



- Fracture.....
- Redrill.....
- New Location.
- Drill Deeper.....
- Abandonment.....

T. DOUGLESS

Source of Elevation U.S. ROADS & 1/4 MI. NW (714)

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.

Minimum accuracy, one part in

Company DURAN & ASSOCIATED, INC.
 Address PITTSBURGH, PA.
 Farm KEY MARK
 Tract _____ Acres 100 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 971' NC
 Quadrangle BIG ISAAC, VA DIS 15
 County DELRIDGE District GREEN DRIFTER
 Engineer Walter H. ...
 Engineer's Registration No. 7411
 File No. _____ Drawing No. 12-13-76
 Date 12-13-76 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. 47-017-2357

+ 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.

APR 10 1979



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD 4

Quadrangle Big Issac
Permit No. 47-017-2357

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

Company Doran & Associates, Inc.
Address 728 Washington Rd. Pgh; PA 15228
Farm Okey Clark #1 Acres 100
Location (waters) Greenbrier Creek
Well No. 1 Elev. 971
District Greenbrier County Doddridge
The surface of tract is owned in fee by Okey & Clara B. Clark
Address Rte #1, Salem, WV 26426
Mineral rights are owned by Same as above
Address _____
Drilling Commenced 7/29/79
Drilling Completed 8/5/79
Initial open flow _____ m cu. ft. _____ bbls.
Final production 733 M cu. ft. per day _____ bbls.
Well open 72 hrs. before test 1675# RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 15 1/8 11 3/4"	29'	29'	
9 5/8			
8 5/8	958'	958'	190 Sks.
7			
5 1/2			
4 1/2	5409'	5409'	400 Sks.
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record. Stimulation Record

Date:	Interval:	From	To	Amt. Fluid	Amt. Sand
8/28/79		5255	5331	545 BBLs.	55,000 #
8/28/79		4955	4960	390 BBLs.	35,000 #

Coal was encountered at 148, 265, 370, 690 Feet _____ Inches
Fresh water 45 Feet _____ Salt Water _____ Feet _____
Producing Sand Alexander Sand, Benson Sand Depth 5255, 4955

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Substructure			0	20		
Sand			20	105		
Sandy Shale			105	140		
Sand			140	148		
Coal			148	150		
Sand			150	265		
Coal			265	267		
Shale & Red Rock			267	320		
Sand			320	370		
Coal			370	373		
Sandy Shale			373	420		
Sand			420	440		
Sandy Shale			440	465		
Sand			465	530		
Sandy Shale			530	600		
Sand			600	680		
Shale			680	690		
Coal			690	693		
Sandy Shale			693	910		
Sand			910	985		
Sandy Shale			985	1575		
Sand			1575	1600		
Sandy Shale			1600	1670		
Sand			1670	1775		

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet ⁴	Bottom Feet	Oil Gas or Water	Remarks
Sandy Shale			1775	1980		
Little Lime			-1980	1995		
Sandy Shale			1995	2020		
Big Lime			-2020	2090		
and			2090	2165		
Shale			2165	2255		
and			2255	2335		
Sandy Shale			2335	2430		
and			2430	2515		
Sandy Shale			2515	2940		
and			2940	2955		
Sandy Shale			2955	3365		
and			3365	3475		
Sandy Shale			3475	3500		
and			3500	3555		
Sandy Shale			3555	4965	Show @ 3635'	
and			4965	4980		
Sandy Shale			4980	5290		
and			5290	5315		
Sandy Shale <i>BRAD.</i>			5315	5650		
Drillers T.D.				5650		
Big Injun			2048	2138		
South Sand			2768	2782		
Speechley			3358	3400		
Bradford			4434	4466		
Riley			4824	4834		
Benson			-4950	4962		
Alexander			5280	5332		
Loggers T.D.				5651		

Date Dec. 3 1979

APPROVED Donald R. Langley Owner

By Vice President

(T.16)



RECEIVED

FEB 28 1979

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 11-15-79

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

Robert R. [Signature]
Deputy Director - Oil & Gas Division

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 December 19, 1978

Surface Owner Okey & Clara B. Clark

Company Doran & Associates, Inc.

Address Rt. #1, Salem, WVA 26426

Address 728 Washington Road, Pgh., PA 15228

Mineral Owner Okey & Clara B. Clark

Farm Okey Clark #1 Acres 100

Address Rt. #1, Salem, WVA 26426

Location (waters) Greenbrier Creek

Coal Owner Willis G. Tetrick, Jr.

Well No. 1 Elevation 971'

Address Union Bank Building

District Greenbrier County Doddridge

Coal Operator Clarksburg, WVA 26301

Quadrangle Big Isaac

Address _____

ADDITIONAL SURFACE AND MINERAL OWNER

Ruby V. Sadler
201 Easan Avenue
Highland Park, Michigan 48203

INSPECTOR
TO BE NOTIFIED Paul Garrett

ADDRESS 321 Beech Street, Clarksburg, WVA 26301

PHONE 304-622-3871

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 October 25, 1978 by Okey & Clara Clark, et al made to Doran & Associates, Inc. and recorded on the 20th day of Nov., 1978, in Doddridge County, Book 105 Page 536

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 this 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) Donald R. Laughlin
Well Operator

728 Washington Road
Street
Pittsburgh
City or Town
Pennsylvania 15228
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 BOARD

