

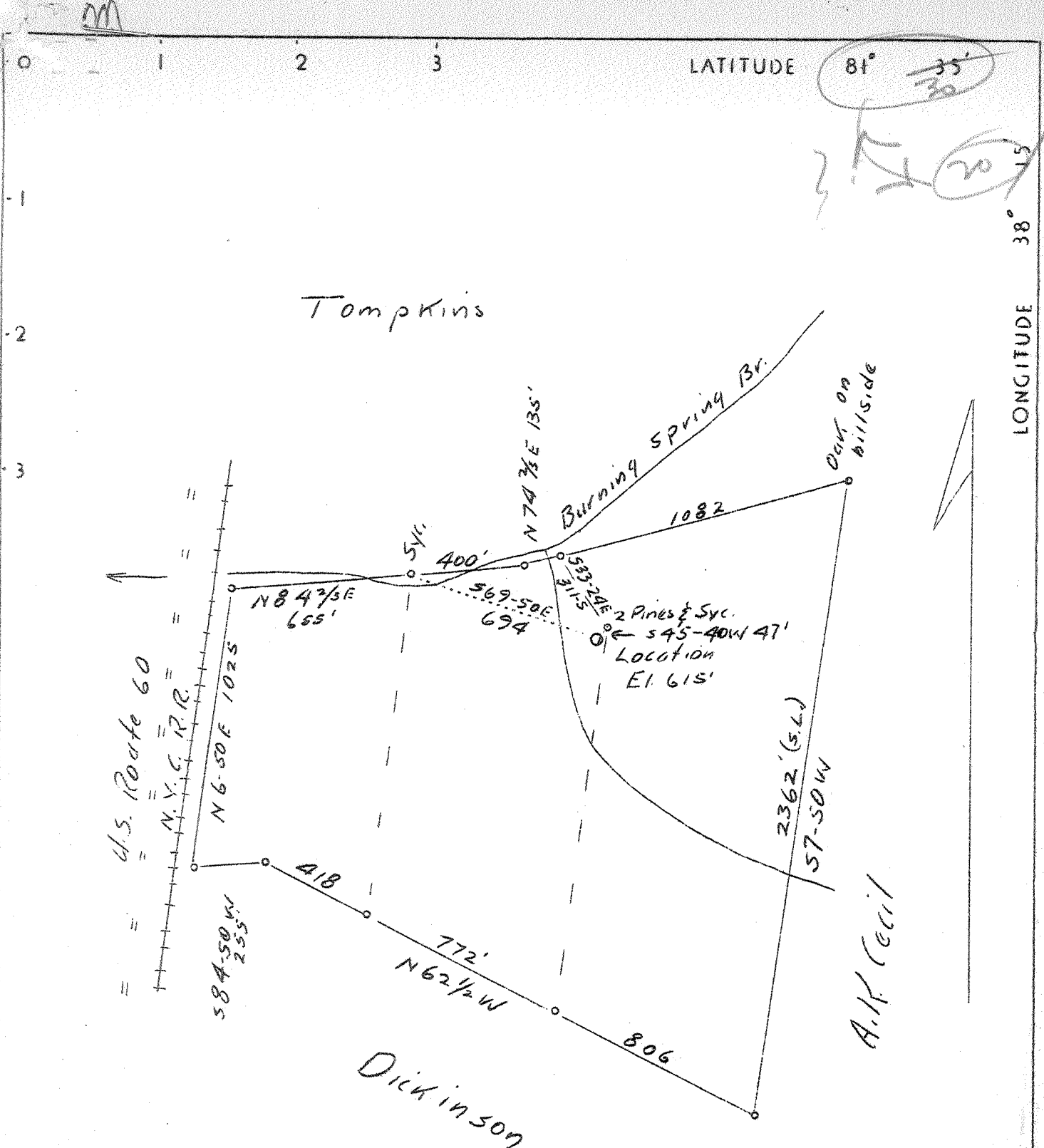
Company Cabot Oil & Gas Corp.  
 Address P.O. Box 459, Glasgow, WV 25086  
 Farm WILLIAMS  
 Tract \_\_\_\_\_ Acres 77.5 Lease No. \_\_\_\_\_  
 Well (Farm) No. 1 Serial No. 923  
 Elevation (Spirit Level) 615 643.37  
 Quadrangle Charleston, East 7.5' 56  
 County Kanawha District Malden  
 Engineer H.P. Burtwell C.E. + E.M.  
 Engineer's Registration No. 710  
 \_\_\_\_\_ Drawing No. \_\_\_\_\_  
May 2, 1937 Scale 1" = 500'

**STATE OF WEST VIRGINIA**  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL & GAS  
 NITRO, WEST VIRGINIA

**WELL LOCATION MAP**  
 FILE NO. 47-039-402-W

+ 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 corner on border line of original tract

AUG 19 1937



Calculated from  
dist upstream from RR  
Topo Location not given

3.33 W  $\angle$  81° 30'  
4.48 @  $\angle$  38° 20'

This stencil taken from blue print. No tracing submitted.

Company	Glen Oil & Gas Co.
Address	No. 511 Chs'n. Nat'l. Bank Bldg.
Farm	Williams
Tract	Acros 77.5 Lease No.
Well (Farm) No.	Serial No.
Elevation (Spirit Level)	615
Quadrangle	Charleston <b>SE</b>
County	Kanawha District Malden
Engineer	H.J. Burtnett C.E. & E.M.
Engineer's Registration No.	710
File No.	Drawing No.
Date	May 2, 1937 Scale 1"-500'

STATE OF WEST VIRGINIA  
 Department of Mines  
 OIL AND GAS DIVISION  
 CHARLESTON

WELL LOCATION MAP  
 File No. KAN-402

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.

