

BERLAND AND ALLEGHENY GAS COMPANY  
Company

Division # 4

Record of well No. 520 on James F. Hamilton Farm 350 Acres

Buckhannon Field # 8 ~~District~~ Garrett County Maryland State

Rig Commenced January, 31 1955. Completed February, 8 1955

Drilling Commenced February, 12 1955. Completed May, 24 1955

Contractor Union Drilling Company Inc. Address Washington, Pennsylvania

Driller's Name Royal Varner &amp; Alfred Kahlbaugh

## CASING AND TUBING RECORD

	Conductor	13"	10"	8 1/4"	7"	6 5/8"	5 3/16"	4"	3"		
Used in Drig.	-	92' 10"	508' 6"	1796' 8"	3694' 8"						Threads On
Left in well	-	92' 10"	508' 6"	1796' 8"	3694' 8"					"	"

PACKER RECORD None

SHOOTING RECORD

Size	Depth Set	Type Packer	Date	<del>Conductor</del>	Amount	DEPTH		Volume Before Cu. Ft.	Volume After Cu. Ft.
						Top	Bottom		
			6-9-55	Hydrafrac	(See Remarks)				

## VOLUME AND PRESSURE

Date	Reading in Inches	Liquid	Size Orifice	Volume	Sand	PRESSURE IN MIN.					24 Hour R. P.	Max. R. P.	Hours
						1	5	10	30	60			
6/20/55	40/10	M	4"	4,425,200	Oriskany	60	240					710	48

TOTAL INITIAL OPEN FLOW

4,425,200

CUBIC FEET PER 24 HOURS

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Clay	0	20	20	Water at 50'. 3 Bailers per. hr.
Slate	20	150	130	Ran 92'10" of 13" Casing.
Slate & Shells	150	409	259	
Gritty Lime	409	459	50	
Slate & Shells	459	625	166	Ran 504'9" of 10" Casing.
Lime	625	801	186	
Slate & Shells	801	1612	811	
Lime	1612	1650	38	
Slate & Shells	1650	1710	60	
Lime	1710	1725	15	
Slate & Shells	1725	2120	405	Ran 1782'5" of 8 5/8" Casing.
Lime	2120	2200	80	
Slate & Shells	2200	2471	271	Gas Pays 3759-3789.
Brown Shale	2471	2540	69	Gamma Ray Ran 4/26/55. Shows feet at 3803.
Slate & Shells	2540	2672	132	Casing at 3674. Bottom Drilled 3820. Filled back to 3802'. Derrick floor 6' above ground.
Brown Shale	2672	2705	33	Well Fractured 5/18/55. 4000 gal. Kerosene.
Slate & Shells	2705	3063	358	38/10 W-3" before fracture. Form broke at 1800#, fell off to 1500#. Petro frac injected at 3500#.
Broken Lime	3063	3080	17	
Slate & Shells	3080	3152	72	Well acidized 6/9/55 W/2000 gal. HCL. acid. Preceded by 4 1/2 bbl. of Kerosene. Packer set at 3639'. Tail pipe 12 1/2'. putting bottom of
Tulley Lime	3152	3165	13	

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Slate & Shells	3080	3152	72	1800#, fell off to 1500#. Petro frac injected
Tulley Lime	3152	3165	13	at 3500#.
Slate & Shells	3165	3527	362	Well acidized 6/9/55 W/2000 gal. HCL. acid.
Lime	3527	3570	43	Preceded by 4 1/2 bbl. of Kerosene. Packer set
Slate & Shells	3570	3639	69	at 3639'. Tail pipe 124'. putting bottom of
Brown Break	3639	3641	2	Tubing at 3755'. Took acid from 300#-1000#
Onedago Lime	3641	3669	28	well opened 1/2 hr. after treatment. Failed to
Chert Sand	3669	3740	71	flow. Ran swab to 1200', met acid. On 2 nd.
Shale, (Break)	3740	3658	18	run met acid at 500'. Began flowing.
Oriskany Sand	3758	3802	44	TOTAL DEPTH: 3820. before filling back to 3802

Examined above information and measurements and found to be correct by *Union Drilling Inc. by John Williams* Contractor

Examined and Approved by *John E. Lane* Field Superintendent

NOTE—The above blank must be filled out carefully by the contractor, with a complete and accurate record of the well, and accompany, when presented for payment of the fee for drilling. All formations and known sands must be given by their proper name, with steel line measurements, and under the head of "Remarks" must be recorded in sand and at what depth Oil, Gas or water was found, the quantity of same, the quality of the sand, and thickness of pay.

State of Maryland  
DEPARTMENT OF GEOLOGY, MINES AND WATER RESOURCES  
The Johns Hopkins University  
Baltimore 18, Maryland

APPLICATION FOR PERMIT TO DRILL OIL OR GAS WELL  
(Applications must be submitted in triplicate)

OWNER James F. Hamilton  
STREET or R.F.D. Route 2  
POST OFFICE Oakland, Maryland

LOCATION OF WELL  
COUNTY Garrett  
NEAREST POSTOFFICE Oakland  
Distance from Post Office 7 1/2 miles  
Direction from Post Office Southwest

PERMIT TO DRILL WELL  
NOT TO BE FILLED IN BY APPLICANT

PERMIT NO. 11 (Eleven)

APPROXIMATE DEPTH OF WELL (feet) 3860  
METHOD OF DRILLING Cable Tools

The permit is herewith granted subject to the conditions stipulated.

DEEPEST GEOLOGIC FORMATION  
WELL WILL BE DRILLED Oriskany

*J. Robert Simpson*  
Director

DISTANCE OF WELL LOCATION TO NEAREST BUILDING (feet) 2200' (Adjoining premises)  
3650' (On leased premises)

Date January 6, 1955

NUMBER OF SHIFTS PER DAY \_\_\_\_\_

Special conditions that may apply:

LICENSED DRILLER IN CREW OF EACH SHIFT	
NAME	ADDRESS

These names may be supplied later but before drilling begins

The names and post office addresses of the owners of the tracts of land included on the plat or map accompanying the application are to be given below.

- Albert W. Snyder, R. D. #2, Oakland, Md.
- Harvey W. Wolf, R. D. #2, Oakland, Md.
- James F. Hamilton, R. D. #2, Oakland, Md.
- Delia I. Wolfe, R. D. #2, Oakland, Md.
- H. C. Selders, R. D. #2, Oakland, Md.
- Amos C. Martin, R. D. #2, Oakland, Md.
- L. B. Shaffer, R. D. #2, Oakland, Md.
- Adam J. Lucas, R. D. #2, Oakland, Md.
- Ray C. Arnold, R. D. #2, Oakland, Md.

NOTE

A BOND FOR \$2,500 PAYABLE TO THE STATE OF MARYLAND MUST ACCOMPANY THE APPLICATION  
THIS APPLICATION FORM MUST BE FILLED OUT WITH TYPEWRITER OR IN BLOCK LETTERS