

SURFACE, OIL & GAS : Herbert J. & Thelma Schmidt, St. Clara, W. V.  
 COAL : Eastern Associated Coal Corp., Koopers Bldg., Pittsburgh, Pa.

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1 inch = 1000 feet  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION Junction Driveway & Road 1700' SW of Location Elev. = 839'

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 OCTOBER 8, 1980  
 OPERATOR'S WELL NO. ONE  
 API WELL NO. 47-017-2851  
 STATE WV COUNTY CLAY 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 1050' WATER SHED SAND FORK  
 DISTRICT COVE COUNTY DODDRIDGE  
 QUADRANGLE VADIS 7.5' & 15' WC  
 SURFACE OWNER HERBERT J. & THELMA SCHMIDT ACREAGE 305.35  
 OIL & GAS ROYALTY OWNER HERBERT J. & THELMA SCHMIDT LEASE ACREAGE 305.35  
 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 BENSON - ELK ESTIMATED DEPTH 5500'  
 WELL OPERATOR CARSON PETROLEUM CORP DESIGNATED AGENT MR. LOWELL M. JOHNSON  
 ADDRESS BOX 133 SAND FORK WV 26430 ADDRESS BOX 133 SAND FORK WV 26430

FORM IV-35  
(Obverse)

Operator's  
Well No. H. Schmidt #1

WELL OPERATOR'S REPORT 10

API Well No. 17 - 017 - 2851  
State County Permit

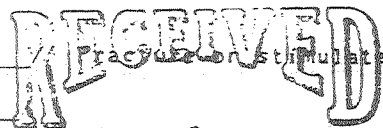
[08-78]

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: 1050' Watershed: Sand Fork  
District: Cove County: Doddridge Quadrangle: Vadis

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 October 16, 1980 OIL & GAS DIVISION  
OIL & GAS INSPECTOR Paul Garrett  
Name Paul Garrett  
Address Clarksburg, WV  
622-3871

LOGICAL TARGET FORMATION: Devonian Shale Depth \_\_\_\_\_ feet  
Depth of completed well, 5465 feet Rotary  / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh, 105 feet; salt, \_\_\_\_\_ feet.  
Coal seam depths: None Is coal being mined in the area? No  
Work was commenced October 20, 1980, and completed October 25, 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		
Drill pipe	8 5/8					1243'	1243'	To surface
Intermediate pipe								Sizes
Production tubing	4 1/2						5333'	440 sks Double set
Perforations								Perforations: Top Bottom

PRODUCTION FLOW DATA

Producing formation Benson Pay zone depth 4977 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, 0 Ebl/d  
Final open flow, \_\_\_\_\_ Mcf/d Final open flow, 0 Ebl/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 5308 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, 0 Ebl/d  
Final open flow, 596.000 Mcf/d Final open flow, 0 Ebl/d  
Time of open flow between initial and final tests, 6 hours  
Static rock pressure 1700 psig (surface measurement) after 24 hours shut in

DEC 5 1980

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

Fractured October 31, 1980

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

Benson - 20,000 lb. 80/100 sand  
40,000 lb. 20/40 sand  
1900 lb. breakdown  
490 bbls. water  
17.5 BPM at 1600 PSI

Perforations - 5250 - 5308, 7 holes

Perforations - 4975 - 4977.5, 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	592	Water 105'
Sand			592	714	
Coal			714	717	
Shale			717	1019	
Shale & Red Rock			1019	1150	
Coal			1150	1153	
Sand & Shale			1153	2072	
Little Lime			-2072	2100	
Pencil Cave			2100	2114	
Big Lime			-2114	2158	
Big Injun			2158	2272	
Sand & Shale			2272	2516	
Gantz			-2516	2530	
Sand & Shale			2530	4969	
Benson			-4969	4984	
Sand & Shale			4984	5218	
Elk Sand			5218	5324	
Sand & Shale			5324	5465	
Total Depth			5465		

(Attach separate sheets to complete as necessary)

Carson Petroleum Corporation  
Well Operator

By Lowell M. Johnson, LLC  
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

RECEIVED  
Schmidt #1

OCT 16 1980

Oil and Gas Division  
OIL & GAS DIVISION  
DEPT. OF MINES  
OIL AND GAS WELL PERMIT APPLICATION

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

DATE October 10, 1980  
Company Carson Petroleum Corporation  
Address P O Box 133, Sand Fork, WV 26430  
Farm H. Schmidt Acres 305.35  
Location (waters) Sand Fork  
Well No. One Elevation 1050'  
District Cove County Doddridge  
Quadrangle Vadis

Surface Owner Herbert Schmidt  
Address St. Clara, WV  
Mineral Owner Herbert Schmidt  
Address St. Clara, 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 6-20-81.

*Thomas E. Huzzey*  
Deputy Director - Oil & Gas Division

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

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 February 8 19 80 by Herbert J. Schmidt made to Rockwell Petroleum Company and recorded on the 2nd day of April 19 80 in Doddridge County, Book 114 Page 295  
 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:

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

Address  
of  
Well Operator

Very truly yours, *[Signature]*  
(Sign Name) [Signature]  
Well Operator  
P O Box 133  
Street  
Sand Fork  
City or Town  
West Virginia 26430  
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

47-017-2851

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 *[Signature]*

Y903 COPY

THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME Union Drilling, Inc. NAME Lowell M. Johnson  
 ADDRESS Drawer 40, Buckhannon, WV 26201 ADDRESS P O Box 133, Sand Fork, WV 26430  
 TELEPHONE 472-4610 TELEPHONE 462-7009  
 ESTIMATED DEPTH OF COMPLETED WELL: 5500' ROTARY X CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Benson-Elk  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS X COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	1100	1100	To surface
7			
5 1/2			
4 1/2		5500'	
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 60 FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS None  
 IS COAL BEING MINED IN THE AREA? No BY WHOM? \_\_\_\_\_

TO DRILL:  
 SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:  
 SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:  
 OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.  
 OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.  
 Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.  
 We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
 For Coal Company  
 \_\_\_\_\_  
 Official Title