



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION UGGS BM
ELEV. 613

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) Danell Boice
 R.P.E. _____ L.L.S. 667

PLACE SEAL HERE

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



DATE JAN 15 19 82
 OPERATOR'S WELL NO. BONNING-1
 API WELL NO. _____
47 - 107 - 1207
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 610 WATER SHED OHIO RIVER
 DISTRICT WILLIAMS COUNTY WOOD
 QUADRANGLE VALLEY MILLS 7 1/2 Marietta 15' WX
 SURFACE OWNER LAWRENCE BONNING ET AL ACREAGE 5
 OIL & GAS ROYALTY OWNER SAME LEASE NO. _____ LEASE ACREAGE 5
 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 4000 6-0 B022 (70)
 WELL OPERATOR ENERGEX DESIGNATED AGENT WALTER ALLEN
 ADDRESS P.O. Box 5306 ADDRESS P.O. Box 5306
VIENNA, W VA 26105 VIENNA, W VA 26105

MAR 01 1982



IV-35
(Rev 8-81)

Date May 21, 1984
Operator's
Well No. 1
Farm Ronning
API No. 47 - 107 - 1207

State of West Virginia
Department of Mines
Oil and Gas Division

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 610' Watershed Ohio River
District: Williams County Wood Quadrangle Valley Mills

COMPANY Energex Oil and Gas Corp.
ADDRESS Box 905 Marietta, OH 45750
DESIGNATED AGENT Sherry Barker
ADDRESS Box 905 Marietta, OH 45750
SURFACE OWNER Lawrence Ronning, etal
ADDRESS 4002 River Road, Vienna, WV 26105
MINERAL RIGHTS OWNER Lawrence Ronning, etal
ADDRESS 4002 River Road, Vienna, WV 26105
OIL AND GAS INSPECTOR FOR THIS WORK Deo
Mace ADDRESS Rt. #1, Box 65 Sand Ridge, WV
PERMIT ISSUED February 5, 1982
DRILLING COMMENCED February 15, 1982
DRILLING COMPLETED February 20, 1982
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 Cond.			
13-10"			
9 5/8			
8 5/8	230'	230'	To Surface
7			
5 1/2			
4 1/2		2300'	500' from sur.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 4000 feet
Depth of completed well 2300 feet Rotary X / Cable Tools
Water strata depth: Fresh 18 feet; Salt 345 feet
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Gordon Pay zone depth 2178 feet
Gas: Initial open flow 14 Mcf/d Oil: Initial open flow None Bbl/d
Final open flow 2 Mcf/d Final open flow None Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure 520 psig (surface measurement) after 72 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

(Continue on reverse side)

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

12 SHOTS

2178'-2180' 4 SHOTS
2184'-2186' 4 SHOTS
2190'-2192' 4 SHOTS

Gordon

Hydraulically Fractured with 22,000 lbs. of sand.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand and Shale			0	250	
Shale			250	320	
Sand			320	336	
Shale			336	386	
Sand			386	434	
Shale			434	582	
Sand			582	600	
Shale			600	700	
Sand			700	720	
Shale			720	754	
Sand			754	842	
Shale			842	868	
Sand			868	910	
Shale			910	970	
Sand			970	1000	
Shale			1000	1042	
Sand			1042	1138	
Shale			1138	1212	
Sand			1212	1254	
Shale			1254	1298	
Sand			1298	1330	
Shale			1330	1352	
Big Injun			1352	1482	
Gray Shale			1482	1814	
Coffee Shale			1814	1862	
Berea			1862	1868	
<i>upper</i> Devonian Shale			1868	2300	Gas

(Attach separate sheets as necessary)

Energex Oil and Gas Corp.

Well Operator

By: *Robert E. Kiebride, President*

Date: May 21, 1984

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."



Date: Feb. 5, 1982

Operator's Well No. Ronning - 1

API Well No. 47 107 1207
State County Permit

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

WELL TYPE: Oil / Gas
(If "Gas", Production _____ / Underground storage _____ / Deep _____ / Shallow)

LOCATION: Elevation: 610' Watershed: Ohio River
District: Williams County: Wood Quadrangle: Valley Mills

WELL OPERATOR Energex Oil & Gas Corp.
Address P. O. Box 5306
Vienna, WV 26105

DESIGNATED AGENT Walter H. Allen
Address P. O. Box 5306
Vienna, WV 26105

OIL & GAS ROYALTY OWNER Lawrence Ronning
Address 4002 River Road
Vienna, WV 26105
Acreage 5 acres

COAL OPERATOR _____
Address _____

SURFACE OWNER Lawrence Ronning
Address 4002 River Road
Vienna, WV 26105
Acreage 5 acres

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____
Address _____
Name FEB 8 - 1982
Address OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

FIELD SALE (IF MADE) TO:
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
Name _____
Address _____

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Dee Mace
Address Rt. #1, Box 65
Sandridge, WV (304) 655-7398

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed _____ / lease other contract _____ / dated August 5, 1981, to the undersigned well operator from Lawrence Ronning and Betty Pierce

(If said deed, lease, or other contract has been recorded:)

Recorded on Dec. 11, 1981, in the office of the Clerk of the County Commission of Wood County, West Va., in Deed Book 764 at page 761. A permit is requested as follows:

PROPOSED WORK: Drill / Drill deeper _____ / Redrill _____ / Fracture or stimulate _____ / Plug off old formation _____ / Perforate new formation _____ / Other physical change in well (specify) _____

—planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

ENERGEX OIL & GAS CORPORATION

Well Operator
By Darrell R. Boice
Its Agent

BLANKET BOND

PROPOSED WORK ORDER

1. Form IV-2
(12-81)

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) PAUL DRILLING CORPORATION

Address P. O. Box 1841
Parkersburg, WV 26101

GEOLOGICAL TARGET FORMATION, Marcellus Shale

Estimated depth of completed well, 4000 feet Rotary X / Cable tools _____ /

Approximate water strata depths: Fresh, 200 feet; salt, 600 feet.

Approximate coal seam depths: None Is coal being mined in the area? Yes _____ / No X /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			New		FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	Used	For drilling	Left in well			
Conductor	8 5/8	St. 45	24	X		250	250	To Surface	Kind
Fresh Water									
Coal									Sizes
Intermediate									
Production	4 1/2	St. 40	9 1/2	X			4000	500' FROM 125 SKS. SURFACE	Depth set
Tubing									
Liners									Perforations:
									Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 10-9-82.


Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof.

WAIVER

The undersigned coal operator _____ / owner _____ / lessee _____ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____, 19____

By _____
Its _____