

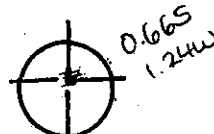
Plot

Card 17 CSD 114

KF 7 17 80 (15') 37° 55'

Latitude 37° 52' 30"

3500' SOUTH  
6500' WEST



254  
66  
354  
1.24  
2.28  
332

NEW RIVER POCAHONTAS

T-RAIL

N 585,540.189  
E 3206,394.830

STONE O N64°25'15"E - 3949.57'

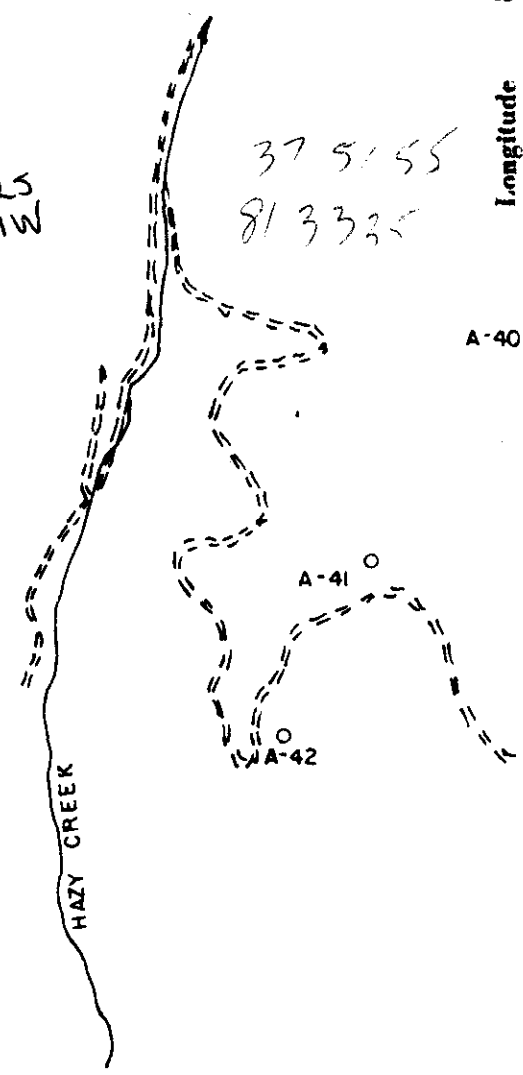
SET-STONE N65°05'30"E - 627.60  
O-STONE  
N64°25'15"E - 1104.25  
1953.35



37 51 55  
81 33 35

A-44  
EL 2490'  
N 584,525.225  
E 3,208,066.141

8044 ACRES



7.5' 0615 topo loc 15' loc  
0.68S  
1.21W

ACCURACY: 1/2500'  
New Location   
Drill Deeper   
Abandonment   
Fracture   
Redrill   
Other

Formation \_\_\_\_\_  
Est. Depth \_\_\_\_\_  
Oil \_\_\_\_\_  
Gas   
Other \_\_\_\_\_

Source of Elevation KNOB (2579')  
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.

*Chet Waterman*

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

WELL LOCATION MAP  
47 - 005 - 1330  
STATE COUNTY PERMIT

+ Denotes location of well on United States Topographic Maps.  
Engineer CHET WATERMAN  
Engineer's Registration No. 3788 File No. 80-338

Company CITIES SERVICE COMPANY  
Address CHARLESTON, WV  
Surface Owner ROWLAND LAND COMPANY  
Mineral Owner " " "  
Well No. A-44 Acres 8044  
Elevation 2490' Bald Knob 15'  
Quadrangle PILOT KNOB Series 7.5' EC  
County BOONE District CROOK  
Date 5/21/80 Scale 1" = 2000'

6-6 Unnamed

AUG 11 1980





STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division  
WELL RECORD

RECEIVED  
MAR - 2 1981

OIL & GAS DIVISION  
DEPT. OF MINES  
Rotary  Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Quadrangle Pilot Knob  
Permit No. 47-005-1330

Company Cities Service Company  
Address Box 873, Charleston, WV 25323  
Farm Rowland Land Company Acres 8044  
Location (waters) Matts Creek  
Well No. "A" #44, GW-1854 Elev. 2490  
District Crook County Boone  
The surface of tract is owned in fee by Rowland  
Land Company, 1033 Quarrier Sr.  
Address Charleston, WV 25301  
Mineral rights are owned by same  
Address \_\_\_\_\_  
Drilling Commenced 11-2-80  
Drilling Completed 1-16-81  
Initial open flow 327 M cu. ft. - bbls.  
Final production 2903 M cu. ft. per day - bbls.  
Well open 22 hrs. before test 800 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16	44'	44'	To Surface (15 sx)
Cond. <del>13-10</del> 11-3/4"	1318'	1318'	To Surface (440)
9 5/8			
8 5/8 "	2024'	2024'	To Surface (445)
7			
5 1/2			
4 1/2 "	4263.36'	4263.36'	105 sx
3			
2 -3/8"	4112	4112	
Liners Used			

Well treatment details:

Attach copy of cementing record.

