



Surface, Oil & Gas Owners:  
 H.B. & Charlotte Gum  
 New Milton, W.V. 26411.

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1 inch = 1000 feet  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION Top Knob 2200' SW of Location ELEV = 1296'

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 SEPTEMBER 5, 1980  
 OPERATOR'S WELL NO. "REVISED" 2-B  
 API WELL NO. \_\_\_\_\_  
47 - 017 - 2828  
 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 1243' WATER SHED SAND FORK of FINK CREEK  
 DISTRICT COVE COUNTY DODDRIDGE  
 QUADRANGLE NEW MILTON 7.5' VADIS 15' WC  
 SURFACE OWNER H.B. & CHARLOTTE GUM ACREAGE 260.87  
 OIL & GAS ROYALTY OWNER H.B. & CHARLOTTE GUM LEASE ACREAGE 260.87  
 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 5500  
 WELL OPERATOR CARSON PETROLEUM CORP. DESIGNATED AGENT MR. CLAY JOHNSON  
 ADDRESS BOX 133 SAND FORK, W.V. 26430 ADDRESS BOX 133 SAND FORK, W.V. 26430

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

Date November 4, 1980

FORM IV-35  
(Obverse)

Operator's  
Well No. B. Gum #2B

WELL OPERATOR'S REPORT 2-8

API Well No. 17 - 017 - 2828  
State County Permit

[08-78]

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: 1243' Watershed: Sand Fork of Fink Creek  
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 X / Convert \_\_\_ / Drill deeper \_\_\_ / Redrill \_\_\_ / Fracture or stimulate \_\_\_  
Plug off old formation \_\_\_ / Perforate new formation \_\_\_  
Other physical change in well (specify) \_\_\_\_\_

NOV 10 1980

PERMIT ISSUED ON September 16, 1980 OIL & GAS INSPECTOR FOR FIELD WORK

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED \_\_\_\_\_  
Name Paul Garrett  
Address Clarksburg, WV  
622-3871

GEOLOGICAL TARGET FORMATION: Big Injun Depth \_\_\_\_\_ feet

Depth of completed well, 5708 feet Rotary X / 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 September 23, 1980, and completed September 28, 1980

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					1207'	1207'	To surface
Production	4 1/2						5592'	420
								Depth set
								Perforations:
								Top Bottom

PRODUCTION FLOW DATA

Producing formation Big Injun  
Benson Pay zone depth 2462 feet  
5235

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 5560 feet

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

Final open flow, 3,000 Mcf/d Final open flow, 0 Bbl/d

Time of open flow between initial and final tests, 12 hours

Static rock pressure, 800 psig (surface measurement) after 12 hours shut in

NOV 25 1980

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

Fractured October 3, 1980

Elk - 20,000 lb. 80/100 sand	Benson - 10,000 lb. 80/100	Injun - 50,000 lb. 20/40
40,000 lb. 20/40 sand	30,000 lb. 20/40	1900 lb. breakdown
1750 lb. breakdown	1600 lb. breakdown	547 bbls. water
406 bbls. water	290 bbls. water	24 BPM at 1835 lb.
20.8 BPM at 2340 lb.	16 BPM at 2280 lb.	

Perfs - 5525 - 5560, 8 holes      Perfs - 5232 - 5235, 6 holes      Perfs - 2426 - 2462, 9 holes

L LOG

FORMATION	Color	Hard or Soft	28 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Sand & shale			0	215	Water 160'
Shale & red rock			215	652	
Sand & shale			652	800	
Sand			800	1115	
Sand & shale			1115	2288	
Lime			- 2288	2317	
Pencil cave			2317	2333	
Big Lime			- 2333	2382	
Injun sand			2382	2434	
Sand & shale			2434	2750	
Gantz sand			2750	2777	
Sand & shale			2777	5231	
Benson sand			- 5231	5240	
Sand & shale			5240	5500	
Elk sand			5500	5570	
Sand & shale			5570	5708	
Total Depth			5708		

(Attach separate sheets to complete as necessary)

Carson Petroleum Corporation  
Well Operator  
By Lowell 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."

**COPY**

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

Date: September 16, 1980

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. B. Gum #2B  
API Well No. 47 - 017 2828  
State County Permit

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

LOCATION: Elevation: 1243' Watershed: Sand Fork of Fink Creek  
District: New Milton County: Doddridge Quadrangle: New Milton

WELL OPERATOR Carson Petroleum Corporation  
Address P O Box 133  
Sand Fork, WV 26430

DESIGNATED AGENT Clay Johnson  
Address P O Box 133  
Sand Fork, WV 26430

OIL & GAS LEASE & GAS LEASED TO:  
ROYALTY OWNER H. B. & Charlotte Gum  
Address New Milton, WV 26411

COAL OPERATOR N/A  
Address     

ACREAGE 260.87  
SURFACE OWNER H. B. & Charlotte Gum  
Address New Milton, WV 26411

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

ACREAGE 260.87  
FIELD SALE (IF MADE) TO:  
Name N/A  
Address     

Name N/A  
Address       
OIL & GAS DIVISION  
DEPT. OF MINES

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 X / other contract      / dated March 12, 19 80, to the undersigned well operator from H. B. Gum and Charlotte Gum, his wife of said deed, lease, or other contract has been recorded:]

Recorded on NOT OF RECORD, 19    , in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in      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 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  
15 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET BOND

Carson Petroleum Corporation  
Well Operator

By Aura L. Cochran  
Its

Y9100

PROPOSED WORK ORDER

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

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

GEOLOGICAL TARGET FORMATION, Big Injun

Estimated depth of completed well, 2200 feet Rotary X / Cable tools      /  
Approximate water strata depths: Fresh, 130 feet; salt,      feet,  
Approximate coal seam depths: None Is coal being mined in the area? Yes      / No X /

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		Left in well	Kinds
Conductor									
Fresh water	8 5/8					1100'	1100'	To surface	
Intermediate									
Production	4 1/2						2200'	100 Sbs or sufficient to cover production formations	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 31, (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 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 5-17-81

*[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 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 \_\_\_\_\_