

NOTE -  
 OIL & GAS ROYALTY OWNER(S)  
 G.C. HAUGHT, HEIRS  
 SALEM, W.VA.  
 SURFACE OWNERS(S)  
 GILBERT F. CADOS  
 3406 45th AVENUE  
 LANDOVER, MD.

DESIGNATED AGENT:  
 ROBERT R. JONES  
 P.O. BOX 86  
 SAND FORK, W.VA. 26480

Minimum Error of Closure ONE PART IN 200'  
 Source of Elevation TOP OF KNOB 700' SW SOUTH WEST OF LOCATION  
 ELEVATION = 1296'

Fracture   
 New Location  GAS-DRILL - SHALLOW  
 DEVONIAN SHALE T.F.  
 EST. DEPTH 5380'  
 Drill Deeper   
 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

Company ROCKWELL PETROLEUM COMPANY  
 Address P.O. BOX 86, SAND FORK, W.VA. 26430  
 Farm THOMAS G. SMITH, MRS.  
 195.76 AC.  
 Tract \_\_\_\_\_ Acres 224.26 Lease No. \_\_\_\_\_  
 Well (Farm) No. REVISED TWO Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1038  
 Quadrangle NEW MILTON 25 (VADIS 15) WL  
 County DODDRIDGE District COVE  
 Surveyor MARK C. ECHARD  
 Surveyor's Registration No. 490  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date AUGUST 20, 1979 Scale 1" = 1000'

