



14-Apr-88 * AFI # 47- 23-00018 __

State of West Virginia
DEPARTMENT OF ENERGY Division of Oil and Gas DEPT OF 322 708 - 1 Chas., WV 20204

Well Operator's Report of Well Work

Operator Well No.: 2533 Farm name: EVANS, RUTH APR 1 1 Elevation: 2290.00 Quadransle: BLACKBIRD KNOB LOCATION: County: GRANT District: UNION Latitude: 5550 Feet South of 39 Des. 5 Min. 0 Sec. Lonsitude 3350 Feet West of 79 Des. 15 Min. 0 Sec. Company: EQUITABLE RESOURCES EXPLORATION, INC. -----| Casing | Used in | Left | | Cement | P. O. DRAWER 40 Į. IFill Upl BUCKHANNON, WV 1 & 1 | Tubins | Drillins | in Well|Cu. Ft.| Asent: Douglas P. Terry 1 1 Size Inspector: PHILLIP TRACY 13 3/8" 28 28 04/15/88 Permit Issued: Well work Commenced: 10=4-88_____ Well work Completed: 11=3-88_____ 1510.35 Verbal Plussins Permission granted on: _____ 1--Rotary_X_ Cable ____ Ris

Total Depth (feet) _8602' ____ | 5 1/2" | 8559.03 | 8559.03 | 949.75 CF

Fresh water depths (ft) 60'__1307' | _____ | Salt water depths (ft) None ŧ Î 1 Is coal being mined in area (Y/N)?__ | 8049 Coal Derths (ft):_____ | 2 3/8" | OPEN FLOW DATA Producing formation Oriskany Pay zone depth (ft) 8010 ____ Gas: Initial open flow 582 MCF/d Oil: Initial open flow Bbl/d Final open flow $\underline{5865}$ ___MCF/d Final open flow _____Bbl/d Time of open flow between initial and final tests____6__Hours Static rock Pressure_ $\underline{2100}$ __psis (surface pressure) after $\underline{72}$ ___Hours Second producing formation_____ Pay zone depth (ft)_____ Gas: Initial open flow_____Bbl/d Final open flow_____Bbl/d Time of open flow between initial and final tests_____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.

Static rock Pressure_____psis (surface pressure) after ____Hours

For: EQUITABLE RESOURCES EXPLORATION, INC.

By: ___ Douglas P. Terry Douglas P. Jun Date: __April 10, 1989

11/12/88 - Halliburton acidized with 2000 gallons 5% Fe Acid, RTTS Packer set @ 7859'.

2/7/89 - Halliburton fracked with 200,000 lbs. 20/40 sand, 13,200 lbs. 80/100 sand and 210,000 Scft N2.
Perforations: 7929' - 8010', Oriskany Sandstone.

Harrell Shale	6714'
Upper Marcellus	7526'
Purcell	7547'
Lower Marcellus	7615'
Tioga Metabentonite	7661'
Needmore	76831
Oriskany Sandstone	7795'
Helderberg L.S.	8016'
Shriver Chert	8196'
Mandata Shale	8243'
Corriganville	82621
Keyser Group 497	8346 to TD 8602'





11	Date: A	pri1	14		_, 19_8	7
- ,	Operator's Well No.	251	3.3			
3)	API Well No.	47		023-0	018	
٠,		State		County	Pe	ermit

