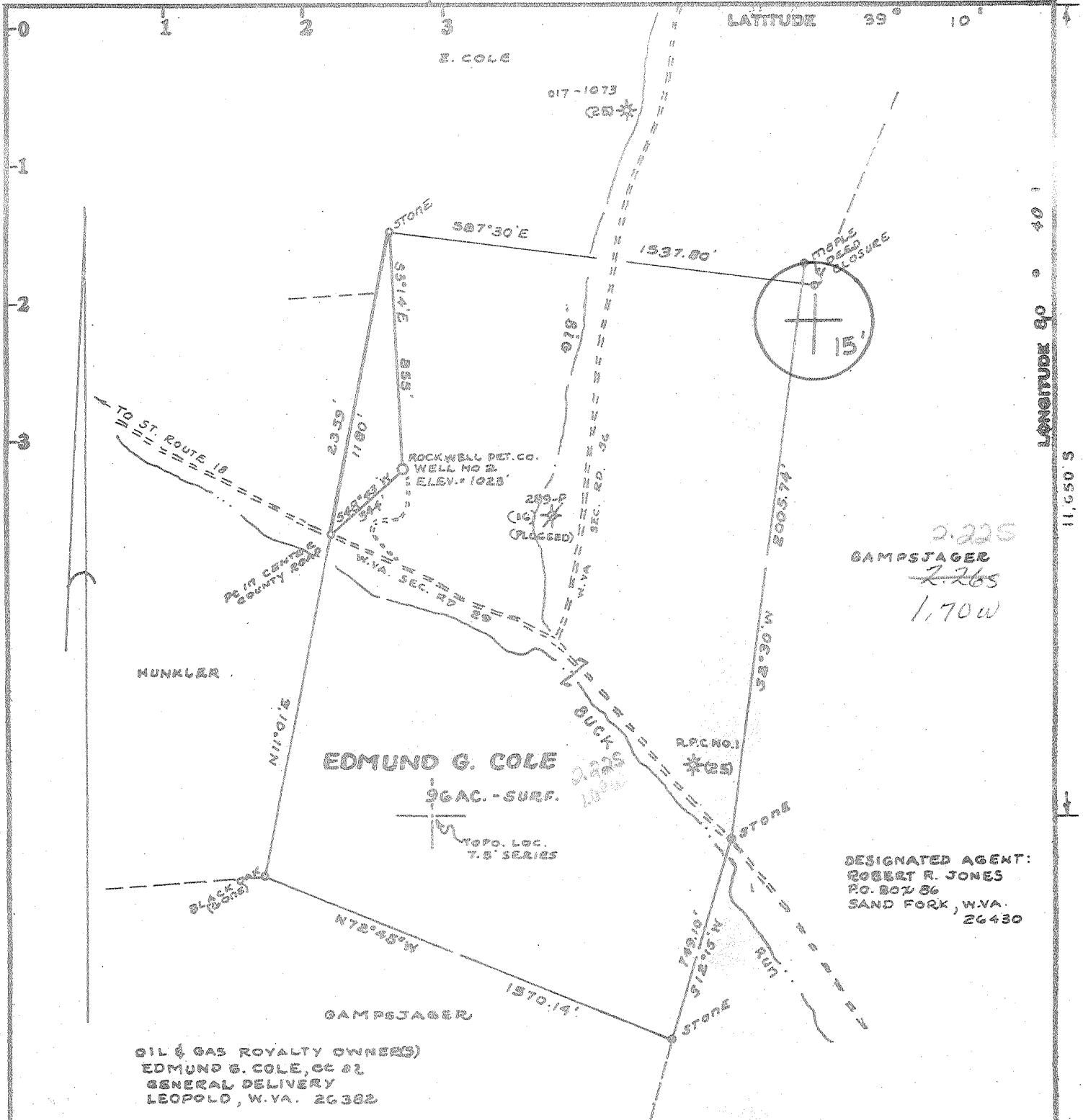


7/16/79 *RJ*

8920' W.

LATITUDE 39° 10'



2.225  
GAMPSTAGER  
~~2.265~~  
1.70W

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

OIL & GAS ROYALTY OWNERS(S)  
EDMUND G. COLE, GC 82  
GENERAL DELIVERY  
LEOPOLD, W.VA. 26382

Minimum Error of Closure 0.05 PART ID. 300'  
Source of Elevation U.S.G.S. B.M. 07 NORTH WINE WALL OF COOK CULVERT  
FOR BUCK RUN UNDER WVA SEC. RD 29, S41°E 820' FROM LOC. ELEV. 820'

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.

Fracture.....  GAS-DRILL-SHALLOW  
New Location.....  DEVONIAN SHALE-T.F. EST. DEPTH 5370'  
Drill Deeper.....   
Abandonment.....

Signed: Mark C. Echard  
Squares: N S E W

Map No. \_\_\_\_\_

WELL OPERATOR/  
Company ROCKWELL PETROLEUM COMPANY  
Address P.O. BOX 86, SAND FORK, W.VA. 26430  
Farm EDMUND G. COLE  
Tract \_\_\_\_\_ Acres 96 Lease No. \_\_\_\_\_  
Well (Farm) No. TWO Serial No. \_\_\_\_\_  
Elevation (Spirit Level) 1023  
Quadrangle NEW MILTON 7.5' VADIS 15'  
County DODDRIDGE District COVE  
Surveyor MARK C. ECHARD  
Surveyor's Registration No. 490  
File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
Date JULY 3, 1979 Scale 1" = 500'

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

WELL LOCATION MAP  
FILE NO. 47-017-2452

+ 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. AUG 7 1979

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

FORM IV-35  
(Obverse)

