

09-Jul-96 47-099-01894

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Farm name: Cassidy Leonard					port of Well	Work				
Farm name: Cassidy, Leonard				Operator	Well No.:	et ekskar CN	VR Fee #1	nio continuis. Granto de co		
LOCATION: Elevati		955.		-	Quadrangle:			Wayne		
District: Butler Latitude: 12100 Fe		et South	of 38	Deg. 10 Min Deg. 25 Min.		, endugray \	Wayne			
	t Oil & Gas C airway Drive: polis, PA 151	orporation Suite 400		01 02 1	Casing & Tubing Size	Used in Drilling	Left in Well	I	Cement Fill up Cu. Ft.	
Well Work Commenced: 09/24 Well Work Completed: 10/19 Verbal Plugging Permission granted on: Rotary X Cable Rig Total Depth (feet) 414		07/09/9	96		16"	40'	40'			
		09/24/96 10/19/96			9-5/8" 646'		646'	1 .	220 sks Class "A"	
		Rig 4146	4146'		7"	1804'	1804	1	80 sks Class "A"	
Salt Water Depths (ft) 1070		7								
Is coal being mine Coal Depths (ft) OPEN FLOW D		N)? _								
	Producing formation Gas: Initial open flow		315		Six CF/d Oil:	_ Pay zone der	` ′	3976` - N/A	3996' Bbl/d	
Final open flow			481			Initial open flow Final open flow		N/A	Bbl/d	
	Time of open flow Static rock pressure		w betw 1260			final tests		4	Hours Hours	
	Second prod	ucing forma	tion		,	_ Pay zone der	oth (ft)			
	Gas: Initial of	*			CF/d Oil:	Initial open flow			_ Bbl/d	
	Final op		1		CF/d	Final open flo	ow		_ Bbl/d	
•	Static rock pr	-	w Detw		nitial and f ig (surface p	ressure after			Hours 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 & G	AS CORP	ORATIO	N	
	$\bigcap I$. ' /	710-			
By:	John	WI	lshen			
Date:	// /2/	30/96				
~						

OPEN FLOW DATA

Perf'd Big Six @ 3976' - 3996'. Broke down with 500 gals 15% HCl acid and treated water. Break down pressure - 5400 psi. ISIP - 2850 psi. Treated with 8000 gals 15% HCl acid and 28,000 SCF N2. ATP - 3200 psi. AIR - 3.1 bpm and 450 SCFM. ISIP - 2740 psi.

FORMATION	TOP	воттом		
Shale	0	968		
Salt sand	968	1324		
Shale	1324	1368		
Little Lime	1368	1400		
Big Lime	1400	1570		
MacCrady	1570	1660		
Big Injun	1660	1688		
Shale	1688	2139		
Sunbury Shale	2139	2183		
Berea	2183	2310		
Shale	2310	3292		
Coniferous Lime	3292	3913		
Big Six	3913	4020		
Keener	4020	4037		
Rochester Shale	4037	4146 - TD		

TABE	S.	PECIFICAT	IONS	FOOTAGE I	NTERVALS	CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well_	Fill-up (cu. ft.)
Conductor	16"	L.S.	65 ∦	30 '	30'	10 sks (GFS)
Fresh Water			-			38CSR19-11-2-2
Coal	9-5/8"	L.S.	32#	600°	600'	220 sks (CTS)
OPTIONAL Intermediate	*7"	L.S.	20#	1770'	700'	70 sks
Production	4-1/2"	M-70	11.6#	4075°	4075')	125 sks
Tubing				-		38CR1811.1
Liners						
Fee(s) p	F paig: I		of Oil a	nd Gas Use	Only lamation F	und WPCP

*7" Casing may be run, at company's discretion, if wet below the 9-5/8" casing.

