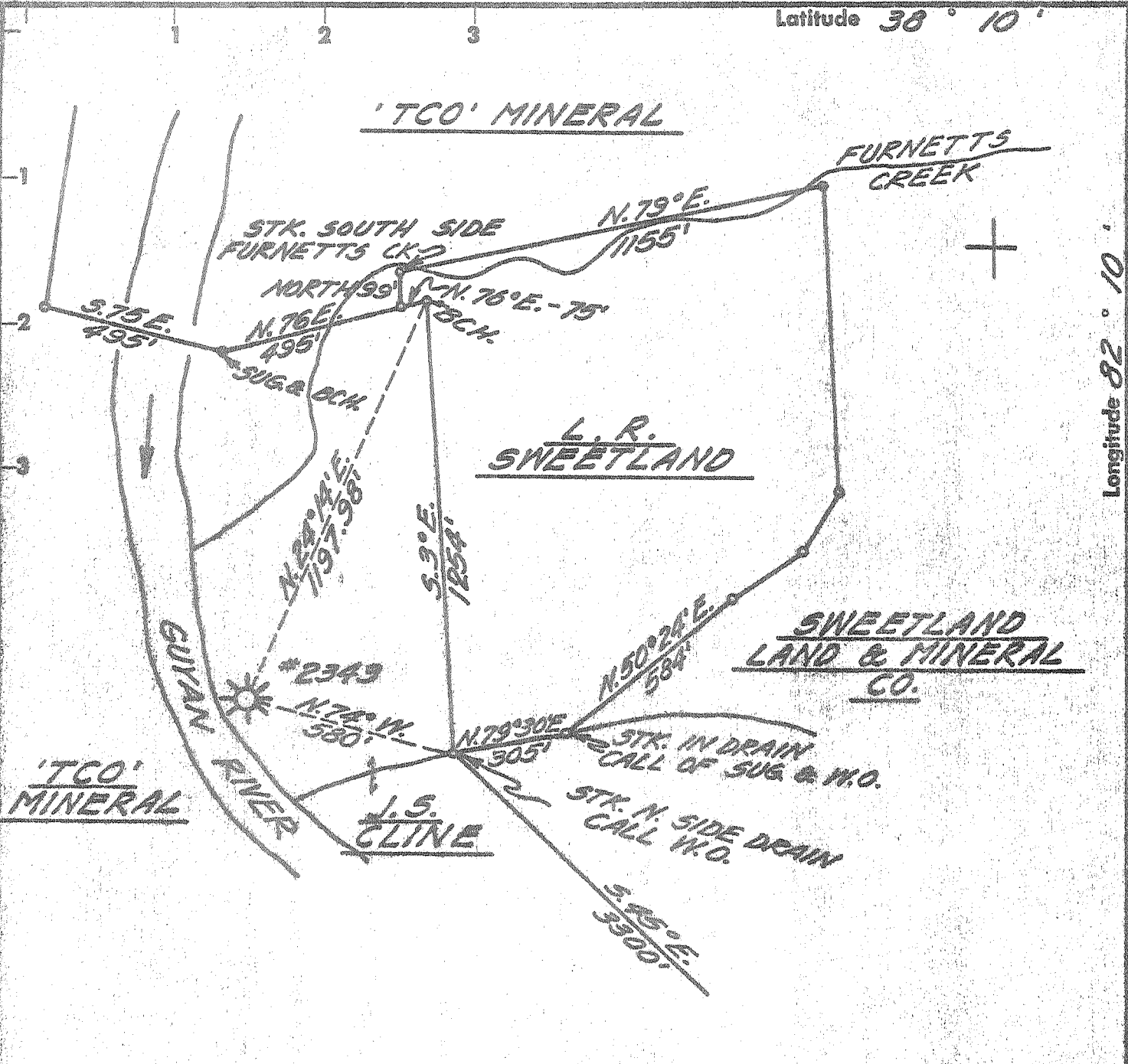


Latitude 38° 10'

Longitude 82° 10'



