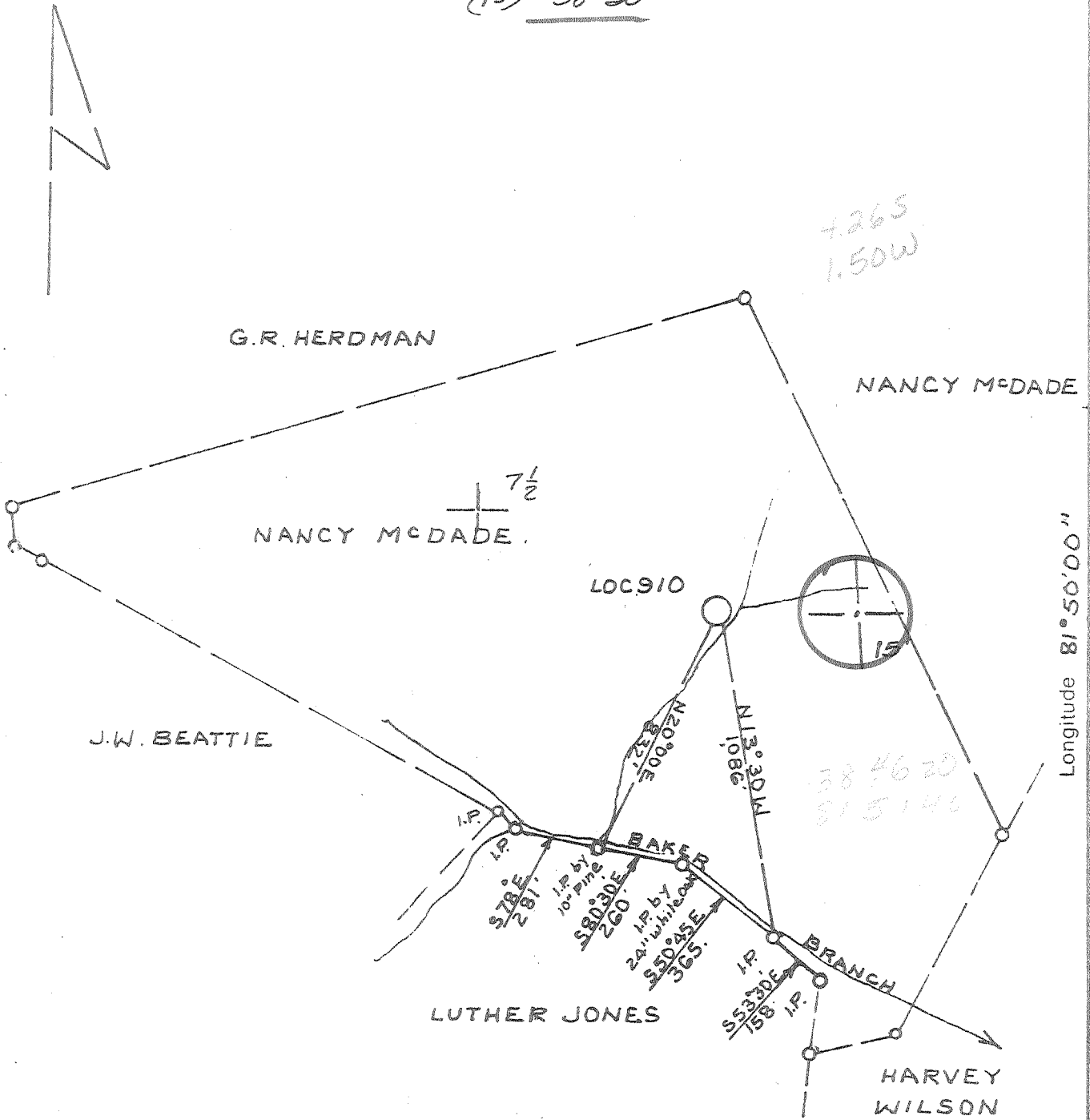


Latitude 38°47'30"
(15') 38°50'

7800'

7200'
Longitude 81°50'00"



Source of elevation road forks
of Route 87 and Kapp Ridge road
Elev. 984.00'

- New Location
- Storage
- Drill Deeper
- Abandonment
- Re-Drill/Fracture

"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 the rules and regulations of the oil and gas section of the mining laws of West Virginia.
Minimum degree of accuracy is one part in 200.
Land Surveyors License No. 92 Legg Star Rt Box 549-B
Sissonville WVA 25320

Signed C. J. Tolley Jr.

