



Minimum Error of Closure 1' IN 200'

Source of Elevation B.M. - I.R. 1' WEST OF NW CORNER OF CINDER BLOCK BUILDING - ELEVATION 1680.88'

"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."

New Location
 Drill Deeper
 Abandonment

MAP SHEET 989 E-4

F.B. 1697 Pgs. 32-35

Company RAY RESOURCES CORP.
 Address CHARLESTON, WEST VA. 25301
 Farm PRESTON COUNTY COAL & COKE CO.
 Tract Acres 704.88 Lease No. 70271
 Well (Farm) No. 474 Serial No. (11821) (conn)
 Elevation (Spirit Level) 1716' SE
 Quadrangle MASONTOWN-7 1/2' Morgantown-15'
 County PRESTON District VALLEY
 Engineer Jackson M. Jarvis
 Engineer's Registration No. 2397
 File No. 6-- Drawing No. 47-077
 Date MAY 24, 1974 Scale 1" = 1320'

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

WELL LOCATION MAP
 FILE NO. PRES-170

+ 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.

47-077



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Masontown

Permit No. PRES-170

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

Company RAY RESOURCES CORPORATION
Address Charleston, W. Va. 25301
Farm Cascade Corp. Acres 704
Location (waters) Deekers Creek
Well No. 474 Elev. 1716'
District Valley County Preston
The surface of tract is owned in fee by _____
Preston County Coal & Coke
Address Masontown, W. Va.
Mineral rights are owned by Preston County Coal & Coke Address Masontown, W. Va.
Drilling Commenced 5/28/74
Drilling Completed 6/29/74
Initial open flow 0 cu. ft. _____ bbls.
Final production 3651M cu. ft. per day _____ bbls.
Well open 72 hrs. before test 3540 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"	60'	60'	To Surface
9 5/8	1172'	1172'	To Surface
8 5/8			
7			
5 1/2			
4 1/2	7850'	7850'	
3			
2	7697'	7697'	
Liners Used			

Well treatment details:

Attach copy of cementing record.

Fractured with 1,360 bbls. gelled water with 5% HCl.
45,000# 20-40 Sand.

Coal was encountered at _____ Feet _____ Inches
Fresh water 39 Feet 175 Salt Water 1128 Feet _____
Producing Sand Huntersville Chert Depth 7750

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			0	205	Water at 39 & 175	
Red Rock & Sand			205	1141		
Black Shale			1141	1177		
Sand & Gray Shale			1177	2033		
Sand & Red Rock			2033	4420		
Gray Shale			4420	6000		
Sand & Shale			6000	7124		
Tully Lime			7124	7207		*
Black Shale			7207	7532		
Onondaga Lime			7532	7549		*
<u>Huntersville Chert</u>			7549	7716		*
Oriskany			7716	7783		*
<u>Helderberg</u>			7783			*
Total Depth			7850			

(over)

* Indicates Electric Log tops in the remarks section.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

MAY 29 1974

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 28, 1974
Company RAY RESOURCES CORPORATION
630 Commerce Square
Address Charleston, W. Va. 25301
Farm Cascade Corp. Acres 88.94
Location (waters) Deckers Creek
Well No. 474 (CONSOL 11821) Elevation 1716'
District Valley County Preston
Quadrangle Masontown

Surface Owner The Cascade Corp.
Address Morgantown, W. Va.
Mineral Owner The Cascade Corp.
Address Morgantown, W. Va.
Coal Owner The Cascade Corp.
Address Morgantown, W. Va.
Coal Operator None
Address _____

INSPECTOR TO BE NOTIFIED Wm. Blosser
Colfax PH: Fairmount
W.Va. 363-9105

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 9-29-74

Robert L. Wood
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 9-15 1970 by PRESTON COAL CO made to CONSOL GAS and recorded on the _____ day of _____ 19____, in PRESTON County, Book 416 Page 169

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, W. Va. 26505
AC 304-296-4461

Address
of
Well Operator

Very truly yours, Tom P. Hogsdale
(Sign Name) _____
Well Operator
630 Commerce Square
Street
Charleston,
City or Town
West Virginia 25301
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.

Prest-170 PERMIT NUMBER
47-077

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

PROPOSED WORK ORDER TO XX DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME RAY RESOURCES CORPORATION NAME E. D. Hanley, Jr.
630 Commerce Square 630 Commerce Square
 ADDRESS Charleston, W. Va. 25301 ADDRESS Charleston, W. Va. 25301
 TELEPHONE 344-8393 TELEPHONE 344-8393
 ESTIMATED DEPTH OF COMPLETED WELL: 7,750 Ft. ROTARY XX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 TYPE OF WELL: OIL _____ GAS XX 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	60 Ft.	60 Ft.	To Surface
9 - 5/8	1,000 Ft.	1,000 Ft.	400 Sks. to Surface
8 - 5/8			
7			
5 1/2			
4 1/2	7,750 Ft.	7,750 Ft.	200 Sks.
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 40 FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS _____
 IS COAL BEING MINED IN THE AREA? _____ 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