BENCH MARK DESCRIPTION

BM-B-51 2.0 MI. NW ALONG C.&O. TRACKS FROM RANGER. 33 1/2 RAILS SOUTH OF MILE POST B-29, 21' EAST OF E. OF TRACK 7' SW. OF CROSSING SIGN & IN FACE OF SANDSTONE LEDGE. STANDARD DISK STAMPED B-51, 1935 & SET VERTICALLY. ELEV. 607.338'

- Fracture
- Before 6/5/29
- New Location
- Drill Deeper
- Redrill
- Abandonment 9-16-71

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 5 of the Rules and Regulations of the Oil and Gas Section of the Mining Laws of West Virginia. The accuracy of this survey is within the limits and as prescribed in Paragraph 5 by the Oil and Gas Division of the Department of Mines Regulations.

Company COLUMBIA GAS TRANSMISSION CORP.
 Address CHARLESTON, W. VA.
 Farm J. C. CLINE
 Tract _____ Acres 45⁰⁰ Lease No. 24654
 Well (Farm) No. _____ Serial No. 2343
 Elevation (Spirit Level) 619.17
 Quadrangle MIDKIFF WC
 County LINCOLN District LAURAL HILL
 Engineer Richard E. Dragman
 Engineer's Registration No. 2330
 File No. 32-45 Drawing No. _____
 Date 9-8-71 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. LIN-1361(A)

was 043 80001, 70033
 + 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.

LINCOLN - A. 331 S. JC QLINE 2343.

MIDKIFF QUAD.
WC

elev. = 619.95'

38° 10'

15' location.

S 1.57

W 0.87

82° 10'



7 - 6

(233)

Fourmile-Branchland
DEEP WELL

Laurel Hill District, Lincoln County, W. Va.
 By United Fuel Gas Co. (Drilled by Columbia Gas & Elec. Co.)
 (Col. G&E No. 343).

31361

Elevation, 619.95' L.
 Commenced 7-18-24; completed, 2-11-25.
 48-hr. R. P. 2" tubing, 530 lbs.
 48-hr. R. P. 6⁵/₈" casing, 340 lbs.
 Test before tubing, 5/10 water in 2" (106 M.)
 Test after tubing, 2/10 water in 2" (67 M.)
 Berea and Gas Sand only.
 Gas pay in Injun 3/10 water in 2" (83 M.) 1326-1336'.
 No gas pay below 2792-2802'; test 5/10 water in 2" (106 M.)
 Gas pay in Berea 2/10 water in 2" (67 M.), 1877-1879'.
 Well not shot.
 10" casing, 98' 5"; 8¹/₂", 170' (pulled); 2" tubing, 1575'.
 Hole filled up to 2852'. Total depth now 2852'.
 Packer set 1575' from top of hole, 6⁵/₈ x 2 x 16, O. W. S. Hook
 Wall Packer.
 48-hr. initial R. P. 530 lbs. 2-11-25.
 Initial volume, 67 m. 2-11-25.
 Most recent R. P. 450 lbs. 4-15-36.
 No.....in Gas Report.

	Top.	Bottom.
Surface, gravel, etc.	0	- 100
Coal	150	- 155
Slate	155	- 200
Sand	200	- 300
Slate	300	- 325
Sand	325	- 400
Slate	400	- 450
Gas Sand	450	- 500
Salt Sand	500	- 875
Slate	875	- 1005
Red rock	1005	- 1020
Slate	1020	- 1069
Little Lime	1069	- 1099
Pencil Cave	1099	- 1101
Big Lime	1101	- 1295
Keener Sand	1295	- 1303
Red rock	1303	- 1321
Big Injun Sand	1321	- 1339
Slate	1339	- 1354
Squaw Sand	1354	- 1369
Slate	1369	- 1400
Shell	1400	- 1415
Slate and shell	1415	- 1533
Big shell	1533	- 1633
Slate	1633	- 1855
Brown shale	1855	- 1865
Berea Sand	1865	- 1883
Slate and shell	1883	- 2025
Slate	2025	- 2150
Brown shale	2150	- 2792
Gas Sand	2792	- 2802
Slate	2802	- 3450
Hard lime, white	3450	- 3526

J. C. CLINE NO. 2343 WELL (Continued).

	Top.	Bottom.
Slate	3526	- 3535
Lime	3535	- 3622
Black shale	3622	- 3635
Gray lime, hard	3635	- 4116
Broken-up formation	4116	- 4125
Lime	4125	- 4221
Sand, hard	4221	- 4244
Lime	4244	- 4262
Red rock	4262	- 4400
Slate, gray	4400	- 4465
Total depth		4465
Hole filled up to		2852

48-hr. Initial rock pressure, 530 lbs. 2-11-25.
 Initial volume, 67 M. 2-11-25.
 Most recent R. P. 450 lbs. 4-15-36.

