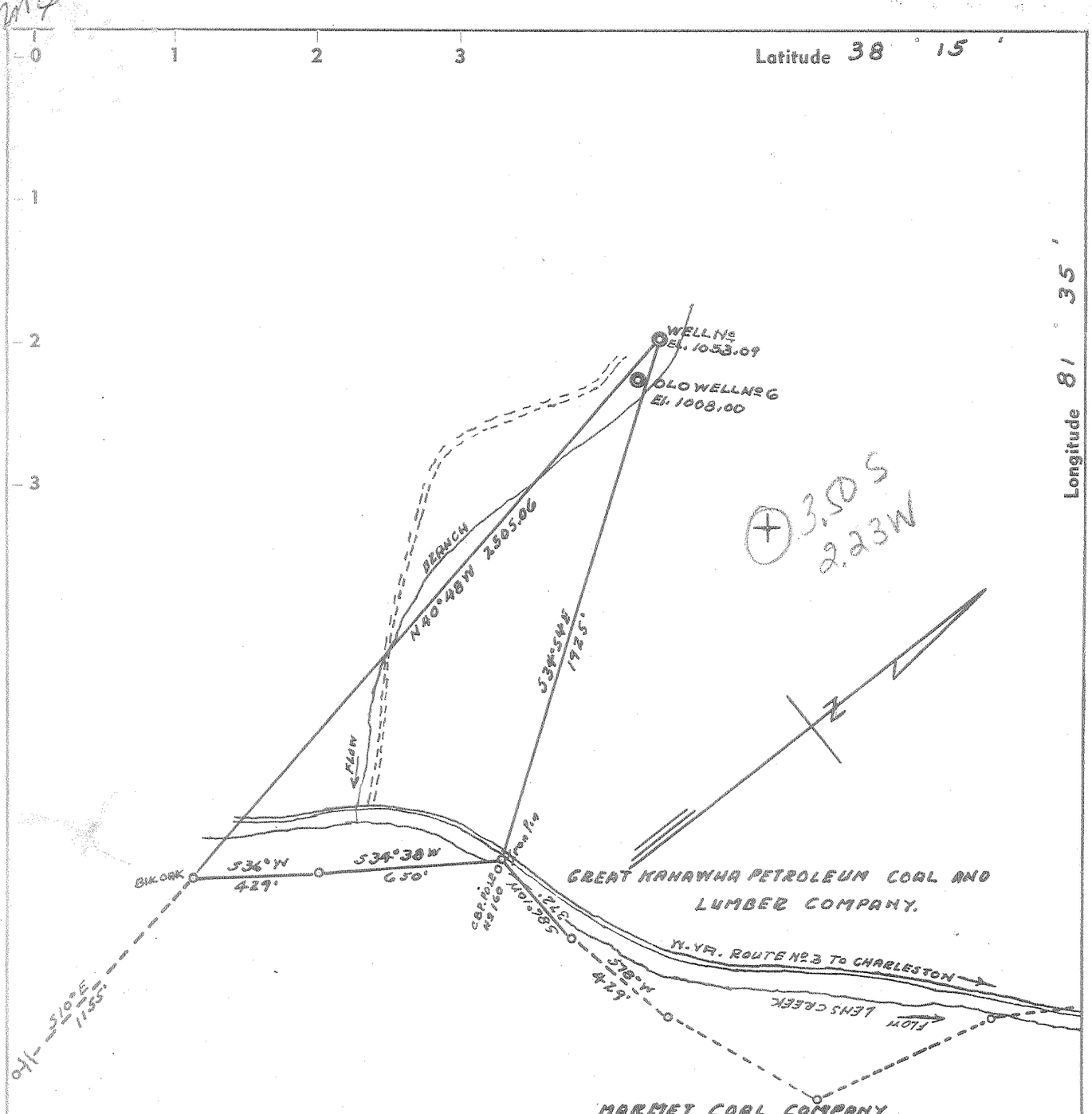
KAN-2058



ELEVATION FROM O.L.O. WELL N° 6 EL. 1008.00

SURVEY CONN. — 1" to 1000'

3.52 S
2.23 W

New Location . ☒
Drill Deeper . . . . ☐
Redrill . . . . . ☐
Abandonment . . . . . ☐

2C (K-5)

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.

