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	rur	CIAI AA AA-710					rage	. 01 -	
					OF WEST			T & BITT ~	4.0
		DIAIZIO	OF ENVIE					LAND	AS
	1)	Well Operator:			K PERMIT	45	10N)	678	
89	1)	weii Operator:	Caudi On 6	& Gas Corpo	149	4,	(2)	<u>v , o</u>	
24468	2)	Operator's Well	Number:	Marstiller #	1		3) Elevatio	n.	A333 22
24	٠,	Oberator 2 Morr.	_	IVALUI D'ULTION II	<u> </u>		1 /2/-		77.7
	4)	Well Type:	a) Oil	_ / or	Gas X		Bued 1912	4197 6	
	,	V 1	_			- G	(pures 10/2	4/99 C	167 1 1997
			b) If Gas	: Pro	duction X	/Underg	round Storag	ge	1997
					Deep X	· · · · · · · · · · · · · · · · · · ·	Shallo	W	10 300 mg.
	5)	Proposed Target	Formation(s)	: Orisk	any 47	75		Olilo	1 2 2 2 2
	~ `			0.6	60	c .			107 1 1997 1 1997 1 1997 1 0, d Cas
	6)	Proposed Total D	eptn:	96	60	feet			
	7)	Approximate fres	ch water strai	ta denthe:		3	00', 1189', 1	541'	
	′,	Approximate ites	on water stra	ia ucpins.			00,1102,1	J 1 1	
	8)	Approximate salt	water depth	s:			N/A		
		# #							
	9)	Approximate coa	l seam depth	s:			N/A		
	10)	Does land contain	n coal seams	tributary to	active mine?	Yes .	/ No	o <u>X</u>	. /
		70° 0 70° 1 70° 1 70° 1		11 1 1	. 11				
	11)	Proposed Well W	ork: <u>Dn</u>	ii and compi	ete a gas well				
	12)	Based on Randolp	h 1139						
	1. zm j	Design of the second		CASING A	ND TUBIN	G PROGRA	M		
							,	<i>ા</i> ડિ	VSRIGH.3
		TYPE	SPECI	FICATION	····	FOOTAG	GE INTERVA	ALS	CEMENT
-					Weight	101	27626 181		I III WD
	-		Size	Grade	per ft.	Drilling	Well	1	(cu. ft.)
	-	ductor	13-3/8" 9-5/8"	L.S.	54.5#	80'	(80°) (1750°)) sks (GFS)
		sh Water	9-3/8	J-55	36#	1750'	1730		0 sks (CTS) SBIBM, Q, Z
	Coa	14				1 1		1971°	AND THE OLD
		rmediate	*7"	T-55	20#	3500'	(35000)	53	
		ermediate	*7" 4-1/2"	J-55 N-80	20# 11.6#	3500° 9600°	(3500°)	53	0 sks (CTS)
	Pro	duction	*7" 4-1/2"	J-55 N-80	20# 11.6#	3500' 9600'	(3500°) (9600°)	53	
	Pro Tub	duction bing		 	}	 			0 sks (CTS) 100 sks
	Pro Tub Lin	duction ping ers	4-1/2"	N-80	11.6#	9600'	9600,	38	0 sks (CTS) 100 sks
	Pro Tuk Line *7"	duction bing ers may be run, at co	4-1/2"	N-80	11.6#	9600'	9600,	38	0 sks (CTS) 100 sks
	Pro Tub Line *7" drill	duction ping ers	4-1/2" ompany's dis	N-80	11.6#	9600'	9600,	38	0 sks (CTS) 100 sks
	Pro Tub Line *7" drill	duction bing ers may be run, at colling to TD	4-1/2" pmpany's dis	N-80	11.6#	9600'	9600,	38	0 sks (CTS) 100 sks
	Pro Tub Line *7" drill	duction bing ers may be run, at colling to TD CKERS: Kind Size	4-1/2" pmpany's dis	N-80	11.6#	9600'	9600,	38	0 sks (CTS) 100 sks
	Pro Tub Line *7" drill PAG	duction bing ers may be run, at colling to TD CKERS: Kind Size	4-1/2" ompany's dis	N-80	11.6#	9600'	9600,	38	0 sks (CTS) 100 sks
223	Pro Tub Line *7" drill	duction bing ers may be run, at colling to TD CKERS: Kind Size	4-1/2" ompany's dis	N-80	11.6# vater is foun	9600' d below 9-5.	/8" casing th	38	0 sks (CTS) 100 sks
~	Pro Tut Line *7" drill PAG	duction bing ers may be run, at colling to TD CKERS: Kind Size Dep	4-1/2" ompany's dis	N-80 cretion, if v	vater is foun	9600' d below 9-5.	/8" casing th	38	0 sks (CTS) 100 sks
~	Pro Tut Line *7" drill PAG	duction bing ers may be run, at colling to TD CKERS: Kind Size Dep	4-1/2" company's disconnections disconnections otherwise the set	N-80 cretion, if v For Officerk Permit	vater is foun	9600' d below 9-5. Gas Use On	/8" casing th	38	0 sks (CTS) 100 sks OP/O-1/, J problems
~	Pro Tut Line *7" drill PAG	duction bing ers may be run, at colling to TD CKERS: Kind Size Dep	4-1/2" company's disconnections disconnections otherwise the set	N-80 cretion, if v	vater is foun	9600' d below 9-5	/8" casing th	38	0 sks (CTS) 100 sks SP/B-11, 1 problems
~	Pro Tut Line *7" drill PAG	duction bing ers may be run, at colling to TD CKERS: Kind Size Dep	4-1/2" company's disconnections disconnections otherwise the set	N-80 cretion, if v For Officerk Permit	vater is foun	9600' d below 9-5. Gas Use On	/8" casing th	38	0 sks (CTS) 100 sks OP/O-1/, J problems
	Pro Tut Line *7" drill PAG	duction bing ers may be run, at colling to TD CKERS: Kind Size Dep	4-1/2" company's disconnections disconnections otherwise the set	N-80 cretion, if v For Officerk Permit	vater is foun	9600' d below 9-5	/8" casing th	38	0 sks (CTS) 100 sks OP/O-1/, J problems

