



Fracture.....
 New Location.....
 Drill Deeper.....
 Abandonment.....

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.

Signed: W. H. H. No. 3
 Squares: N S E W

Map No. _____

Company Justin M. Henderson
 Address West Union, West Va.
 Farm Justin M. Henderson
 Tract Acres Part 3166 Lease No. _____
 Well (Farm) No. Squirrel 1 Serial No. _____
 Elevation (Spirit Level) 978 NE
 Quadrangle Oxford 7 1/2, Holbrook 15'
 County Doddridge District West Union
 Engineer W. H. H. No. 3
 Engineer's Registration No. 1227 665 200
 File No. _____ Drawing No. _____
 Date June 10, 1978 Scale 1" = 400' = 660'

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

WELL LOCATION MAP
 FILE NO. DODD-2189

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000 or 62,500, latitude and longitude lines being represented by border lines as shown.

— Denotes one inch spaces on border line of original tracing.

AUG 7 1978
 47-017



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STATE OF WEST VIRGINIA JAN 2 1979
DEPARTMENT OF MINES & GAS DIVISION
DEPT. OF MINES
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES
Rotary _____ Oil _____
Cable _____ Gas
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

WELL RECORD

Quadrangle Holbrook
Permit No. Doddridge 2189 (47-017)
47-017

Company <u>Justin M. Henderson</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>108 Wood St., West Union, WV</u>	Size			
Farm <u>Leeman Maxwell lease Acres 3164</u>	20-16			
Location (waters) <u>Bluestone Creek</u>	Cond.			
Well No. <u>Squirrel Well</u> Elev. <u>978</u>	13-10"	40'	40'	None
District <u>Southwest</u> County <u>Doddridge</u>	9 5/8			
The surface of tract is owned in fee by <u>Justin M. Henderson</u>	8 5/8	719	719	210 CFT
Address <u>Same</u>				
Mineral rights are owned by <u>Justin M. Henderson</u>	5 1/2			
Address <u>Same</u> et al	4 1/2	5079	5079	380 CFT
Drilling Commenced <u>10/4/78</u>	3			
Drilling Completed <u>10/11/78</u>	2			
Initial open flow <u>2,000,000</u> cu. ft. _____ bbls.	Liners Used			
Final production <u>2,000,000</u> cu. ft. per day _____ bbls.				
Well open <u>12</u> hrs. before test <u>1675# RP.</u>				

Well treatment details: Attach copy of cementing record. See attached
Well hydrofractured by Dowell well on 10/26/78.

1st stg. Alexander	Total Fluid	745 bbl.	Sand	20000# 80/100; 40000# 20/40
2nd stg. Benson	"	535 bbl.	"	15000# 80/100; 30000# 20/40
3rd stg. Sheffield	"	410 bbl.	"	10000# 80/100; 20000# 20/40
4th stg. Warren	"	675 bbl.	"	25000# 80/100; 30000# 20/40

Coal was encountered at None Feet _____ Inches _____
Fresh water 1/2" stream Feet 90' Salt Water _____ Feet _____
Producing Sand Alexander, Benson, Sheffield, Warren Depth _____

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay, sand & shale			0	1500		
Big Lime			1500	1670		
Big Injun			1670	1730		
Sand & shale			1730	1870		
Weir			1870	2000		
Sand & shale			2000	2299		
Gordon			2299	2315		
Sand & shale			2315	2956		
Warren			2956	3080	Gas	
Sand & shale			3080	3720		
Sheffield			3720	3722	Gas	
Sand & shale			3722	4582		
Benson			4582	4586	Gas	
Sand & shale			4586	4874		
Alexander			4874	4933		
Sand & shale			4933	T.D.		

* Indicates Electric Log tops in the remarks section.

4933
4586
347 EXPL FT



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

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JUL 18 1978

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE 7/6/78
Company Justin M. Henderson Oil & Gas
Address 108 Wood St., West Union, WV
Farm J. M. Henderson Acres 1607
Location (waters) Bluestone Creek
Well No. Squirrel No. 1 Elevation 978
District Southwest County Doddridge
Quadrangle Holbrook

Surface Owner Justin M. Henderson
Address 108 Wood St., West Union, WV
Mineral Owner Justin M. Henderson et al.
Address 108 Wood St., West Union, WV
Coal Owner No coal in this area
Address _____
Coal Operator No coal in this area
Address _____

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 11-21-78.

INSPECTOR
TO BE NOTIFIED Paul Garrett
ADDRESS Clarksburg, WV
PHONE 622-3871

[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 as of July 1 1978 by Justin M. Henderson et al. & Carnegie Natural Gas Company made to Justin M. Henderson and recorded on the _____ day of _____ 19____, in _____ County, Book _____ Page _____ (to be recorded)

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 NA day NA 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

Very truly yours,
(Sign Name) Justin M. Henderson
Well Operator
Address of Well Operator
108 Wood St. Street
West Union City or Town
WV 26456
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.

BOND DRILL

DOD-2189
47-017

Lawson

ALL INFORMATION WILL BE SUPPLIED ON 06-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME S. W. Jack Drilling Company NAME Justin M. Henderson
 ADDRESS P. O. Box 754, Indiana, Pa., 15701 ADDRESS 108 Wood St., West Union,
 TELEPHONE 412-463-9191 WV, 26456 TELEPHONE 304-873-1441
 ESTIMATED DEPTH OF COMPLETED WELL: 5250 ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Second Alexander
 TYPE OF WELL: OIL _____ GAS _____ COMB. X STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT (LBS) UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10	160	160	
9 - 5/8			
8 - 5/8	1600	1600	
7			
5 1/2			
4 1/2	5250	5250	
3			
2			Perf. Top
Liners			Perf. Bottom
			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 160 FEET SALT WATER 1600 FEET
 APPROXIMATE COAL DEPTHS No coal in this area
 IS COAL BEING MINED IN THE AREA? No BY WHOM? NA

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.

No coal

For Coal Company

Official Title