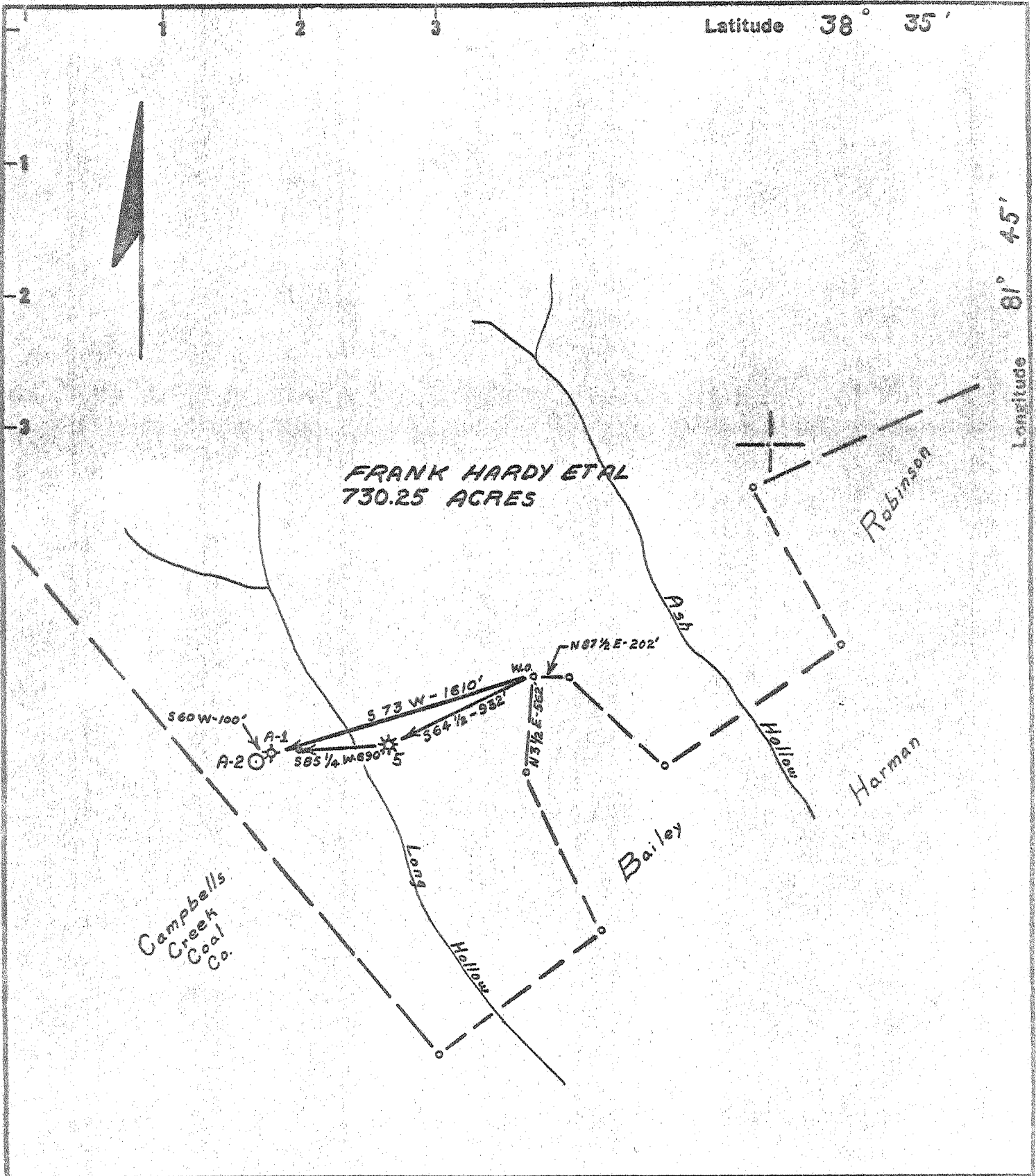


6/17/69



New Location   
 Drill Deeper   
 Abandonment   
 Dated 7-3-69

Minimum Error of Closure 1' IN 200'  
 Source of Elevation WELL No. 5 - 828.7'

"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."

