



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

Rotary
Spudder
Cable Tools
Storage

Quadrangle Paden City

Permit No. TYL-488

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company The Denholm Corporation
Address 210 Fleetway, Houston, TX 77024
Farm Earl Grimes Acres 20
Location (waters) Willow Fork
Well No. 1 Elev. 799' Grn
District Lincoln County Taylor
The surface of tract is owned in fee by Earl Grimes
Address Sistersville, WV
Mineral rights are owned by above 26175
Address _____
Drilling commenced 12/4/77
Drilling completed 12/29/77
Date perf. 2/11/78 From 2210 To 2214 (9 jets)
With 2628 2632 (5 jets)
2640 2652 (13 jets)

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10			Size of
8 1/4	260'	260'	Cem.w/100 Sks.12/7/77
6 1/2			Depth set
5 3/16			
4 1/2		2727'	Cem.w/135 Sks.12/29/77
3			Perf. top
± 1 1/2"		2627'	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Open Flow /10ths Water in Inch Attach copy of cementing record. SEE ABOVE
/10ths Merc. in Inch CASING CEMENTED SIZE No. Ft. Date
Volume 250 MCFD Cu. Ft. Amount of cement used (bags) _____
Rock Pressure 1235 lbs. 7 days hrs. Name of Service Co. Halliburton
Oil nil bbls., 1st 24 hrs. COAL WAS ENCOUNTERED AT none observed
WELL ACIDIZED (DETAILS) Berea Snd.: 750 gals 15% HCl FEET INCHES FEET INCHES
Fifth Snd.: 500 gals. 15% HCl FEET INCHES FEET INCHES
WELL FRACTURED (DETAILS) Berea Snd: 934 bbls. water and 28,000 lbs. 20-40 sand.
Fifth Snd: 836 bbls. water and 28,000 lbs. 20-40 sand.
RESULT AFTER TREATMENT (Initial open Flow or bbls.) 250 MCFD
ROCK PRESSURE AFTER TREATMENT 1235 Psig. HOURS 7 days
Fresh Water _____ Feet Salt Water _____ Feet
Producing Sand Berea and Fifth Sands - both deeper pool disc. Depth Berea 2208 - 2214
Fifth 2628 - 2652

Formation	Color	Hard or Soft	Top *	Bottom *	Oil, Gas or Water	Depth	Remarks
Sands & Shales			Surface	1008			
1st, 2nd, & 3rd salt sands			1008	1336			
Maxton			1406	1482			
Big Lime			1568	1616			
Keener			1654	1672			
Big Injun			1690	1796			
Squaw			1796	1822			
Weir			2034	2126			
Berea			2208	2214	Gas	2208-14	Perf.
30' Sand			2460	2474			
Gordon			2544	2548			
Fifth			2628	2652	Gas	2628-52	Perf
Sixth			2802	2808			
Speechley			3200	3234			T.D.

* Electric Log Depths

1568
799

769

3-3
3234
1796
1438 expln st.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
NOV 2 - 1977

Oil and Gas Division
OIL AND GAS WELL PERMIT APPLICATION

OIL & GAS DIVISION
DEPT. OF MINES

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE October 31, 1977

Surface Owner Earl Grimes

Company The Denholm Corporation

Address Sistersville, WV 26175

Address 210 Fleetway, Houston, TX 77024

Mineral Owner Same

Farm Earl Grimes Acres 20

Address _____

Location (waters) Willow Fork

Coal Owner Same

Well No. 1 Elevation 799' Grn.

Address _____

District Lincoln County Tyler

Coal Operator None

Quadrangle Paden City

Address _____

THIS PERMIT MUST BE POSTED AT THE WELL SITE

provisions being in accordance with Chapter 22,
the W. Va. Code, the location is hereby approved
for drilling. This permit shall expire if
operations have not commenced by 3-14-78.

INSPECTOR TO BE NOTIFIED Phillip Tracy
PH: 758-4573 ADDRESS Middlebourn, W.Va.

[Signature]
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) assignment ~~assignment~~ August 29 19 77 by Jack Holden made to The Denholm Corporation and recorded on the 1st day of September 19 77, in Tyler County, Book 213 Page 385

NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours,

The Denholm Corporation
(Sign Name) Bank Well Operator
210 Fleetway
Street
Houston
City or Town
Texas 77024
State

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

West Virginia Geological and Economic Survey
Box 879
Martinsburg, W. Va. 26505

SECTION 3. . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the time of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

TYL-488 PERMIT NUMBER

[Handwritten mark]

**THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION**

PROPOSED WORK ORDER TO DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME Unknown NAME W. M. Woodroe
 ADDRESS _____ ADDRESS Charleston National Plaza
 TELEPHONE _____ TELEPHONE Charleston, WV 25301 304-343-4841
 ESTIMATED DEPTH OF COMPLETED WELL: 3400' ROTARY CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Warren Sands
 TYPE OF WELL: OIL _____ GAS _____ COMB. STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8			
7	250'	250'	Circulate to surface
5 1/2			
4 1/2		3400'	Cover Productive Sands
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 60 FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS 100' _____
 IS COAL BEING MINED IN THE AREA? No BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title