

FILE NO. 81-122
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1'/200'
 PROVEN SOURCE OF ELEVATION RD. INT. ON BULL RUN RD. (660')
REDRAWN 7/23/81

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) Chet Waterman
 R.P.E. 3788 L.L.S. _____

PLACE SEAL HERE

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



DATE 3/25/81 1981
 OPERATOR'S WELL NO. 1
 API WELL NO. 47-107-1157-Rev
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

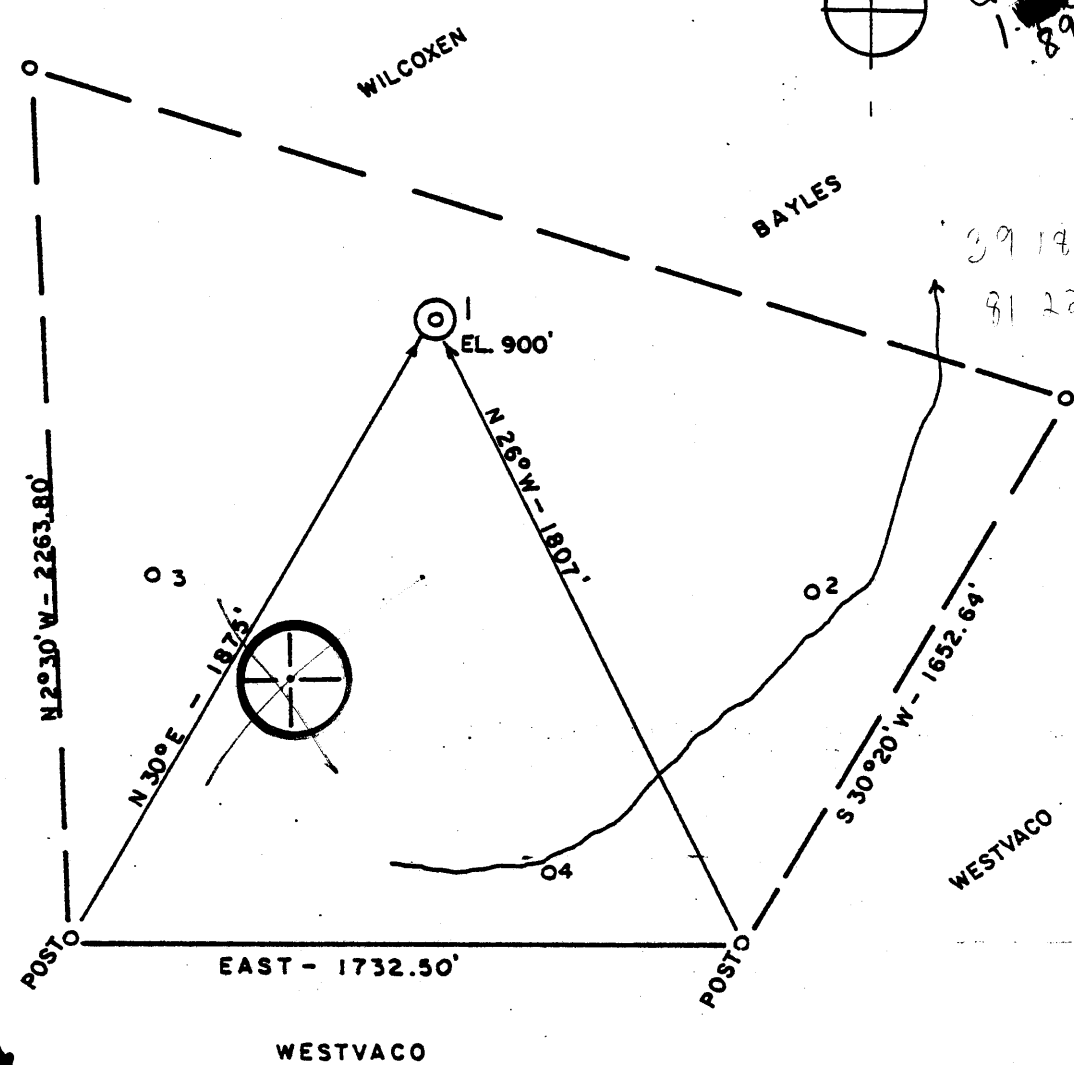
WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 900' WATER SHED BULL RUN
 DISTRICT UNION COUNTY WOOD
 QUADRANGLE WILLOW ISLAND 7.3' Marietta 15' SC
 SURFACE OWNER WESTVACO ACREAGE 96.5
 OIL & GAS ROYALTY OWNER CORBIN HEIRS ET AL LEASE ACREAGE 96.5
 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 SHALE ESTIMATED DEPTH 4700'
 WELL OPERATOR ENERGY UNLIMITED INC. DESIGNATED AGENT DAVID CLOVIS AUG 17 1981
 ADDRESS 127-2ND ST. ADDRESS PARKERSBURG, W. VA.
6-6 MARIETTA, OHIO HENDERSHOT OG. IN.

