



CERTIFICATE

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."

Minimum degree of accuracy is one part in 200 *William S. Crank* L.L.S. No. 116

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY **CITIES SERVICE OIL COMPANY**

ADDRESS **P.O. Box 873 CHARLESTON, W.VA. 25323**

FARM **LEWIS MAXWELL "B"**

MAP _____ ACRES **1562** LEASE NO. **WV-431**

WELL (FARM) NO. **29-B** SERIAL NO. **GW-1834**

ELEVATION (SPIRIT LEVEL) **946.2'**

QUADRANGLE **WEST UNION 1:24,000 & WEST UNION S.E.**

COUNTY **DODDRIDGE** DISTRICT **WEST UNION**

POINT OF PROVEN ELEVATION **U.S.G.S. DATUM - Elevation from Well No. B-24 (Elev. 1017.39')**

FILE NO. _____ DATE **APRIL 17, 1980**

DRAWING NO. **W-11-80** SCALE **1" = 400'**

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

WELL LOCATION MAP

FILE NO. **017-2691**

• DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS SCALE 1" TO 62,500' LATITUDE AND LONGITUDE LINES, BEING REPRESENTED BY BORDER LINES AS SHOWN

• DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRAIL

5250 Alexander
6-4 STRAIGHT FR BRUSTONE CR (099) MAY 29 1980



RECEIVED

NOV 14 1980

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD 7

Rotary Oil _____
Cable _____ Gas _____
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Quadrangle West Union

Permit No. 47-017-2691

Company Cities Service Company
Address Box 873, Charleston, WV 25323
Farm Lewis Maxwell et ux Acres 1562
Location (waters) Brushy Fork
Well No. "B" #29, GW-1834 Elev. 946.0
District West Union County Doddridge
The surface of tract is owned in fee by Lewis
Maxwell Heirs, Robert L. Holland, Agent
Address Box 425, West Union, WV 26456
Mineral rights are owned by same
Address _____
Drilling Commenced 5-7-80
Drilling Completed 9-23-80
Initial open flow Not est. cu. ft. 0 bbls.
Final production 84 MCFD cu. ft. per day 0 bbls.
Well open 24 hrs. before test 1710 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cond.			
13-10" 11-3/4"	83	83	surface (45 sx)
9 5/8"			
8 5/8"	1703	1703	surface (435 sx)
7"			
5 1/2"			
4 1/2"	5173.60'	5173.60'	889 cuft. (570 sx)
3"			
2 -3/8"	5047	5047	
Liners Used			

Well treatment details:

Attach copy of cementing record.

Acidized Alexander perfs with 500 gal. Mod 202 with 15% HCL 13 BW pad, 500 gal. Mod 202 with 15% HCL and displaced with 282 BW. 2200# B.D. pressure Ran 30 perf balls within treatment, good ball action. Fraced Alexander with 2800# 80/100 sand and 88,000# 20/40 sand in 577 bbl. fluid and 165 bbl. pad, 732 bbl. TL&T 682 BLWTR. Max. T.P. 2205 Min. TP 1500# and avg. T.P. 1650#. Max. sand conc. 8 PPG, Min. 2 PPG Avg. 5.3 PPG. AIR 20 BPM ISIP 1700# 5 min. SIP 1525# 10 Min. SIP 1500# 15 Min. SIP 1500#

Coal was encountered at 110-113' Feet _____ Inches _____
Fresh water 20 & 250' Feet _____ Salt Water _____ Feet _____
Producing Sand Alexander _____ Depth 5035'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Clay			0	10		
Sand Rock			10	14		
R. Rock			14	19	Water at 20'	
Sand Rock			19	50		
Shale			50	70		
Sand			70	110		
Coal			110	113		
Shale			113	135		
Sand			135	145		
RR			145	164		
Sand			164	193		
Shale			193	205		
Sand			205	210		
R. Rock			210	230		
Shale			230	235		
Sand			235	295	Water 250'	
Shale			295	390		
Sand			390	405		
Shale			405	500		
R. Rock			500	565		
Shale			565	660		
RR			660	685		
Shale			685	845		
Sand			845	900		

DEC 5 1980

Formation	Color	Hard or Soft	Top Feet ?	Bottom Feet	Oil, Gas or Water	Remarks
Shale			900	960		
Sand			960	985		
Shale			985	1070		
Sand			1070	1130		
Shale			1130	1140		
Sand			1140	1205		
Shale			1205	1215		
Sand			1219	1235		
Shale			1235	1240		
Sand			1240	1290		
Shale			1290	1305		
Sand			1305	1375		
Shale			1375	1446		
Sand			1446	1467		
Shale			1467	1640		
Lime			1640	1655		
Shale			1655	1668		
Lime			1668	1708		
Sand			1708	1833	Gas at 1830'	
Shale			1833	1860		
Sand			1860	1903		
Shale			1903	2040		
Sand			2040	2125	Gas at 3568'	
Shale			2125	2430		
Sand			2430	2540		
Shale			2540	3110		
Sand			3110	3150		
Shale			3150	4342		
Sand			4342	4490		
Shale			4490	5000		
<u>Alexander T.D. 5191'</u>					5035' Gas	

Date November, 12, 1980

APPROVED Cities Service Company Owner



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED
APR 23 1980
OIL & GAS DIVISION
DEPT. OF MINES

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

DATE April 23, 1980

Surface Owner Robert L. Holland Agent

Company Cities Service Company

Address Box 425, West Union, WV 26456

Address Box 873, Charleston, WV 25323

Mineral Owner Lewis Maxwell, et ux

Farm Lewis Maxwell "B" Acres 1562

Address Robert L. Holland, Agent

Location (waters) Brushy Fork

Address Box 425, West Union, WV 26456

Coal Owner _____

Well No. "B" #29, GW-1834 Elevation 946.0'

Address _____

District West Union County Doddridge

Coal Operator _____

Quadrangle West Union 1:24,000 & West Union S.E.

Address _____

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All work 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 12-28-80.

INSPECTOR TO BE NOTIFIED Paul Garrett

ADDRESS 321 Beech St., Clarksburg, WV 26301

PHONE 622-3871

Robert L. Holland
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 Feb. 1, 1899 by Lewis Maxwell et ux made to Columbian Carbon (now Cities Service Co.) and recorded on the _____ day of _____ 19____, in Doddridge County, Book 33 Page 431

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:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address of Well Operator

Very truly yours, Cities Service Company
(Sign Name) Robert L. Oliver
Well Operator

Box 873 Street
Charleston City or Town
W. Va. 25323 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

47-017-2691 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-1 and will carry out the specified requirements."

Signed by Robert L. Oliver

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 Spencer Enterprises NAME Sam J. Matthews
 ADDRESS West Union, WV 26456 ADDRESS Box 873, Charleston, WV 25323
 TELEPHONE _____ TELEPHONE 304-344-8383
 ESTIMATED DEPTH OF COMPLETED WELL: 5250' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Alexander
 TYPE OF WELL: OIL _____ GAS X COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
20-20 11-3/4 42#	60	60	To surface
9 - 5/8			
8 - 5/8 24#	1700	1700	To surface
7			
5 1/2			
4 1/2 11.6#	5250	5250	509 Sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 120 FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS 400
 IS COAL BEING MINED IN THE AREA? _____ 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