[08-78]

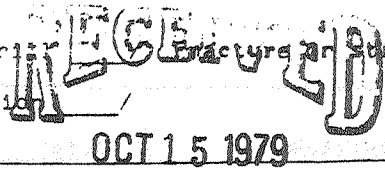
WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil \_\_\_ / Gas X / Liquid Injection \_\_\_ / Waste Disposal \_\_\_ /  
(If "Gas", Production X / Underground storage \_\_\_ / Deep \_\_\_ / Shallow X /)

LOCATION: Elevation: 1023' Watershed: Buck Run  
District: Cove County: Doddridge Quadrangle: New Milton 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 X / Convert \_\_\_ / Drill deeper \_\_\_ / Redrill \_\_\_ / Fracture or Stimulate \_\_\_  
Plug off old formation \_\_\_ / Perforate new formation \_\_\_  
Other physical change in well (specify) \_\_\_\_\_



PERMIT ISSUED ON July 16, 19 79

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED \_\_\_\_\_, 19 \_\_\_\_\_)

OIL & GAS DIVISION  
DEPT. OF MINES  
Name Paul Garrett  
Address Clarksburg, WV  
622-3871

GEOLOGICAL TARGET FORMATION: Elk Depth 5470 feet

Depth of completed well, 5403 feet Rotary X / Cable Tools \_\_\_

Water strata depth: Fresh, 122 feet; salt, \_\_\_ feet.

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

Work was commenced August 17, 1979, and completed August 21, 1979

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								Kinds
Fresh water	8 5/8					1170	1170	To surface
Coal								Sizes
Intermediate								
Production	4 1/2						5334	150 sks
Tubing								Depths set
Liners								Perforations:
								Top Bottom

OPEN FLOW DATA

Producing formation Benson Pay zone depth 5274 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 4951 feet

Gas: Initial open flow, \_\_\_ Mcf/d Oil: Initial open flow, 0 Bbl/d

COMBINED Final open flow, 890 Mcf/d Final open flow, 0 Bbl/d

Time of open flow between initial and final tests, 3 hours

Static rock pressure, 1810 psig (surface measurement) after 52 hours shut in

OCT 25 1979

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

ractured September 1, 1979

EIK - 20,000 lb. 80/100 sand  
40,000 lb. 20/40 sand  
19 BPM at 2030lb.  
2000 lb. breakdown

Benson - 20,000 lb. 80/100 sand  
40,000 lb. 20/40 sand  
14.3 BPM at 1595 lb.  
2800 lb. breakdown

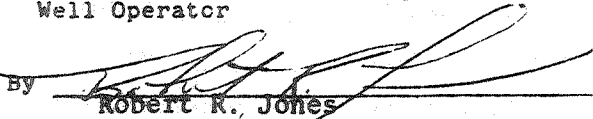
Perforations - 5071 - 5274, 8 holes

Perforations - 4948 - 4951, 7 holes

WELL 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	100	
Shale			100	122	
Sand			122	127	Water
Shale			172	149	
Red Rock			149	168	
Shale			168	309	
Red Rock			309	322	
Shale			322	689	
Red Rock			689	714	
Sand			714	722	
Shale			722	1082	
Sand			1082	1124	
Shale			1124	1420	
Sand			1420	1505	
Shale			1505	1900	
Sandy Shale			1900	2008	
Sand			2008	2040	
Lime			2040	2068	
Slate			2068	2080	
Lime			2080	2115	
Big Injun			2115	2215	
Shale			2215	2270	
Sandy Shale			2270	2400	Show gas
Shale			2400	2476	
Sand			2476	2495	
Shale			2495	3020	
Sandy Shale			3020	3040	
Shale			3040	3395	
Sandy Shale			3395	3425	
Shale			3425	4046	
Sandy Shale			4046	4060	Show gas
Shale			4060	4490	
Sandy Shale			4490	4526	Show gas
Shale			4526	4940	
Sandy Shale			4940	4960	Show gas
Shale			4960	5065	
Sandy Shale			5065	5090	Show gas
Shale			5090	5190	
Sandy Shale EIK			5190	5295	Show gas
Shale			5295	5403	
Total Depth		5403			

Rockwell Petroleum Company  
Well Operator

By   
Robert R. Jones  
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. Cole #2

API Well No. 47 - 017 - 2452  
State County Permit

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

LOCATION: Elevation: 1023 Watershed: Buck Run  
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 Edmund G. Cole, et al  
Address General Delivery  
Leopold, WV 26382

COAL OPERATOR       
Address     

ACREAGE 96  
SURFACE OWNER Edmung G. Cole  
Address General Delivery  
Leopold, WV 26382

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name       
Address     

FIELD SALE (IF MADE) TO:  
Name       
Address     

Name       
Address     

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

COAL LESSEE WITH DECLARATION ON RECORD:  
Name       
Address     

JUL 16 1979

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 X / other contract      / dated February 7, 1979, to the undersigned well operator from Edmund, Cole, Marie Cole, and others [if said deed, lease, or other contract has been recorded:]

Recorded on March 29, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 108 at page 142. A permit is requested as follows:

PROPOSED WORK: Drill X / 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 location 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  
5 WASHINGTON STREET EAST  
CHARLESTON, WV 25311

TELEPHONE: (304) 348-3092

BLANKET BOND

Rockwell Petroleum Company  
Well Operator

By Robert R. Jones  
Its Partner

[08-78]

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, 5470 feet Rotary  / Cable tools  /  
Approximate water strata depths: Fresh, 120 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					1200'	1200'	To surface	
Coal									Sizes
Intermediate									
Production	4 1/2						5425	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. ~~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.

te:         , 19         

By           
Its