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

WELL OPERATOR'S REPORT
OF
WELL: [Redacted]

WELL TYPE: [Redacted]

LOCATION: Elev. 1369', Watershed: Upper Bowman Run

District: Meade

County: Marshall

WELL OPERATOR: Appalachian Exploration & Dev., Inc.

Address: P.O. Box 628

Charleston, West Virginia 25322

PERMITTED WORK: Drill X / Perforate new formation / Fracture or stimulate

PERMIT ISSUED ON July 30, 1979

GEOLGICAL TARGET FORMATION: Gordon

Depth of completed well: 3201 feet

Rotary X / Cable Tools

Water strata depth: Fresh, 100 feet; salt, 1910 feet

Oil & Gas Inspector for this work: Phillip Lee Tracy

Address: P.O. Box 173 – Dodd Street

Middlebourn, WV 26149

Casing and Tubing Program

<table>
<thead>
<tr>
<th>Casing or Tubing Type</th>
<th>Specifications</th>
<th>Footage Intervals</th>
<th>Cement Fill-Up or Sacks (Cubic Feet)</th>
<th>Packers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

OPEN FLOW DATA

Producing formation: Gordon Sand

Oil: Initial open flow, 169 Bbl/d

Final open flow, TSTM, Bbl/d

Oil: Initial open flow, Bbl/d

Final open flow, Bbl/d

Timed open flow between initial and final tests, hours

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

Second producing formation

Pay zone depth feet

Oil: Initial open flow, Bbl/d

Final open flow, Bbl/d

Oil: Initial open flow, Bbl/d

Final open flow, Bbl/d

Timed open flow between initial and final tests, hours

Static rock pressure, psig (surface measurement) after hours shut in
DETAILED OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

8/28/79 - Broke down Gordon with 2550#. Pumped 1000 gals. 15% HCL at 10 BPM at 2700#. Dropped perf balls. Complete shut-off at 3000#.
8/29/79 - Treated Gordon with 15,000# 80/100 (Maximum conc. 6#/gal.) and 45,000# 20/40 (Maximum conc. 8#/gal.). Average injection rate 7.7 BPM; with nitrogen, 25.4 BPM. Average treating pressure 3625#. Total fluid 454 bbls. (310 bbls. S/L) 715,000 cubic feet of nitrogen at 15,000 cubic feet/min. Used 70% quality foam. ISIP 2700#.

WELL LOG

<table>
<thead>
<tr>
<th>FORMATION</th>
<th>Color</th>
<th>Hard or Soft</th>
<th>Top Feet</th>
<th>Bottom Feet</th>
<th>Including indication of all fresh and salt water, coal, oil and gas</th>
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</thead>
<tbody>
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<td>3086</td>
<td>T.D.</td>
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</tbody>
</table>

Show gas

E. Log
D.T.D. 3180'
L.T.D. 3201'

(Attach separate sheets to complete as necessary)

APPALACHIAN EXPLORATION & DEVELOPMENT, INC.

Well Operator

By James L. Cramblitt

Regional Manager, Drilling and Production

NOTE: Please provide us with a file of the 'well log'.
STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT APPLICATION

Date: June 14, 1979
Operator's Well No. Hally J. Hubbs #1
API Well No. 37-051-0662
State County Permit

WELL TYPE: Oil / Gas X /
(If "Gas", Production / Underground storage /)

LOCATION: Elevation: 1369 / Watershed: Upper Bowman Run
District: Meade / County: Marshall

WELL OPERATOR
Appalachian Exploration & Development, Inc.
Address: P. O. Box 628
Charleston, WV 25322

OIL & GAS ROYALTY OWNER
Hally J. Hubbs
Address: Route 1, Box 243
Moundsville, WV 26041
Acres: 84,668

SURFACE OWNER
Kenneth L. Neely
Address: Route 1, Box 126
Glen Easton, WV 26039
Acres: 84,668

FIELD SALE (IF MADE) TO:
Name:
Address:

OIL & GAS INSPECTOR TO BE NOTIFIED
Name:
Address:

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease X / other contract / dated August 8, 1975, from McCombs, Conrad and Barrett.

