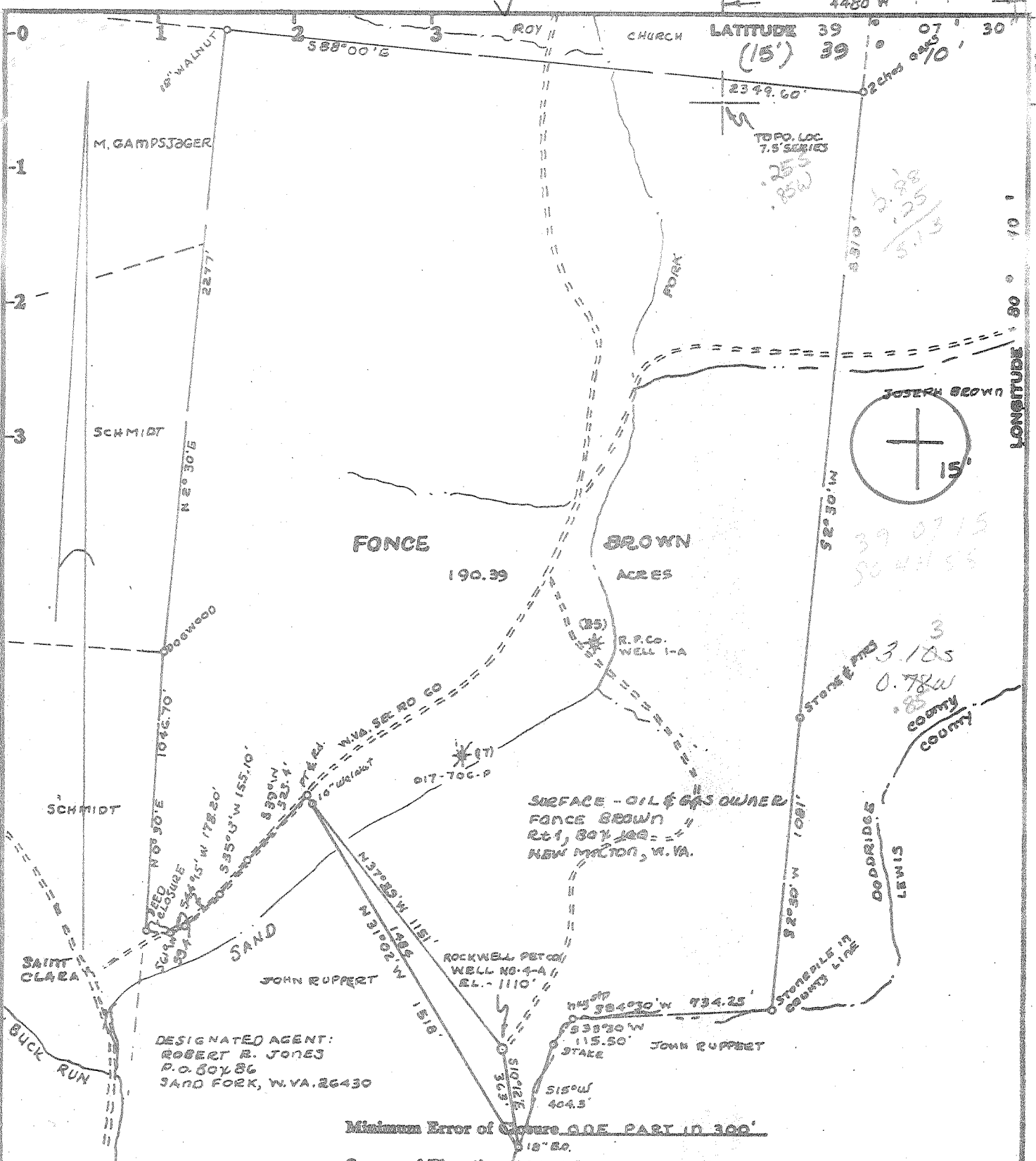


4480'W 7/16/75



SURFACE - OIL & GAS OWNER
FONCE BROWN
 Rt 1, Box 100
 NEW MILTON, W. VA.

DESIGNATED AGENT:
ROBERT R. JONES
 P.O. BOX 86
 SAND FORK, W. VA. 26430

Minimum Error of Closure 0.05 PART IN 300'
 18" 80.
 Source of Elevation USGS SPOT ELEVATION IN CENTER OF WVA. SEC. RD. 29
AT ROY SCHMIDT DRIVEWAY 1300' WEST OF LOCATION. ELEV - 847'

Fracture..... 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.
 New Location..... GAS-DRILL-SHALLOW DEVONIAN SHALE-T.F. EST. DEPTH - 5550'
 Drill Deeper.....
 Abandonment..... Map No. _____ Signed: Mark C. Echard
 Squares: N S E W

WELL OPERATOR/
 Company ROCKWELL PETROLEUM COMPANY
 Address P.O. BOX 86, SAND FORK, W. VA. 26430
 Farm FONCE BROWN
 Tract _____ Acres 190.39 Lease No. _____
 Well (Farm) No. 4-A Serial No. _____
 Elevation (Spirit Level) 1110'
 Quadrangle VADIS 7.5', 15'
 County DODDRIDGE District COVE
 Surveyor MARK C. ECHARD
 Surveyor's Registration No. 490
 File No. _____ Drawing No. _____
 Date JULY 9, 1979 Scale 1" = 500'

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

WELL LOCATION MAP
 FILE NO. 47-017-2450

+ 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.

