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DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

Slule of Mest Nirginiu Department of Mines

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	10/21/88
Operator'	S
Well No.	E-64
Farm R.	NICHOLSON #1
ΛΡΙ NO. 04	47 - 017 - 3664

WELL OPERATOR'S REPORT

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas x / Liquid Injection (If "Gas," Production x / Undergrow	n/ Wastr urd Storage	Disposa / Deep	l/ p/ Sha	llow X /)
LOCATION: Elevation: 1090' Watershed				-
District: GREENBRIER County DOD			BIG ISA	AAC 7½
•	·	. J.	***************************************	
CYMIDANIV TWOTIT THEROW THO				
COMPANY EXCEL ENERGY, INC.	T		****	1.63
ADDRESS P.O. BOX 1020, BRIDGEPORT, WV 26330 DESIGNATED AGENT H.L. BARNETT	Casing	Used in		Cement fill up
ADDRESS P.O. BOX 1020, BRIDGEPORT, WV 26330	}	Drilling	in Well	Cu. ft.
	Size 20-16	201	eric en e	
SURFACE OWNER JEFFREY A. MILLS ADDRESS RE 1 BOY 345 SALEM WW 26462	Cond.	20 '	20 '	Sanded Ir
ADDRESS RT. 1 BOX 345, SALEM, WV 26462 MINERAL RIGHTS OWNER ROSA NICHOLSON HEIRS	13-10"			
ADDRESS UNKNOWN	9 5/8			
OIL AND GAS INSPECIOR FOR THIS WORK	8 5/8	1239'	1239'	Ċ.T.S.
MIKE UNDERWOODADDRESS SALEM; WV 26426	7	-		
	5 1/2			
PERMIT ISSUED 08/07/88	4 1/2	5513'	5513'	500 sks
DRILLING COMMENCED 09/11/88	3			
DRILLING COMPLETED 09/16/88 IF APPLICABLE: PLUGGING OF DRY HOLE ON	2			
CONFINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners used		workers and the state of the st	
GEOLOGICAL TARGET FORMATION ALEXANDER, BENSO	N	Donl	-1, 580	5
Depth of campleted well 5591 feet 1				reec
Water strata depth: Fresh45, 1568feet;			10015	
Coal seam depths: 202 - 207			, Yl in the	area? NO
OPEN FLOW DATA				· · · · · · · · · · · · · · · · · · ·
	Dave	nous dans		F 420 =
Producing formation ALEXANDER Gas: Initial open flow SHOW Mcf/d	Oile Trii	zone depi	CJ 2320.	-5430 teet
Final open flow 581 Mcf/d	OTT: HITI	lar open	r.row	Bb1/d
Time of open flow between init	ruli ini nod 61.	u. open r.	row .	Bbl/d
Time of open flow between init				
Static rock pressure 1600 psig(surface (If applicable due to multiple completion)		ent) artei	r_/2_hou	rs shut in
		-	. 5060	
Second producing formation BENSON Gas: Initial open flow SHOW Mof/d	Pay	zone depi	th 5060-	feetfeet
. XI/U	Oil: Ini	tial open	flow	Bbl/d
Final open flow 581 Mcf/d	Oil: Fina	al open f	l.ow	Bbl/d
Time of open flow between init	ial and fin	nal tests	<u>h</u>	UTS2 8 1988
Static rock pressure 1600 psig(surface	measurene	nt) after	72 hou	rs shut in

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHARGE, EIC.

STAGE I - ALEXANDER (5353'-5426') 12 holes, 400 sks sand, 500 gal 15% HCL, 160 BBL 75Q Foam.

STATE II - BENSON (5063'-5068') 13 holes, 400 sks sand, 500 gal 15% HCL, 160 BBL 75Q Foam.

WELL LOG

		ELL LOG	
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all freakl salt water, coal, oil and ga
FILL SHALE & RED ROCK COAL SHALE & RED ROCK SAND SHALE SAND SHALE & SAND BIG LIME BIG INJUN SHALE SAND (50') SHALE SAND (GORDON) SAND & SHALE SPEECHLEY SHALE & SAND BENSON SHALE ALEXANDER SHALE.	0 12 202 207 1167 1282 1677 1704 2115 2170 2233 2774 2789 2850 2889 3460 3500 5050 5070 5386 5422	12 202 207 1167 1282 1677 1704 2115 2170 2233 2774 2789 2850 2889 3460 3500 5050 5070 5386 5422 5593 DTD	DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

EXCEL ENERGY, INC.	
Well Operator	
By: To pasus	PRESIDENT
Date: 10/21/88	
▲	

OCT 28 1988

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 of a well."