If said deed, lease, or other contract has been recorded:
Recorded on August 8, 1975, in the office of the Clerk of the County Commission of Marshall County, West Virginia, in - - - Book -- at page -- --. A permit is requested to follow:

PROPOSED WORK: Drill X / 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 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 EOGHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
615 Washington Street East
Charleston, WV 25311
TELEPHONE: (304) 348-3902

BLANKET BOND

Appalachian Exploration & Development, Inc.
Well Operator

By
Its District Production Superintendent

RECEIVED
JUL 30 1979
PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN)  Clint Hurt
Address  P. O. Box 1973
         Midland, TX 79702

GEOLOGICAL TARGET FORMATION,  Gordon
Estimated depth of completed well,  3200 feet  Rotary X / Cable tools /
Approximate water strata depths:  Fresh, 100 feet;  salt, 1000 feet.
Approximate coal seam depths:  802  Is coal being mined in the area?  Yes X / No /
                               952
                               1072

CASING AND TUBING PROGRAM

<table>
<thead>
<tr>
<th>CASING OR TUBING TYPE</th>
<th>SPECIFICATIONS</th>
<th>FOOTAGE INTERVALS</th>
<th>CEMENT FILL-UP OR SACKS (Cubic feet)</th>
<th>PACKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Conductor 13-3/8</td>
<td>36#</td>
<td>30'</td>
<td>30'</td>
<td>5</td>
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<tr>
<td>Fresh water 9-5/8</td>
<td>36#</td>
<td>300'</td>
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<td>Coal</td>
<td>17#</td>
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<td>2475'</td>
<td>200</td>
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<td>Intermediate 7&quot;</td>
<td>9.5#</td>
<td>3200'</td>
<td>3200'</td>
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<td>Tubing</td>
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<td>Top</td>
</tr>
<tr>
<td>Liners</td>
<td></td>
<td></td>
<td></td>
<td>Bottom</td>
</tr>
</tbody>
</table>

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 plot 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 § 22-4-22, (iii) Form IV-2, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-10b and Regulation 25, (iv) unless previously paid on the same well, the fee required by Code § 22-4-11b, and (v) if applicable, the amount required by Code § 22-4-8a from the owner of any water well or dwelling within 100 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 not a separate operation therewith.

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling by __________________________.  This permit shall expire if operations have not commenced by 3-31-80.

Deputy Director - Coal Gas Division

The following work must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-29, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

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 adjusted 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
STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OIL AND GAS DIVISION

APPROVED: PLUGGING AND FILLING WELL

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

LOCATION: Elevation: 1369' Watershed: Upper Bowman Run
District: Meade County: Marshall Quadrangle: Glen Easton

WELL OPERATOR: Cabot Oil & Gas Corp. of WV
Address: P.O. Box 628 Charleston, West Virginia 25322

DESIGNATED AGENT: Robert E. Horrell
Address: P.O. Box 628 Charleston, West Virginia 25322

Mark McCormick and Mike Wine (Pool Well Service)

being first duly sworn according to law, depose and say that they are experienced in the work of
plugging and filling oil and gas wells; that they were employed by Cabot Oil & Gas Corp. of WV
the well operator, and participated in the work of plugging and filling the above well; that the work
was commenced on May 22, 1984, and completed on May 22, 1984, in the
following manner:

PERMITTED WORK: Plug and abandon X / Clean out and replug X /

PLUGGING MATERIALS:

<table>
<thead>
<tr>
<th>Type of Cement</th>
<th>Other Materials</th>
<th>Depth</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A w/ 3% CaCl₂</td>
<td>3050</td>
<td>250</td>
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<tr>
<td>8.7# Gel</td>
<td>2800</td>
<td>400</td>
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</tr>
<tr>
<td>Class A w/ 3% CaCl₂</td>
<td>2405</td>
<td>100</td>
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<tr>
<td>8.7# Gel</td>
<td>2305</td>
<td>2205</td>
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</tr>
<tr>
<td>Class A w/ 3% CaCl₂</td>
<td>100 to surface</td>
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</tr>
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</table>

Bridge Plugs Used—Type and Depth

Baker Model S 4-1/2" Bridge Plug @ 2750'.
Cut 4-1/2" @ 2310'.

VENT PIPE

MISCELLANEOUS MATERIALS

CASING LOST 41" (878') 7" (2543')

TYPE OF RIG: 9-5/8" (338')
Owner: Well Co's / Contractor X /
Rig time: ___ days plus ___ hours

Subscribed and sworn to before me this
20 day of September, 1984.
My commission expires March 5, 1989.

Mark A. McCormick (SEAL)
Mike Wine (SEAL)

Date: September 20, 1984
Operator's Well No.: Hally Hubbs #1
API Well No.: 47-051-0686
State County Permit

Coal Seams (Names and Depths)

<table>
<thead>
<tr>
<th>Name</th>
<th>Depth</th>
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</thead>
<tbody>
<tr>
<td>814', 980', 1031', 1066'</td>
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</tr>
</tbody>
</table>

Description of Well Monument

7" casing bearing API number

Mark A. McCormick (SEAL)

[Signature]

OCT 09 1984