



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1-2000'
 PROVEN SOURCE OF ELEVATION HIGH POINT SW OF LOCATION

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) Michael T. Goff
 R.P.E. 6023 L.L.S. _____

PLACE SEAL HERE

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



Department of Mines
 Oil & Gas Division

DATE 2-25, 1981
 OPERATOR'S WELL NO. CABOT #1
 API WELL NO. _____
47 - 079 - 1067
 STATE COUNTY PERMIT

WELL TYPE: OIL _____ GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW _____)
 LOCATION: ELEVATION 936 WATER SHED GUANO CREEK
 DISTRICT UNION DISTRICT COUNTY PUTNAM
 QUADRANGLE BANCROFT 7 1/2' Winfield 15 SC
 SURFACE OWNER AMHERST LAND CO. ACREAGE 405
 OIL & GAS ROYALTY OWNER CABOT GAS CORPORATION LEASE ACREAGE 5000
 LEASE NO. FE
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 9200' G-G SCOTT DEPOT
 WELL OPERATOR CABOT OIL & GAS CORP. DESIGNATED AGENT TIM CRAMALETT
 ADDRESS P.O. BOX 628 ADDRESS P.O. BOX 628
CHARLESTON, W.VA. CHARLESTON, W.VA.

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OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

Date January 5, 1982

Operator's

Well No. #1

Farm Cabot Oil & Gas

API No. 47 - 079 - 1067

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 / DeepXX / Shallow /)

LOCATION: Elevation: 936' Watershed Guano Creek
District: Union County Putnam Quadrangle Bancroft

COMPANY Cabot Oil & Gas Corporation
ADDRESS P.O. Box 628, Charleston, WV 25322
DESIGNATED AGENT H. Baird Whitehead
ADDRESS P.O. Box 628, Charleston, WV 25322
SURFACE OWNER Amherst Coal Co. Attn: Vance Price
ADDRESS Lundale, WV 25631
MINERAL RIGHTS OWNER Cabot Oil & Gas Corp.
ADDRESS P.O. Box 628, Charleston, WV 25322
OIL AND GAS INSPECTOR FOR THIS WORK Martin Nichols
ADDRESS P.O. Box 554 Clendenin, WV 25045
PERMIT ISSUED September 8, 1981
DRILLING COMMENCED October 12, 1981
DRILLING COMPLETED October 20, 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 Cord.			
13-10"			
9 5/8	633.72'	633.72'	185 sks
8 5/8			
7	2398.25'	2398.25'	375 sks
5 1/2			
4 1/2	5017.71'	5017.71'	195 sks
3			
2-3/8		4335.91'	
Liners used			

GEOLOGICAL TARGET FORMATION Brown Shale Depth 5055 feet
Depth of completed well feet Rotary / Cable Tools
Water strata depth: Fresh feet; Salt feet
Coal seam depths: Is coal being mined in the area?

OPEN FLOW DATA

Producing formation Huron *BR Sh* Pay zone depth 3950'-4341' feet
Gas: Initial open flow TSTM Mcf/d Oil: Initial open flow Bbl/d
Final open flow 561 Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests hours
Static rock pressure 800# 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.

11/6/81 - Perforated well from 4826' - 4829' (2 holes), 4917' - 4926" (8 holes).

11/7/81 - Spotted 500 gal 15% MCA acid. Loaded hole & broke down @ 2400 psi. Ran injection test (14 bbls). ISIP: 2750 psi. Swabbed csg. Treated w/5000# 80/100 (2#/gal) & 15,000# 20/40 (2-1/2#/gal), 500 gal 15% HCL, 2300 gal 28# HCL. Avg injection rate: 10.9 bbl/min. Avg treating press: 3458#. Total fluid 423 bbls. Sand laden 270 bbls. 55500 SCF/Min N₂. Total N₂: 187,000 SCF. ISIP: 2400#; 15 min - 900#.

11/13/81 - Set bridge plug @ 4500' w/10' of calseal. Perforated Brown Shale from 3950' - 4341' (25 holes).

