

Surface, Oil, & Gas: BROOKS GUM, New Milton, W.V. 26411.

FILE NO. _____
 DRAWING NO. _____
 SCALE 1 inch = 500 feet
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION Top Knob 1100' SE of Location, Elev. 1409'

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.

(SIGNED) Mark C. Echard
 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 OCTOBER 1, 1980
 OPERATOR'S WELL NO. ONE
 API WELL NO. _____
47 - 017 - 2845
 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 1158' WATER SHED ROBERTS FORK
 DISTRICT NEW MILTON COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' VADIS 15' C
 SURFACE OWNER BROOKS GUM ACREAGE 56.5
 OIL & GAS ROYALTY OWNER BROOKS GUM LEASE ACREAGE 56.5
 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 CARSON PETROLEUM CORP. DESIGNATED AGENT MR. LOWELL M. JOHNSON
 ADDRESS BOX 133 SAND FORK, W.V. 26430 ADDRESS BOX 133 SAND FORK, W.V. 26430
6-C NEW MILTON S 307 10-3-80

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

Date October 20, 1980

FORM IV-35
(Obverse)

Operator's
Well No. Carson-Gum #1

[08-78]

WELL OPERATOR'S REPORT
OF

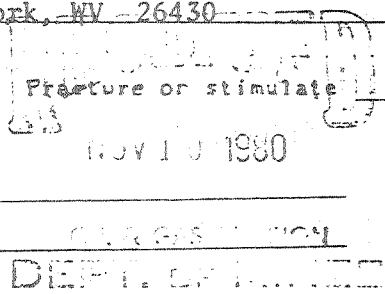
API Well No. 47 - 017 - 2845
State County Permit

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: 1158' Watershed: Roberts Fork
District: New Milton 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 / Re-drill / Fracture or stimulate
Plug off old formation / Perforate new formation
Other physical change in well (specify) _____



PERMIT ISSUED ON October 2, 1980 OIL & GAS INSPECTOR FOR THIS WORK:
Name Paul Garrett
Address Clarksburg, WV 26301
622-3871

LOGICAL TARGET FORMATION: Devonian Shale Depth 5393 feet
Depth of completed well, 5584' 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 October 8, 1980, and completed October 13, 1980

LOGGING AND TUBING PROGRAM

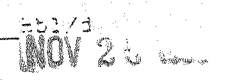
LOGGING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								Minds
Fresh water	8 5/8					1223'	1223'	To surface
Intermediate								Sizes
Production	4 1/2						5469'	500 sacks
Logging								Deaths set
Packers								Perforations:
								Top Bottom

TESTING AND FLOW DATA

Producing formation Benson Pay zone depth 5186 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 Pay zone depth 5393 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, 0 Bbl/d
Final open flow, 421,000 Mcf/d Final open flow, 0 Bbl/d
Time of open flow between initial and final tests, 7 hours
Static rock pressure, 1240 psig (surface measurement) after 48 hours shut in



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

Fractured October 20, 1980

Elk - 20,000 lb. 80/100 sand
40,000 lb. 20/40 sand
2400 lb. breakdown
20.6 BPM at 2500 lb.
495 bbls water

Benson - 20,000 lb. 80/100 sand
40,000 lb. 20/40 sand
1600 lb. breakdown
27.3 BPM at 1800 lb.
504 bbls. water

Perforations - 5365 - 5393, 7 holes

Perforations - 5071 - 5186, 6 holes

LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Sand & shale			0	187	Water 160'
Coal			187	197	
Sand & shale			197	321	
Coal			321	326	
Sand, shale & red rock			326	788	
Coal			788	791	
Sand & shale			791	1243	
Sand & red rock			1243	2141	
Lime			2141	2160	
Pencil cave			2160	2184	
Lime			2184	2228	
Injun sand			2228	2340	
Sand & shale			2340	2533	
Gantz sand			2533	2614	
Sand & shale			2614	5070	
Benson sand			5070	5076	
Shale			5076	5127	
Sand			5127	5142	
Shale			5142	5312	
<u>Elk sand</u>			5312	5404	
Shale			5404	5584	
Total Depth			5484		

(Attach separate sheets to complete as necessary)

Carson Petroleum Corporation
Well Operator

By David M. Johnson
Its Agent

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."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED
OCT - 2 1980

COPY OIL AND GAS WELL PERMIT APPLICATION
DIVISION
DEPT. OF MINES

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE October 2, 1980
Company Carson Petroleum Corporation
Address P O Box 133, Sand Fork, WV 26430
Farm Gum Acres 56.5
Location (waters) Roberts Fork
Well No. One Elevation 1158
District New Milton County Doddridge
Quadrangle New Milton

Surface Owner H. B. Gum
Address New Milton, WV
Mineral Owner H. B. Gum
Address New Milton, WV
Coal Owner None
Address _____
Coal Operator None
Address _____

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 6-6-81.

INSPECTOR
TO BE NOTIFIED Paul Garrett
ADDRESS Clarksburg, WV 26301
PHONE 622-3871

J. J. Huggins
Deputy Director, Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated October 1 1980 by H.G. Gum made to Carson Petroleum Corporation and recorded on the _____ day of _____ 19____ in NOT OF RECORD County, Book _____ Page _____

NEW WELL _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE
_____ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days.

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

Very truly yours,
(Sign Name) [Signature]
Well Operator

OFFICE OF OIL AND GAS
1615 Washington Street, East
Charleston, West Virginia
Area Code 304 -348-3092 348-3096

Address _____
of _____
Well Operator _____
P O Box 133 _____
Street _____
Sand Fork _____
City or Town _____
West Virginia _____
State _____

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

47-017-2845 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by _____

