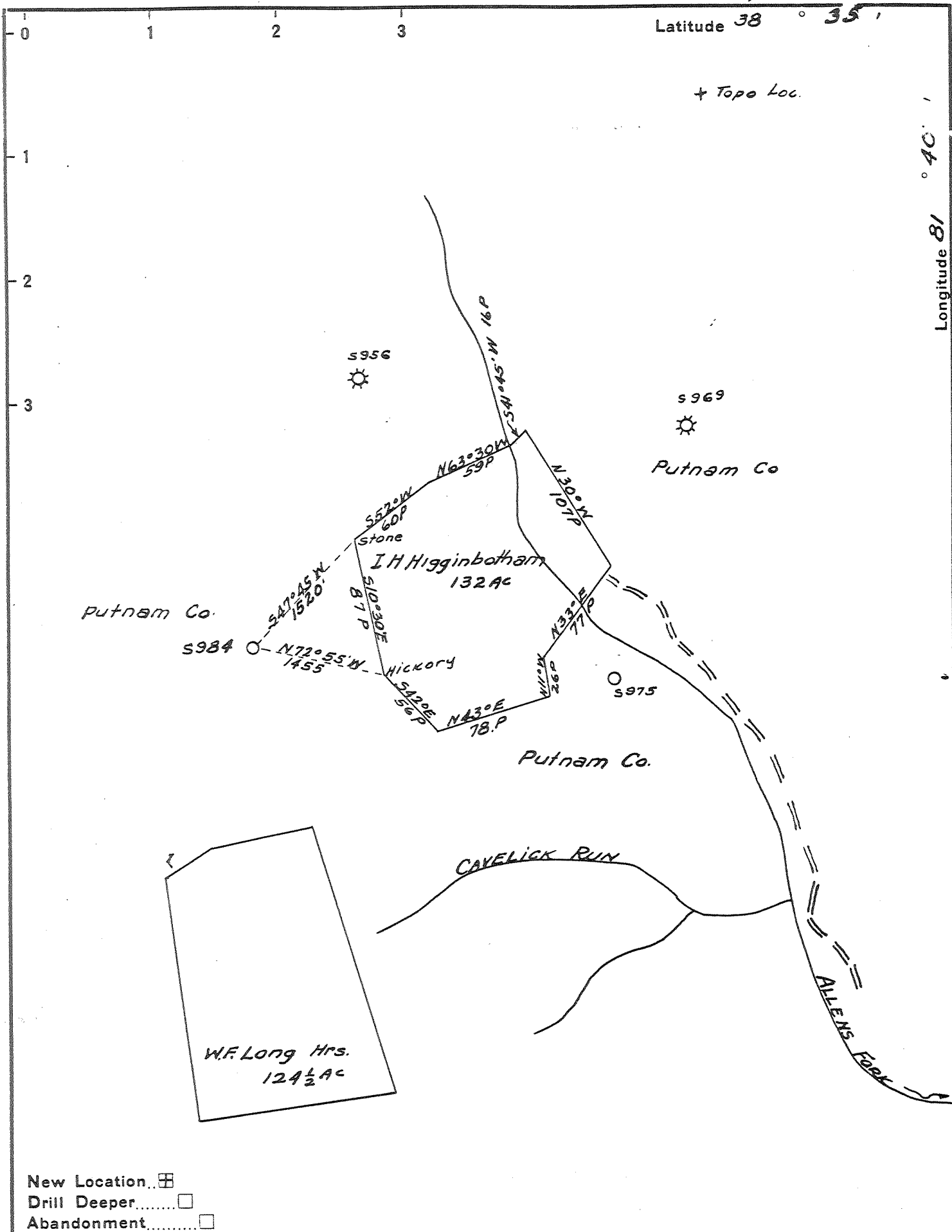


10,550'

Latitude 38° 35'

Longitude 81° 40'