From: Tucker R.C. 1944
 Summarised records of
 Deep wells. V. 16

J. C. Cline No. 2343 Well.

Laurel Hill District, Lincoln County, W. Va.
 By Columbia Gas & Electric Company.
 Lin. A on map.
 Elevation, 619.95' L.
 106 M. cu. ft. gas.
 Located 1.57 mi. S. of 38° 10' and 0.87 mi. W. of 82° 10'—WC—Midkiff
 Quadrangle.
 On east bank of Guyandot River, (600' south of mouth of Furnett
 Creek).
 Just southwest of Bradyville; 1.7 mi. N. of Ranger.

	Top.	Bottom.	Thickness.	Elevation (top).
Big Lime	1101	1295	194	— 481
Big Injun Sand	1295	1339	44	— 675
Berea Sand	1865	1883	18	—1245
Corniferous Lime	3535	3622	87	—2915
Oriskany Sand	3622	3635	13	—3002
Newburg Sand	4221	4244	23	—3601

Thickness, Devonian Shales, 1652 feet. Total depth, 4465'.

Remarks: Completed about 1925.
 83 M. gas in Big Injun at 1326-36'.
 67 M. gas in Berea at 1877-79'.
 106 M. gas in sand at 2792-2802'.

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J. C. Cline No. 2343 Well

From: Tucker R.C. 1936
 Deep well Records
 W.V.G.S. (Pub. V. 7)

Laurel Hill District, Lincoln County, W. Va.
 By Columbia Gas & Electric Company.
 600 S. of Furnett Creek, east bank of Guyandot River, just south-
 west of Bradyville.
 Elevation, 619.95' L.
 3.75 mi. E. of 82° 15' and 4.25 mi. N. of 38° 05'—WC—Midkiff
 Quadrangle.
 107,000 gas in Berea and Brown Shale. 530 lbs. rock pressure.
 Completed about 1925. Starts about 915' below Pittsburgh Coal
 horizon.

0 - 100 Gravel	200 - 300 Sand
100 - 155 Coal, etc.	300 - 325 Slate
155 - 200 Slate	325 - 400 Sand
400 - 450 Slate	1877-1879'; 67,000.)
450 - 500 Gas? Sand	1883 - 2025 Slate and shell
500 - 875 Salt Sand	2025 - 2150 Slate
875 - 1005 Slate	2150 - 2792 Brown shale
1005 - 1020 Red rock	2792 - 2802 Sand (gas, 2792- 2802'; 5/10 W. in 2"; 106,000)
1020 - 1069 Slate	2802 - 3450 Slate
1069 - 1099 Lime	3450 - 3526 Lime, hard, white
1099 - 1101 Pencil Cave	3526 - 3535 Slate
1101 - 1295 Big Lime	3535 - 3622 Lime, Corniferous
1295 - 1303 Keener Sand	3622 - 3635 Brown shale, Oris- kany
1303 - 1321 Red rock	3635 - 4116 Lime, hard, gray, Helderberg, etc.
1321 - 1339 Big Injun Sand (gas, 1326-1336'; 3/10 W. in 2"; 83,000.)	4116 - 4125 Lime, broken
1339 - 1354 Slate	4125 - 4221 Lime
1354 - 1369 Squaw Sand	4221 - 4244 Sand, hard, Newburg
1369 - 1400 Slate	4244 - 4262 Lime
1400 - 1415 Shell	4262 - 4400 Red rock
1415 - 1533 Slate and shell	4400 - 4465 Slate, gray, to bot- tom
1533 - 1633 Big shell	
1633 - 1855 Slate	
1855 - 1865 Brown shale	
1865 - 1883 Berea Sand (gas,	