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

Well Operator's Report of Well Work

Farm name: BENSON, KERMIT  
Operator Well No.: W.F. SMITH #6

LOCATION:  
Elevation: 916.00  
Quadrangle: WEST UNION

District: WESTUNION  
County: DODDRIDGE

Latitude: 10770 Feet South of 39 Deg. 22Min. 30 Sec.  
Longitude: 470 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: QUAKER STATE CORPORATION  
1226 PUTNAM HOWE DR. P O B 189  
Belpre, OH 45714-0000

Agent: FRANK R. ROTUNDA

Inspector: MIKE UNDERWOOD  
Permit Issued: 02/05/90

Well work Commenced: 03/07/90  
Well work Completed: 03/15/90

Verbal Plugging  
Permission granted on: N/A  
Rotary X Cable Rig

Total Depth (feet): 4950  
Fresh water depths (ft): 85

Salt water depths (ft): 1320  
Is coal being mined in area (Y/N)? N

Coal Depths (ft): N/A

<table>
<thead>
<tr>
<th>&amp;</th>
<th>Tubing</th>
<th>Drilling</th>
<th>in Well</th>
<th>Cu. Ft.</th>
<th>Fill Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 5/8&quot;</td>
<td>222'</td>
<td>222'</td>
<td>C.T.S.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7&quot;</td>
<td>1122'</td>
<td>1122'</td>
<td>C.T.S.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 1/2&quot;</td>
<td>4919'</td>
<td>4919'</td>
<td>120 sx.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OPEN FLOW DATA

Producing formation | Benson | Pay zone depth (ft) | 4839
Gas: Initial open flow show MCF/d Oil: Initial open flow | Bbl/d
Final open flow | 80 | MCF/d | Bbl/d
Time of open flow between initial and final tests | Hours
Static rock Pressure | psig (surface pressure) after | Hours

Second producing formation | Riley | Pay zone depth (ft) | 4393
Gas: Initial open flow show MCF/d Oil: Initial open flow | Bbl/d
Final open flow | comm. MCF/d | Final open flow | Bbl/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 WELLBORE.

RECEIVED  
Division of Energy  
JUN 25 90  
Permitting Oil and Gas Section

For: QUAKER STATE CORPORATION

By: Frank Rotunda  
Date: May 1, 1990
Perf: 4839' - 4844', with 21 shots  
Frac: 900 bbl. fluid, 475 sx. sand, 155M SCF N2
Perf: 4393' - 4434' with 19 shots  
Frac: 200 bbl. fluid, 250 sx. sand, 467 M SCF N2

<table>
<thead>
<tr>
<th>LOG</th>
<th>surface</th>
<th>FEET</th>
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<tbody>
<tr>
<td></td>
<td>shale</td>
<td>30 - 300</td>
</tr>
<tr>
<td></td>
<td>sand</td>
<td>300 - 380</td>
</tr>
<tr>
<td></td>
<td>shale</td>
<td>380 - 430</td>
</tr>
<tr>
<td></td>
<td>sand</td>
<td>430 - 470</td>
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<tr>
<td></td>
<td>silt/shale</td>
<td>470 - 1320</td>
</tr>
<tr>
<td></td>
<td>salt sands</td>
<td>1320 - 1604</td>
</tr>
<tr>
<td></td>
<td>shale</td>
<td>1604 - 1678</td>
</tr>
<tr>
<td></td>
<td>silt/shale</td>
<td>1678 - 1774</td>
</tr>
<tr>
<td></td>
<td>Bit Lime</td>
<td>1774 - 1852</td>
</tr>
<tr>
<td></td>
<td>Big Injun</td>
<td>1852 - 1966</td>
</tr>
<tr>
<td></td>
<td>shale</td>
<td>1966 - 2121</td>
</tr>
<tr>
<td></td>
<td>Weir</td>
<td>2121 - 2219</td>
</tr>
<tr>
<td></td>
<td>silt/shale</td>
<td>2219 - 4950</td>
</tr>
</tbody>
</table>
1) Well Operator: Quaker State Corporation 40400 (8) 670
2) Operator's Well Number: W.F. Smith #6
3) Elevation: 916'
4) Well type: (a) Oil_/ or GasXX_/ (b) If Gas: ProductionXX_/ Underground Storage_/ Deep_/ Shallow_/ 
5) Proposed Target Formation(s): Benson
6) Proposed Total Depth: 4950 feet
7) Approximate fresh water strata depths: 150
8) Approximate salt water depths: 990
9) Approximate coal seam depths: N/A
10) Does land contain coal seams tributary to active mine? Yes_/ No XX_/ 
11) Proposed Well Work: Drill and 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 per ft.</td>
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<tr>
<td>Conductor</td>
<td>11 3/4''</td>
<td>H-40</td>
<td>42</td>
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<tr>
<td>Fresh Water</td>
<td>8 5/8''</td>
<td>H-40</td>
<td>23</td>
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<tr>
<td>Coal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>4 1/2''</td>
<td>J-55</td>
<td>10.5</td>
</tr>
<tr>
<td>Tubing</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Liners</td>
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<td></td>
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</tbody>
</table>

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 ☑ Bond 50 ☑ Security ☑ Agent (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 Kermit Benson
       Address Route 2
       West Union, WV 26456
   (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 Harold Mike Underwood
    Address Route 2 Box 114
    Salem, 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
XX 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 Quaker State Corporation
By: Frank Rotunda
Its: Designated Agent
Address P.O. Box 823
Parkersburg, WV 26102
Telephone (614) 423-9543

Subscribed and sworn before me this 15th day of January, 1990

Dolores L. Branch
Notary Public

My commission expires March 14, 1995