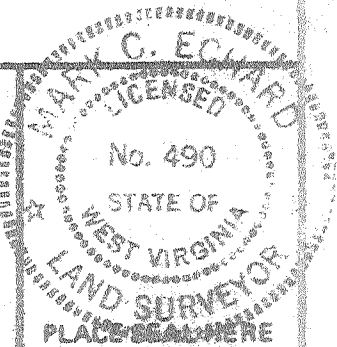


FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 2100' W OF LOC. - ELEV. 1412'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES. *Mark C. Echard*
 (SIGNED) MARK C. ECHARD
 R.P.E. _____ L.L.S. 490



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-S (3-78)



DATE MARCH 9, 1980
 OPERATOR'S WELL NO. ONE
 API WELL NO. 47-017-2661
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 942' WATER SHED LITTLE INDIAN FORK
 DISTRICT NEW MILTON COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON T.S. 15
 SURFACE OWNER LOUIS E. NICHOLSON ACREAGE 115.03
 OIL & GAS ROYALTY OWNER LOUIS E. NICHOLSON LEASE ACREAGE 115.03
 LEASE NO. _____
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION BLG T.N.I.U.N ESTIMATED DEPTH 2250
 WELL OPERATOR ROCKWELL PETROLEUM CO. DESIGNATED AGENT MR. ROBERT R. JONES
 ADDRESS P.O. BOX 86 SAND FORK, W.VA. 26430 ADDRESS P.O. BOX 86 SAND FORK, W.VA. 26430

6-6 NEW MILTON T.S. (146) J.P.A.

MAY 15 1980

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

Date June 9, 1980

FORM IV-35
(Obverse)

Operator's
Well No. L. Nicholson #1

[08-78]

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

API Well No. 47 - 017 - 2661
State County Permit

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

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

LOCATION: Elevation: 942' Watershed: Little Indian Fork

District: New Milton 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 X / Convert ___ / Drill deeper ___ / Redrill ___ / Fracture or stimulate ___

Plug off old formation ___ / Perforate new formation ___ /

Other physical change in well (specify) _____

REPORT ISSUED ON March 31, 19 80

OIL & GAS INSPECTOR FOR THIS WORK:

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

Name Paul Garrett

Address Clarksburg, WV

622-3871

ORIGINAL TARGET FORMATION: Big Injun Depth 2170 feet

Depth of completed well, 2262 feet Rotary X / Cable Tools ___

Water strata depth: Fresh, 81 feet; salt, ___ feet.

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

Work was commenced May 30, 1980, and completed June 3, 19 80

LOG 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	For drilling	Left in well		
Motor									Kinds
Water	8 5/8					1212'	1213'	To surface	Sizes
Intermediate									Depth: set
Section	4 1/2						2203'		Perforations:
									Top Bottom

RECEIVED
JUL 4 1980

OIL & GAS DIVISION
DEPT. OF MINES

FLOW DATA

Producing formation Big Injun Pay zone depth 2170 feet

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

Final open flow, 900,000 Mcf/d Final open flow, ___ Bbl/d

Time of open flow between initial and final tests, 6 hours

Static rock pressure, 600 psig (surface measurement) after 48 hours shut in

[If applicable due to multiple completion--]

Second producing formation ___ Pay zone depth ___ 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

AUG 1 1980

8-78]

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

Fractured June 4, 1980

Big Injun - 56,000 lb. 20/40 sand
2900 lb. breakdown
755 bbls water
16.8 BPM at 2850 lb

Perforations - 2097 - 2170, 7 holes

LL LOG

FORMATION	Color	Hard or Soft	7 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Surface			0	81	
Sand			81	84	Water
Shale			84	99	
Sand			99	104	Water
Shale			104	170	
Red Rock			170	182	
Shale			182	304	
Red Rock			304	316	
Slate			316	391	
Shale			391	592	
Red Rock			592	620	
Shale			620	914	
Sand			914	926	
Shale			926	1124	
Slate			1124	1141	
Sand			1141	1182	
Shale			1182	1420	
Sand			1420	1443	
Shale			1443	1680	
Sand			1680	1730	
Shale			1730	1980	
Lime			1980	1996	
Slate			1996	2024	
Lime			2024	2090	
Sandy Lime			2090	2104	Show of gas
Lime			2104	2120	
Sand			2120	2132	Show of gas & oil
Lime			2132	2180	
Shale			2180	2262	
Total Depth			2262		

(Attach separate sheets to complete as necessary)

Rockwell Petroleum Company

Well Operator

By

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. L. Nicholson #1

API Well No. 47 - 017 - 2661
State County Permit

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

LOCATION: Elevation: 942' Watershed: Little Indian Fork
District: Ne Milton 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 Louis E. Nicholson
Address P O Box 306
Manchester Center, Vermont 05255

COAL OPERATOR N/A
Address _____

Acreage 115.03

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Louis E. Nicholson
Address P O Box 306
Manchester Center, Vermont 05255

Name N/A
Address _____

Acreage 115.03

Name N/A
Address _____

DEED SALE (IF MADE) TO:
Name N/A

COAL LESSEE WITH DECLARATION ON RECORD:

Address _____

Name N/A
Address _____

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

RECEIVED
MAR 31 1980

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 July 6, 19 79, to the undersigned well operator from Louis E. Nicholson & Priscilla A. Nicholson. If said deed, lease, or other contract has been recorded:]

Recorded on July 17, 19 79, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 109 at page 293. 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
155 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

Rockwell Petroleum Company
Well Operator
By Mark R. Wood
Its Partner

PROPOSED WORK ORDER

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

DRIILLING CONTRACTOR (IF KNOWN) Union Drilling, Inc.
Address Drawer 40
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Big Injun

Estimated depth of completed well, 2250 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 140 feet; salt, feet.

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

LOGGING AND TUBING PROGRAM

LOGGING 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						380	To surface	
Intermediate									Sizes
Production	4 1/2						2250'		Depths set
Logging									Perforations:
Packers									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.

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 12-3-80.


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.

_____, 19____

By _____

Its _____