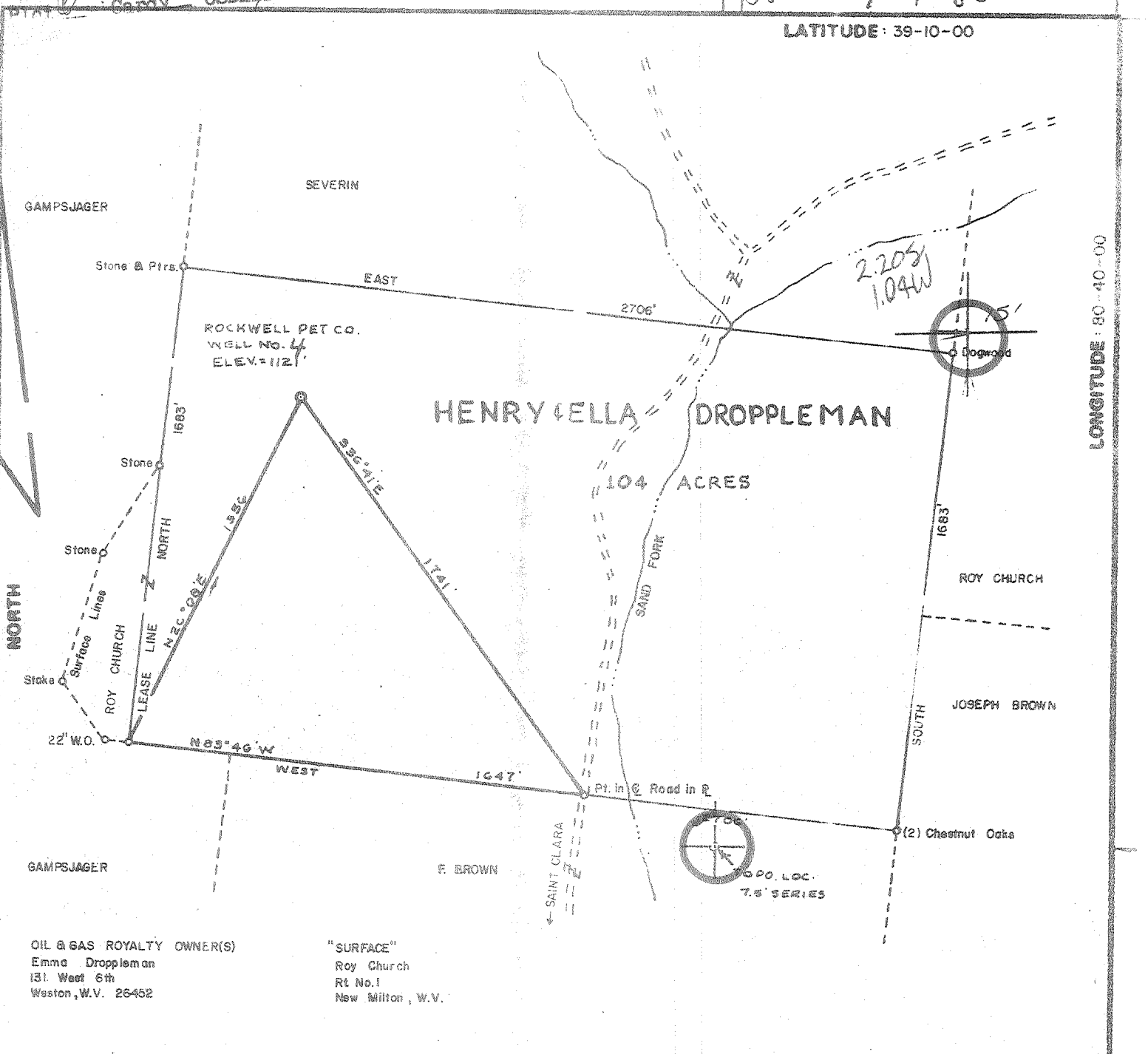


LATITUDE: 39-10-00

HW 7-1-80



LONGITUDE: 80-40-00

OIL & GAS ROYALTY OWNER(S)
 Emma Droppleman
 131 West 6th
 Weston, W.V. 26452

"SURFACE"
 Roy Church
 Rt No. 1
 New Milton, W.V.

FILE NO. _____
 DRAWING NO. _____
 SCALE 1 inch = 500 feet
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TCT OF ROADS 1800' ±
 NE OF LOC. - 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 12, 1980
 OPERATOR'S WELL NO. 4
 API WELL NO. 47-017-2781
 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 1121' WATER SHED SAND FORK of FINK CREEK
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' 1/4 DIS 15' WC
 SURFACE OWNER ROY CHURCH ACREAGE 104
 OIL & GAS ROYALTY OWNER EMMA DROPPLEMAN LEASE ACREAGE 104
 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 DEVONIAN SHALE ESTIMATED DEPTH 5450' ±
 WELL OPERATOR ROCKWELL PETROLEUM 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

6-6 NEW MILTON S.

