

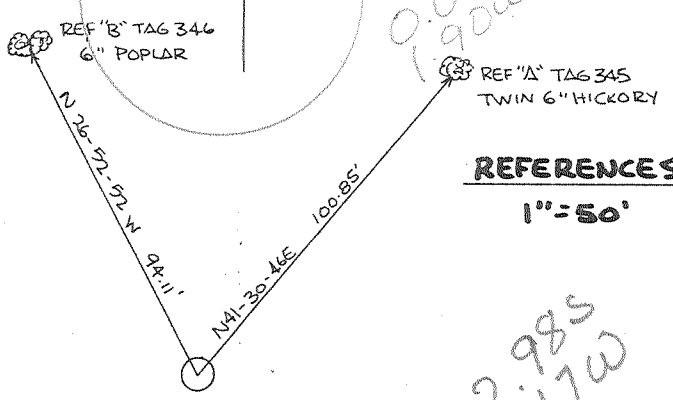
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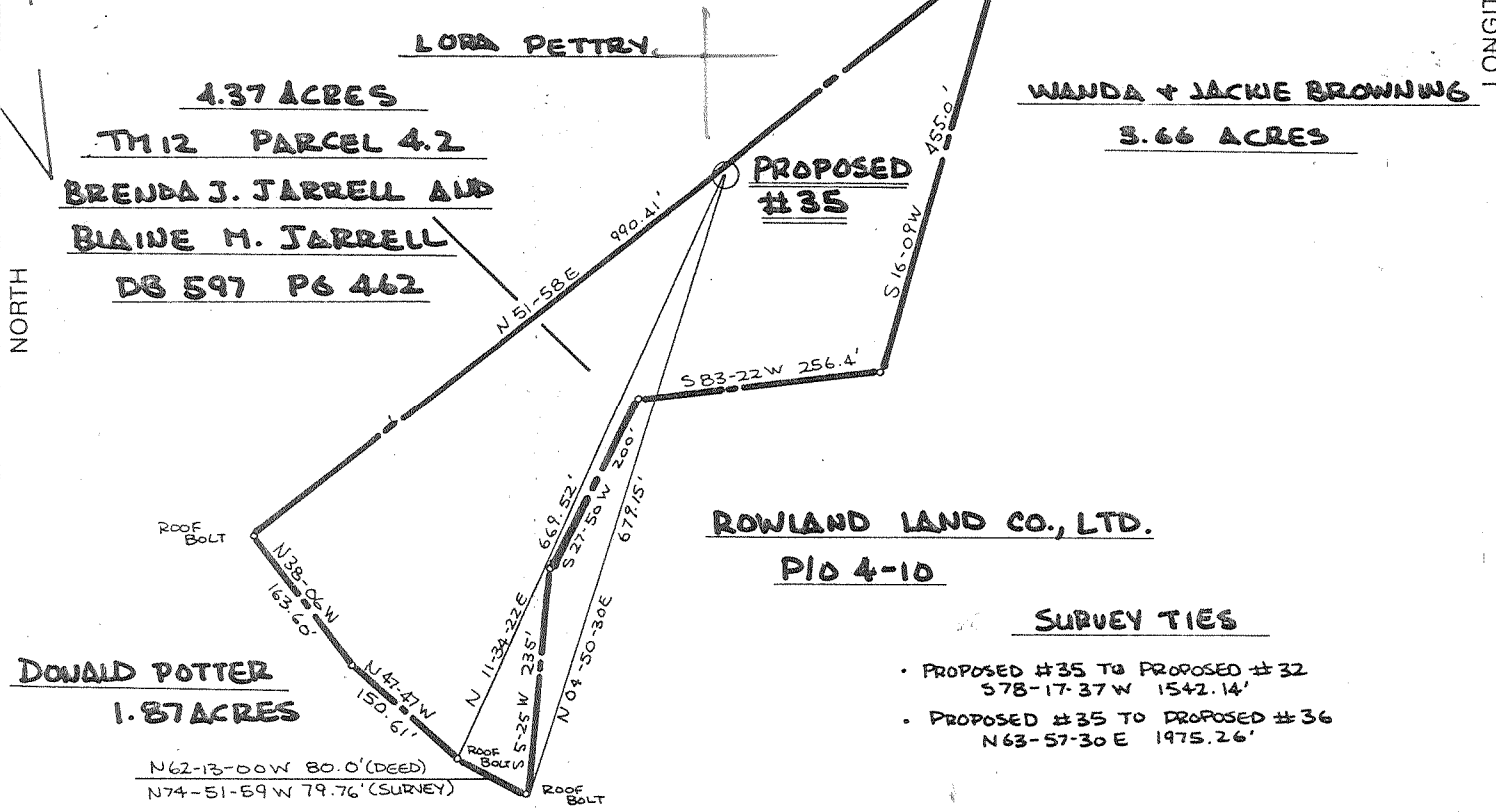
37.53

