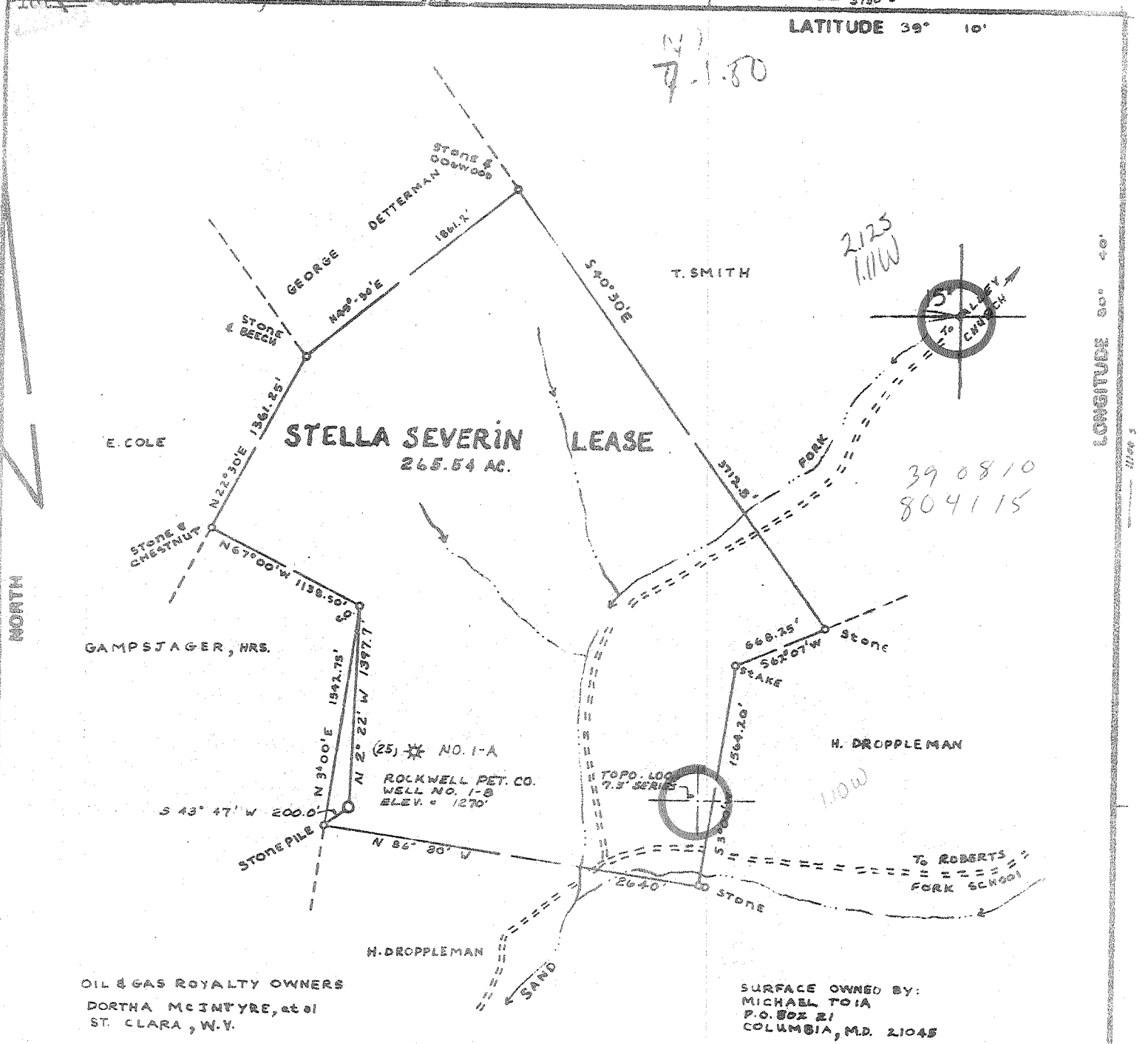


7-1-80



LONGITUDE 80° 40'

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION JCT RDS. ± 1800'
EAST OF LOCATION ELEV. = 879'

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

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE JUNE 10, 1980
 OPERATOR'S WELL NO. ONE-B
 API WELL NO. _____
47 - 017 - 2779
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1270' WATER SHED SAND FORK of FZK CREEK
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' VADIS 15' WC
 SURFACE OWNER MICHAEL TOIA ACREAGE 265.54
 OIL & GAS ROYALTY OWNER DORTHA Mc INTYRE, et al LEASE ACREAGE 265.54
 LEASE NO. _____
 PROPOSED WORK: DRILL X 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 BIG INJUN ESTIMATED DEPTH 2500'
 WELL OPERATOR ROCKWELL PETROLEUM CO. DESIGNATED AGENT ROBERT R. JONES
 ADDRESS P.O. BOX 86 SAND FORK, W.V. 26430 ADDRESS P.O. BOX 86 SAND FORK, W.V. 26430