Company PACE BOWER CONSTRUCTION COMPANY

Address ROOM 305 NELSON BUILDING, CHARLESTON, W. VA.

Farm GREAT KANAWHA PETROLEUM COAL & LUMBER COMPANY

Tract ____ Acres 2809 Lease No. ____

Well (Farm) No. (22) Serial No. ____

Elevation (Spirit Level) 1053.09

Quadrangle PETTONA — NC

County KANAWHA District LOUDON

Engineer Geo. H. Miller

Engineer's Registration No. 1892

File No. ____ Drawing No. ____

Date AUGUST 28 1965 Scale 1" = 500'

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

WELL LOCATION MAP

FILE NO KAN-2058

+ 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.

No Samples

Deep Well

Form OG-3

1-14-66 WB

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary [X]
Spudder [ ]
Cable Tools [ ]
Storage [ ]

WELL RECORD

Oil or Gas Well Gas (KIND)

Quadrangle Peytona
Permit No. Kan. 2058

Company Pace Power Construction Company
Address 305 Nelson Bldg., Charleston, W.Va.
Farm Great Kanawha Petroleum Coal & Lumber Acres 2809
Location (waters) Lens Creek 1048.98 K.B.
Well No. 22 Elev. 1040.98 G.L.
District London County Kanawha
The surface of tract is owned in fee by
Address
Mineral rights are owned by
Address
Drilling commenced 8/30/65
Drilling completed 9/21/65
Date Shot not shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume how gas natural - Newburg & Keefer Cu. Ft.
Rock Pressure lbs. hrs.
Oil None bbls., 1st 24 hrs.
WELL ACIDIZED See completion data
WELL FRACTURED See completion Data
RESULT AFTER TREATMENT 980 MCF = Newburg
ROCK PRESSURE AFTER TREATMENT 2000#
Fresh Water 65' Feet Salt Water Feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size	Ground Level Measurement		Kind of Packer
13 3/8(40#)	27	27	
9-5/8(32#)	1605.19	1605.19	
8¼ 7(23#)	5396	873	Depth set 5380
5⅜ 16 4-1/2(11.6#)	5668.45	5668.45	Perf. top
2 3/8(4.6)	5380	5380	Perf. bottom see completion data
Liners Used			Perf. top
			Perf. bottom

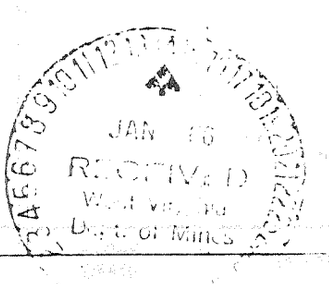
CASING CEMENTED	SIZE	No. Ft	Date
See completion data			

COAL WAS ENCOUNTERED AT FEET INCHES FEET INCHES
FEET INCHES FEET INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
LITHOLOGY BASED ON GAMMA LOG - ALL MEASUREMENTS FROM KELLY BUSHING							
Soil			0	6			
Sandstone			6	35			
Shale			35	84	Water	65'	Driller
Sandstone			84	94			
Shale			94	124	Coal?	120-125	Driller
Sandstone			124	127			
Shale			127	136			
Sandstone			136	143			
Shale			143	182			
Sandstone			182	202			
Shale			202	223			
Sandstone			223	226			
Shale			226	233			
Sandstone			233	283			
Shale			283	302			
Sandstone			302	339			
Shale			339	342			
Sandstone			342	383			
Shale			383	412			
Sandstone			412	427			
Shale			427	462			
Sandstone			462	465			
Shale			465	479			
Sandstone			479	490			
Shale			490	535			
Sandstone			535	547			
Shale			547	555			
Sandstone			555	591			

DRILLING DATA:

0-1615 Air and Foam
1615-5250 Air
5250-5404 Mud
5404-5675 Air



(over)