LATITUDE 37° 52' 30"

LONGITUDE 81° 27' 30"



REFERENCES  
1"=50'



WANDA + JACKIE BROWNING  
3.66 ACRES

4.37 ACRES  
TH12 PARCEL 4.2  
BRENDA J. JARRELL AND  
BLAINE M. JARRELL  
DB 597 PG 462

ROWLAND LAND CO., LTD.  
P10 4-10

DONALD POTTER  
1.87 ACRES

SURVEY TIES

- PROPOSED #35 TO PROPOSED #32  
578-17-37 W 1542.14'
- PROPOSED #35 TO PROPOSED #36  
N63-57-30 E 1475.26'

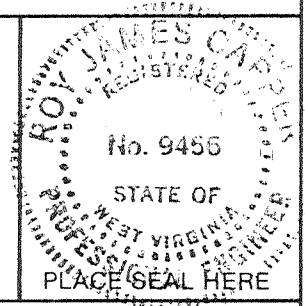
PEABODY WELL COORDINATES

N: 588716.98  
E: 3228338.63

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

FILE NO. AW-081-015  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=200'  
 MINIMUM DEGREE OF ACCURACY 1 IN 10000  
 PROVEN SOURCE OF ELEVATION BM MOUTH OF HORSE CREEK (1075')

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) Roy James Copper  
 R.P.E. 9456 L.L.S. \_\_\_\_\_



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE 1 JULY, 1987  
 OPERATOR'S WELL NO. ROWLAND #35  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 1267 WATER SHED HORSE CREEK OF MARSH FORK  
 DISTRICT MARSH FORK 2 COUNTY RALEIGH  
 QUADRANGLE ARNETT 7.5' 218 036 WCY Eales  
 SURFACE OWNER BRENDA + BLAINE M. JARRELL ACREAGE 4.37  
 OIL & GAS ROYALTY OWNER ROWLAND LAND CO., LTD. LEASE ACREAGE 15000

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 MARCELLUS ESTIMATED DEPTH 5900'  
 WELL OPERATOR A+W ENERGY CORP. DESIGNATED AGENT DENNIS L. MANN  
 ADDRESS P.O. Box 2587 ADDRESS P.O. Box 2587  
CHARLESTON, W.VA. 25329 CHARLESTON, W.VA. 25329

FORM VW-6 H.T. HALL 4-8573

COUNTY NAME PERMIT

DEEP WELL b-b Hopkins Fork - Jarrolds Valley (247)



IV-35  
(Rev 8-81)

**RECEIVED**  
NOV 12 1987

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date November 1 1987  
Operator's  
Well No. Rowland 35  
Farm Rowland Land  
API No. 47 - 081 - 0793

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

WELL OPERATOR'S REPORT  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil     / Gas X / Liquid Injection     / Waste Disposal     /  
(If "Gas," Production     / Underground Storage     / Deep     / Shallow X /)

LOCATION: Elevation: 1267 Watershed Horse Creek  
District: Marsh Fork County Raleigh Quadrangle Arnett 7.5

COMPANY Allegheny & Western Energy Corp

ADDRESS P.O.Box 2587, Charleston, W.Va., 25329

DESIGNATED AGENT Dennis L. Mann

ADDRESS P.O.Box 2587, Charleston, W.Va., 25329

SURFACE OWNER Rowland Land Co

ADDRESS 1033 Quarrier St, Charleston, W.va.

MINERAL RIGHTS OWNER Same

ADDRESS    

OIL AND GAS INSPECTOR FOR THIS WORK Rodney  
Dillon P.O.Box 1526

ADDRESS Sophia, W.Va

PERMIT ISSUED 7/23/87

DRILLING COMMENCED 7/28/87

DRILLING COMPLETED 8/9/87

IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON    

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"	40	0	0
9 5/8	619	619	210 sks
8 5/8			
7	2143	2143	175 sks
5 1/2			
4 1/2	5753	5753	240 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5900 feet

Depth of completed well 5795 feet Rotary x / Cable Tools    

Water strata depth: Fresh 50 feet; Salt 500 feet

Coal seam depths: N/A Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 2854 feet