APPALACHIAN EXPLORATION  
 Company DEVELOPMENT, INC.  
 Address CHARLESTON, W. VA.  
 Farm FRANK HARDY ET AL  
 Tract \_\_\_\_\_ Acres 730.25 Lease No. \_\_\_\_\_  
 Well (Farm) No. A-2 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 942.9  
 Quadrangle WINFIELD SE  
 County PUTNAM District POCA  
 Engineer CHET WATERMAN  
 Engineer's Registration No. 3788  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 6-11-69 Scale 1" = 800'

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

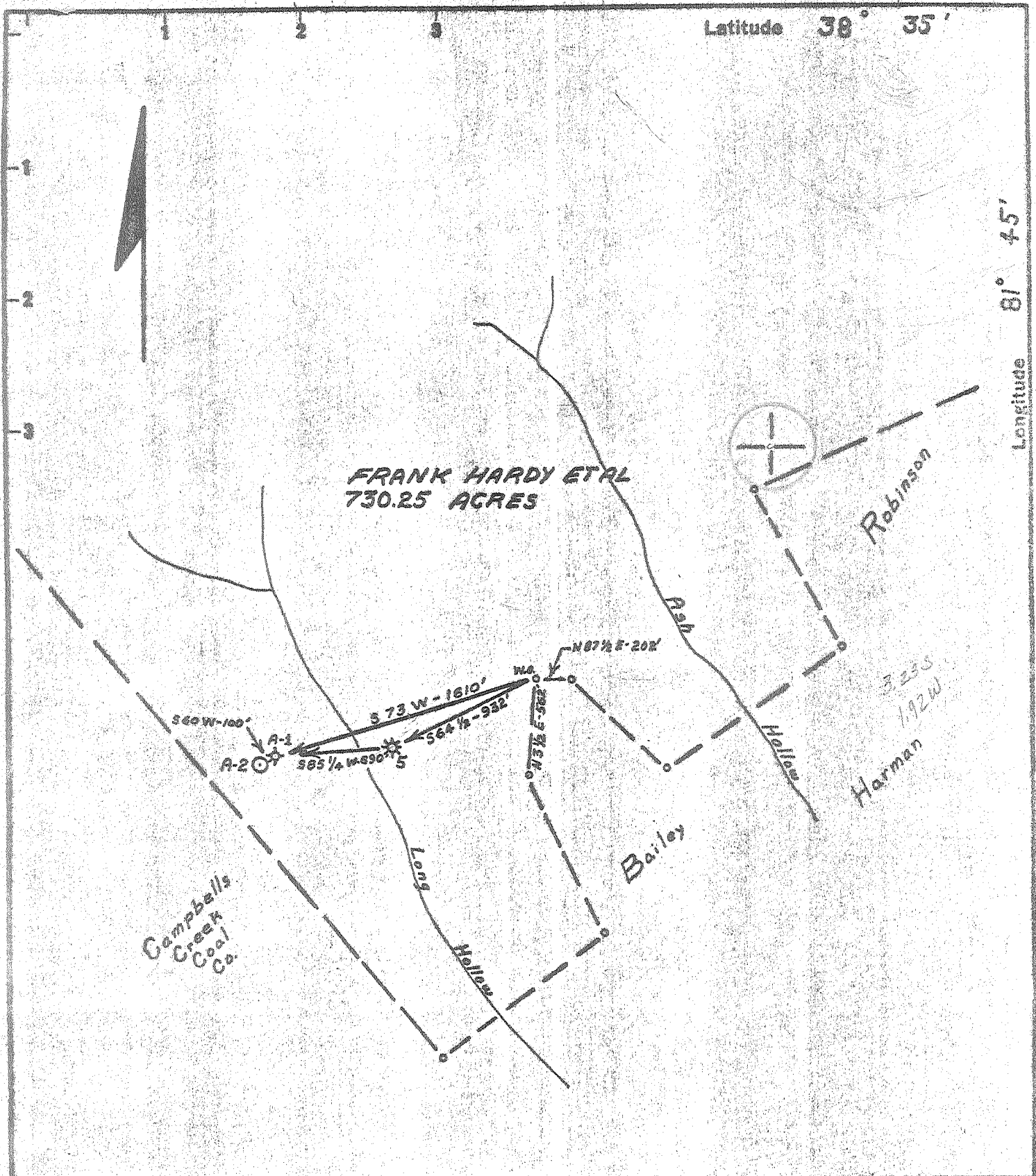
WELL LOCATION MAP  
 FILE NO. PUT-758-P

+ 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.

