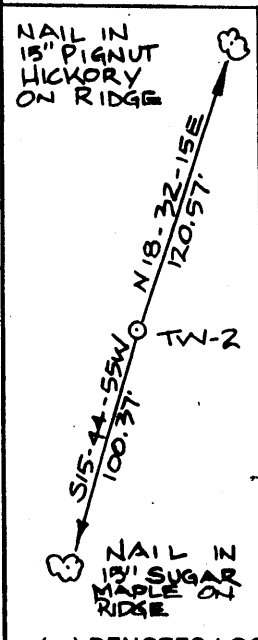
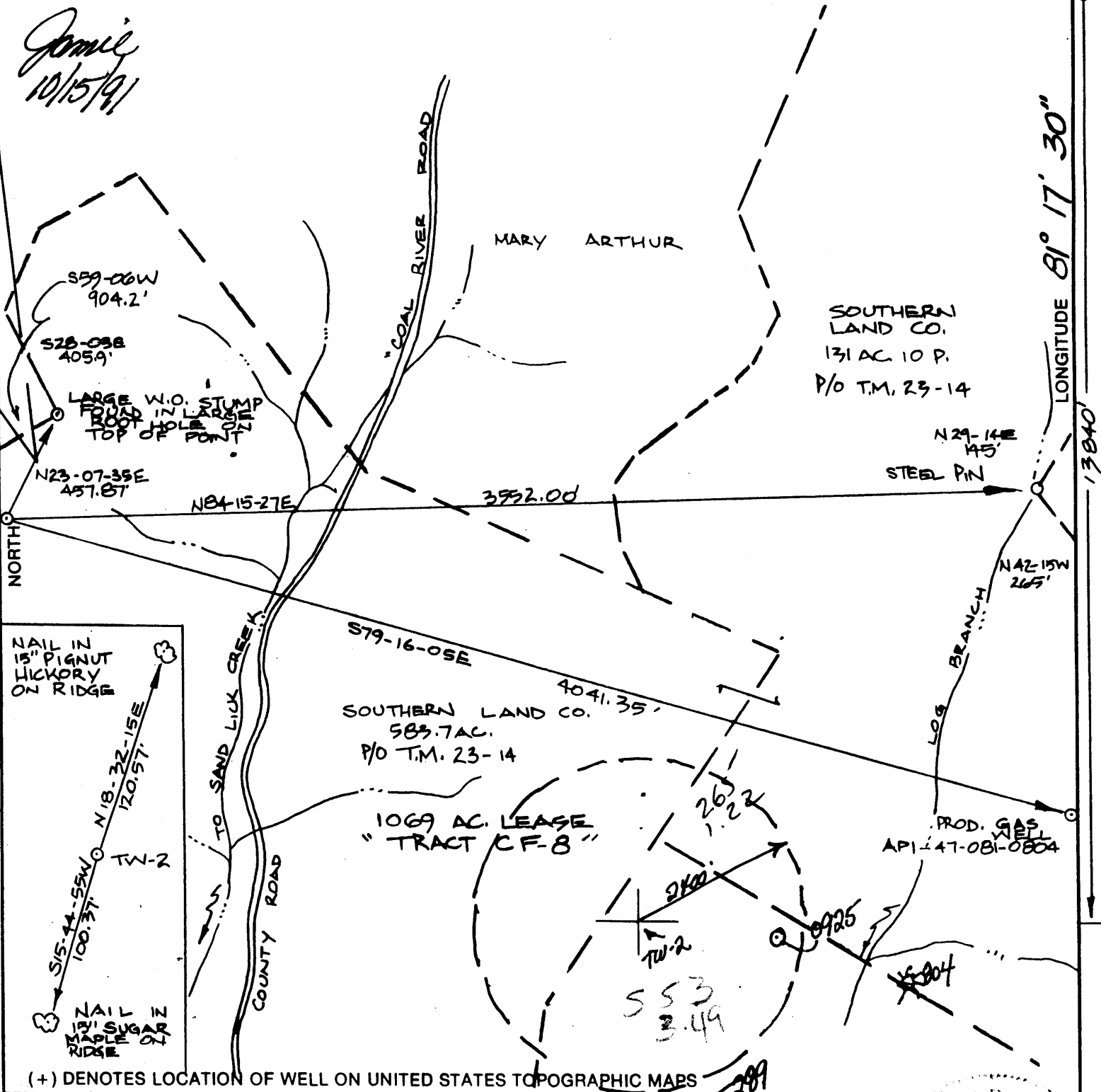


