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

Well Operator's Report of Well Work

Farm name: COTTRILL, JACOB  
Operator Well No.: COTTRILL #1

LOCATION:  
Elevation: 1010.00  
Quadrangle: WEST UNION

District: WESTUNION  
County: DODDRIIDGE

Latitude: 13935 Feet South of 39 Deg. 22 Min. 30 Sec.  
Longitude: 1510 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: TERM ENERGY CORP.  
110 N. SPRING ST.  
HARRISVILLE, WV 26362-0000

Agent: JEAN FREELAND

Inspector: MIKE UNDERWOOD  
Permit Issued: 04/02/90

Well work Commenced: 4/15/90  
Well work Completed: 4/25/90

Verbal Plugging  
Permission granted on:____________________

Rotary X Cable Rig (  
Total Depth (feet) 5370  
Fresh water depths (ft) 430'

Salt water depths (ft) NONE

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

<table>
<thead>
<tr>
<th>Casing &amp; Tubing</th>
<th>Used in Drilling</th>
<th>Left in Well</th>
<th>Cement Fill Up Cu. Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16&quot;</td>
<td>15'</td>
<td>-0-</td>
<td>-0-</td>
</tr>
<tr>
<td>11 3/4&quot;</td>
<td>25'</td>
<td>-0-</td>
<td>-0-</td>
</tr>
<tr>
<td>8 5/8&quot;</td>
<td>1108'</td>
<td>1108'</td>
<td></td>
</tr>
<tr>
<td>4 1/2&quot;</td>
<td>5328.9'</td>
<td>5328.9'</td>
<td>697.95'</td>
</tr>
</tbody>
</table>

OPEN FLOW DATA

Producing formation Alexander  
Pay zone depth (ft) 5270

Gas: Initial open flow ______ MCF/d  
Final open flow 530 MCF/d  
Time of open flow between initial and final tests ______ Hours  
Static rock Pressure 950 psig (surface pressure) after ______ Hours

COMINGLED PRODUCTION

Second producing formation Bradford & Benson  
Pay zone depth (ft) 4506

Gas: Initial open flow ______ MCF/d  
Final open flow ______ MCF/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 WELLSORE.

For: TERM ENERGY CORP.  
By: ____________________________  
Date: 5-10-90
2 STAGE FRAC-ENERGIZED WATER

- ALEXANDER:
  MAX TR PRESS 3509; AVG RATE 23.5; AVG PRESS 3039;
  50,000# 20/40; 10,000# 80/100, MAX CONC 4;
  TOTAL ACID 500 GAL; TOTAL NITROGEN 149,000 SCF;
  TOTAL FLUID 663 BBLs ISIP 1550; 5 MIN SIP 1372

- BENSON & BRADFORD:
  MAX TR PRESS 3600; AVG RATE 20.4; AVG PRESS 3160;
  39,200# 20/40; 10,000# 80/100; MAX CONC 4;
  TOTAL ACID 1000 GAL; TOTAL NITROGEN 138,000 SCF;
  TOTAL FLUIDS 666 BBLs; ISIP 2800

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WELL LOG

<table>
<thead>
<tr>
<th>SAND &amp; SHALE</th>
<th>TOP</th>
<th>BOTTOM</th>
<th>WATER</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
<td>1888</td>
<td>1/2&quot; STREAM - 430'</td>
</tr>
<tr>
<td>BIG LIME</td>
<td>1880</td>
<td>1990</td>
<td></td>
</tr>
<tr>
<td>BIG INJUN</td>
<td>1990</td>
<td>2076</td>
<td></td>
</tr>
<tr>
<td>SAND &amp; SHALE</td>
<td>2076</td>
<td>5379</td>
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GEOPHYSICAL LOG

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<th>BIG LIME</th>
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<tr>
<td></td>
<td>1900</td>
<td>1980</td>
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<td>2076</td>
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<table>
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<td>2688</td>
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<table>
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<table>
<thead>
<tr>
<th>ALEXANDER</th>
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<tr>
<td></td>
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<td>5274</td>
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</table>
1) Well Operator: TERM Energy Corporation

2) Operator's Well Number: Cottrill #1

3) Elevation: 1010'

4) Well type: (a) Oil x / or Gas x /
   (b) If Gas: Production x / Underground Storage /
              Deep / Shallow x /

5) Proposed Target Formation(s): Alexander

6) Proposed Total Depth: 5400 feet

7) Approximate fresh water strata depths: 140', 452', 265', 515'

8) Approximate salt water depths: 1250', 1183'

9) Approximate coal seam depths: none OK. Note from review reports.

10) Does land contain coal seams tributary to active mine? Yes / No x /

11) Proposed Well Work:

   Drill & stimulate new well

12) CASING AND TUBING PROGRAM

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SPECIFICATIONS</th>
<th>FOOTAGE INTERVALS</th>
<th>CEMENT</th>
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<tbody>
<tr>
<td></td>
<td>Size</td>
<td>Grade</td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>per ft.</td>
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<tr>
<td>Conductor</td>
<td>11 3/4&quot;</td>
<td>J-55</td>
<td>42#</td>
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<td>Fresh Water</td>
<td>8 5/8&quot;</td>
<td>J-55</td>
<td>20#</td>
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<tr>
<td>Coal</td>
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<tr>
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<td>11.6</td>
</tr>
<tr>
<td>Tubing</td>
<td></td>
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<td>10.5</td>
</tr>
<tr>
<td>Liners</td>
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<td></td>
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PACKERS: Kind

Sizes

Depths set

For Division of Oil and Gas Use Only

Fee(s) paid:

Well Work Permit
Reclamation Fund
WPCP
Plat WW-9 WW-2B Blanket Biller (Type)
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 Jacob Cottrill
       Address 207 E. Crown Ave.
               Pennsboro, WV 26415
   
   (b) Name
       Address
   
   (c) Name
       Address

5) (a) Coal Operator:
    Name N/A
    Address
   
   (b) Coal Owner(s) with Declaration
       Name N/A
       Address
   
   (c) Coal Lessee with Declaration
       Name N/A
       Address

6) Inspector Mike Underwood
   Address Rt. 2 Box 135
           Salam, WV 26426
   Telephone (304)-782-1043

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.

By: ____________________________
   Well Operator   TERM Energy Corporation
   Address 110 North Spring Street
            Harrisville, WV 26362
   Telephone 304 643-4500

Subscribed and sworn before me this 6th day of March, 1990

[Signature]
Notary Public

My commission expires Oct. 15, 1994