



Longitude 81° 45'

Minimum Error of Closure 1 in 200
 Source of Elevation U.S.G.S. Elev. 881' Road Intersection

"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."

New Location
 Drill Deeper
 Abandonment
dated: 4-16-74

Company LOGAN & CO. INC.
SOLE SOURCE CO. CO.
 Address 270 S. BOSTON ST., CHARLESTON, W.V. 25302
 Farm GERALD FERGUSON
 Tract _____ Acres 2 PART OF 250 AC. UNIT Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 881'
 Quadrangle RAVENSWOOD EC
 County JACKSON District UNION
 Engineer W. P. Dutton
 Engineer's Registration No. 1892
 File No. _____ Drawing No. _____
 Date Sept. 19, 1970 Scale 1" = 100'

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

WELL LOCATION MAP
 FILE NO. Jac-1239-P

+ 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.

47-035

Deep Well

APR 26 1974

Form OG-10
 27-00
 6-24



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

Rotary
 Spudder
 Cable Tools C. NO. 1
 Storage C. NO. 1

Quadrangle Ravenswood

WELL RECORD

Permit No. Jac-1239

Oil or Gas Well Gas
 (KIND)

Company Colonial Gas Company
 Address Charleston, West Virginia
 Farm Gerald Ferguson Acres 2
 Location (waters) Log Lick Run
 Well No. 1 (One) Elev. 888 KB
 District Union County Jackson
 The surface of tract is owned in fee by _____
 Address _____
 Mineral rights are owned by _____
 Address _____
 Drilling commenced 9/27/70
 Drilling completed 11/7/70
 Date Shot _____ From _____ To _____
 With _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10 3/4	213	213	Size of
8 1/2	2440	2440	Depth set
6 1/2			
5 XXX 1/2	5380	5380	Perf. top
4 1/2			Perf. bottom
3			Perf. top
2			Perf. bottom
Liners Used			

Open Flow _____ /10ths Water in _____ Inch
 _____ /10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock Pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 WELL ACIDIZED (DETAILS) 500 gal. HCl
ahead of face
 WELL FRACTURED (DETAILS) Yes: 2 1/2" dia. 220' - 711' max. pressure 2300 lb/in²
aver. 29 lb/in² (pressure) 3-1/2" dia. 240' - 711' max. pressure 2300 lb/in²
 RESULT AFTER TREATMENT (Initial open flow or bbls.) became flow - 20-40 gal. 24,000 MCF/D
 ROCK PRESSURE AFTER TREATMENT 185 HOURS 20 minutes
 Fresh Water None Feet _____ Salt Water _____ Feet _____
 Producing Sand Newburg Depth 5392

Attach copy of cementing record.
 CASING CEMENTED Yes SIZE _____ No. Ft. _____ Date _____
 Amount of cement used (bags) See other side
 Name of Service Co. Halliburton
 COAL WAS ENCOUNTERED AT None FEET _____ INCHES _____
 FEET _____ INCHES _____ FEET _____ INCHES _____
 FEET _____ INCHES _____ FEET _____ INCHES _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	5			
Shale			5	15			
Red Rock			15	40			
Shale			40	60			
Red Rock			60	175			
Shale			175	185			
Red Rock			185	240			
Shale			240	270			
Sandy Shale			270	410			
Sand			410	440			
Red Rock			440	455			
Shale			455	475			
Sand - <u>13 P.H.S.?</u>			475	550			
Shaly Sand			550	575			
Shale			575	620			

(over)

Formation	Color	Hard or Soft	Top \downarrow	Bottom	Oil, Gas or Water	Depths Found	Remarks
Red Rock			620	730			
Shale			730	935			
Sand			935	1155			
Shale			1155	1255			
Sandy Shale			1255	1666			
Little Lime			1666	1750			
Big Lime			1750	1888			
Shale			1888	1916			
Big Injun			1916	2060			
Shale			2060	2374			
Coffee Shale			2374	2396			
Berea			2396	2399			
Shale			2399	4606			
Corniferous Lime			4606	4697			
Oriskany Sand			4697	4704			
Limestone & Dolomite			4704	5392			
Newburg Sand			5392	5404	Gas	5394	
Dolomite		McKenzie	5404	5426			
				5426	TOTAL DEPTH		
CASING RECORD:							
9/30/70	10-3/4" csg.	@ 213 ft.	cemented w/150 sx.				
10/2/70	8-5/8" csg.	@ 2440 ft.	cemented w/150 sx.				
11/14/70	5-1/2" csg.	@ 5380 ft.	cemented w/160 sx.				

Date December 1, 1970

APPROVED Colonial Gas Co., Owner

By [Signature] (Title)