

Minimum Error of Closure ONE PART IN 200

Source of Elevation U.S.G.S. B.M. AT POINT PLEASANT CHURCH

ELEVATION = 1030'

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.

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

Signed: Mark C. Echard  
Squares: N S E W

Company ROCKWELL PETROLEUM COMPANY  
 dba Ro-Jo Inc.  
 Address P.O. BOX 86, SAND FORK, W.VA. 26430  
 Farm GRAHAM-OAK LEASE, Bryan Pierce  
 Tract \_\_\_\_\_ Acres 128 Lease No. \_\_\_\_\_  
 Well (Farm) No. 2-A Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1274'  
 Quadrangle VADIS 7.5', 15' WC  
 County DODDRIDGE District COVE  
 SURVEYOR  
 Engineer MARK C. ECHARD  
 SURVEYOR'S  
 Engineer's Registration No. 490  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date OCTOBER 25, 1977 Scale 1" = 500'

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

### WELL LOCATION MAP

FILE NO. DODD-1879

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

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

NOV 7 1977

47-017



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STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division DEPT. OF MINES

WELL RECORD

Rotary \*\*\* Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas \*\*\* \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Quadrangle Vadis 7 1/2  
Permit No. Dodd- 1879

Company Rockwell Petroleum Company  
Address Sand Fork, W. Va.  
Farm Graham-Doak Acres 128  
Location (waters) Little Cove Creek  
Well No. 2-A Elev. 1274  
District Cove County Doddridge  
The surface of tract is owned in fee by \_\_\_\_\_  
Bryan Pierce  
Address Troy, W. Va.  
Mineral rights are owned by Graham and Doak  
Address West Union, W. Va.  
Drilling Commenced 11-10-77  
Drilling Completed 11-15-77  
Initial open flow show cu. ft. \_\_\_\_\_ bbls.  
Final production 500 MCF cu. ft. per day 0 bbls.  
Well open 4 hrs. before test 705 bRP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			To Surface          160 sks
Cond. 13-10"			
9 5/8			
8 5/8	303	303	
7			
5 1/2			
4 1/2		2720	
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Water Frac 1-9-78	Perforated intervals	
721 Bls of Water	2286 to 2287	2 Holes
40 thousand lb of 20/40 sand	2298 to 2301	4 Holes
500 gal of acid	2308	1 Hole
Breakdown at 2250 lb	2316 to 2318	2 Holes
Avg. injection rates 17.8 Bls at 2078 lb		

Coal was encountered at None Feet \_\_\_\_\_ Inches  
Fresh water 110 ft Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Big Injun Depth 2286 to 2318 feet

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Surface			0	100		
Shale			100	189		
REd Rock			189	233		
Shale			233	304		
Red Rock			304	325		
Shale			325	455		
Red Rock			455	510		
Shale and Slate			510	732		
Red Rock			732	789		
Shale			789	935		
Slate			935	995		
Red Rock			955	1050		
Shale			1050	1233		
Red Rock			1233	1302		
Shale and Slate			1302	1455		
Red Rock			1455	1500		
Shale			1500	1642		
Sandy Shale			1642	1810		
Sand			1810	1850		
Shale			1850	1862		
Shale, sandy			1862	1966		
Sand			1966	2022		
Shale			2022	2056		

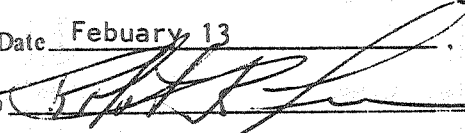
(over)

\* Indicates Electric Log tops in the remarks section.

FEB 23 1978

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			2056	2088		
Shale			2088	2111		
Sand, shale			2111	2168		
Limestone			2168	2356		
Shale			2356	2426		
Siltstone			2426	2556		
Shale			2556	2630		
Gantz	Sand		2630	2640		
Shale			2640	2744		
Total Depth			2744			

Date February 13, 19 78

APPROVED  Owner

By Partner  
(Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED  
OCT 31 1977  
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 October 29, 1977

Surface Owner Mr. Bryan Pierce

Company Rockwell Petroleum Company dba Ro-Jo and

Address Troy, W. Va.

Address P.O. Box 86, Sand Fork, W. Va.

Mineral Owner Doak and Graham

Farm Graham-Doak Acres 128

Address West Union, W. Va.

Location (waters) Little Cove Creek

Coal Owner \_\_\_\_\_

Well No. Two A Elevation 1274

Address \_\_\_\_\_

District Cove County Doddridge

Coal Operator None

Quadrangle Vadis 7.5

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 3-1-78.

INSPECTOR TO BE NOTIFIED Paul Garrett

ADDRESS Clarksburg, W. Va.

PHONE 622-3871

Robert L. Doak  
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 November 5 1976 by Jim Doak Mrs Graham made to Mack R. Worl and recorded on the 16 day of August 1977 in Doddridge County, Book 102 Page 567

++++ 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, Rockwell Petroleum Company  
(Sign Name) by [Signature] Well Operator  
P.O. Box 86  
Street  
Sand Fork  
City or Town  
West Virginia 26430  
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

DODD-1879 PERMIT NUMBER

47-021

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 43-b and will carry out the specified requirements."

Signed by [Signature]

[Signature]

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

PROPOSED WORK ORDER TO ~~\*\*\*~~ DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME G. L. Haught and Sons \_\_\_\_\_ NAME Robert R. Jones \_\_\_\_\_  
 ADDRESS Smithville, W. Va. \_\_\_\_\_ ADDRESS P.O. Box 86, Sand Fork, W. Va. \_\_\_\_\_  
 TELEPHONE 477-3333 \_\_\_\_\_ TELEPHONE 462-8366 \_\_\_\_\_  
 ESTIMATED DEPTH OF COMPLETED WELL: 2650 \_\_\_\_\_ ROTARY \*\*\* CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Big Injun and Gantz \_\_\_\_\_  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \*\*\* 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			
8 - 5/8	210 ft	210 ft	To Surface
7			
5 1/2			
4 1/2		2650	160 sks Pozz
3			Perf. Top
2			Perf. Bottom
Lines			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 90 FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS No Coal \_\_\_\_\_  
 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