Deep Well (Newburg) JUL 15 1969

6/17/69 CEM



**FRANK HARDY ET AL  
730.25 ACRES**

Latitude **38° 35'**

Longitude **81° 45'**

- New Location
- Drill Deeper
- Abandonment

Minimum Error of Closure 1' IN 200'  
Source of Elevation WELL No. 5 - 828.7'

"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."

**APPALACHIAN EXPLORATION & DEVELOPMENT, INC.**  
 Company CHARLESTON, W. VA.  
 Address FRANK HARDY ET AL  
 Farm Tract \_\_\_\_\_ Acres 730.25 Lease No. \_\_\_\_\_  
 Well (Farm) No. A-2 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 942.9  
 Quadrangle WINFIELD SE  
 County POTOMAC District POCA  
 Engineer CHET WATERMAN  
 Engineer's Registration No. 3788  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 6-11-69 Scale 1" = 800'

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

**WELL LOCATION MAP**  
 FILE NO. PUT-758

⊕ 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*

6-0 Sissonville (Elk-Poca) 192

JUN 28 1969  
 (Newburg)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS WELLS DIVISION 7

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle Winfield  
Permit No. Putnam - 758

WELL RECORD

Oil or Gas Well Dry  
(KIND)

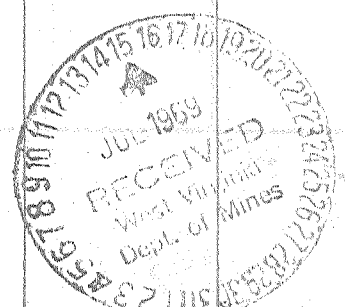
Company Appalachian Exploration & Development, Inc.  
Address P.O. Box 628, Charleston, W.Va. 25322  
Farm Franl. A. Hardy Acres 730.25  
Location (waters) Hizer  
Well No. A-2 Elev. 942.9  
District Poca County Putnam  
The surface of tract is owned in fee by Lovell Slater  
Rt. 1, Box 55 Address Poca, West Virginia  
Mineral rights are owned by Frank A. Hardy, c/o Kanawha  
Valley Bank, Agent Address Charleston, W.Va.  
Drilling commenced June 16, 1969  
Drilling completed July 2, 1969  
Date Shot Not shot From \_\_\_\_\_ To \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13-3/8	30'	30'	
10			Size of
8 1/2 X 5/8	2200'	2200'	
6 1/2			Depth set
5 1/2 X 1/2	5715'	1615'	
4 1/2			Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

With \_\_\_\_\_  
Open Flow 10ths Water in \_\_\_\_\_ Inch  
10ths Merc. in \_\_\_\_\_ Inch  
Volume Dry Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
WELL ACIDIZED (DETAILS) None  
WELL FRACTURED (DETAILS) None  
RESULT AFTER TREATMENT (Initial open Flow or bbls.) \_\_\_\_\_  
ROCK PRESSURE AFTER TREATMENT \_\_\_\_\_ HOURS  
Fresh Water 120 Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand None Depth \_\_\_\_\_

Attach copy of cementing record. (See back of sheet.)  
CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
Amount of cement used (bags) \_\_\_\_\_  
Name of Service Co. \_\_\_\_\_  
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand			0	40			
Shale			40	120	Fresh water	120	
Sand & shale			120	335			
Shale & red rock			335	470			
Sand			470	1090			
Sand & shale			1090	1415			
Shale			1415	1575			
Sand			1575	1885	Salt water	1775	
Limestone			1885	2095			
Sand			2095	2139			
Shale			2139	4920			
Limestone			4920	4995	5740	5740	
Sand <u>Oriskany</u>			4995	5030	4995	943	Oriskany
Limestone			5030	5740			
Sand (Newburg)			5740	5760	745	5797	Newburg
Limestone <u>McKenzie</u>			5760	5785			



Formation	Color	Hard or Soft	Top 7	Bottom	Oil, Gas or Water	Depth Found	Remarks
<u>PIPE AND CEMENT RECORD</u>							
6-16-69	Set 13-3/8" @ 40'	cemented with	25 sacks				
6-24-69	Set 8-5/8" @ 2199'	cemented with	600 sacks				
6-29-69	Set 5-1/2" @ 5715'	cemented with	200 sacks				

Date July 14, 19 69  
 APPALACHIAN EXPLORATION & DEVELOPMENT, INC.  
 APPROVED *Jama Salas*, Owner  
 By Field Engineer (Title)