Deep Well

Formation	Color	Hard or Soft	Top 10	Bottom	Oil, Gas or Water	Depth Found	Remarks
Shale			591	597			
Sandstone			597	700			
Shale			700	724			
Sandstone			724	727			
Shale			727	766			
Sandstone			766	788			
Shale			788	810			
Sandstone			810	835			
Shale			835	878			
Sandstone			878	972			
Shale			972	986			
Sandstone			986	993			
Siltstone			993	1024			
Sandstone			1024	1041			
Siltstone and Shale			1041	1074			
Sandstone			1074	1090			
Shale			1090	1103			
Sandstone			1103	1117			
Shale			1117	1121			
Sandstone			1121	1167			
Shale			1167	1204			
Sandstone			1204	1252			
Shale			1252	1266			
Sandstone			1266	1274			
Shale			1274	1301			
Little Lime			1301	1378			
Big Lime			1378	1567			
Pawn			1567	1591			
Siltstone			1591	1615			
Shale			1615	2000			
Coffee Shale			2000	2013			
Bacon			2013	2015			
Shale			2015	4640			
Cherokee			4640	4738			
Oriskany			4738	4749			
Limestone, Dolomite, Anhydrite (Helderberg (Top))			4749	5411	H_2S Zone 5280-5310		
Newberry			5411	5429	Show Gas (Baroid Sniffer)		
Dolomite			5429	5550			
Limestone			5550	5604			
Keefer Sand			5604	5650	Show Gas (Baroid Sniffer)		
Shale			5650	5675			
T.D.			5675 (Driller & Logger)				

SEE ATTACHED COMPLETION DATA

Date January 12, 1966

APPROVED Pace-Beaver Construction Co., Owner

By G B Pace - President
(Title)

Robert W. Ritta

Kan. 2058

Kan-205

CHRONOLOGICAL ORDER OF EVENTS:

8/30/65 Commenced Drilling

8/30/65 Ran 27.00 Feet of 13-3/8" casing - cemented with 20 sacks of cement and one sack of calcium chloride

9/6/65 Ran 1605.49 feet of 9-5/8" casing with guide shoe and four centrauzers cemented with 50 sacks cement and 5 gallons Resiment.

9/14/65 Ran 5396 feet of 7" casing with guide shoe and 5 centraulizers cemented with 95 sacks of cement.

9/21/65 Completed Drilling - T. D. 5675

9/21/65 Logged Well (Schlumberger):

Gamma Ray - 1" and 5" - 50 to 2100; 4480-5674
Density - 1" and 5" - 5400 to 5674
Induction - 5" - 5400-5669

9/21/65 Ran 5668.45 feet of 4-1/2" casing with Float Shoe, Float Collar, and 6 Centralizers - Cemented with 45 sacks cement. (Dowell)

9/24/65 Perforated 4-1/2" casing with 15- 3-5/8" Selecto Jets. (Birdwell): 9 Holes 5618-5626 (Schlumberger Meas)
6 Holes 5641-5645 " "

9/25/65 Fractured Keefer (Dowell):

Props & Liquids Injected:

500 Gallons mud acid
13,000 # - 20/40 Sand
557 BBLS. Water
80,000 Scf. of Nitrogen

Treating Data:

Breakdown Pressure - 3,000#
Average Pressure - 2,591#
Average Liquid Injection Rate - 11.4
Adjusted Injection Rate (Solids) - 11.8

Results:

Show Gas before Frac
Slight increase after frac.

9/27/65 Set Plug with Calceal at 5490'

9/27/65 Perforated Newburg (Birdwell):
2 Shots/Foot 5414-16 (Schlumberger Meas.)
4 Shots/Foot 5419-23 " "

9/27/65 Fractured Newburg (Dowell):

Props & Liquids Injected:

500 gallons Mud Acid
13,000# - 20/40 Sand
1,500# - 12/20 Glass Beads
611 BBLS. Water
115,000 SCF. of Nitrogen

Treating Date:

Breakdown Pressure - 4900#
Average Pressure - 4862#
Average Liquid Injection Rate - 10.8
Adjusted Injection Rate (Solids) - 11.2

Results:

Show Gas before Frac (Less 50 MCF)
680 MCF after Frac.

DEEP WELL

Kan-2058

11/12/65 Acidized Newburg Through 2-3/8" Tubing (No Packer) set at 5417 (Dowell):

Liquids Injected:

1,000 Gallons Mud Acid
750 Gallons Dowell X (HCL-Acid)

Results:

Before Acidizing 680 MCF
After Acidizing 980 MCF

Ran 5380' Feet of 2-3/8" Tubing with Packer at 5380

FINAL OPEN FLOW - 980 MCF and 2,000# R.P.