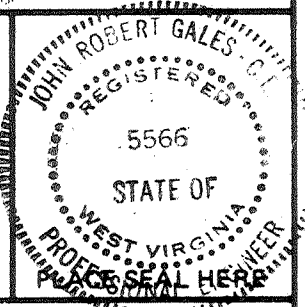


FILE NO. 82-823-7
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION 450' NE TO INT. OF BIG BATTLE RD & 23

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
 (SIGNED) John Robert Gales
 P.P.E. 5566 L.L.S. _____



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE JUNE 11, 19 82
 OPERATOR'S WELL NO. S-416
 API WELL NO. William Bates #1
47 - 017 - 3116 W
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL & GAS
 NITRO, WEST VIRGINIA 25143

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 800 WATERSHED BIG BATTLE RUN
 DISTRICT MC CLELLAN COUNTY DODDRIDGE
 QUADRANGLE CENTER POINT
 SURFACE OWNER BATES ACREAGE 15
 OIL & GAS ROYALTY OWNER BATES LEASE ACREAGE 15
 LEASE NO. 1575
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Final Existing well Martin fracture completion.
 PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Alexander - Benson ESTIMATED DEPTH 5500
 WELL OPERATOR Cabot Oil & Gas DESIGNATED AGENT David L. McCluskey
 ADDRESS 400 Farway Drive, Suite 400, Chesapeake, VA 23041-4308

Well Operator's Report of Well Work

Farm name: William Bates

Operator Well No.: W. Bates #1

LOCATION: Elevation: 800 Quadrangle: Center Point

District: McClellan County: Doddridge
 Latitude: 11,400 Feet South of 39 Deg. 25 Min. 00 Sec.
 Longitude 1,800 Feet West of 80 Deg. 37 Min. 30 Sec.

Company: CABOT OIL & GAS CORPORATI
 400 FAIRWAY DRIVE, SUITE 400
 CORAOPOLIS, PA 15108-4308

Agent: DAVID G. McCLUSKEY

Inspector: Mike Underwood
 Permit Issued: 1/24/96
 Well work Commenced: 2/18/96
 Well work Completed: 2/21/96
 Verbal Plugging _____
 Permission granted on: _____
 Rotary Cable _____ Rig _____
 Total Depth (feet) 4999'
 Fresh water depths (ft) 65'

 Salt water depths (ft) _____

Is coal being mined in area (Y/N)? N
 Coal Depths (ft): _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 ³ / ₄ "	80'	80'	To Surface
8 ⁵ / ₈ "	1300'	1300'	To Surface
4 ¹ / ₂ "	4922'	4922'	650' sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4834'
 Gas: Initial open flow show MCF/d Oil: Initial open flow N/A Bbl/c
 Final open flow 298 MCF/d Final open flow N/A Bbl/c
 Time of open flow between initial and final tests 4 Hours
 Static rock Pressure 1625 psig (surface pressure) after 72 Hours

Second producing formation Maxton Pay zone depth (ft) 1510'
 Gas: Initial open flow -- MCF/d Oil: Initial open flow N/A Bbl/c
 Final open flow comm 189 MCF/d Final open flow N/A Bbl/c
 Time of open flow between initial and final tests 4 Hours
 Static rock Pressure 100 psig (surface pressure) after 16 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: CABOT OIL & GAS CORPORATION

By: Del Mccluskey
 Date: 9/16/96

Perf Maxton @ 1510' - 1516', acidized with 500 gals HCl 15% acid @ 5 BPM.

FORMATION	TOP	BOTTOM
Red Mud	0	25
Shale	25	35
Sand/Shale	35	65
Shale/Sand & Shale	65	141
Red Rock	141	148
Shale/Sand	148	190
Shale	190	215
Sand/Shale	215	267
Red Rock	267	290
Red Rock & Shale	290	323
Sand/Shale	323	440
Shale	425	558
Sand/Shale	558	630
Red Rock	630	690
Shale	690	946
Sand/Shale	946	1097
Shale	1097	1120
Sand/Shale	1120	1251
Sand	1251	1319
Shale	1319	1475
Sand	1475	1515
Shale	1515	1680
Little Lime	1680	1695
Shale/Sand	1695	1710
Big Lime	1710	1790
Shale	1790	1838
Sand	1838	1860
Sand/Shale	1860	1950
Shale	1950	2015
Sand	2015	2025
Sand/Shale	2025	2170
Red Rock	2170	2200
Sand/Shale	2200	2490
Gordon	2490	2525
Sand/Shale	2525	2795
Sand	2795	2820
Sand/Shale	2820	3650
Shale	3650	4862
Sand	4860	4896
Shale	4896	4999 TD

017-3116-W

DEC 18 1995

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

Permitting
 Office of Oil & Gas

Well Operator: Cabot Oil & Gas Corporation ¹⁴⁹ 8145 (5) 286

- 2) Operator's Well Number: William Bates #1 3) Elevation: 800
- 4) Well type: (a) Oil ___ / or Gas X / *Issued 01/24/96*
 (b) If Gas: Production X / Underground Storage ___ / *Revised 01/24/98*
 Deep ___ / Shallow X /
- 5) Proposed Target Formation(s): Maxton ³²⁵
- 6) Proposed Total Depth: 4999 feet
- 7) Approximate fresh water strata depths: 65
- 8) Approximate salt water depths: None
- 9) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No ___
 Complete Maxton Formation by setting a temporary plug,
- 11) Proposed Well Work: perforating & acidizing the Maxton then, commingling with the Injun, Pocono, 5th & Benson Sands.
- 12) Existing.

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11-3/4"		42#	80'	80'	CTS
Fresh Water						3052/18/11.3
Coal						3052/18/11.2
Intermediate	8-5/8"		23#	1300'	1300'	CTS
Production	4-1/2"		10.5#	4922'	4922'	650 sks
Tubing						3052/18/11.2
Liners						

Existing well.

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Blanket Agent
 (Type)

013674
 49

21468

1) Date: _____
2) Operator's well number
William Bates #1
3) API Well No: 47 - 017 - 3116 - W
State County Permit

RECEIVED
WV Division of
Environmental Protection

* WORKOVER

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

DEC 18 1995

Permitting
Office of Oil & Gas

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name William Bates
Address Center Point Rt.
West Union, WV 26456
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Mike Underwood
Address Rt. 2, Box 135
Salem, WV 26426
Telephone (304) - _____

5) (a) Coal Operator:
Name N/A
Address _____
(b) Coal Owner(s) with Declaration
Name N/A
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
 Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:
 Personal Service (Affidavit attached)
 Certified Mail (Postmarked postal receipt attached)
 Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Cabot Oil & Gas Corporation
By: D. M. Chubb
Its: Engineering Manager
Address 400 Fairway Drive, Suite 400
Coraopolis, PA 15108
Telephone (412) 299-7000

Subscribed and sworn before me this 9th day of DECEMBER, 1995

Notarial Seal
Cynthia M. Bowles, Notary Public
My commission expires June 17, 1996
Member, Pennsylvania Association of Notaries

Cynthia M. Bowles
JUNE 17, 1996

Notary Public