FORM IV-35 (Obverse)

WELL OPERATOR'S REPORT //

[08-78]

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

TYPE: Oil / Gas / Liquid Injection / Waste Disposal /
(If "Gas", Production / Underground storage / Deep / Shallow /)
Elevation: 1270' Watershed: Sand Fork of Fink Creek
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

RECEIVED

AUG 22 1980

WORK: Drill / Convert / Drill deeper / Redrill / Fracture or stimulate
Plug off old formation / Information /
Other physical change in well (specify) _____

DEPT. OF MINES

ISSUED ON June 26, 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 26301
622-3871

PHYSICAL TARGET FORMATION: Big Injun Depth 2286 feet

Depth of completed well, 2420 feet Rotary / Cable Tools

Water strata depth: Fresh, 89 feet; salt, _____ feet.

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

Work was commenced July 26, 19 80, and completed July 28, 19 80

AND TUBING PROGRAM

TUBING OR TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Surface								Winds
Water	8 5/8					1206'	1206'	330 sks
Intermediate								Sizes
Production	4 1/2						2330	125 sks
								Depth set
								Perforations:
								Top Bottom

FLOW DATA

Producing formation Blue Monday Pay zone depth 2152 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 Injun Pay zone depth 2286 feet

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

Final open flow, 1,250 Mcf/d Final open flow, _____ Bbl/d

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

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

SEP 9 1980

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

Fractured August 6, 1980

Big Injun - 40,000 lb. 20/40 sand
2200 lb. breakdown
481 bbls. water
17.1 BPM at 2700 lb.

Blue Monday - 25,000 lb. 20/40 sand
10,000 lb. 80/100 sand
2950 lb. breakdown
471 bbls. water
18.1 BPM at 2650 lb.

Perforations - 2280, 2281, 2282, 2283,
2284, 2285, 2286, 1 hole each

Perforations - 2120, 2124, 2128, 2132,
2136, 2140, 2144, 2148,
2152, 1 hole each

WELL LOG

FORMATION	Color	Hard or Soft	//		Remarks Including indication of all fresh and salt water, coal, oil and gas
			Top Feet	Bottom Feet	
Surface			0	89	
Sand			89	94	Water
Shale			94	128	
Sand			128	130	Water
Red Rock			130	142	
Shale			142	220	
Red Rock			220	261	
Slate			261	284	
Shale			284	610	
Red Rock			610	705	
Shale			705	910	
Red Rock			910	1001	
Shale			1001	1240	
Sand			1240	1261	
Shale			1261	1402	
Sand			1402	1429	
Shale			1429	1568	
Sand			1568	1604	
Shale			1604	2050	
Sand			2050	2066	
Lime			2066	2100	
Shale			2100	2108	
Sandy Lime			2108	2165	
Lime			2165	2205	
Sandy Lime			2205	2240	
Lime			2240	2280	
Sandy Lime <i>BI</i>			2280	2295	
Shale			2295	2340	
Sandy Shale <i>SQUAC</i>			2340	2385	
Shale			2385	2420	
Total Depth			2420		

(Attach separate sheets to complete as necessary)

Rockwell Petroleum Company

Well Operator

By James L. Carlson

Its Secretary

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

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. Severin #1B 2779
API Well No. 47 - 017 -
State County Permit

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

LOCATION: Elevation: 1270' Watershed: Sand Fork of Fink Creek
District: Cove County: Doddridge Quadrangle: New Milton

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
PROPERTY OWNER Dorothea McIntyre
Address Route 1, Box 164
New Milton, WV 26411

COAL OPERATOR N/A
Address

ACREAGE 265.54
SURFACE OWNER Michael Toia
Address P O Box 21
Columbia, MD 21045

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

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

COAL LESSEE WITH DECLARATION ON RECORD:
Name N/A
Address

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

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease / other contract X / dated June 20, 1978, to the undersigned well operator from John R. Warren.
[said deed, lease, or other contract has been recorded:]

Recorded on June 28, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 104 at page 254. 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 action 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 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
WASHINGTON STREET EAST
CHARLESTON, WV 25311
PHONE: (304) 348-3092

RECEIVED
JUN 26 1980
OIL & GAS DIVISION
DEPT. OF MINES

BLANKET BOND

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

Y905

PROPOSED WORK ORDER

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

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

GEOLOGICAL TARGET FORMATION, Devonian Shale (Gordon?)

Estimated depth of completed well, 2500 feet Rotary / Cable tools

Approximate water strata depths: Fresh, 168 feet; salt, N/A feet.

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

DRILLING AND TUBING PROGRAM

DRILLING 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					1140'	1140'	To surface
Intermediate								Sizes
Production	4 1/2						2500'	Depths set
Perforations								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 when this permit is to be part of the work for which a permit is sought and is noted as such on the Form IV-2.

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 3-2-81.

[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 location, the well location has been added to the mine map. The undersigned has no objection to 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 _____