	(b) NameAddress(c) NameAddress	Gaithersburg, MD 20877 Linda J. Warner 15225 Breedens Road Doswell, VA 23047		(b) Coal Owner(s) with Declaration Name David S. Marstiller Address 4 Mills Road Gaithersburg, MD 20877 Name Linda J. Warner Address 15225 Breedens Road	-
6)	Inspector Address Telephone			Doswell, VA 23047 (c) Coal Lessee with Declaration Name Address	_
		\$100 per 100 pe		VE TAKE NOTICE THAT:	
under applic	Included is a representation plat, and acceptance of the control o	as required under Chapter 22 of the ecompanying documents pages 1 thresonal Service (Affidavit attached) retified Mail (Postmarked postal receblication (Notice of Publication attached) and understand Chapter 22-6 and 38 h. Her penalty of law that I have personal attachments, and that based on not that the information is true, accurate	22, Article 6, See West Virginia (ough ough ough ough ough attached) 3 CSR 11-18, and ally examined and inquiry of tho te and complete.	ection 8(d) of the Code of West Virginia (see page 2) Code I have served copies of this notice and application, on the above named parties, by: d I agree to the terms and conditions of any permit issued and am familiar with the information submitted on this see individuals immediately responsible for obtaining the	



STATE OF WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION

#10 McJUNKIN ROAD NITRO, WEST VIRGINIA 25143-2506

October 22, 1997

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

Re: Application for Permit #47-083-01142 to drill deep well.

COMPANY: Cabot Oil and Gas Corporation

FARM: David S. Marstiller #1

COUNTY: Randolph DISTRICT: Dry Fork QUAD: Whitmer

The application of the above company is Approved for Oriskany.

(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 400+ 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,

Engineer

*3,170 feet to 47-083-01139

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3.4	1 1	4 10	
- W D	2.5		

Date: 5-Oct-98 **API** # 47-083-01142

State of West Virginia Division of Environmental Protection Section of Oil and Gas Well Operator's Report of Well Work

Marstiller, David S. Farm name: Operator Well No.: Marstiller #1 LOCATION: 4,333.22' Elevation: Quadrangle: Whitmer District: Dry Fork County: Randolph Latitude: 3,210 feet South of 38 DEG. 52 30 SEC. MIN. Longitude: 7,070 feet West of 79 DEG. 30 MIN. 0 SEC. Company: Cabot Oil & Gas Corporation Used Casing Left Cement 400 Fairway Drive: Suite 400 & in Fill up in Coraopolis, PA 15108-4308 Tubing Drilling Well Cu. Ft. Size John Abshire Agent: Inspector: Philip Tracy 13-3/8" 57' 57' 15 sks Permit Issued: 10/24/97 Class "A" Well Work Commenced: 1/30/98 Well Work Completed: 3/17/98 9-5/8" 1799.90' 1799.90' 600 sks Verbal Plugging Class "A" Permission granted on: Rotary X Cable Rig 4-1/2" 9301' 9301' 230 sks Total Depth (feet) 9537 Class "A" Fresh Water Depths (ft) 132' Salt Water Depths (ft) RECEIVED Office of Oil & Gas Permitting Is coal being mined in area (Y / N)? N Coal Depths (ft) OCT 21 1998 WV Division of **OPEN FLOW DATA** Environmental Protection Producing formation Oriskany Pay zone depth (ft) open hole Gas: Initial open flow _ 1,032 MCF/d Oil: Initial open flow N/A Bbl/d Final open flow 4,230 MCF/d N/A Final open flow Bbl/d Time of open flow between initial and final tests Hours 2,185 psig (surface pressure after Static rock pressure Hours Second producing formation Pay zone depth (ft) Gas: Initial open flow Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours Static rock pressure psig (surface pressure after Hours NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED OR STIMULATING, PHYSICAL CHANGE, ETC.

GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: CABOT OIL & GAS CORPORATION

10-14-98

KAN /

OPEN FLOW DATA

Pumped 144 bbls of 15% HCl acid at 7.7 bpm and 3230 psi. No true break seen. ISIP: 2500 psi. Frac'd well with 1,720 bbls of 30% x-linl gel, 11,200% 80/100 mesh, 54,000% 20/40 mesh sand. ATP: 3628 psi. MTP: 4200 psi. AIR: 20 bpm. ISIP: 2485 psi.

FORMATION	TOP	ВОТТОМ	REMARKS
KB	0	10	
Sand/Shale	10	3334	
Shale/Silt	3334	3795	
Sand	3795	3918	
Sand/Shale	3918	4391	
Shale/Sand	4391	6104	
Shale	6104	7733	
Sand	7733	7768	
Shale	7768	7980	
Sand	7980	7992	
Shale	7992	8661	
Tully	8661	8707	
Shale/Lime	8707	8910	
Upper Marcellus	8910	8993	
Purcell	8993	9024	
Lower Marcellus	9024	9096	
Onondaga	9096	9149	
Huntersville	9149	9205	-
Needmore	9205	9231	
Oriskany	9231	9439	
Helderberg	9439	9537 - TD	