Gas: Initial open flow     Mcf/d Oil: Initial open flow     Bbl/d

Final open flow (424) Mcf/d Final open flow     Bbl/d

Time of open flow between initial and final tests 24 hours

"Static" rock pressure 900 psig (surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

Second producing formation     Pay zone depth     feet

Gas: Initial open flow     Mcf/d Oil: Initial open flow     Bbl/d

Final open flow     Mcf/d Oil: Final open flow     Bbl/d

Time of open flow between initial and final tests     hours

Static rock pressure     psig (surface measurement) after     hours shut in

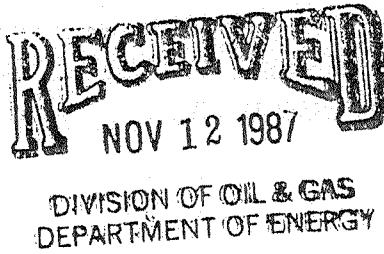
NOV 16 1987

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

2841-3504 perf w/ 30 holes frac w/ 60,000# 20/50 sd + 880,000 scf n2  
 3509-4883 perf w/ 50 holes frac w/ 60,000# 20/50 sd + 981,000 scf n2  
 5007-5738 perf w/ 50 holes frac w/ 60,000# 20/50 sd + 916,000 scf n2

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
sandstone & shale			0	977	<div style="text-align: center;">  </div>
salt sand			977	1287	
shale			1287	1336	
salt sand			1336	1749	
shale & sand			1749	1829	
little lime			1829	1913	
big lime			1913	2370	
shale			2370	2434	
weir			2434	2594	
shale			2594	2840	
sunbury shale			2840	2854	
gordon			3045	3066	
grey & brown shale			3066	5640	
marcellus shale			5640	5786	
onondaga			5786	5795	TD. 5795 KB.

404 2854  
 813 4054  
 822 4804  
 825 5004  
 830 5304  
 835 5604

(Attach separate sheets as necessary)

Allegheny & Western Energy Corp

Well Operator

By: Dennis R. Allen Vice President

Date: November 1, 1987

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including <sup>983</sup>minerals, encountered in the drilling of a well."



1) Date: 1 July, 1987  
 2) Operator's Well No. Rowland #35  
 3) API Well No. 47 - 081 - 0793  
                   State                  County                  Permit

FORM WW-2(B) FILE COPY

RECEIVED  
JUL 21 1987

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

- 4) WELL TYPE: A Oil        / Gas XXX /  
 B (If "Gas", Production XXX / Underground storage        / Deep        / Shallow XXX /)
- 5) LOCATION: Elevation: 1267 Watershed: Horse Creek of Marsh Fork  
 District: Marsh Fork 2 County: Raleigh 081 Quadrangle: Arnett 7.5' 218
- 6) WELL OPERATOR A&W Energy Corp. CODE: 1100 7) DESIGNATED AGENT Dennis L. Mann  
 Address P.O. Box 2587 Address P.O. Box 2587  
Charleston, West Virginia 25329 charleston, WV 25329
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Rodney Dillon 9) DRILLING CONTRACTOR: Name NA  
 Address P.O. Box 1526 Address         
Sophia, WV 25921
- 10) PROPOSED WELL WORK: Drill XXX / Drill deeper        / Redrill        / Stimulate XXX /  
 Plug off old formation        / Perforate new formation         
 Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, Weir, Devonian Shales
- 12) Estimated depth of completed well, 5900 feet
- 13) Approximate strata depths: Fresh, 50, 270, 925 feet; salt, 2099, 1728 feet.
- 14) Approximate coal seam depths: 1728, 1727, 2097 Is coal being mined in the area? Yes        / No XXX
- 15) CASING AND TUBING PROGRAM 803, 709, 556, 299

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		Kinds	Sizes
Conductor										
Fresh water	9-5/8	smls	32#	XX		1182	1182	300sks cts		by rule 15.05
Coal	7	smls	23#	XX		2962	2962	200 sks		Sizes
Intermediate										
Production	4-1/2	smls	10.5#	XX		5900	5900	200-400 sks		Depths set OR as required by rule 15.01
Tubing										Perforations:
Liners										Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-081-0793 Date July 23 1987

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires July 23, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <input checked="" type="checkbox"/>	Casing: <input checked="" type="checkbox"/>	Fee: <u>220</u> <u>06307</u>	NEOP: <input checked="" type="checkbox"/>	SEP: <input checked="" type="checkbox"/>	Other: <input type="checkbox"/>
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NOTE: Keep one copy of this permit posted at the drilling location. Director, Division of Oil and Gas File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

10473