Company DEVON CORP.
 Address P.O. BOX 1433 CHARLESTON WV
 Farm NANCY McDADE
 Lease _____ Acres 130
 Well Farm No. 1 Ser. No. 910
 Elevation - Spirit Level 767.0' SC
 Quadrangle COTTAGEVILLE Ravenswood 15'
 Township or District UNION
 County MASON
 Sec., Lot, Qr. _____ T _____ R _____
 Coordinates _____
 File No. _____ Dwg. No. _____
 Date 5-24-78 Scale 1" = 500'

WELL LOCATION MAP
THE STATE OF WEST VIRGINIA

(+) Denotes Values Of Well On United States Topographic Maps

MAS - 154

Scale 15' 7 1/2'

47-053

JUN 7 1978

6-6 Providence (359)

deep well



RECEIVED
SEP - 4 1979
47-053-0154

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD 33

Quadrangle Cottageville

Permit No. MAS-154

Rotary XXX Oil _____
Cable _____ Gas XX
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Company Devon Corporation
Address Box 1433, Charleston, W. Va.
Farm Nancy McDade Acres 130
Location (waters) Baker Branch
Well No. 910 Elev. 767
District Union County Mason
The surface of tract is owned in fee by _____
Nancy McDade, Rt. 1,
Address Evans, W. Va. 25241
Mineral rights are owned by Same as above
Address _____
Drilling Commenced December 13, 1978
Drilling Completed December 20, 1978
Initial open flow 5 MCFD ~~XXXXXX~~ bbls.
Final production 165 MCFD ~~XXXXXX~~ per day _____ bbls.
Well open 3 hrs. before test 640 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8	200	200	100 sax=to surface
8 5/8			
7	2338	2338	75 sax=625'
5 1/2			
4 1/2		4606	200 sax=2400'
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record. 165MCF

Perforated 4 1/2" casing 4210' to 4405' with 23 shots
Fractured Marcellus with 857 BBLS water and 60,000# sand
Set drillable bridge plug in 4 1/2" casing at 4,000'
Perforated 4 1/2" casing 3690' to 3888' with 26 shots
Fractured Br. Shale with 309 BBLS water & 60,000# sand.

Coal was encountered at None reported Feet _____ Inches _____
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Brown Shale & Marcellus Depth 3690-3888' & 4210-4405'
Dev Sh *MRC*

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Shale			0	15		
Sand			15	38		
Shale			38	142		
Sand			142	163		
Shale			163	300		
Broken Sand			300	382		
Shale			382	720		
Sand			720	733		
Shale			733	825		
Sand			825	840		
Shale			840	858		
Sand			858	892		
Shale			892	1004		
Sand			1004	1077		
Shale			1077	1158		
Sand			1158	1270		
Shale			1270	1315		
Sand			1315	1335		
Shale			1335	1358		
Sand			1358	1398		
Shale			1398	1435		
Sand			1435	1520		
Shale			1520	1580		
Maxon Sand			1580	1674		

(over)

* Indicates Electric Log tops in the remarks section.

47-053-0154

Formation	Color	Hard or Soft	Top Feet 33	Bottom Feet	Oil, Gas or Water	* Remarks
Big Lime			1674	1806		
Shale			1806	1830		
Injun Sand			1830	1960		
Shale			1960	2298		
Coffee Shale			2298	2312		
Berea Sand			2312	2326		
Shale			2326	3466		
Br. Shale			3466	3891		
Shale			3891	4277		
Marcellus Shale			4277	4408		
Onondaga L. S.			4408	4493		
Oriskany Sand			4493	4518		
Helderberg L. S.			4518	4650		
Log Total Depth				4650'		

Date January 8, 1979

APPROVED A. C. Gause Owner
 By A. C. Gause District Geologist
 (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

MAY 31 1978

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE May 8, 1978

Surface Owner Nancy McDade, et al
Address Rt. 1, Evans, W. Va. 25241
Mineral Owner Nancy McDade, et al
Address Rt. 1, Evans, WV 25241
Coal Owner Same as above
Address _____
Coal Operator Not Operated
Address _____

Company DEVON CORPORATION
Address Box 1433, Charleston, W. Va.
Farm Nancy McDade Acres 130 ac
Location (waters) Baker Branch
Well No. 910 Elevation 767
District Union County Mason
Quadrangle Cottageville

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 10-1-78

INSPECTOR
TO BE NOTIFIED Kenneth Butcher
ADDRESS RFD # 1, Barboursville, W.Va.
PHONE 736-4885

[Signature]
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated Dec. 22, 1973 by Nancy McDade, et al made to Devon & Eason and recorded on the _____ day of _____ 19____, in Mason County, Book 38 Page 4

XXX NEW WELL _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE
_____ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address
of
Well Operator

Very truly yours,
(Sign Name) A. C. Youse
A. C. Youse, ^{Well Operator} District Geologist
PO Box 1433
Street
Charleston,
City or Town
West Virginia 25325
State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

MAS-154

PERMIT NUMBER

47-053

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO XXX DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME FWA Drilling Co. NAME Bill Endicott
 ADDRESS Box 448, Elkview, W. Va. ADDRESS Box 1433, Charleston, W. Va.
 TELEPHONE 965-3379 TELEPHONE 342-3171
 ESTIMATED DEPTH OF COMPLETED WELL: 4625 ROTARY XXX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 TYPE OF WELL: OIL _____ GAS XXX COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8	200	200	100 sax=to surface
8 - 5/8			
7	2375	2375	75 sax=625'
5 1/2			
4 1/2		4625	150 sax=1800'
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS None anticipated
 IS COAL BEING MINED IN THE AREA? No BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title