STATE OF WEST VIRGINIA DIVISION OF OIL & GAS DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

DE	PARTM	ENT OF	ENERG	Ϋ́	AP	PLICAT	TION FOR A WI	ELL WORK PERM	T		
4) 33	VELL TYP	DE. A O	÷1	/ Ga	. X	,					
4) W	VELL IIF	E: A U	f "Cae" I	/ Oa Production	з <u>— х</u>		/ Undergroun	d storage	Deep X	/ Shallow	/)
6) T	OCATION		vation:	2.	290		Watershed:	Big Star	r Run		
5) L	OCA HO	v. Die	trict:	3 3 Un	ion	3	County:	Grant 2	3Ouadrangle: _I	Blackbi	rd Knob 2
77	UCII ODE	יים אינט. פוע	IIn i on	Dril	ling	COL	E: 50550	7) DESIGNAT	ED AGENT Joseph	C. Pet	ctey
0) N		_AOTAX	et Of	fice	Drav	ver 4	0	Address	Post Office	Drawei	<u> 40</u>
	Address		ckhan						Buckhannon		
	IL & GAS						handra and a second	9) DRILLING	CONTRACTOR:		
	IIL & GAS							Name	Union Dri	ling.	Inc.
N		. Do	st Of	fica	Por	2536		Address		e Drawe	er 40
	Address		kins,				<i>I</i>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Buckhannor	1. WV 2	26201
			•		7.U.2.2 V			/ D-4-111			
10) P	ROPOSE	D METT.	WORK:	Drill	Λ	_/ Drill	deeper	/ Redriii	/ Stimulate_X_		
								forate new formati			
				Other p	hysical	change i	n well (specify)_	. ~			
11) C	GEOLOGI	CAL TAR	GET FOR	MATION.	,	Oris	skany	· 			
12	2) Estima	ted depth	of complet	ed well,		_&_K(X)	X 8300 fe	eet	_		
13	3) Appro	ximate trat	ta depths:	Fresh,			feet; s	salt,	feet.		
14	4) Appro	ximate coa	ıl seam dep	ths:			ls	coal being mined in	the area? Yes	/ No_	/
15) C	CASING A	ND TUB	ING PRO	GRAM							
CASI	NG OR		SPEC	DIFICATIONS	6		FOOTAG	GE INTERVALS	CEMENT FILL-UP OR SACKS	PACI	KERS
TUBI	NG TYPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	(Cubic feet)		
Conduc	205	20			χ		as needed	as needed	1	Kinds	
Fresh w	······	120		1							
	vate:	-		1					170	Sizes 🕥	
Coal	**	0 5/0	NI OO	76010	v		1500	1500	as required	By Rul	15.05
Interme		()	N-80	1	1	 	11	8200	ta-surface	Depths set	-
Product		5 1/2	N-80	17	<u> </u>		8200	8200	820 SKS C		REQUIRED
Tubing		 	-	-	 	-			BY RULE IS	U	CC-90THC 5
Liners	·····		-	 	 	-			- WI THE	Top	Bottom
			<u> </u>	-						100	Bottom
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			1		<u> </u>	<u>i</u>	<u> </u>			<u> </u>	
							OFFICE US				
							DRILLING	PERMIT			0.7
			47	-023-0	018				Apri	L Z3	87 19
Permi	t number_						~		Da	le	
											artinant lagal re-
This p	permit cove	ering the v	vell operat	or and we	ll locati	on show	n below is evider	ice of permission gr	anted to drill in accordan	and Cas Incas	neter (Defer to
quiren	nents subjected the	ect to the t	conditions	ede locati	nerem nerem	nits for	any nermitted we	ork. In addition, th	e given to the District Oil ne well operator or his con	tractor shall r	otify the proper
distric	t oil and s	as inspect	or 24 hour	rs before a	ctual p	ermitted	work has comme	nced.)			
									ect to any modifications	ind conditions	specified on the
	e hereof.	OIK IS AS C					, p.a.,		•		
	t expires		Ap	ril 23	, 19	89	unless	well work is commer	nced prior to that date and	prosecuted wi	th due diligence.
2 (11111	cxpncs.									,	
							T T				
Bo	ond:	Agen	t: :	Plat:	Cars:	ing	Fee WP	SP 995	Other		
		V	1/		1	5	4/10/1	1/10			
	$V \perp$		$ \perp$		16		196 615	1	<u> </u>		
							÷	Sal 1	10 el stan	1 -	
								John A	Journey)	<u> </u>	/
NOT	E: Keep	one copy o	of this peri	nit posted	at the	drilling l	ocation.	Difector, I	italian of 0il	and Gas	L PRIMUL
						- 6 48 ^	DDE ICALITIC CO	ADV for instruction	S to the well operator.	www.	1000
			Sec	e the rever	se side	of the A	PPLICANT'S C	OPX for instruction	s to kie well obelatoly		