LATITUDE 37° 52' 30"

Janie
10/15/91



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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:2500
 PROVEN SOURCE OF ELEVATION BM ELEV 1997
NE'LY 2050' FROM TW-2

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) [Signature]
 R.P.E. _____ L.L.S. 551

PLACE SEAL HERE

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



DATE 27 SEPTEMBER, 19 91
 OPERATOR'S WELL NO. TW-2
 API WELL NO. _____

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X
 LOCATION: ELEVATION 2224.4 WATERSHED SAND LICK CREEK
 DISTRICT CLEAR FORK 1 COUNTY RALEIGH
 QUADRANGLE ECCLES DIS 9L

SURFACE OWNER SOUTHERN LAND CO. ACREAGE 589.7 of 1069
 OIL & GAS ROYALTY OWNER SOUTHERN LAND CO. LEASE ACREAGE 1069
 LEASE NO. _____

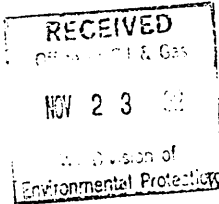
PROPOSED WORK: DRILL X CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION WEIR Big Lime ESTIMATED DEPTH 3250'
 WELL OPERATOR BDM ENGINEERING SERVICES DESIGNATED AGENT C. DAVID LOCKE
 ADDRESS 1199 VANVOORHIS RD, STE 4 ADDRESS 1199 VANVOORHIS RD, STE 4
MORGANTOWN, WV 26505 4761 MORGANTOWN, WV 26505

COUNTY NAME
 PERMIT

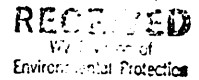
H.I. HALL FORM WW-6

WR-35



11-Oct-91
API # 47- 81-00924

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



Well Operator's Report of Well Work

Farm name: SOUTHERN LAND COMPANY Operator Well No.: TW-2

LOCATION: Elevation: 2224.40 Quadrangle: ECCLES

District: CLEAR FORK County: RALEIGH
Latitude: 13840 Feet South of 37 Deg. 52Min. 30 Sec.
Longitude: 6380 Feet West of 81 Deg. 17 Min. 30 Sec.

Company: BDM ENGINEERING SERVICES

1199 VAN VOORHIS ROAD, SUITE 4 | Casing | Used in | Left | Cement

MORGANTOWN, WV 26505-0000 | & | | | | Fill Up

Agent: C D. LOCKE

Inspector: RODNEY G. DILLON
Permit Issued: 10/15/91
Well work Commenced: 11/12/91
Well work Completed: 11/18/91
Verbal Plugging
Permission granted on:
Rotary x Cable _____ Rig _____
Total Depth (feet) 3248
Fresh water depths (ft) 204

Size	Drilling	in Well	Cu. Ft.
13 3/8	30	All	
8 5/8	1410	All	531
4 1/2	3179	All	
2 3/8		1810	N/A

Salt water depths (ft) None

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

Coal Depths (ft): 992 Beckley
1255 (Poca #4)
1283 (Poca #3)

OPEN FLOW DATA

Producing formation Big Lime Pay zone depth (ft) 2772-3044
Gas: Initial open flow 42 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 53.7 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 67 Hours
Static rock Pressure 500 psig (surface pressure) after _____ Hours

Second producing formation Ravencliff Pay zone depth (ft) 1829-1838
Gas: Initial open flow Show MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 37 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 200 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: BDM ENGINEERING SERVICES COMPANY

Reviewed: TMG
Recorded: CH

By: [Signature]
Date: 11/15/92

4/8/97

API #: 47-081-00924

SOUTHERN LAND COMPANY
DISTRICT: CLEARFORK
ELEVATION: 2224.4

Operator Well No.: TW-2
County: Raleigh
Quadrangle: Eccles

<u>FORMATION NAME</u>	<u>TOP</u>	<u>BASE</u>	<u>THICKNESS</u>	<u>NOTES</u>
Beckley Coal	992	1000	8	
Pocahontas #4 Coal	1262	1264	2	
Pocahontas #3 Coal	1282	1286	4	gas show 1286'
Ravenclyff	1818	1887	69	
Big Lime	2698	3112	414	gas flow @2776, 2799, 2987, 3302, 3045-49