11/18/81 - Pumped 1000 gal reg 15% HCL. Broke dwn w/1300#. Treated w/85,000# 20/40 (2.5#/gal). Avg inj rate: 11.2 BPM. Avg treat press: 1680#. Total fluid 418 bbls. Sand laden 358 bbls. 15,000 SCF/min - total N₂ 525,000. ISIP: 900#; 15 min - 800#.

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Shale			0	720	
Sand & Shale			720	1465	
Sand			1465	1524	
Shale			1524	1567	
Sand			1567	1750	
Shale			1750	1759	
Sand			1759	1830	
Big Lime			1830	2010	
Shale			2010	2065	
Big Injun			2065	2105	
Shale			2105	2510	
Sunbury Shale			2510	2536	
Berea			2536	2554	
Shale			2554	3750	
Huron			3750	4206	
Shale			4206	4555	
Marcellus			4555	4800	Gas check @ 4800' TSTM
Onondaga			4800	4918	Gas check @ TD TSTM
Oriskany			4918	4928	
<u>Helderberg</u>			4928	5038	
				DTD 5038'	
				LTD 5033'	

(Attach separate sheets as necessary)

CABOT OIL AND GAS CORPORATION

Well Operator

By:

R. P. [Signature]

Date:

January 12, 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."

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Clint Hurt & Assoc., Inc.
Address P.O. Box 388
Elkview, WV 25071

GEOLOGICAL TARGET FORMATION, Oriskany

Estimated depth of completed well, 4975 feet Rotary XX / Cable tools /

Approximate water strata depths: Fresh, 50 feet; salt, feet.

Approximate coal seam depths: 550 Is coal being mined in the area? Yes / No XX /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh Water									
Coal	9 5/8			X		635	635	Circ. to Surf.	Sizes
Intermediate	7			X		2560	2560	Circ. to Surf.	
Production	4 1/2			X		4975	4975	200 sks. <i>or</i>	Depths set
Tubing								<i>into 7"</i>	
Liners									Perforations:
									Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 5-29-82.

J. E. Hargrett
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof.

WAIVER

The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: , 19

By
Its

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Date: November 16, 19 81

FORM IV-38

NOV 23 1981

Operator's Well No. Cabot Well No.1

[08-78]

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

API Well No. 47 - 079 - 1067
State County Permit

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

Partial Plug

AFFIDAVIT OF PLUGGING AND FILLING WELL

WELL TYPE: Oil ___ / Gas XX / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas", Production XX / Underground storage ___ / Deep ___ / Shallow ___ /
LOCATION: Elevation: 936' Watershed: Guano Creek
District: Union County: Putnam Quadrangle: Bancroft

WELL OPERATOR Cabot Oil & Gas Corporation DESIGNATED AGENT H. Baird Whitehead
Address P.O. Box 628 Address P.O. Box 628
Charleston, WV 25322 Charleston, WV 25322

STATE OF WEST VIRGINIA,)
COUNTY OF Kanawha) SS:

C. E. McClure Sr. and Walter Parsons,

being first duly sworn according to law, depose and say that they are experienced in the work of plugging and filling oil and gas wells; that they were employed by Cabot Oil & Gas Corporation, the well operator, and participated in the work of plugging and filling the above well; that the work was commenced on November 12, 19 81, and completed on November 12, 19 81, in the following manner:

PERMITTED WORK: Partial
Plug and abandon XX / Clean out and replug ___ /

PLUGGING MATERIALS

Type of Cement	Other Materials	Depth	Thickness
Calseal		4500'	10'

Bridge Plugs Used--Type and Depth

Cast iron @ 4500'

VENT PIPE

MISCELLANEOUS MATERIALS

CASING LOST

TYPE OF RIG:

Owner: Well Op'r ___ / Contractor XX /

Rig time: ___ days plus ___ hours

COAL SEAMS (NAMES AND DEPTHS)

DESCRIPTION OF WELL MONUMENT

C. E. McClure, Sr. (SEAL)
Walter Parsons (SEAL)

Subscribed and sworn to before me this

16th day of November, 19 81.

My commission expires March 5, 19 89.

Lorene Miller
Notary Public