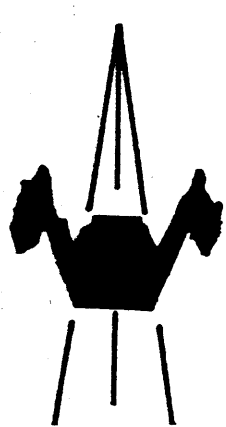
Latitude 39° 20' 00"

Longitude 81° 20' 00"

11,100' SOUTH



39 19 10
81 22 10

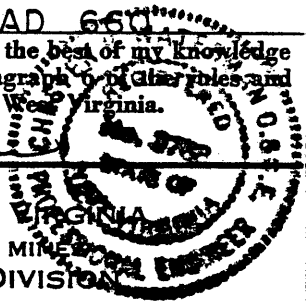


ACCURACY: 1/200
 New Location
 Drill Deeper
 Abandonment
 Fracture
 Redrill
 Other _____

Formation MARCELLUS SHALE Oil
 Est. Depth 4600' (2 & 4) Gas
4700' (1 & 3) Other _____

Source of Elevation ROAD INT. ON BULL RUN ROAD 660'
 I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraphs 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Chet Waterman



Company ENERGY UNLIMITED
 Address MARIETTA, OHIO
 Surface Owner WESTVACO
 Mineral Owner CORBIN HEIRS ET. AL.
 Well No. 1 Acres 96.5
 Elevation 900' *Marietta 15' SC*
 Quadrangle WILLOW ISLAND Series 7.5'
 County WOOD District UNION
 Date 3/25/81 Scale 1" = 500'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
47 - 107 - 1157
 STATE COUNTY PERMIT

+ Denotes location of well on United States Topographic Maps.
 Engineer CHET WATERMAN
 Engineer's Registration No. 3788 File No. 81-122

JUN 4 1981



REVISED

IV-35
(Rev 8-81)

Date 4/29/82
Operator's
Well No. #1-A
Farm Corbin Heirs etal
API No. 47 - 107 - 1157

RECEIVED

State of West Virginia
Department of Mines
Oil and Gas Division

MAY 17 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 900' Watershed Bull Run
District: Union County Wood Quadrangle Willow Island

COMPANY Energy Unlimited, Inc.
ADDRESS 427 Second St. Marietta, OH 45750
DESIGNATED AGENT Dave Clovis
ADDRESS Union Trust Bldg. Parkersburg, WV 26101
SURFACE OWNER West Vaco
ADDRESS 1900 Blizzard Dr. Parkersburg, WV 26101
MINERAL RIGHTS OWNER Corbin Heirs
ADDRESS N/A
OIL AND GAS INSPECTOR FOR THIS WORK Paul Goodnight
ADDRESS Smithville, WV
PERMIT ISSUED 5/20/81
DRILLING COMMENCED
DRILLING COMPLETED
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"			
9 5/8			
8 5/8	263'	263'	100sx
7			
5 1/2			
4 1/2	2729	2729	250sx
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Gordon Depth 2630'-2664' feet
Depth of completed well 2746' feet Rotary xx / Cable Tools
Water strata depth: Fresh 90' feet; Salt 1350' feet
Coal seam depths: none Is coal being mined in the area? no

OPEN FLOW DATA
Producing formation Gordon Pay zone depth 2630'-2664' feet
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 10M Mcf/d Final open flow 1.5 Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure 400 psig (surface measurement) after 12 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

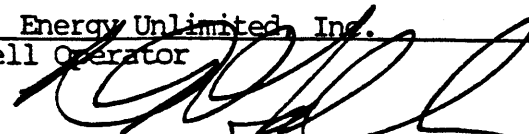
DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

FW 50# sand in 34,000 gal H2O thur 14 - .5 hole from 2642' to 2655'

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
soil		soft	0	15	
shale		soft	15	90	
sand		hard	90	115	freshwater
shale		soft	115	285	
sand		hard	285	305	
sandy shale		soft	305	522	
sand		hard	522	548	
shale		soft	548	710	
sand		hard	710	740	
shale		soft	740	865	
sand		hard	865	898	
silty-shale		soft	898	1062	
sand		hard	1062	1115	
shale		soft	1115	1284	
sandy-shale		medium	1284	1350	
Salt Sand		hard	1350	1480	salt water
silty shale		soft	1480	1618	
Maxton		hard	1618	1686	salt water
silty-shale		medium	1686	1712	
Keener		medium	1712	1720	salt water
shale		soft	1720	1744	
Big Injun		hard	1744	1930	salt water
shale		soft	1930	2220	
Wells Stray		medium	2220	2224	
shale		soft	2224	2276	
Berea		hard	2276	2284	show of oil & gas
silty-shale		medium	2284	2390	
Gantz		medium	2390	2394	little gas
shale		soft	2394	2514	
Thirty-Foot		medium	2514	2523	little gas
shale		soft	2523	2630	
Gordon		medium	2630	2664	show of oil & gas
shale		soft	2664	2746	T. D. 2746'

(Attach separate sheets as necessary)

Energy Unlimited, Inc.
Well Operator
By: 
Date: Douglas M. Galloway 4/29/82

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 coal, encountered in the drilling of a well."



