



DESIGNATED AGENT:
MR. FRANK JOHNSON
GLENVILLE, W.VA. 26351

Minimum Error of Closure ONE PART IN 200'

Source of Elevation TOP OF KNOB 2200' NORTH OF LOCATION

ELEVATION = 1369'

- Fracture..... GAS-DRILL-SHALLOW
- New Location..... DEVONIAN SHALE-TP
- Drill Deeper..... EST. DEPTH = 5400'
- Abandonment.....

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: Mark C. Echard

Squares: N S E W

Map No.

WELL OPERATOR/
Company RUSSELL V. JOHNSON, JR.
Address 925 FIRST-LIFE ASSURANCE BUILDING
OKLAHOMA CITY, OKLAHOMA 73102.

Farm HOWARD HINTERER.

Tract _____ Acres 266 Lease No. _____

Well (Farm) No. ODE Serial No. _____

Elevation (Spirit Level) 1234

Quadrangle NEW MILTON 7.5 Vadio WC

County RODRIDGE District NEW MILTON

Surveyor MARK C. ECHARD

Surveyor's Registration No. 490

File No. _____ Drawing No. _____

Date AUGUST 24, 1979 Scale 1" = 500'

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

WELL LOCATION MAP

FILE NO. 47-017-2481

+ Denotes location of well on United States Topographic Maps, scale 1 to 25,000, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

SEP 18 1979

66 EIK 5400' NEW MILTON S. 307

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

Date 26 October 1979

FORM IV-35
(Obverse)

Operator's
Well No. Howard Hinterer #1

[08-78]

WELL OPERATOR'S REPORT 4

API Well No. 017-240

OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___

(If "Gas", Production X / Underground storage ___ / Deep ___ / Shell w X)

LOCATION: Elevation: 1234' Watershed: Tom's Fork

District: New Milton County: Doddridge Quadrangle: New Milton 7.5'

WELL OPERATOR Russell V. Johnson, Jr. DESIGNATED AGENT Gai L. Smythe

Address 330 First Life Assurance Bldg. Address Drawer "L"

Oklahoma City, Okla. 73102 Glenville, WV 25351

PERMITTED WORK: Drill X / Convert ___ / Drill deeper ___ / Ream ___ / Fracture or stimulate

Plug off old formation ___ / Perforate new formation ___

Other physical change in well (specify) _____

PERMIT ISSUED ON August 28, 19 79 OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED

Name Paul Garrett

Address Clarksburg, WV 25301

(304) 622-3871

GEOLOGICAL TARGET FORMATION: Devonian Shale (Elk) Depth 5560-5646 feet

Depth of completed well, 5710 feet Rotary X / Cable Tools ___

Water strata depth: Fresh, 240 feet; salt, ___ feet.

Coal seam depths: None Is coal being mined in the area? No

Work was commenced 30 August, 19 79, and completed 7 September, 19 79

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILLING OR CASKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								Kinds
Fresh water	8 5/8					1333	1333	To surface
Scale								
Intermediate								
Production	4 1/2						5659	Perforations:
Tubing								Top <u>5286</u> Bottom <u>5611</u>
Liners								

OIL & GAS DIVISION
DEPT. OF MINES

OPEN FLOW DATA

Producing formation Benson Pay zone depth 5288 feet

Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d

Final open flow, ___ Mcf/d Final open flow, ___ Bbl/d

Time of open flow between initial and final tests, ___ hours

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

[If applicable due to multiple completion--]

Second producing formation Elk ALEX Pay zone depth 5612 feet

Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d

Final open flow, 350,000 Mcf/d Final open flow, ___ Bbl/d

Time of open flow between initial and final tests, 4 hours NOV 28 1979

Static rock pressure, 1750 psig (surface measurement) after 24 hours shut in

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

Perforated: Elk--7 holes:5579-5612'; Benson--5 holes:5286-5288'.
 Fracturing: Elk: 15% HCl--500 gal; 20,000lb 80/100 sand; 40,000lb 20/40 sand
 480 Bbl. water. Treating at 2000#-2500#.
 Benson: 15% HCl--599 gal; 10,000lb 80/100 sand; 30,000lbs. 20/40 sand
 480 Bbl. water. Treating at 1100# to 1500#.

ELL LOG

FORMATION	Color	Hard or Soft	4 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Red Rock, Sand, Shale, Lime			0	2200	
Blue Monday & Lime			2201	2352	Hole caving
Big Lime			= 2353	2410	
Big Injun			2410	2517	Show of gas, 179,000 natural
Shale			2518	2596	
Weir			2597	2691	
Shale			2692	2804	
Shale & Sand			2805	2822	
Shale			2823	2906	
Sand			2907	2956	
Shale, Sand			2957	3356	Hole caving
Shale			3357	3650	
Sandy shale			3651	3691	
Shale			3692	3711	
Shaly Sand			3712	3910	
Shale			3911	5096	
Sand			5096	5106	
Shale			5107	5284	
Benson			- 5284	5291	
Shale			5292	5572	
Elk A-EA			5573	5650	
Shale			5650	5717	
Total Depth			5717		

(Attach separate sheets to complete as necessary)

Russell V. Johnson, Jr.
Well Operator

By [Signature]
Its Partner

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."

[08-78]

COPY

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. Hinterer #1

API Well No. 47 - 017 - 2481
State County Permi

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

LOCATION: Elevation: 1234' Watershed: Tom's Fork
District: New Milton County: Doddridge Quadrangle: New Milton 7.5'

WELL OPERATOR Russell V. Johnson, Jr.
Address 330 First Life Assurance Building
Oklahoma City, OK 73102

DESIGNATED AGENT Frank Johnson
Address Glenville, WV 26351

OIL & GAS ROYALTY OWNER Howard Hinterer
Address New Milton, WV

COAL OPERATOR None
Address _____

Acreage 266

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Howard Hinterer
Address New Milton, WV

Name N/A
Address _____

Acreage 266

Name N/A
Address _____

FIELD SALE (IF MADE) TO:
Name N/A
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
Name N/A
Address _____
RECEIVED
AUG 28 1979

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address Clarksburg, WV 26301
622-3871

OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease / other contract / dated February 1, 19 79 to the undersigned well operator from Howard Hinterer, et al
[If said deed, lease, or other contract has been recorded:]

Recorded on June 13, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 108 at page 689. A permit is requested as follows:

PROPOSED WORK: Drill / 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 on 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 GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

Russell V. Johnson, Jr.
Well Operator
By Frank L. Johnson
Its Frank Johnson Agent

[08-78]

Y90

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Fox Drilling
Address Glennville, WV 26351

GEOLOGICAL TARGET FORMATION, E1k

Estimated depth of completed well, 5400 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 120 feet; salt, feet.

Approximate coal seam depths: None Is coal being mined in the area? Yes / No X /

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	Left in well		
Conductor									Kinds <u> </u>
Fresh water	8 5/8					1200'	1200'	To surface	
Coal									Sizes <u> </u>
Intermediate									
Production	4 1/2						5400	160 sks	Depths set <u> </u>
Tubing									
Liners									Perforations: <u> </u>
									Top <u> </u> Bottom <u> </u>

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 plat 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 § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-3 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 noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling

. This permit shall expire if operations have not commenced by 4-28-80

[Signature]

~~Deputy Director, Oil & Gas Division~~ must be completed by the coal operator and by any coal owner or coal lessee who has provided a declaration under Code § 22-4-20, 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 added 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.

e: , 19

By
Its