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

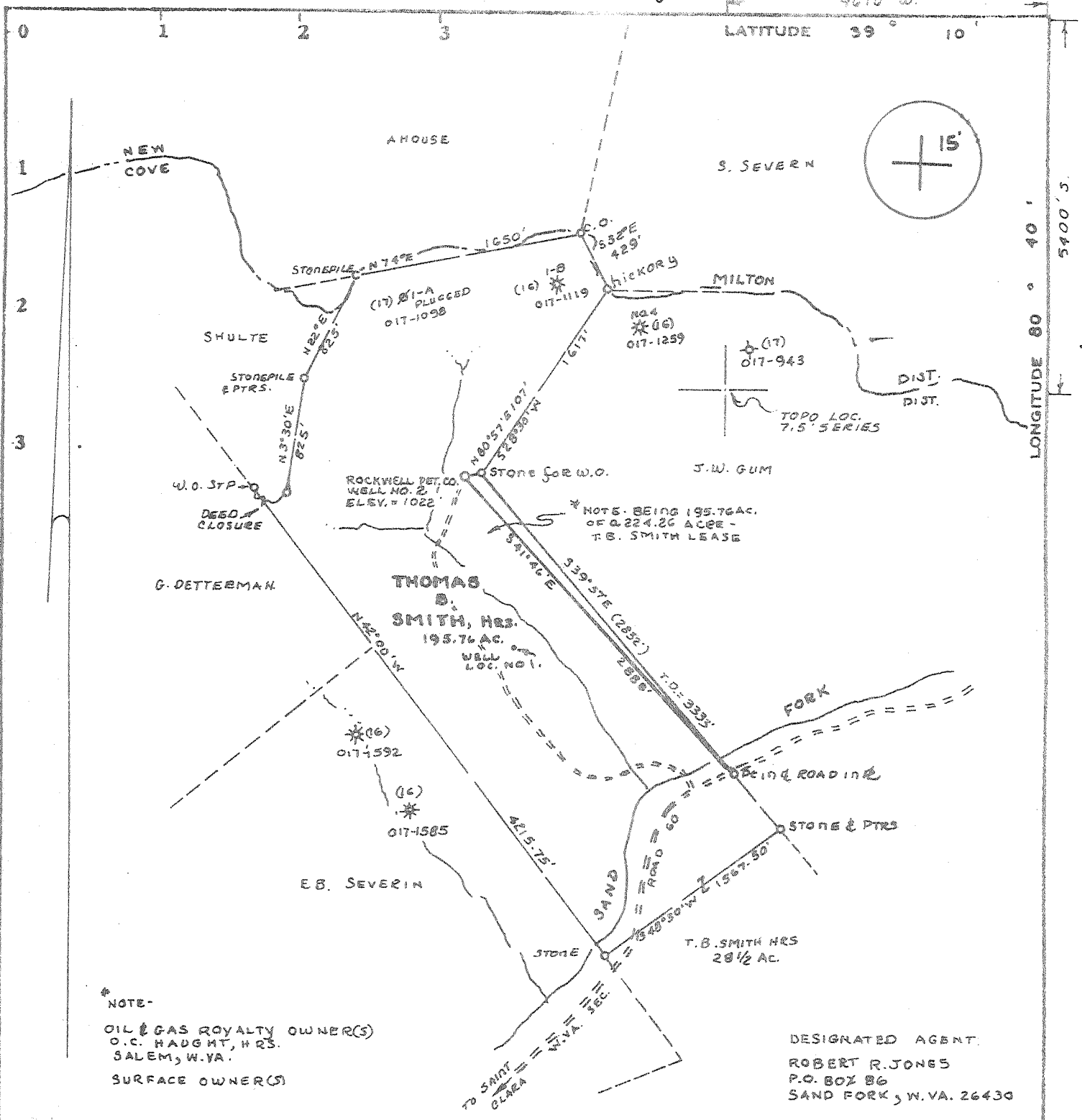
**WELL LOCATION MAP**

FILE NO. 47-017-2577  
 FORMERLY 47-017-2374

+ 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.





\* NOTE-

OIL & GAS ROYALTY OWNER(S)  
O.C. HAUGHT, HRS.  
SALEM, W.VA.  
SURFACE OWNER(S)

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

Minimum Error of Closure ONE PART IN 800'

Source of Elevation TOP OF KNOB 1300' SW. OF LOCATION

ELEVATION = 1296'

Fracture   
New Location  GAS-DRILL DEVONIAN SHALE-T.F. EST. DEPT. -5300'  
Drill Deeper   
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

Map No. Squares: N S E W

Company ROCKWELL PETROLEUM COMPANY  
Address P.O. BOX 86 SAND FORK, W.VA. 26430  
GILBERT T. CAPOS  
Farm THOMAS B. SMITH, HRS.  
Tract \_\_\_\_\_ Acres 224.26 Lease No. \_\_\_\_\_  
Well Farm No. TWO Serial No. \_\_\_\_\_  
Elevation (Spirit Level) 1922 WC  
VADIS 15'  
Chordangle NEW MILTON 7.5'  
County DODDRIDGE District COVE  
Surveyor/Engineer MARK C. ECHARD  
Surveyor's/Engineer's Registration No. 490 LLS  
Date No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
Date MARCH 27, 1979 Scale 1"=1000'

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

WELL LOCATION MAP  
FILE NO. 47-017-2374

now: 017-2517

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

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

APR 27 1979

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

Date April 28, 1980

FORM IV-35  
(Obverse)

Operator's  
Well No. Smith #2A

[08-78]

WELL OPERATOR'S REPORT //  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

API Well No. 47 - 017 - 2577  
State County Permit

TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal   
(If "Gas", Production  / Underground storage  / Deep  / Shallow )  
Elevation: 1022' Watershed: Sand Fork  
District: Cove County: Doddridge Quadrangle: New Milton

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

PLANNED WORK: Drill  / Convert  / Drill deeper  / Redrill  / Fracture or stimulate   
Plug off old formation  / Perforate new formation  /  
Other physical change in well (specify) \_\_\_\_\_

PERMIT ISSUED ON April 4, 1980 OIL & GAS INSPECTOR FOR THIS WORK:  
Name Paul Garrett  
Address Clarksburg, WV  
622-3871

LOGICAL TARGET FORMATION: Devonian Shale Depth 5339 feet  
Depth of completed well, 5401 feet Rotary  / Cable Tools   
Water strata depth: Fresh, 80 feet; salt, \_\_\_\_\_ feet.  
Coal seam depths: None Is coal being mined in the area? NO  
Work was commenced April 7, 1980, and completed April 14, 1980

LOGGING AND TUBING PROGRAM

LOG OR LOG TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS		
	Size	Grade	Weight per ft	New	Used				
Production	8 5/8					1246'	1246'	To surface	Kinds
Intermediate									Sizes
Production	4 1/2					5376'	150 sks		Depths set
Perforations									Perforations: Top Bottom

RECEIVED  
MAY - 5 1980

OIL & GAS DIVISION  
DEPT. OF MINES

FLOW DATA  
Producing formation Hanson Pay zone depth 5017.5 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 Pay zone depth 5339 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
Final open flow, 750,000 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests, 4 hours  
Static rock pressure, 1750 psig (surface measurement) after 72 hours shut in

JUN 4 1980

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

Fractured April 11, 1980

~~ALX~~  
20,000 lb. 80/100 sand  
40,000 lb. 20/40 sand  
3450 lb. breakdown  
660 bbls. water  
22 BPM at 1950 lb.