6-6 214

dear No 1

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

W E L L R E C O R D

Permit No. Kan 402 & 402D

Gas Well

Charleston Quad.

CASING & TUBING

Company	Glenn Oil & Gas Co.	13	43
Address	511 Charleston Nat. Bank Bldg.	10	399
Farm	Maxine Williams Acres 77 $\frac{1}{2}$	8 $\frac{1}{2}$	1240
Location	Burning Springs Br. Kanawha River	5 $\frac{3}{16}$	4377
Well No.	1		
District	Malden		
Surface	Maxine Williams		
Mineral			
Drilling	Commenced Not given		
	Completed Nov. 29, 1937		
Date Shot	11-22-37		
Volume	785000 Cu.Ft.		
Rock Press.	810#		
		CASING CEMENTED 5 $\frac{3}{16}$ 4377'	

Formation	Color	Top	Base	Result	Formation	Color	Top	Base	Result
Sand & Gravel		0	218						
Grampus		218	399						
Slate		399	425						
Salt Sand Break		425	610	Salt					
Break		610	650	Water					
Salt Sand		650	675	518 &					
Sand & Break		675	810	590'					
Maxon		810	900	H.F.W.					
Lime-Little		900	940						
Lime Shell	Black	940	975						
Break & Cave		975	978						
Lime -Big		978	1170						
Lime	Red	1170	1220						
Lime Shells	Black	1220	1240						
Broken Lime Shells		1240	1550						
Berea		1550	1610	Sh. Gas					
Slate & Lime		1610	2050	1565					
Slate	White	2050	2811						
Slate	Gray	2811	2861						
Slate & Shells		2861	3135						
Shale	Brown	3135	3450	Sh. Gas					
Slate & Shells	White	3450	3850						
Shale (Broken)	Brown	3850	4155						
Shale	Coffee	4155	4358						
Concretionous Lime		4358	4465						
Criskey Sand		4465	4477	Gas					
Lime	Red	4477	4491	4472'					
TOTAL DEPTH			4491	23,640 Nat.					

**RECEIVED**  
WV Division of  
Environmental Protection

MAR 06 1995

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas  
Well Operator's Report of Well Work

\*WORKOVER

Permitting  
Office of Oil & Gas

Farm name: BONNETT, CLEO

Operator Well No.: WILLIAMS #1-923

Location: Elevation: 643.37

Quadrangle: CHARLESTON EAST

District: MALDEN

County: KANAWHA

Latitude: 8300 Feet South of 38 Deg. 17 Min. 30 Sec.

Longitude: 5400 Feet West of 81 Deg. 32 Min. 30 Sec.

Company: CABOT OIL & GAS CORPORATION  
400 FAIRWAY DRIVE, SUITE 400  
CORAOPOLIS, PA 15108

Agent: DAVID G. MCCLUSKEY

Inspector: CARLOS HIVELY

Permit Issued: 08/15/94

Well Work Commenced: 10/14/94

Well Work Completed: 11/22/94

Verbal Plugging

Permission granted on:

Rotary  Cable  Rig

Total Depth (feet) 4491

Fresh water depths (ft) N/A

Salt water depths (ft) 518

Is coal being mined in area (Y/N)? N

Coal Depths (ft): N/A

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13"	42'	42'	N/A
10"	399'	399'	N/A
8-1/4"	1240	1240	N/A
5-1/2"	4377'	4377'	N/A
*PLUG SET OVER THE ORISKANY			

OPEN FLOW DATA

Producing formation BROWN SHALE Pay zone depth (ft) 3136-3408

Gas: Initial open flow 84 MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 25 MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests 4 Hours

Static rock Pressure 450 psig (surface pressure) after 48 Hours

Second Producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_

Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests \_\_\_\_\_ Hours

Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: CABOT OIL & GAS CORPORATION

By: John W. [Signature]

Date: 3/1/95

MAR 9 1995

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perf Brown Shale 3136-3174, 3138-3178, 3159-3187, 3202-3254, 3209-3269, 3228-3293, 3300-3368, 3312-3390, 3353-3408. Break down formation w/250 gals of 15% hcl, displaced w/35,000 scf N<sub>2</sub>; BDP - 2678 psi; Surface ISIP - 1800 psi. Frac w/606,800 scf N<sub>2</sub>, 46,600# sand; ISIP - 1300 psi.

FORMATION	TOP	BOTTOM
SAND & GRAVEL	0	216
GRAMPUS SAND	216	399
SLATE	399	425
SALT SAND	425	610
BREAK	610	650
SALT SAND	650	675
SAND & BREAK	675	810
MAXTON	810	900
LITTLE LIME	900	940
LIME SHELL	940	975
BREAK & CAVE	975	978
BIG LIME	978	1170
LIME	1170	1220
LIME SHELL	1220	1240
BLACK SLATE	1240	
BROKEN LIME SHELLS	1240	1550
BEREA SHELLS	1550	1610
SLATE & LIME SHELLS	1610	2050
WHITE SLATE	2050	2811
GREY SLATE	2811	2861
SLATE & SHELLS	2861	3135
BROWN SHALE	3135	3450
WHITE SLATE & SHELLS	3450	3850
BROKEN BROWN SHALE	3850	4155
COFFEE SHALE	4155	4358
CORNIFEROUS LIME	4358	4465
ORISKANY SAND	4465	4477
BROKEN LIME	4477	
TOTAL DEPTH		4491