Acidized L. Weir with 500 gal. 15% HCL Flushed with 65 BW. Fraced with Halliburton premixe X-linked Gel System. Frac contained 30,000# 80/100 and 60,000# 20/40 sands. TL&T 670 bbl. Acidized Upper Weir with 1000 gal. 15% HCL. Flushed with 39 BW. Formation broke at 0#.

Fraced U. Weir with Halliburton premixe x-linked gel system containing 30,000# 80/100 and 90,000# 20/40 sand. AIR 23.5 BPM. Avg. Sand conc. 6.6 ppg. Max. treating pressure 1300#

Avg. TP 1100# Min. T.P. 900# Final TP 1200# ISIP 400# 5 Min. SIP 275# 15 Min. SIP 200#

Coal was encountered at TL&T 745 bbl. 111-114, 926-29, 496-97 Feet 1049-52, 1502-05, 1676-78'

Fresh water 80 Feet 80 Salt Water 80 Feet 80  
Producing Sand Weir Sand 3994-4125 Depth 4121'-4125', 3986-90', 3994-07'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand			65	80		
Sand			80	145		
Sand			145	198		
Sand			198	226		
Coal			226	229		
Sand			229	325		
Sand			325	455		
Sand			455	585		
Sand			585	655		
Shale			655	675		
Sand			675	715		
Sand & Shale			715	830		
Sand			830	960		
Sand			960	1050		
Poss. Coal			1050	1053		
Sand			1053	1125		
Sand			1125	1280		
Sand			1280	1343		
Shale			1343	1485		
Sand			1485	1502		
Coal			1502	1505		
Shale			1505	1676		
Coal			1676	1678		
Shale			1678	1690		
Sand & Shale			1690	1885		

MAR 23 1981

Formation	Color	Hard or Soft	Top Feet 2	Bottom Feet	Oil, Gas or Water	Remarks
Sand			1905	1980		
Shale			1980	2063		
Sand			2063	2160		
Sand			2160	2315		
Sand			2315	2450		
Shale			2450	2495		
Sand			2495	2510		
Shale			2555	2760		
Sand			2760	2775		
Shale			2775	3053		
RR & Shale			3053	3100		
Sand			3100	3210		
Sand			3210	3272		
Sand			3272	3370		
Shale			3370	3470		
L. Lime			3470	3495		
L. Lime			3495	3530		
B. Lime			3530	3740		
B. Lime			3740	3910		
Inj. Sand			3910	3950		
Shale			3950	3990		
Weir			3990	4020		
Sand & Shale			4020	4125		
Weir			4125	4165		
Shale			4165	4255		
Shale			4255	4307	T.D.	

Date February 27, 19 81

APPROVED Cities Service Company Owner  
 By: Paul D. Phillips  
 Paul D. Phillips, Operations Manager



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

JUL 16 1980

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE July 15, 1980

Surface Owner Rowland Land Company  
1033 Quarrier Street, Charleston, WV 25301

Company Cities Service Company

Mineral Owner Same

Address Box 873, Charleston, WV 25323

Address \_\_\_\_\_

Farm Rowland Land Company Acres 8044

Coal Owner Armco, Inc. / Attn: Clayton Condry

Location (waters) Matts Creek

Address Clayton Condry, Chief Engineer

Well No. "A" #44, GW-1854 Elevation 2490

Coal Operator Same WV 25324

District Crook County Boone

Address \_\_\_\_\_

Quadrangle Pilot Knob

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 3-24-81.

INSPECTOR TO BE NOTIFIED Leroy Hopkins

ADDRESS Gen. Delivery, Ansted, WV 25812

PHONE 658-4280

*Frederic B. Burchett*  
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. 5 1942 by Rowland Land Company made to Columbian Carbon (now Cities Service) and recorded on the 11 day of March 1942 in Raleigh County, Book 13 Page 14 13 Feb.

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 same 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

Very truly yours, Cities Service Company

(Sign Name) *Sam J. Matthews*  
Sam J. Matthews Well Operator Reg. Prod. Manager

Address Box 873 Street  
of Charleston, City or Town  
Well Operator 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.

47-005-1330 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 *Sam J. Matthews*

BLANKET BOND