New Location
 Drill Deeper
 Abandonment

Cabot Oil & Gas Co. of WVa.
 P.O. Box 628 - Charleston, WVa. 25322
 Surface: Roy Snodgrass / Putnam #19

Tract _____ Acres 22,000 Lease No. 3-464
 Well (Farm) No. 19 Serial No. 984
 Elevation (Spirit Level) 926.0 GROUND
 Quadrangle KENNA S.W.
 County KANAWHA District POCA
 Engineer Charles Sturm
 Engineer's Registration No. 975
 File No. _____ Drawing No. _____
 Date MAY 3 1941 Scale 1" = 1320'

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

WELL LOCATION MAP
 FILE NO. KAN-820-Frac.

FRAC CANCELLED
 + Denotes location of well on United States
 Topographic Maps, scale 1 to 62,500, lat-
 itude and longitude lines being represented
 by border lines as shown JUN 1 1987
 - Denotes one inch spaces on border line
 of original tracing.

47-039

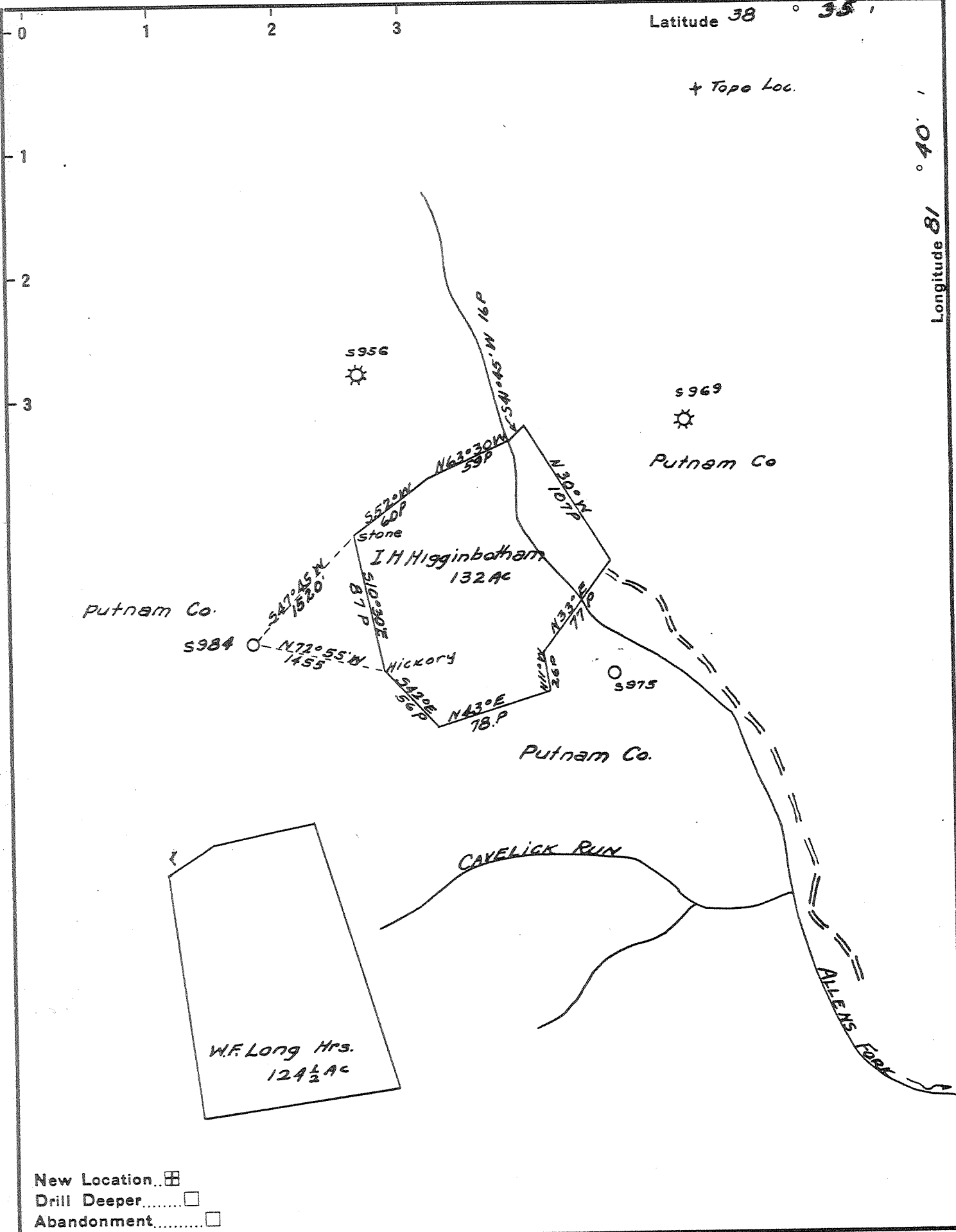
10,550'

