



Surface John A Jordan
 Mineral- Putnam Co.

Agent:
 JIM CRAMBLETT
 P.O. BOX 628
 CHARLESTON, W.VA.

CERTIFICATE

"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 degree of accuracy is one part in 200
 Signed Michael J. Hoff, P.E., #6023

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY	CABOT OIL & GAS
ADDRESS	CHARLESTON, W.V.
FARM	JORDAN
MAP	ACRES 81.0 LEASE NO.
WELL (FARM) NO.	PUTNAM B-25 SERIAL NO.
ELEVATION (SPIRIT LEVEL)	970'
QUADRANGLE	BANCROFT Winfield SE
COUNTY	PUTNAM DISTRICT UNION
POINT OF PROVEN ELEVATION	TOP OF POINT SLEV 1022, APPROX. 2,200' SE OF LOCATION
FILE NO.	DRAWING NO.
DATE	10-24-1980 SCALE 1" = 500' FT.

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION CHARLESTON WELL LOCATION MAP FILE NO. 47-079-1021
+ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS. SCALE 1" TO 2000' LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.
- DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

RECEIVED



IV-35
(Rev 8-81)

APR 20 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

State of West Virginia

Department of Mines
Oil and Gas Division

Date April 19, 1982
Operator's
Well No. B-25
Farm Putnam
API No. 47 - 079 - 1021

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

REVISED

WELL TYPE: Oil ___ / Gas xx / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production ___ / Underground Storage ___ / Deep ___ / Shallow xx /)

LOCATION: Elevation: 970' Watershed Painters Branch
District: Union County Putnam Quadrangle Bancroft

COMPANY Cabot Oil & Gas Corporation
ADDRESS P.O. Box 628, Chas., WV 25322
DESIGNATED AGENT Richard P. Parsons
ADDRESS P.O. Box 628, Chas., WV 25322
SURFACE OWNER John A. Jordan
ADDRESS Liberty, WV
MINERAL RIGHTS OWNER Putnam Co. F.A. Hardy et al
c/o Mr. P. Brown Trust Dept.
Kanawha Valley Bk., NA, One Valley Sq.
ADDRESS P.O. Box 1793, Chas., WV 25326
OIL AND GAS INSPECTOR FOR THIS WORK Martin
Nichols ADDRESS Clendenin, WV 25045

PERMIT ISSUED March 6, 1981
DRILLING COMMENCED July 6, 1981
DRILLING COMPLETED July 13, 1981

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8	701	701	245 sks
8 5/8			
7	2819.80	2819.80	470 sks
5 1/2			
4 1/2			
3			
2 7/8	2203	2203	
Liners used	Parmaco tbg hanger set @ 2655.15' KB		

GEOLOGICAL TARGET FORMATION Brown Shale & Marcellus Depth 4550 feet
Depth of completed well 4970' feet Rotary xx / Cable Tools _____
Water strata depth: Fresh _____ feet; Salt _____ feet
Coal seam depths: _____ Is coal being mined in the area? _____

OPEN FLOW DATA

Producing formation Brown Shale & Marcellus Pay zone depth 3190'-4970' feet
Gas: Initial open flow show Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow 163 Mcf/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure 625# psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)
Second producing formation _____ Pay zone depth _____ feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ Mcf/d Oil: Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure _____ psig (surface measurement) after _____ hours shut in

(Continue on reverse side)

APR 26 1982

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

7/13/81 - Ran 18,000# 80/100. Top of shot: 3190'.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas		
Sand & Shale			0	170	No water or coal reported.		
Shale			170	366			
Sand			366	380			
Shale			380	494			
Sand & Shale			494	630			
Sand			630	638			
Sand & Shale			638	700			
Sandy Shale			700	914			
Shale			914	1048			
Sand & Shale			1048	1120			
Sand			1120	1160			
Shale			1160	1320			
Sand			1320	1360		Temp Shows: Noise Shows: 4284' 3900'	
Shale			1360	1384			4210' 4120'
Sandy Shale			1384	1410			4155' 4300-4320'
Shale			1410	1476			4460-4500'
Sand			1476	1518		4900'	
Shale & Sand			1518	1800			
Salt Sand			1800	2000			
Sandy Shale			2000	2030			
Big Lime			2030	2160			
Sand			2160	2195			
Injun Sand			2195	2264	Temp Shows: 4284		
Shale			2264	2640	Gas ck @ TD: TSTM		
Sunburry Shale			2640	2670			
Berea Sand			2670	2678			
Sandy Shale			2678	2730			
Shale			2730	3850			
Brown Shale			3850	4550			
Shale			4550	4640			
Marcellus Shale			4640	4970			
				4970'			
				4972'			

(Attach separate sheets as necessary)

CABOT OIL AND GAS CORPORATION

Well Operator

By: *Richard M. ...*

District Drilling
Superintendent

Date: April 19, 1982

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

RECEIVED



NOV 13 1981

IV-35
(Rev 8-81)

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES
State of West Virginia
Department of Mines
Oil and Gas Division

Date November 7, 1981
Operator's
Well No. B-25
Farm Putnam
API No. 47 - 079 - 1021

