



Minimum Error of Closure ONE PART IN 2,000

Sources of Elevation USGS 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.

Signed: *Mark C Echard*

Map No. _____ Squares: N S E W

Fracture.....

New Location.....

Drill Deeper.....

Abandonment.....

GILMER CO.
LEWIS CO.

Company ROCKWELL PETROLEUM COMPANY
dbo Ro-jo Ind
Address PO BOX 86, SAND FORK, W.VA. 26430

Farm S.L. GRAY LEASE Howard Hintzer

Tract _____ Acres 148 1/2 Lease No. _____

Well (Farm) No. ONE Serial No. _____

Elevation (Spirit Level) 1054'

Quadrangle VADIS WC 7.5; 15'

County DODDRIDGE District COVE

SURVEYOR
MARK C. ECHARD
SURVEYOR'S
Registration No. 490

File No. _____ Drawing No. _____
G

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-1878

+ Denotes location of well on United States Topographic Maps, scale 1 to 25,000, latitude and longitude lines being represented by border lines as shown.

NOV 7 1977

— Denotes one inch spaces on border line of original tracing. 47-017

2550' Big Injun & Gant 2 5-5 Conings (142)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

RECEIVED
MAR 27 1978
OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD 2

Quadrangle Vadis 7½
Permit No. Dodd-1878

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

Company Rockwell Petroleum
Address Sand Fork, W. Va.
Farm S. L. Gray Acres 148.5
Location (waters) Br. of Sycamore Fk.
Well No. One Elev. 106KB
District Cove County Doddridge
The surface of tract is owned in fee by Howard Hinterer
Address New Milton, W. Va.
Mineral rights are owned by Howard Hinterer
et. al Address New Milton, W. Va.
Drilling Commenced 11/1/77
Drilling Completed 11/9/77
Initial open flow show cu. ft. show bbls.
Final production 1,310 cu. ft. per day 2 bbls.
Well open 6 hrs. before test 758 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			
8 5/8	253	253	to surface
7			
5 1/2			
4 1/2	2496	2496	160 sks.
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Well Fracked March 16, 1978 Perforations Big Injun
47 thousand lb of 20/40 sand 2100 to 2150 - 10 Holes
810 Bis of water
500 gal of Acid
1300 HHP
Avg. rate 28 bpm at 2000 lb
Coal was encountered at None Feet _____ Inches
Fresh water 90 Feet _____ Salt Water _____ Feet _____
Producing Sand Big Injun Depth 2100 to 2150 feet

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay			0	3		Drilled With Rotary Air
Shale			3	30		
Sand			30	50		
Shale			50	95		
Red Rock			95	105		
Shale			105	130		
Sand			130	180	water	
Shale			180	200		
Sand			200	220		
Red Rock			220	235		
Shale			235	243		
Sand			243	288		
Red Rock			288	290		
Sand			290	313		
Red Rock			313	322		
Sand			322	331		
Red Rock			331	341		
Sand			341	446		
Shale			446	464		
Sand			464	468		
Shale			468	476		
Sand			476	488		
Sandy Shale			488	516		
Shale			516	581		

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			581	650		
Sandy Shale			650	704		
Sand			704	776		
Red Rock			776	778		
Sand			778	836		
Red Rock			836	864		
Shale			864	909		
Sand			909	930		
Shale			930	984		
Sand			984	997		
Shale			997	1026		
Sandy Shale			1026	1030		
Sand			1030	1080		
Shale			1080	1125		
Red Rock			1125	1127		
Sand			1127	1160		
Shale			1160	1210		
Sand			1210	1250		
Shale			1250	1340		
Sand			1340	1378		
Shale			1378	1428		
Sand			1428	1460		
Shale			1460	1540		
Sand			1540	1584		
Shale			1584	1754		
Sand			1754	1870		
Shale			1870	1954		
Limestone			1954	1996		
Blue Monday			1996	2006		
Big Lime			2006	2120		
Big Injun			2120	2160		
Shale			2160	2212		
Siltstone			2212	2350		
Shale			2350	2418		
Gantz			2418	2426		
Shale			2426	2504		
				2504	Total Depth	

Date March 22 1978

APPROVED

By

(Title)

Owner



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.

Surface Owner Mr. Howard Hinterer
Address New Milton, W. Va.
Mineral Owner Mr. Howard Hinterer & others
Address New Milton, W. Va.
Coal Owner _____
Address _____
Coal Operator No Coal
Address _____

DATE October 29, 1977
Company Rockwell Petroleum Co. dba Ro-Jo Inc
Address P.O. Box 86, Sand Fork, W. Va.
Farm S. L. Gray Acres 148 1/2
Location (waters) Branch of Sycamore Fork
Well No. one Elevation 1054
District Cove County Doddridge
Quadrangle Vadis 7.5

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. Todd
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 oct 5 19 77 by Howard Hinterer and others made to Rockwell Pet. Company and recorded on the 25 day of Oct. 19 77 in Doddridge County, Book 103 Page 97

***** 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.

Very truly yours,
(Sign Name) by *[Signature]*
Well Operator

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
P.O. Box 86 Street
SAnd For,k, W. Va. 26430 City or Town
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

DODD-1878 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

47-017

Signed by *[Signature]*

Survey

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: 2550 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		2550 ft	160 sks Pozz
3			Perf. Top
2			Perf. Bottom
Liners			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