Bond V



STATE OF WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION

#10 McJUNKIN ROAD NITRO, WEST VIRGINIA 25143-2506

July 9, 1996

Division of Environmental Protection Office of Oil and Gas Nitro, West Virginia

Re: Application for Permit #47-099-01894 to drill deep well.

Cabot Oil and Gas Corporation COMPANY:

Cassidy/CNR-Fee #1 FARM:

Wayne DISTRICT: Butler QUAD: Wayne COUNTY:

The application of the above company is Approved for Big Six. (Approved or Disapproved)

Applicant has complied with the provisions of Chapter twenty-two, eight (22-8), of the Code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation Commission as follows:

- 1.) Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owner; yes
- 2.) Provided a tabulation of all deep wells within one mile of the proposed location, including the Api number of the deep well, well name, and the name and address of operator and; *yes
- 3.) Provided a plat showing that the proposed location is a distance of 650+ feet from the nearest unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

Sincerely,

*4,600 feet to 47-099-01042 2,200 feet to 47-099-01174P

2,242 feet to 47-099-01067P

Form WW2-A (6/94)	
File Copy	

Environm	Di	visi	On of	D
JUN	1	7	1999	ion S
Office of	nit Oi	ting I &	g Gas	

1)	Date:_	June	13,	1996
2)	Opera	tor's	well	number

	<u>V</u> ,		ree				
3)	API	Well	No:	47	- 099	-	1894
				State	County		F

Permit

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

	NOTICE AND APPLICATI	ON FOR A WELL WORK PERMIT
4)	Surface Owner(s) to be served: 5) (a) (a) Name Leonard Cassidy	Coal Operator: Name Not Operated Address
	Address Rt. 1 Box 18	Address
	(b) Name	(b) Coal Owner(s) with Declaration
	Address	Name Columbia Coal
		Address attn: George Rillings
	(c) Name	P.O. Box 2469, Huntington, WV 25724-2469
	Address	Name
		NameAddressAddress
6)	Inspector Richard Campbell Address P.O. Box 77	(c) Coal Lessee with Declaration
	Address P.O. Box 77	Name
	Sumerco, WV 25567	_Address
	Telephone (304)- 524-7939	
	TO THE PERSON(S) NAM	MED ABOVE TAKE NOTICE THAT:
	Included is the lease or leases or othe	er continuing contract or contracts by which I hold the
right to	o extract oil and gas <u>OR</u>	
<u> </u>	Included is the information required by (Chapter 22, Article 6, Section 8(d) of the Code of West
Virgin	ia (see page 2)	: 22 of the West Virginia Code I have served copies of
thie n	rice and application, a location plat a	 22 of the <u>West Virginia Code</u> I have served copies of nd accompanying documents pages 1 through on
	ove named parties, by:	nd accompanying documents pages i through on
010 QL	Personal Service (Affidavit attack	hed)
	X Certified Mail (Postmarked posta	al receipt attached)
	Publication (Notice of Publication	n attached)
		22-6 and 38 CSR 11-18, and I agree to the terms and
condit	ions of any permit issued under this app	olication.
inform	nation submitted on this application form	have personally examined and am familiar with the n and all attachments, and that based on my inquiry of obtaining the information, I believe that the information
	e, accurate, and complete.	obtaining the information, i believe that the information
		penalties for submitting false information, including the
possil	pility of fine and imprisonment.	A
		or Cabot Oil & Gas Corporation
	By:	Dal IVI: Clink
	lts:	Engineering Manager
	Address	400 Fairway Drive VSuite 400 Coraopolis, PA 15108
	Telephone	(412)299-7000
Subso	cribed and sworn before me this 13th da	ay of JUNE , 1996
	Tun	their M. Bowles Notary Public
My co	ommission expires a tank 17. 97	Trotally I upilo
, , ,	Nibranai Sear Cynthia M. Bowles, Noti	ery Public
	Charters Twp., Washingt My Commission Expires Ju	on County
*	Member, Pennsylvania Associa	The state of the s