307 JUL 28 1980

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

Date December 10, 1980

FORM IV-35
(Obverse)

Operator's
Well No. Droppleman #4
API Well No. 47 - 017 - 2781
State County Permit

[09-78]

WELL OPERATOR'S REPORT 3
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 1121' Watershed: Sand Fork of Fink Creek
District: Cove County: Doddridge Quadrangle: New Milton

WELL OPERATOR Carson Petroleum Corporation DESIGNATED AGENT Lowell M. Johnson
Address P O Box 133 Address P O Box 133
Sand Fork, WV 26430 Sand Fork, WV 26430

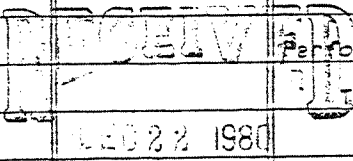
PERMITTED WORK: Drill / Convert / Drill deeper / Redrill / Fracture or stimulate
Plug off old formation / Perforate new formation /
Other physical change in well (specify) _____

PERMIT ISSUED ON June 26, 1980 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 5434 feet
Depth of completed well, 5548 feet Rotary / Cable Tools
Water strata depth: Fresh, 160 feet; salt, _____ feet.
Coal seam depths: None Is coal being mined in the area? No
Work was commenced November 22, 1980, and completed November 28, 1980

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					1227'	1227'	To surface
Coal								Sizes
Intermediate								
Production	4 1/2					5496'	320 sks	Deaths set
Tubing								
Liners								Perforations: Top Bottom



OPEN FLOW DATA

OIL & GAS DIVISION
DEPT. OF MINES

Producing formation Benson Pay zone depth 5112 feet
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 ALEX Pay zone depth 5434 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, 0 Bbl/d
Final open flow, 1,061 Mcf/d Final open flow, 0 Bbl/d
Time of open flow between initial and final tests, 6 hours
Static rock pressure, 1740 psig (surface measurement) after 48 hours shut in

JAN 21 1981

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

Fractured December 4, 1980

~~Elk~~ ^{ALIX} 20,000 lb. 80/100 sand
40,000 lb. 20/40 sand
2100 lb. breakdown
495 bbls. water
21 BPM at 2100 lb.

Benson - 20,000 lb. 80/100 sand
40,000 lb. 20/40 sand
2400 lb. breakdown
484 bbls. water
17.2 BPM at 1900 lb.

Perforations - 5229 - 5434, 7 holes

Perforations - 5109 - 5112, 6 holes

WELL LOG

FORMATION	Color	Hard or Soft	3		Remarks Including indication of all fresh and salt water, coal, oil and gas
			Top Feet	Bottom Feet	
Sand & Shale			0	336	Water 160'
Shale & Red Rock			336	527	
Sand & Shale			527	1242	
Sand			1242	1300	
Shale			1300	1320	
Sand & Shale			1320	1950	
Sand			1950	2010	
Sand & Shale			2010	2160	
Little Lime			2160	2185	
Blue Monday Sand			2185	2240	
Big Lime			2240	2310	
Big Injun Sand			2310	2368	
Shale			2368	2630	
Gantz Sand			2630	2655	
Sand & Shale			2655	5106	
Benson Sand			5106	5116	Gas 5110
Sand & Shale			5116	5400	
Elk Sand ^{ALIX}			5400	5445	
Shale			5445	5548	
Total Depth			5548		

(Attach separate sheets to complete as necessary)

Carson Petroleum Corporation

Well Operator

By Lowell M. Johnson

Its Agent

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. Droppleman #4

API Well No. 47 - 017 - 2781
State County Permit

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

LOCATION: Elevation: 1121' 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
LOYALTY OWNER Emma Droppleman
Address Weston, WV 26452

COAL OPERATOR N/A
Address:

Acreage 104

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Roy Church
Address St. Clara, WV

Name N/A
Address

Acreage 104

Name N/A

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

Address

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

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

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 October 26, 1978, to the undersigned well operator from Consolidated Gas Supply Corporation.
[If said deed, lease, or other contract has been recorded:]

Recorded on , 19 , in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book at page . 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 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

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

BLANKET BOND

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

Y9103

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

LOGICAL TARGET FORMATION, Devonian Shale

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

Approximate water strata depths: Fresh, 160 feet; salt, N/A feet.

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

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		
Drill pipe								Kinds
Production casing	8 5/8					1150'	1150'	To surface
Intermediate casing								Sizes
Production tubing	4 1/2						5450	Depths set
Perforations								Perforations:
								Top Bottom

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.

THIS PERMIT MUST BE POSTED AT THE WELL SITE
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 or 122, in connection therewith.

All provisions being in effect under Chapter 122, 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.

John B. Burchette
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 _____