

15' TOPO

1-175  
2-200

7.5' TOPO

WINTER

HARDY

DAUGHERTY

Loc.-876  
ELEV. 980'

DELMER  
FOSTER  
100 Acs.

DAUGHERTY

I.P.

1725'  
S 83° 50' E

FENCE COR.

To No. 1 Well

S 24° 50' - 5345'  
N 37° E - 1886'  
N 19° 26' W - 831'  
N 6° 10' E - 5068'

15' TOPO Longitude 81° 50'  
7.5' TOPO



New Location   
Drill Deeper   
Abandonment

Minimum Error of Closure 1 in 200  
Source of Elevation DEVON CORP. WELL NO. 840 EL. 621'

"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."

Company DEVON CORP.  
 Address P.O. BOX 1433 CHARLESTON, W.V.  
 Farm DELMER FOSTER  
 Tract \_\_\_\_\_ Acres 100 Lease No. 2175  
 Well (Farm) No. 1 Serial No. 876  
 Elevation (Spirit Level) 980'  
 Quadrangle 15' WINFIELD 7.5 ELMWOOD C  
 County PUTNAM District BUFFALO  
 Surveyor Gunn D. Jeffers  
 Surveyors Registration No. 149  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 6 APRIL 1978 Scale 1" = 1000'

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

WELL LOCATION MAP  
FILE NO. PUT-855

+ 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 tracing.

47-079



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

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AUG 25 1978

Oil and Gas Division

WELL RECORD 14

OIL & GAS DIVISION  
DEPT. OF MINES

Quadrangle Elmwood  
Permit No. PUT-855

Rotary X Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas X  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Company DEVON CORPORATION  
Address PO Box 1433, Charleston, WV  
Farm Delmer K. Foster Acres 101  
Location (waters) Turkey Br. of 18 Mi. Creek  
Well No. 876 Elev. 980  
District Buffalo County Putnam  
The surface of tract is owned in fee by Delmer K. Foster  
Address Box 271, Buffalo, WV  
Mineral rights are owned by Same as above  
Address \_\_\_\_\_  
Drilling Commenced April 13, 1978  
Drilling Completed April 21, 1978  
Initial open flow Show cu. ft. \_\_\_\_\_ bbls.  
Final production 50 M cu. ft. per day \_\_\_\_\_ bbls.  
Well open \_\_\_\_\_ hrs. before test 1000 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8	713	713	350 sacks
8 5/8			
7	2667	2667	75 sacks
5 1/2			
4 1/2	4925	4925	150 sacks
3			
2		4846	
Liners Used			

Well treatment details: perforated from 4854 to 4856 with 16 holes. Water frac Oriskany Sand with 500 gal HCL, 926 BBL of treated gelled water, 121,000 SCF of nitrogen, 20,000 lbs of 80/100 and 28,000 lbs of 20/40 sand.

Attach copy of cementing record. Halliburton

Coal was encountered at 690-696 Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Oriskany Sand Depth 4838-4860

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Surface			0	20		
Shale			20	59		
Sand			59	76		
Shale			76	148		
Red Rock			148	204		
Broken Sand			204	243		
Red Rock			243	364		
Broken Sand			364	392		
Shale			392	402		
Sand			402	428		
Red Rock			428	490		
Broken Sand			490	542		
Red Rock			542	572		
Shale			572	608		
Red Rock			608	636		
Shale			636	690		
Coal			690	696		
Shale			696	722		
Red Rock			722	830		
Shale			830	869		
Red Rock			869	1027		
Shale			1027	1068		
Sand			1068	1102		
Shale			1102	1149		

(over)

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet 14	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			1149	1198		
Shale			1198	1218		
Broken Sand			1218	1292		
Shale			1292	1358		
Sand			1358	1398		
Shale			1398	1428		
Sand			1428	1438		
Slate & Shells			1438	1740		
Sand			1740	1751		
Shale			1751	1818		
Sand			1818	1857		
Shale			1857	1941		
Little Lime			1941	1979		
Big Lime			1979	2120		
Shale			2120	2145		
Injun Sand			2145	2198		
Shale			2198	2596		
Coffee Shale			2596	2618		
Berea Sand			2618	2636		
Shale			2636	3800		
Brown Shale			3800	4230		
Shale			4230	4617		
Marcellus Shale			4617	4766		
Onondaga L. S.			4766	4838		
Oriskany Sand			4838	4860		
Helderberg L. S.			4860			
Total Depth				4967		

Date August 23, 1978

APPROVED DEVON CORPORATION Owner

By *D. C. Gause*  
District Geologist



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

APR 10 1978

OIL & GAS DIVISION  
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE April 5, 1978

Surface Owner Delmer K. Foster  
Address Box 271, Buffalo, W. Va.

Company DEVON CORPORATION  
Address Box 1433, Charleston, W. Va. 25325

Mineral Owner Delmer K. Foster  
Address Box 271, Buffalo, W. Va.

Farm D. K. Foster Acres 101 acres  
Location (waters) Turkey Br. of 18 Mile Creek

Coal Owner Union Carbide Corporation  
Address Sanderson, W. Va.

Well No. 876 Elevation \_\_\_\_\_  
District Buffalo County Putnam

Coal Operator Not Operated  
Address \_\_\_\_\_

Quadrangle Elmwood

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 8-11-78

INSPECTOR  
TO BE NOTIFIED Martin Nichols

ADDRESS Clendenin, W.Va.

PHONE 548-6993

[Signature]  
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 March 28 1972 by D. K. Foster made to Commonwealth Gas Corp. and recorded on the 13th day of April 1972 in Putnam County, Book 56 Page 437

XXX 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) A. C. Youse

Well Operator  
A. C. Youse, Dist. Geologist  
Box 1433  
Street  
Charleston,  
City or Town  
West Virginia 25325  
State

W. VA. OIL & GAS CONSERVATION COMMISSION  
1613 WASHINGTON STREET, EAST  
CHARLESTON, WEST VIRGINIA 25311

Address  
of  
Well Operator .

\*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

PUT-855 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."

47-079

Signed by A. C. Youse  
A. C. Youse, Dist. Geologist

[Signature]

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

PROPOSED WORK ORDER TO XXX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:  
 NAME FWA Drilling Co. NAME Bill W. Backus  
 ADDRESS Box 448, Elkview, W. Va. ADDRESS Box 1433, Charleston, W. Va.  
 TELEPHONE 965-3379 TELEPHONE 342-3171  
 ESTIMATED DEPTH OF COMPLETED WELL: 5000 ROTARY XXX CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Oriskany  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS XXX 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			
13 - 10			
9 - 5/8	725	725	350 sax=to surface
8 - 5/8			
7	2700	2700	75 sax=700 feet
5 1/2			
4 1/2	5000	5000	150 sax=1800 feet
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS 605' 285' ABOVE SEA LEVEL - BASE OF SAL  
 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.

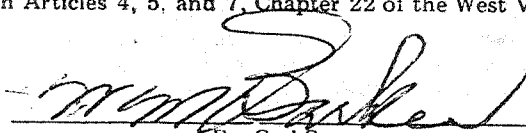
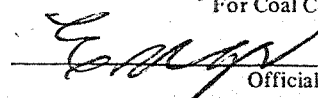
OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

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 Union Carbide Corp. ~~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 Union Carbide Corp. ~~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