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

Date August 13, 1979

FORM IV-35
(Obverse)

Operator's
Well No. Fonce Brown #4A

[08-78]

WELL OPERATOR'S REPORT
OF

API Well No. 017 - 2450

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

Aluminum

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal
(If "Gas", Production / Underground storage / Deep / Shallow
LOCATION: Elevation: 1110' Watershed: Sand Fork
District: Cove County: Doddridge Airangle: Vadis 7.5'

WELL OPERATOR Rockwell Petroleum Company DESIGNATED AGENT Robert R. Jones
Address P O Box 86 Address P O Box 86
Sand Fork, WV 26430 Sand Fork, WV 26430

PERMITTED WORK: Drill / Convert / Drill deeper / Re-drill / Fracture or stimulate
Plug off old formation / Perforate new formation
Other physical change in well (specify) _____

PERMIT ISSUED ON July 16, 1979, 19____ 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 26301
622-3871

GEOLOGICAL TARGET FORMATION: Elk Depth 5450 feet
Depth of completed well, 5426 feet Rotary / Cable Tools
Water strata depth: Fresh, 124 feet; salt, _____ feet.
Coal seam depths: None Is coal being mined in the area? No
Work was commenced July 28, 1979, and completed August 3, 1979

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL- OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								Kinds
Fresh water	8 5/8					1217'	1217'	To surface
Coal								Sizes
Intermediate								
Production	4 1/2						5358	150 sks
Tubing								
Liners								Perforations:
								Top Bottom

SEP - 7 1979

OPEN FLOW DATA
Producing formation Benson 4969.5
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, 0 bbl/d
Final open flow, _____ Mcf/d Final open flow, 0 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 Pay zone depth 5335 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, 0 bbl/d
COMBINED Final open flow, 1,525 Mcf/d Final open flow, 0 bbl/d
Time of open flow between initial and final tests, 8 hours
Static rock pressure, 18 50 psig (surface measurement) after 36 hours shut in

SEP 24 1979

[08-78]

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

August 14, 1979

Elk - 20,000 lb. 80/100 sand
40,000 lb. 20/40 sand
645 bls. water
23 BPM at 1800 lb.
1000 lb. breakdown

Benson - 20,000 lb. 80/100 sand
40,000 lb. 20/40 sand
736 bls. water
16.8 BPM at 1700 lb.
1600 lb. breakdown

Perforations - 5082, 5095, 5246, 5247,
5274, 5275, 5335, 1 hole each

Perforations - 4966.5, 4967, 4967.5, 4968
4968.5, 4969, 4969.5,
1 hole each

WELL LOG

FORMATION	Color	Hard or Soft	3 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Surface			0	120	
Sand			120	124	Water
Shale			124	135	
Sand			135	137	Water
Shale			137	680	
Red Rock			680	711	
Sand			711	724	
Shale			724	1194	
Sand			1194	1209	
Red Rock			1209	1254	
Sand			1254	1287	
Shale			1287	1598	
Sand			1598	1608	
Shale			1608	1880	
Sand			1880	1920	
Shale			1920	1950	
Sandy Shale			1950	1985	
Shale			1985	2090	
Lim & Sand			2090	2110	
Sand			2110	2124	Show gas
Lime			2124	2170	
Big Injun			2170	2270	
Sandy Shale			2270	2420	Show gas
Shale			2420	2514	
Sand			2514	2540	
Shale			2540	3060	
Sandy Shale			3060	3080	
Shale			3080	3406	
Sandy Shale			3406	3440	Show gas
Shale			3440	4200	
Sandy Shale			4200	4225	
Shale			4225	4956	
Sandy Shale			4956	4978	Show gas (Benson)
Shale			4978	5074	
Sandy Shale			5074	5100	Show gas
Shale			5100	5220	
Sandy Shale			5220	5340	Show gas
Shale			5340	5426	
Total Depth			5426		

EIK
BEAL.

By Mack R. Worl
Mack R. Worl
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."

Rockwell Petroleum Company
Well Operator

COPY

OIL AND GAS WELL PERMIT APPLICATION

Operator's
Well No. Fonce Brown #4A

API Well No. 47-017-2450
State County Permit

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

LOCATION: Elevation: 1110' Watershed: Sand Fork
District: Cove County: Doddridge Quadrangle: Vadis 7.5

WELL OPERATOR Rockwell Petroleum Company
Address P O Box 86
Sand Fork, WV 26430

DESIGNATED AGENT Robert R. Jones
Address P O Box 86
Sand Fork, WV 26430

OIL & GAS
ROYALTY OWNER Fonce Brown
Address Route 1, Box 160
New Milton, WV

COAL OPERATOR -----
Address -----

Acreage 190.39

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Fonce Brown
Address Route 1, Box 160
New Milton, WV
Acreage 190.39

Name -----
Address -----
Name -----
Address -----

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

Name -----
Address -----

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

COAL LESSEE WITH DECLARATION ON RECORD:
Name -----
Address -----

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 26, 1979, to the undersigned well operator from Fonce E. Brown and Rita B. Brown

If said deed, lease, or other contract has been recorded:]
Recorded on March 8, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 107 at page 673. 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
PHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA OIL AND GAS
CONSERVATION COMMISSION
115 WASHINGTON STREET EAST
CHARLESTON, WV 25311

TELEPHONE: (304) 348-3092

BLANKET BOND

Rockwell Petroleum Company
Well Operator

By Robert R. Jones
Its Partner

JUL 16 1979
OIL & GAS DIVISION
DEPT. OF MINES

[08-78]

Y900

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Union Drilling, Inc.

Address Drawer 40
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Elk

Estimated depth of completed well, 5450 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 130 feet; salt, feet.

Approximate coal seam depths: 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
Fresh water	8 5/8					1300	1300	To surface	
Coal									Sizes
Intermediate									
Production	4 1/2						5400	160 sks	Depths set
Tubing									
Liners									Perforations: --
									Top Bottom

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-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 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 3-17-80

[Signature]
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded 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.

Date: , 19

By
Its