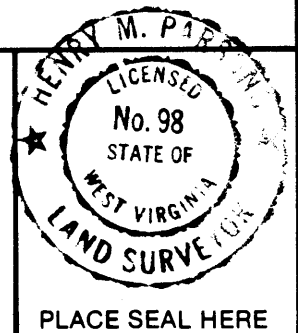


- 39 3/4 ACRES**
- 1-2 N 89°45' E 946
 - 2-3 S 84°30' E 900
 - 3-4 S 6°30' W 241
 - 4-5 S 30°15' E 164
 - 5-6 S 49°30' E 116
 - 6-7 S 79°15' E 204
 - 7-8 S 26°45' E 235
 - 8-9 S 85°00' W 1050
 - 9-10 S 85°00' W 600
 - 10-11 N 4°30' W 198
 - 11-12 S 66°45' W 812
 - 12-13 N 13°45' W 384
 - 13-14 N 22 3/4° E 445.5
 - 14-1 N 00°45' W 272.5

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 80-5749-Y
 DRAWING NO. 80-5749-Y
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 IN 2500
 PROVEN SOURCE OF ELEVATION B.M. 1588 ON WILEYVILLE TOPO

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) Henry M. Parsons
 R.P.E. _____ L.L.S. #98



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE AUGUST 19, 1983
 OPERATOR'S WELL NO. LISTON #1
 API WELL NO. 47 103 WETZEL 1294
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW

LOCATION: ELEVATION 1343.5 WATERSHED RUSH
 DISTRICT PROCTOR COUNTY WETZEL
 QUADRANGLE WILEYVILLE, W.V.A. Littleton 15' C

SURFACE OWNER ARTHUR LISTON ACREAGE 39 3/4
 OIL & GAS ROYALTY OWNER C. LEMASTER, L. LEMASTER LEASE ACREAGE 148
S. TAYLOR & J. SMITH HEIRS LEASE NO. HB-324-648

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 GORDON ESTIMATED DEPTH 3458'
 WELL OPERATOR HADDAD & BROOKS, INC. DESIGNATED AGENT HENRY M. PARSONS
 ADDRESS 905 WASHINGTON ROAD, BOX 714 WASHINGTON, PA 15301-1153 ADDRESS 121 GLENVIEW DR., NEW MARTINSVILLE, WV 26155
6-6 Lynn Camp (36) 26155

NOV 07 1983

FORM IV-6 (8-78) H.T. HALL COUNTY NAME PERMIT 80-5749-Y



IV-35
(Rev 8-81)

Date September 18, 1984
Operator's
Well No. #1
Farm Liston
API No. 47 - 103 - 1294

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 X / Underground Storage / Deep / Shallow X /)

LOCATION: Elevation: 1343.5 Watershed Rush Run
District: Proctor County Wetzel Quadrangle Wileyville

COMPANY Haddad & Brooks, Inc.
ADDRESS 905 Washington Rd., Washington, PA 15301
DESIGNATED AGENT Henry M. Parsons
ADDRESS 121 Glenview Dr., N. Martinsville, WV 26155
SURFACE OWNER Arthur Liston
ADDRESS Rt. 1, Box 78, Morgantown, WV 26505
MINERAL RIGHTS OWNER C. Lemaster et al
ADDRESS New Martinsville, WV 26155
OIL AND GAS INSPECTOR FOR THIS WORK Robert A. Lowther
ADDRESS Middlebourne, WV 26149
PERMIT ISSUED 10-31-83
DRILLING COMMENCED 4-5-84
DRILLING COMPLETED 4-14-84
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. | 78' | | |
| 13-10" | | | |
| 9 5/8 | | | |
| 8 5/8 | 1680' | 1680' | 380 sks 50:50 Poz +4% CaCl |
| 7 | | | 75 sks Neat + 4% CaCl |
| 5 1/2 | | | |
| 4 1/2 | 3440' | 3440' | 150 sks Thixo. |
| 3 | | | |
| 2 | | | |
| Liners used | | | |

GEOLOGICAL TARGET FORMATION Gordon Depth 3323 feet
Depth of completed well 3450 feet Rotary X / Cable Tools
Water strata depth: Fresh Unknown feet; Salt Unknown feet Drilled on fluid
Coal seam depths: 1197 (Pittsburgh Coal) Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Gordon Stray, Gordon Pay zone depth 3303-3337 feet
Gas: Initial open flow 26 Mcf/d Oil: Initial open flow 24 Bbl/d
Final open flow (26) Mcf/d Final open flow (24) Bbl/d
Time of open flow between initial and final tests 2 hours
Static rock pressure 1650 psig (surface measurement) after 67 hours shut in
(If applicable due to multiple completion--)

Second producing formation Berea Pay zone depth 3060-3068 feet
Gas: Initial open flow 176 Mcf/d Oil: Initial open flow 4 Bbl/d
Final open flow (88) Mcf/d Oil: Final open flow (4) Bbl/d
Time of open flow between initial and final tests 7 hours
Static rock pressure 700 psig (surface measurement) after 68 hours shut in

26
88
114 mcf
+2860
FOF for well

(Continue on reverse side)

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

- 6/13/84 Perf Gordon with 12 holes 3326-3338'.
Perf Gordon Stray with 6 holes ~~3305~~-3308'.
Frac Gordon and Gordon Stray with 620 bbl gelled diesel, 41,500# 20/40 sand. ATR 24 BPM. ATP 3400 psi.
- 6/21/84 Perf Berea with 20 holes 3061-3066'.
- 6/22/84 Frac Berea with 900 bbl foamed diesel, 22,000# 20/40 sand. 9500# 10/20 sand. ATR 16 BPM. ATP 3450 psi.

