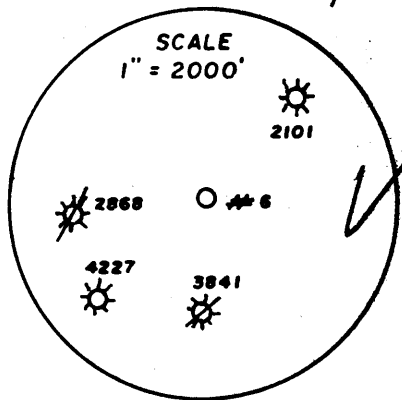
28" POPLAR  
N-89-E  
1208.6'

O. LONG  
31.5 AC

O. LONG  
85 AC

#5

O. LONG  
59.88 AC

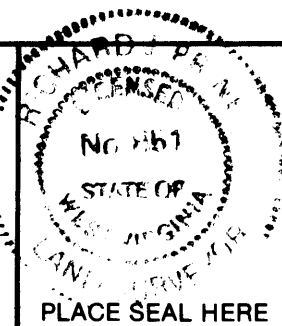


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION B.M. ELV. 1052  
 ON SEC. RT 13 S/E OF WELL

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.

(SIGNED) Richard J. Pine  
 R.P.E. \_\_\_\_\_ L.L.S. 851



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



DATE 9/5, 19 95  
 OPERATOR'S WELL NO. 6  
 API WELL NO.

47-041-04273

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1310 WATERSHED HACKERS CREEK  
 DISTRICT HACKERS CREEK COUNTY LEWIS  
 QUADRANGLE BERLIN 7.5

SURFACE OWNER ORVAL LONG ACREAGE 72  
 OIL & GAS ROYALTY OWNER ORVAL LONG LEASE ACREAGE 72

LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
 STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
 FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 6-6 153

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_

TARGET FORMATION BENSON ESTIMATED DEPTH 4800  
 WELL OPERATOR BOGGS NATURAL GAS CO. DESIGNATED AGENT HARRY BOGGS  
 ADDRESS SPENCER, WV 25276 ADDRESS SPENCER, WV 25276

FORM WW-6

068178

COUNTY NAME PERMIT

DEC 05 1996

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

Permitting  
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: LONG, ORVAL

Operator Well No.: Long #6

LOCATION: Elevation: 1,310.00 Quadrangle: BERLIN

District: HACKERS CREEK County: LEWIS  
Latitude: 4800 Feet South of 39 Deg. 5 Min. 30 Sec.  
Longitude: 13300 Feet West of 80 Deg. 17 Min. 30 Sec.

Company: BOGGS NATURAL GAS CO.  
P. O. BOX 148  
SPENCER, WV 25276-0000

Agent: HARRY C. BOGGS

Inspector: TIM BENNETT  
Permit Issued: 10/25/95  
Well work Commenced: 5/15/96  
Well work Completed: 6/3/96  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary xx Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 4576  
Fresh water depths (ft) 40, 180  
Salt water depths (ft) 2000

Is coal being mined in area (Y/N)? n  
Coal Depths (ft): \_\_\_\_\_

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
9 5/8"	40	40	surface
7"	1320	1320	surface
4 1/2"	4570	4570	2700' linea

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4440-4520  
Gas: Initial open flow 20 MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 100 MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure 1200 psig (surface pressure) after 48 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: BOGGS NATURAL GAS CO.

By: [Signature]  
Date: 12/01/96

DEC 6 1996

2-stage frac 4300-4520 40 shots  
60,000# sand

sand	0	1300	
shale	1300	1360	
sand	1360	1400	
shale	1400 720	1730	
Big Lime	1730	1860	
Big Injun	1860	1870	
shale	1870	2000	
Gordan	2000	2040	
shale	2040	2100	
sand/shale	2100	2200	
sand	2200	2230	water
shale	2230	2510	
5th sand	2510	2530	
shale	2530	2590	
Bayard	2590	2620	
shale	2620	4490	
Benson	4490	4508	
shale	4508	4576	TD

RECEIVED

WV Division of Environmental Protection

041-4273

FORM WW-2B

Page \_\_\_ of \_\_\_

OCT 24 1995

STATE OF WEST VIRGINIA

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

WELL WORK PERMIT APPLICATION

Permitting Office of Oil & Gas

4166

6455 (4) 245

- ) Well Operator: Boggs Natural Gas Co
- ) Operator's Well Number: Long # 6 3) Elevation: 1310
- ) Well type: (a) Oil    / or Gas x / *Issued 10/26/95*  
(b) If Gas: Production x / Underground Storage    / *Expires 10/26/97*  
Deep    / Shallow xx
- ) Proposed Target Formation(s): Benson 435
- 6) Proposed Total Depth: 4750' feet
- 7) Approximate fresh water strata depths: 100', 600'
- 8) Approximate salt water depths: 1000'
- 9) Approximate coal seam depths: 50'
- 10) Does land contain coal seams tributary to active mine? Yes    / No x /
- 11) Proposed Well Work: Drill and Frac well in the Benson formation using Air and Soap drilling
- 12)

CASING AND TUBING PROGRAM

*Handwritten signature*

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling		Left in well
Conductor	11 3/4"			40'		380SR1811.3
Fresh Water	7"			1300'	1300'	surface
Coal						380SR1811.2
Intermediate						
Production	4 1/2"			4800'	4800'	2600' linear
Tubing						380SR1811.1
Liners						

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

For Division of Oil and Gas Use Only

503  
44  
Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond *Blumpet*  Agent

**RECEIVED**

WV Division of  
Environmental Protection

OCT 24 1995

Permitting  
Office of Oil & Gas

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

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

- 1) Date: 9-26-95
- 2) Operator's well number  
Long #6
- 3) API Well No: 47 - 041 - 4273  
State - County - Permit

- 4) Surface Owner(s) to be served:
  - (a) Name Orval Long  
Address Rt 3 Box 170  
Weston, WV 26452
  - (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Tim Bennett  
Address 737 Karl St  
Weston, WV 26452  
Telephone (304)- 269-6167

- 5) (a) Coal Operator:
  - Name None
  - Address \_\_\_\_\_
- (b) Coal Owner(s) with Declaration
  - 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  
~~XXX~~ 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:  
XX 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 Boggs Natural Gas Co  
By: Jeffery C. Boggs *Jeffery C. Boggs*  
Its: Engineer  
Address P.O. Box 148  
Spencer, WV 25276  
Telephone 304-927-1236

Subscribed and sworn before me this 26 day of September, 1995

*Beneda D. Price*  
My commission expires Sept 2, 2002