Latitude 38° 35'

Longitude 81° 40'

3600'

+ Topo Loc.



- New Location
- Drill Deeper
- Abandonment

Cabot Oil & Gas Co. of WVa.
 P.O. Box 628 - Charleston, WVa. 25322
 Surface: Roy Snodgrass / Putnam #19

Tract _____ Acres 22,000 Lease No. 3-464
 Well (Farm) No. 19 Serial No. 984
 Elevation (Spirit Level) 926.0 GROUND
 Quadrangle KENNA S.W
 County KANAWHA District POCA
 Engineer Charles Sturm
 Engineer's Registration No. 975
 File No. _____ Drawing No. _____
 Date MAY 3 1941 Scale 1"=1320'

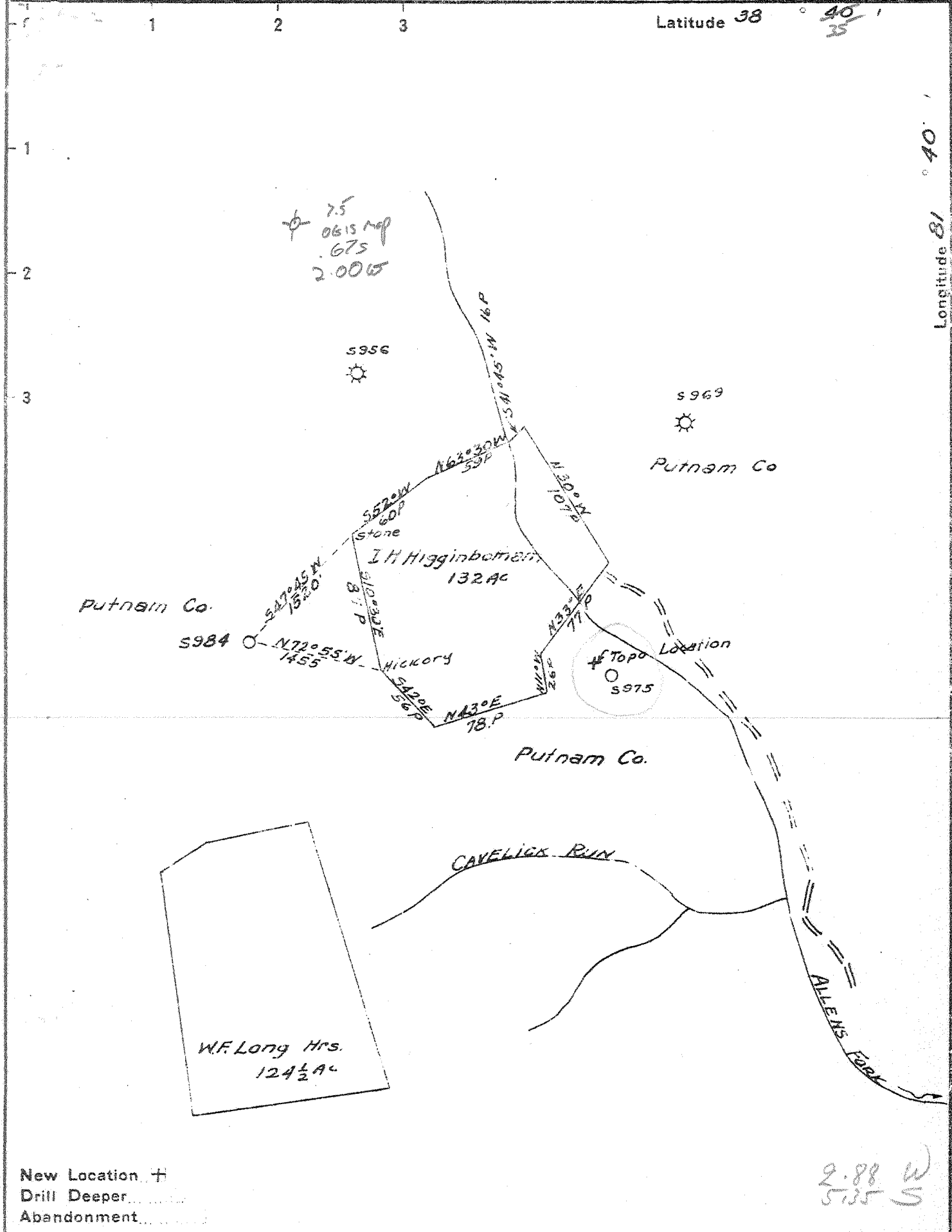
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. KAN-820-Frac.
039