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas xx / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production ___ / Underground Storage ___ / Deep ___ / Shallow xx /)

LOCATION: Elevation: 970' Watershed Painters Branch
District: Union County Putnam Quadrangle Bancroft

COMPANY Cabot Oil & Gas Corporation
ADDRESS P.O. Box 628, Chas., WV 25322
DESIGNATED AGENT Richard P. Parsons
ADDRESS P.O. Box 628, Chas., WV 25322
SURFACE OWNER John A. Jordan
ADDRESS Liberty, WV
MINERAL RIGHTS OWNER SEE ATTACHED SHEET
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK Martin Nichols
ADDRESS P.O. Box 554 Clendenin, WV 25045

PERMIT ISSUED March 6, 1981
DRILLING COMMENCED July 6, 1981
DRILLING COMPLETED July 13, 1981

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8	701	701	245 sks
8 5/8			
7	2819.80	2819.80	470 sks
5 1/2			
4 1/2			
3			
2 7/8	2203	2203	
Liners used	Parmaco tbg hanger set @		
	2655.15'	KB	

GEOLOGICAL TARGET FORMATION Brown Shale & Marcellus Depth 4550 feet
Depth of completed well 4970' feet Rotary xx / Cable Tools _____
Water strata depth: Fresh _____ feet; Salt _____ feet
Coal seam depths: _____ Is coal being mined in the area? _____

OPEN FLOW DATA
Producing formation Brown Shale & Marcellus Pay zone depth 3190'-4970' feet
Gas: Initial open flow show Mcf/d Oil: Initial open flow ---- Bbl/d
Final open flow 163 Mcf/d Final open flow ---- Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure 625# psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)
Second producing formation _____ Pay zone depth _____ feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ Mcf/d Oil: Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure _____ psig (surface measurement) after _____ hours shut in

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

7-13-81 - Ran 18,000# 80/100. Top of shot: 3190'.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS	
					Including indication of all fresh and salt water, coal, oil and gas	
Sand & Shale			0	700		
Sandy Shale			700	914		
Shale			914	1048		
Sand & Shale			1048	1120		
Sand			1120	1160		
Shale			1160	1320		
Sand			1320	1360		
Shale			1360	1384		
Sandy Shale			1384	1410		
Shale			1410	1476		
Sand			1476	1518		
Shale & Sand			1518	1800		
Salt Sand			1800	2000	Temp Shows:	Noise Shows:
Sandy Shale			2000	2030	4284'	3900'
Big Lime			2030	2160	4210'	4120'
Sand			2160	2195	4155'	4300-4320'
Injun Sand			2195	2264		4460-4500'
Shale			2264	2640		4900'
Sunburry Shale			2640	2670		
Berea Sand			2670	2678		
Sandy Shale			2678	2730		
Shale			2730	3850		
Brown Shale			3850	4550	Temp Shows:	
Shale			4550	4640	4284	
<u>Marcellus Shale</u>			4640	4970	Gas ck @ TD: TSTM	
				TD 4970'		
				ITD 4972'		

(Attach separate sheets as necessary)

CABOT OIL & GAS CORPORATION

Well Operator

By: R. P. Parn

Date: November 9, 1981

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

MAR - 6 1981

Oil and Gas Division
OIL AND GAS WELL PERMIT APPLICATION

OIL & GAS DIVISION
DEPT. OF MINES

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

DATE March 3, 1981
Company Cabot Oil and Gas Corporation
Address P.O. Box 628, Charleston, WV 25322
Farm Putnam Company Acres 81
Location (waters) Painters Branch
Well No. Putnam B-25 Elevation 970
District Union County Putnam
Quadrangle Bancroft

Surface Owner John A. Jordan
Address Liberty, WV
Mineral Owner Putnam Co. Frank A. Hardy et al
c/o Mr. Pat Brown, Trust Dept.
Address One Valley Square, Chas., WV 25301
Coal Owner Same as Mineral Owner
Address _____
Coal Operator Not Operated
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 11-18-81.

INSPECTOR
TO BE NOTIFIED Martin Nichols
ADDRESS P.O. Box 554, Clendenin, WV 25045
PHONE 304-548-9663

Fred B. ...
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 February 1 1936 by Frank Hardy et al made to Godfrey L. Cabot, Inc. and recorded on the 13th day of June 1936, in Putnam County, Book 31 Page 517

XX 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 ~~10~~ ¹⁵ 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,
(Sign Name) R. P. Parson
Well Operator
P.O. Box 628
Street
Charleston
City or Town
West Virginia 25322
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

47-079-1021 _____ 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 _____

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 Clint Hurt & Associates Inc. NAME R. P. Parsons
 ADDRESS P.O. Box 1973, Midland, TX 79702 ADDRESS P.O. Box 628, Charlesotn, WV 2532
 TELEPHONE _____ TELEPHONE 304-344-8355
 ESTIMATED DEPTH OF COMPLETED WELL: 4411 ROTARY XX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Shale
 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			
9 - 5/8	730	730	circ
8 - 5/8			
7	2700	2700	circ
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 50 FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 685
 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