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OCT 13 1981

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Willow Island

Permit No. 47-107-1157

Rotary X Oil _____
Cable _____ Gas _____
Recycling _____ Comb. X _____
Water Flood _____ Storage _____
Disposal _____ (Kind) _____

Company Energy Unlimited, Inc.
Address 427 Second St. Marietta, OH 45750
Farm Corbin Heirs Acres 96.5
Location (waters) Bull Run
Well No. #1-A Elev 900'
District Union County Wood
The surface of tract is owned in fee by _____

Address _____
Mineral rights are owned by Corbin Heir, etal
Address _____
Drilling Commenced 8/3/81
Drilling Completed 8/10/81
Initial open flow -0- cu. ft. -0- bbls.
Final production 10M cu. ft. per day 3.5 bbls.
Well open 24 hrs. before test 400 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8		263'	100sx
7			
5 1/2			
4 1/2		2729.37	250sx
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

FW 50M# sand in 34,000 gal H2O
thur 14 - .5 hole from 2642' to 2655'

Coal was encountered at none Feet _____ Inches _____
Fresh water 90' Feet _____ Salt Water 1350' Feet _____
Producing Sand Gordon Depth 2630' - 2664'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
shale	gray	soft	-----	1284'	---	top logged interval 1250'
sandy-shale	gray	medium	1284'	1350'	---	---
sand	white	hard	1350'	1480'	---	---
silty shale	gray	soft	1480'	1618'	salt water	Salt Sand
sand	white	hard	1618'	1686'	---	---
silty-shale	gray	medium	1686'	1712'	salt water	Maxton
shaly-sand	gray	medium	1712'	1720'	---	---
shale	gray	soft	1720'	1744'	salt water	Keener
sand	white	hard	1744'	1930'	---	---
shale	gray	soft	1930'	2220'	salt water	Big Injun
siltstone	gray	medium	2220'	2224'	---	---
shale	gray	soft	2224'	2276'	---	Wells Stray
sand	white	hard	2276'	2284'	---	---
					show of oil & gas	Berea
silty-shale	gray	medium	2284'	2390'	---	---
siltstone	gray	medium	2390'	2394'	---	---
shale	gray	soft	2394'	2514'	little gas	Gantz
siltstone	gray	medium	2514'	2523'	---	---
shale	gray	soft	2523'	2630'	little gas	Thirty-Foot
siltstone	gr-brown	medium	2630'	2664'	---	---
shale	gray	soft	2664'	2746'	show of oil & gas	Gordon T.D. 2746'

* Indicates Electric Log tops in the remarks section.

(over)

OCT 29 1981

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks

Date O. S. B. 19 81

APPROVED Energy Unlimited Inc. Owner

By [Signature] (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

MAY 20 1981

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE May 15, 1981

Surface Owner Westvaco
Address 1900 Blizzard Dr. Parkersburg, WV
Mineral Owner Corbin Heirs etal
Address N/A
Coal Owner Same
Address _____
Coal Operator None
Address _____

Company Energy Unlimited, Inc.
Address 427 Second St. Marietta, OH 45750
Farm Corbin Acres 96.5
Location (waters) Bull Run
Well No. #1 Elevation 900'
District Union County Wood
Quadrangle Willow Island

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22,
of the W. Va. Code, the location is hereby approved
for Drilling. This permit shall expire if
operations have not commenced by 1-22-82.

INSPECTOR
TO BE NOTIFIED Paul Goodnight

ADDRESS Smithville, WV

PHONE 477-2455

Fred B. Binkette
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated N/A 19 by Corbin Heirs, etal made to Energy Unlimited, Inc. and recorded on the day of 19 , in Wood County, Book N/A Page N/A
XX NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address day before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours, Energy Unlimited, Inc.

(Sign Name) Douglas M. Galloway
Well Operator
427 Second St.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address
of
Well Operator

Street
Marietta
City or Town
Ohio
State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed:

47-107-1157

PERMIT NUMBER

BLANKET BOND

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by Douglas M. Galloway

G. Sw.

**THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION**

PROPOSED WORK ORDER TO XX DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME N/A _____ NAME David C. Clovis _____
 ADDRESS _____ ADDRESS Union Trust Bldg. Parkersburg, WV _____
 TELEPHONE _____ TELEPHONE 485-4403 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 2800' _____ ROTARY XX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Gordon _____
 TYPE OF WELL: OIL X GAS X COMB. X STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8 X	250'	250'	to surface
7			
5 1/2			
4 1/2 X	TD	TD	280 or as required by rule 15.01
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS: 150 FEET _____ SALT WATER 1500 FEET _____
 APPROXIMATE COAL DEPTHS NONE _____
 IS COAL BEING MINED IN THE AREA? NO _____ BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title