+ 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. MAY 28 1985

- Denotes one inch spaces on border line of original tracing. 47-039

M



New Location +
 Drill Deeper.....
 Abandonment.....

2.88 W
 5.35 S

Company GODFREY L CABOT INC.
 Address 600 UNION BLDG. CHARLESTON WVA
 Farm THE PUTNAM Co.
 Tract _____ Acres _____ Lease No. 3-464
 Well (Farm) No. 19 Serial No. 284
 Elevation (Spirit Level) 926.0 GROUND
 Quadrangle KENNA S.W.
 County KANAWHA District POCA
 Engineer Charles Sturm
 Engineer's Registration No. 975
 File No. _____ Drawing No. _____
 Date MAY 3 1941 Scale 1" = 1320'

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

WELL LOCATION MAP
 FILE NO. KAN-820

+ 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.

Deep well

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
W E L L R E C O R D

Permit No. Kan-820
Kenna S V Quad.
Company
Address
Farm
Well No.
District
Commenced
Completed
Shot
Flow
Volume

Godfrey L. Cabot, Inc.
Charleston, W. Va.
The Putnam Company
19 Serial No. 984 Elev. 926.
Poca Kanawha County
June 1, 1941
August 23, 1941.
8-26-41 Depth 5116
20 Mins. After shot
6,637

Gas Well

Casing & Tubing
10 1/2 841 841
8-5/8 2192 -
7 5026 5026
2-3/8 5213 5175
Tubed & Shut in 9-1-41
Perf. top 5113
Perf. bot. 5121
Perf. top 5171
Perf. bot. 5177

Soil 0 22
Shale 22 120
Shale 120 171
Shale 171 303
Shale 303 320
Shale 320 385
Shale 385 407
Shale 407 412
Shale 412 456
Shale 456 495
Lime 495 500
Shale 500 524
Shale 524 605
Shale 605 623
Sand 623 658
Shale 658 677
Shale 677 715
Shale 715 735
Shale 735 740
Shale 740 775
Lime 775 790
Shale 790 835
Lime 835 846
Shale 846 885
Shale 885 896
Sand 896 964
Slate & Shells 964 1019
Lime 1019 1041
Shale 1041 1080
Slate & Shells 1080 1120
Lime 1120 1140
Slate 1140 1161
Sand 1161 1196
Shale 1196 1261
Sand 1261 1303
Slate 1303 1350
Sand 1350 1368
Slate 1368 1393
Shale 1393 1492
Salt Sand 1492 2010S 1615 400' at top
Big Lime 2010 2106
Shale 2106 2120
Lime & Sand 2120 2162
Slate 2162 2180
Lime 2180 2230
Slate & Shell 2230 2525
Brown Shale 2525 2535G/S 2535
Brown Sand 2535 2555
Shell & Slate 2555 3775
Brown Shale 3775 3827
Lime, Shell & Shale 3827 4034
Brown Shale 4034 4310
Gray Shale 4310 4742
Brown Shale 4742 4963
Black Shale 4963 5007
Corniferous Lime 5007 5094S.L. 5098