023-18 Resource Experies 4/15/20

FORM WW-2B

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

				* * . * . *	APPLICATION				
1)	Well Ope	rator: Eq	luitable Re	sources Exp	loration, Inc	16	155, 3, 255		
2)	Operator	's Well N	umber:	2533		3) Ele	evation: 2290		
4)	Well typ	e: (a) C)il_/	or Gas	X/				
		(b) I	f Gas:	Production Deep		cound Storage Shallow			
5)	Proposed	Target F	rormation	(s): <u>Orisk</u>	any				
6)	Proposed Total Depth: 8650 feet								
7)	Approxim	ate fresi	n water s	trata dept	:hs:				
8)	Approxim	ate salt	water de	pths:					
9)	Approxim	ate coal	seam dep	oths:					
10)	Does lan	d contair	coal se	ams tribut	ary to act	ive mine? Ye	es/ No/		
11)	·Proposed	Well Wor	k: Drill/	Stimulate					
12)		* & * * * * * * * * * * * * * * * * * *	CASIN	IG AND TUBI	NG PROGRAM				
TYPE		SI	PECIFICAT		FOOTAGE I		CEMENT		
		Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)		
Cond	uctor	20			as needed	as needed			
Fres	h Water								
Coal		elencionalista appare			·	+ to in	38CSR18-11-3		
Inte	rmediate	9 5/8	N-80	36 & 40	1500	1500 Surface	38CSRIB-11.3 as required		
Prod	uction	5 1/2	N-80	17	8550	8550	30CSRIV-11.1 to surface		
<u>Tubi</u>	ng					l me	A TENNOTE IN		
<u>Line</u>	rs					I KE	Ser C		
PACK	ERS : Kin			-		44	MAR 24 1988		
•		ths set				DIVIS DEPAR	SION OF OIL & G AS RTMENT OF ENER GY		
250			A .		and Gas Use		W		
过	Fee(s) p	paid:	Well Well	Work Permi	t A Rec	lamation Fun	d WPCP		
(数)	Plat (M WW-9	JJ ww.	-2B (#1)	Bond 50Blu	(Type)	Agent		



DIVISION OF OIL & GAS 3) DEPARTMENT OF ENERGY

Date	3:	March 7.	1988			
Operator's well number						
-		2533				
API			7023_	_	<u>00018-REN.</u>	
		State	- County	_	Permit	

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

	NOTICE AND APPLICATION F	OR A WELL WORK PERMIT
	Surface Owner(s) to be served: (a) Name <u>SEE ATTACHED EXHIBIT</u> Address	5) (a) Coal Operator: Name Address
	(b) NameAddress	(b) Coal Owner(s) with Declaration Name SEE ATTACHED EXHIBIT Address
	(c) NameAddress	Name Address
6)	Inspector Phillip Tracy Address P. O. Box 2536 Elkins, WV 26241 Telephone (304) - 636-8798	
	TO THE PERSON(S) NAMED AE	OVE TAKE NOTICE THAT:
contr X Secti	re served copies of this notice and	extract oil and gas <u>OR</u> ed by Chapter 22B, Article 1, ia (see page 2) hapter 22B of the <u>West Virginia Code</u> application, a location plat, and on the above named parties,by: ttached) stal receipt attached)
familattad respo	ne terms and conditions of any perm I certify under penalty of law that liar with the information submitted the chments, and that based on my inquitonsible for obtaining the information, accurate, and complete. I am aware that there are significant that including the possibility well Operator	t I have personally examined and am on this application form and all ry of those individuals immediately on, I believe that the information cant penalties for submitting false
	By: Joursa	ons Manager
	Address P. O.	Drawer 40 /
	<u> </u>	nnon, WV 26201
Subso	relephone <u>302</u> cribed and sworn before me this <u>7th</u>	
•	Maya Can Haron Roland	Notary Public
Му с	ommission expires February 19, 1992	