WELL LOG

| FORMATION | COLOR | HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS |
|---------------------------------|-------|--------------|----------|--------------|---|
| | | | | | Including indication of all fresh and salt water, coal, oil and gas |
| Undifferentiated Sand and Shale | | | 0 | 2412' | Pittsburgh Coal @ 1197' |
| Greenbrier | | Tn-Wt H | 2412' | 2488' | |
| Big Injun | | Clr-Wt M-H | 2488' | 2708' | SSG |
| Shale & Slst | | Gy-Bn M-S | 2708' | 2864' | |
| Weir | | Wt H-S | 2864' | 2900' | |
| Shale & Slst | | Gy-Gn S | 2900' | 3060' | |
| Berea | | Clr H | 3060' | 3099' | Broken, SO |
| Shale & Slst | | Gy-Gn S | 3099' | 3303' | |
| Gordon Stray | | Wt M | 3303' | 3310' | SOG |
| Shale | | Gy H-S | 3310' | 3323' | |
| Gordon | | Wt M | 3323' | 3337' | SOG |
| Shale | | Gy-Bn S | 3337' | 3368' | |
| <u>Fourth</u> | | Wt M | 3368' | 3372' | SG |
| <u>Shale</u> | | Gy S | 3372' | <u>3450'</u> | T.D. |

All depths measured from G.L.

(Attach separate sheets as necessary)

Haddad and Brooks, Inc.

Well Operator

By:

Carl A. Boe

Date:

September 18, 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."



1) Date: October 7, 19 83
 2) Operator's Well No. Liston #1
 3) API Well No. 47 - 103 - 1294
 State County Permit

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

- 4) WELL TYPE: A Oil / Gas
 B (If "Gas", Production / Underground storage _____ / Deep _____ / Shallow)
 5) LOCATION: Elevation: 1343.5 Watershed: Rush Run
 District: Proctor County: Wetzel Quadrangle: Wileyville 7.5'
 6) WELL OPERATOR Haddad & Brooks, Inc. 7) DESIGNATED AGENT Henry M. Parsons
 Address 905 Washington Rd., P.O. Box 714 Address 121 Glenview Drive
Washington, PA 15301-1153 New Martinsville, WV 26155
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Robert A. Lowther Name Not yet known
 Address General Delivery Address _____
Middlebourne, WV 26149
 10) PROPOSED WELL WORK: Drill / Drill deeper _____ / Redrill _____ / Stimulate _____
 Plug off old formation _____ / Perforate new formation _____
 Other physical change in well (specify) _____
 11) GEOLOGICAL TARGET FORMATION, Gordon OCT 11 1983
 12) Estimated depth of completed well, 3458 feet
 13) Approximate strata depths: Fresh, N/A feet; salt, 2230 feet.
 14) Approximate coal seam depths: 1207 Is coal being mined in the area? Yes _____

RECEIVED

OIL & GAS DIVISION
 No. X
 DEPT. OF MINES

15) CASING AND TUBING PROGRAM

| CASING OR TUBING TYPE | SPECIFICATIONS | | | | FOOTAGE INTERVALS | | CEMENT FILL-UP OR SACKS (Cubic feet) | PACKERS |
|-----------------------|----------------|-------|----------------|-----|-------------------|--------------|--------------------------------------|--------------------------|
| | Size | Grade | Weight per ft. | New | Used | For drilling | | |
| Conductor | 11 3/4" | | | | | 80' | 80' | Kinds |
| Fresh water | | | | | | | | |
| Coal | | | | | | | | Sizes |
| Intermediate | 8 5/8" | | | | | 1297' | 1297' | 380 sacks |
| Production | 4 1/2" | | | | | 3458' | 3458' | 200 sacks or as set |
| Tubing | | | | | | | | required by Rule 15 |
| Liners | | | | | | | | Perforations: Top Bottom |

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-103-1294 Date October 31, 19 83

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires October 31, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

| | | | | |
|---------------------|--|---|---|------------|
| Bond | Agent: <input checked="" type="checkbox"/> | Plat: <input checked="" type="checkbox"/> | Casing: <input checked="" type="checkbox"/> | Fee |
| BLANKET BOND | <u>LO</u> | <u>[Signature]</u> | <u>[Signature]</u> | <u>119</u> |

[Signature]
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File