Oriskany Sand 5094 5137
Lime, Oriskany 5137 5140
Sand, Oriskany 5140 5162
Qty. Lime Holderberg 5162 5177S.L.
Total Depth 5177
Gauges in Oriskany Sand Before Shot
8-14 5098 377M
8-16 353M
5101 776M
5105 782M
8-17 5110 3,341M
5111 6,039M
8-18 5112 3,048M
5113 4,311M
5116 2,725M
5116 1,279M
5120 1,168M
5121 1,048M
8-22 5159 945M
8-23 5169 945M
5172 945M
5177 945M
Gauges in Oriskany After Shot
8-23 5177 945M Before Shot
8-26 5 Min. 7,394M
10 Min. 7,088M
15 Min. 6,639M
20 Min. 6,637M

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APR 24 1985



1) Date: August 23, 19 84
 2) Operator's Well No. Putnam #19
 3) API Well No. 47 039 0820 Frac
 State County Permit

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS DIVISION
 DEPT. OF MINES APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas X /
 B (If "Gas", Production X / Underground storage / Deep / Shallow X /)
- 5) LOCATION: Elevation: 926.0 Watershed:
 District: Poca County: Kanawha Quadrangle: Sissonville
- 6) WELL OPERATOR Cabot Oil & Gas Corp. of WV 7) DESIGNATED AGENT Robert E. Horrell
 Address P.O. Box 628 Address P.O. Box 628
Charleston, WV 25322 Charleston, WV 25322
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Rodney G. Dillon 9) DRILLING CONTRACTOR:
 Address P.O. Box Name UNKNOWN
Williamstown, WV 26187 375-3747 Address
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate X
 Plug off old formation X / Perforate new formation X /
 Other physical change in well (specify) Plug back Oriskany
- 11) GEOLOGICAL TARGET FORMATION, HURON SHALE
- 12) Estimated depth of completed well, 4500 feet
- 13) Approximate trata depths: Fresh, N/R feet; salt, feet.
- 14) Approximate coal seam depths: N/R Is coal being mined in the area? Yes / No X

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 AUG 26 1984
 OIL & GAS DIVISION
 DEPT. OF MINES

15) CASING AND TUBING PROGRAM WORKOVER

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS		
	Size	Grade	Weight per ft.	New	Used	For drilling		Left in well	Kinds	Sizes
Conductor										
Fresh water	10-3/4		36.75			EXISTING	841'	SHOE		
Coal	8-5/8		25.55			EXISTING	2192'	B.H. PACKER	Sizes	
Intermediate	7		24			EXISTING	5026'	B.H. PACKER		
Production									Depths set	
Tubing	2-3/8		3.75			TO BE PULLED	5175			
Liners									Perforations:	
	<u>SEE REVERSE FOR CONDITIONING</u>								Top	Bottom
	2-3/8					PROPOSED	4400'			

- (1). Set cement plug 5177-4975'. Gel hole 4980-4500'.
 (2). Set cement retainer @ 4500'. (3). Squeeze cement 7" csg. 4500-3700'.

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-039-0820Frac Date May 17 19 85

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
 Permit expires May 17, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>30</u> BLANKET	Agent: <u>LM</u>	Plat: <u>MH</u>	Casing: <u>MH</u>	Fee: <u>014-517</u>
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Margaret J. Hass
 Administrator, Office of Oil and Gas