Benson - 10,000 lb. 80/100 sand  
25,000 lb. 20/40 sand  
2800 lb. breakdown  
375 bbls. water  
15 BPM at 1600 lb.

Perforations - 5128' - 5339', 8 holes

Perforations - 5015 - 5017.5, 6 holes

ELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Surface			0	80	
Sand			80	84	Water
Shale			84	122	
Sand			122	128	Water
Red Rock			128	164	
Shale			164	385	
Red Rock			385	440	
Shale			440	680	
Slate			680	685	
Red Rock			685	708	
Shale			708	910	
Sand			910	972	
Red Rock			972	1011	
Shale			1011	1220	
Sand			1220	1242	
Slate			1242	1301	
Shale			1301	1642	
Sand			1642	1673	
Shale			1673	2020	
Sand			2020	2050	
Shale			2050	2080	
Sand			2080	2120	Show of gas
Lime			2120	2180	
Shale Lime			2180	2188	
Lime			2188	2260	
Shale			2260	2290	
Sandy Shale			2290	2410	
Shale			2410	2522	
Sand			2522	2548	
Shale			2548	2670	
Slate & Shale			2670	2885	
Sand			2885	2908	
Slate			2908	3180	
Sandy Shale			3180	3120	
Shale			3210	5010	
Sandy Shale			5010	5020	Show of gas
Shale			5020	5040	
Sandy Shale			5040	5152	Show of gas
Shale			5152	5300	
Sandy Shale			5300	5370	Show of gas
Shale			5370	5401	
Total Depth			5401		

(Attach separate sheets to complete as necessary)

Rockwell Petroleum Company  
Well Operator

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."

# COPY

OIL AND GAS WELL PERMIT APPLICATION

Operator's  
Well No. Smith #2  
API Well No. 47 - 017-2374  
State County Permit  
now 017-2517

WELL TYPE: Oil  / Gas  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow )  
LOCATION: Elevation: 1022' Watershed: Sand Fork  
District: Cove County: Doddridge Quadrangle: New Milton 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 O. C. Haught Heirs  
Address Salem, WV

COAL OPERATOR \_\_\_\_\_  
Address \_\_\_\_\_

Acreage 224.26

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Gilbert T. Capos  
Address 3406 65th Avenue  
Landover, MD  
Acreage 224.26

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  
Phone: 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 October 25, 1977, to the undersigned well operator from O. C. Haught and Blanche Haught, et al. If said deed, lease, or other contract has been recorded:]

Recorded on January 10, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in 103 Book \_\_\_\_\_ at page 379. 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  
GEOLOGICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS  
CONSERVATION COMMISSION  
615 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

Rockwell Petroleum Company  
Well Operator  
By [Signature]  
Its Partner

BLANKET BOND

[08-78]

Y990

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, 5320 feet Rotary  / Cable tools  /

Approximate water strata depths: Fresh, 170 feet; salt,        feet.

Approximate coal seam depths:        Is coal being mined in the area? Yes  / No  /

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		20 lb	X		1200	1200	To surface	
Coal									Sizes
Intermediate									
Production	4 1/2		9.5	X			5320		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 12-05-79

*John S. [Signature]*

The following information 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



# COPY

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's  
Well No. Smith #2

API Well No. 47 - 017 2577  
(Formerly State County Form: DOD-2374)

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

LOCATION: Elevation: 1022' Watershed: Sand Fork  
District: Cove County: Doddridge Quadrangle: New Milton 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 O. C. Haught Heirs  
Address Salem, WV

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

Acreage 224.26

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Gilbert T. Capos  
Address 3406 65th Avenue  
Landover, MD

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

Acreage 224.26

Name -----

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

Address -----

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

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

RECEIVED  
JAN 16 1980  
DEPT OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes on the above location under a deed  / lease  / other contract  / dated October 25 1977, to the undersigned well operator from O. C. Haught and Blanche Haught, et al

[If said deed, lease, or other contract has been recorded:]

Recorded on January 10, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 103 at page 379. 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

Rockwell Petroleum Company  
Well Operator

By [Signature]  
Its Partner

COPY

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, 5320 feet Rotary  / Cable tools  /  
Approximate water strata depths: Fresh, 170 feet; salt,          feet.  
Approximate coal seam depths: None Is coal being mined in the area? Yes  / No  /

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		20 lb	X		1200	1200	To surface	
Coal									Sizes
Intermediate									
Production	4 1/2		9.5	X			5320		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 stimulation 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.

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 9-18-80

*Robert T. [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