



BENCH MARK DESCRIPTION

SECTION CORNER AT ROAD FORK ON SOUTH SIDE FISHER MILL TO UNION SCHOOLHOUSE RD. ELEY. 1946.

New Location
 Drill Deeper
 Abandonment

Company PATRICK PETROLEUM CORP.
 Address 3319 TATES CREEK PIKE
LEXINGTON, KENTUCKY 40502
 Farm MARLAND KETCHUM, et al
 Tract _____ Acres 45 Lease No. 83034
 Well (Farm) No. 1 Serial No. B-5
 Elevation (Spirit Level) 1752.62' EC
 Quadrangle AUDRA-7 1/2' , PHILIPPI -15'
 County BARBOUR District PHILIPPI
 Surveyor _____
 Surveyor's Registration No. 259
 File No. _____ Drawing No. _____
 Date OCT. 11, 1976 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. BAR-806

+ 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.

47-001 NOV 18 1976



RECEIVED

AUG - 1 1977

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Philippi

Permit No. BAR 806

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

Company Patrick Petroleum Corp.
Address 3319 Tates Creek Pk.
Farm Marland Ketchem Acres _____
Location (waters) _____
Well No. 1 Elev. 1752.62
District Philippi County Barbour
The surface of tract is owned in fee by _____
Marland Ketchem
Address Philippi, W. Va.
Mineral rights are owned by Same
Address _____
Drilling Commenced 4-12-77
Drilling Completed 4-18-77
Initial open flow 267 Mcu. ft. - bbls.
Final production 746 Mcu. ft. per day - bbls.
Well open 4 hrs. before test 1360 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 2 1/2 1 3/4	32'	32'	10 sks
9 5/8			
8 5/8	598.65'	598.65'	190 sks
7			
5 1/2			
4 1/2	3794.74'	3794.74'	300 sks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Fraced w/50,000 # sd., 956 Bbls. water.

Av. treating press.: 2450 # psi., av. rate 346 bpm.

Coal was encountered at 45' Feet _____ Inches
Fresh water 48' Feet _____ Salt Water _____ Feet _____
Producing Sand Benson Depth 3666' - 3677'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay			0	7		
White sand			7	45		
Coal			45	48		1/2" stream water @ 48'.
White sand			48	80		
Coal			80	84		
Shale			84	115		
Sand			115	255		2-1/2 stream water @ 150'.
Sand & shale			255	550		More water @ 190'.
Shale			550	700		
Sand			700	760		Oil odor @ 1015'.
Shale			760	985		Gas 1044' 10/10 1" FMW.
Bl. Lime			985	1070		Gas 1138' 8/10 2" OFW.
Bl. Ljun			1070	1195		Gas 1914' 20/10 1" FMW.
Sand & shale			1195	1550		
Shale & red rock			1550	2400		Gas 2540' 4/10 2" FMW.
Sand			2400	2470		Gas 3257' 2/10 2" FMW.
Sand shale			2470	3360		Gas @ 3412 2/10 2" OFW.
Brown sand			3360	3380		Gas @ 3597 2/10 2" OFW.
Sand & shale			3380	3665		Gas @ 3721 40/10 2" OFW.
Brown sand <u>Benson</u>			3665	3705		Gas @ 3816 20/10 2" OFW.
Sand & shale			3705	3816		T.D.

(over)

* Indicates Electric Log tops in the remarks section.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED
NOV 4 1976

OIL & GAS DIVISION
DEPT. OF MINES

AKL

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

Surface Owner Marland Ketchem
Address Philippi, W. Va.
Mineral Owner same
Address _____
Coal Owner Domonic Marrara, et al
Address 200 Kinston Rd., Kingwood, W. Va.
Coal Operator Not operated
Address _____

DATE October 27, 1976
Company Patrick Petroleum Corporation
Address Lexington, Kentucky
Farm Marland Ketchem Acres 45
Location (waters) Big Laurel Run
Well No. 1 (B-5) Elevation 1752.62'
District Philippi County Barbour
Quadrangle Audra (7 1/2'); Philippi (15')

THIS PERMIT MUST BE POSTED AT THE WELL SITE

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 3-5-77.

INSPECTOR
TO BE NOTIFIED Bill Hatfield
ADDRESS P.O. Box 385, Buckhannon, W.Va. 26201
PHONE 472-4268

Robert L. Bell
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 April 20 1976 by Marland Ketchem made to Consol. Gas Supply and recorded on the 30th day of June 1976, in Barbour County, Book 75 Page 562

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 1 mi day Nov 1976 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, PATRICK PETROLEUM CORPORATION
(Sign Name) *J. Hunt Perkins*
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

3319 Tates Creek Road
Street
Lexington
City or Town
Kentucky 40502
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.

BAR-806

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."

Signed by *J. Hunt Perkins*

47-001

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

PROPOSED WORK ORDER TO X DRILL DEEPEN FRACTURE-STIMULATE

DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
NAME Falcon Drilling Corp. NAME John Clowser
ADDRESS Charleston, W. Va. 25311 ADDRESS Philippi, W. Va. 26416
TELEPHONE 304-343-0542 TELEPHONE 304-457-3368

ESTIMATED DEPTH OF COMPLETED WELL: 3720' ROTARY X CABLE TOOLS

PROPOSED GEOLOGICAL FORMATION: Benson

TYPE OF WELL: OIL GAS X COMB. STORAGE DISPOSAL
RECYCLING WATER FLOOD OTHER

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
xxxx 11 - 3/4"	40'	40'	Cement to surface
9 - 5/8			
8 - 5/8	700'	700'	Cement to surface
7			
5 1/2			
4 1/2	3720'	3720'	1000'+ Fill-up
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS FEET SALT WATER FEET

APPROXIMATE COAL DEPTHS

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 Use