API # 47-81-00924

SOUTHERN LAND COMPANY
District: CLEARFORK
Elevation: 2224.4

Operator Well No.: TW-2
County: RALEIGH
Quadrangle: ECCLES

TW#2

Details of Perforated Intervals and Fracturing

January 23, 1992 Perforated Big Lime 2772.5 to 3043.5 (16 shots)
Fraced Big Lime with 500 gallons of 15% HCl

January 28, 1992 Perforated Ravencliff 1829 to 1838 (10 shots)

January 29, 1992 Stimulated Ravencliff with 25,000 gailons of 80
quality nitrogen foam, 40,000# (35,000# 20/40
sand, 5,000# 80/100 sand). BDP 2350 psi, ATP
2047 psi, ISIP 1850, 5 min SIP 1630 psi, 10 min
SIP 1610 psi, 15 min SIP 1570 psi.

RECEIVED

WV Division of
Environmental Protection

NOV 06 92

Permitting
Office of Oil & Gas

OCT 11 1991

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

DEPT. OF ENERGY

4761

3285

11

331

- 1) Well Operator: BDM Engineering Services Company
- 2) Operator's Well Number: TW - 2 3) Elevation: 2224.4'
- 4) Well type: (a) Oil / or Gas x/
(b) If Gas: Production / Underground Storage /
Deep / Shallow x/
- 5) Proposed Target Formation(s): Big Lime 345
- 6) Proposed Total Depth: 3150 feet
- 7) Approximate fresh water strata depths: 246, 297, 324, 436, 478
- 8) Approximate salt water depths: None
- 9) Approximate coal seam depths: 616, 916, 1098, 1158
- 10) Does land contain coal seams tributary to active mine? Yes / No x/
- 11) Proposed Well Work: Drill & Stimulate Flow Well
- 12)

CASING AND TUBING PROGRAM See Schematic Attached

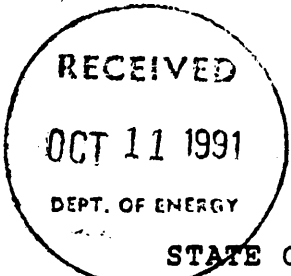
TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	13-3/8"					380 SPT 18-1/2
Fresh Water						380 SPT 18-1/2
Coal Coal Intermediate	8-5/8"	H-40	28#	1300'	1300'	Cement to surface
Production	4-1/2"	J-55	10.5#	3100'	3100'	200 sacks
Tubing						380 SPT 18-1/2
Liners						

PACKERS : Kind Cement Open Hole Hawk Wall Packer
 Sizes 8 5/8" x 10 3/4"
 Depths set Above the Beckley Coal Seam @ 916'

For Division of Oil and Gas Use Only

2987
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Single Bond # 400JA 6036 Agent
 (Type)

15683



1) Date: October 1, 1991
2) Operator's well number
TW - 2
3) API Well No: 47 - 081 - 0924
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 Southern Land Company
Address 1401 Kanawha Valley Bldg.
Charleston, WV 25301
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Rodney C. Dillon
Address P.O. Box 1526
Sophia, WV 25921
Telephone (304) - 683-3989

5) (a) Coal Operator:
Name New Beckley Mining Corporation
Address P.O. Box 145, Mattsville Road
Glen Daniel, WV 25844
(b) Coal Owner(s) with Declaration
Name Southern Land Company
Address 1401 Kanawha Valley Bldg.
Charleston, WV 25301
Name _____
Address _____
(c) Coal Lessee with Declaration
Name New Beckley Mining Corporation
Address P.O. Box 145, Mattsville Road
Glen Daniel, WV 25844

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

_____ 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:

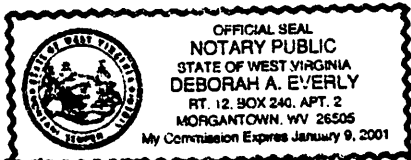
- _____ Personal Service (Affidavit attached)
- _____ Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

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 BDM Engineering Services Company
By: C.D. Locke
Its: Agent
Address 1199 Van Voorhis Road, Suite 4
Morgantown, WV 26505
Telephone 304-598-2666



Subscribed and sworn before me this 1 day of October, 19 91

My commission expires January 9, 2001

Deborah A. Everly Notary Public