25-JUL-97 API # 47- 17 -03664 F

State of West Virginia

JAN 0.7 1998 Division of Environmental Protection Section of Oil and Gas

Permitting Office of Oil & Gas

Well Operator's Report of Well Work

arm name:

MILLS, JEFFREY A. Operator Well No.: NICHOLSON E-64

OCATION:

Elevation: 1,090.00 Quadrangle: BIG ISAAC

District: GREENBRIER

County: DODDRIDGE

Latitude: 5560 Feet South of 39 Deg. 15 Min. 0 Sec. Longitude 5850 Feet West of 80 Deg. 35 Min. 0 Sec.

ompany: Exploration Partners Prod

P.O. Box 930

Bridgeport, WV 26330-1245

gent: Louis A. Ferrari

nspector: MIKE UNDERWOOD

ermit Issued: 07/28/97 ell Work Commenced: 09/12/97

Well Work Completed: <u>09/11/97</u>

erbal Plugging

ermission granted on:

otary<u>x</u> Cable____ Rig

otal Depth (feet) _____ resh water depths (ft)__

alt water depths (ft)_____

s coal being mined in area (Y/N)?-

coal Depths (ft): _____

Casing &	Used in	Left	Cement
Tubing	Drilling	in Well	Fill Up Cu. Ft.
Size			
SEE	ORIGINAL (√R-35 	
NO A	ADDITIONAL	CASING F	RUN
(s	 	PPER PAYS	§)

PEN FLOW DATA

Producing formations BRADFORD, SPEECHLEY, BALETOWN Nay zone depth (ft)3486-4943
Gas: Initial open flow 60 MCF/d Oil: Initial open flow Bbl/
Final open flow <u>60</u> MCF/d Final open flow <u></u> Bbl/
Time of open flow between initial and final tests24 Hour
Static rock pressure <u>300</u> psig (surface pressure) after <u>24</u> Hour
Second producing formationPay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial Open flow Bbl/
Final open flow MCF/d Final open flow Bb1/
Time of open flow between initial and final tests Hour
Static rock pressure psig (surface pressure) after Hour
OTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED
NTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL
od which is a systematic detailed dedication recurb of all formations,
ACLUDING COAL ENCOUNTERED BY THE WELLBORE.
X S S S S S S S S S S S S S S S S S S S
() Sin G. Ferran
For: EXPLORATION PARTNERS LIC
FOR: EXPLORATION PARTNERS LLC
By: Louis A. Ferrari
Date: November 18, 1997

1 23-96

ORM IV-35 REVERSE)

ETAILS OF PERFORATED INTERVALS, FRACTURING, OR STIMULATING PHYSICAL CHANGE, ETC.

TAGE I (4846-4943) 16 HOLES 500 GAL 15% HCL, 30,000# SAND, 325 BBL GELLED H20.

TAGE II (3486-3778) 16 HOLES 500 GAL 15% HCL, 30,000# SAND, 345 BBL GELLED H20.

WELL LOG

ORMATION COLOR	HARD OI	R SOFT	TOP F	EET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal and gas	
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			manufacture and the state of th				

IV-35 (Rev 8-81) RECEIVED
W Division of
Environmental Protection

· JUN 2 8 1996

Permitting Office of Oil & Gas



Slute of Mest Mirginia Well No. E-64

annilft, do besontragell, noieivich and ben liw

Date 10/21/88
Operator's
Well No. E-64
Farm R. NICHOLSON #1
API No.047 - 017 - 3664

WELL OPERATOR'S REPORT

OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas x / Liquid Injection (If "Gas," Production x / Undergrow	ı/ Wast und Storay	e Disposa e/ Dee	1/ p / Sha	ulow X /)
LOCATION: Elevation: 1090' Watershed	BUCKEYE	CDEFK		**************************************
District: GREENBRIER County DOD	DRIDGE	Quadranal	a BIG IS	AAC 71
		_daaaca aa ig r	*	
COMPANY				
COMPANY EXCEL ENERGY, INC.	:			
ADDRESS P.O. BOX 1020, BRIDGEPORT, WV 26330	Casing	Used in	Left	Cement
DESIGNATED AGENT H.L. BARNETT	Tubing	Drilling	in Well	fill up Cu. ft.
ADDRESS P.O. BOX 1020, BRIDGEPORT, WV 26330	Size			
SURFACE OWNER JEFFREY A. MILLS ADDRESS RT 1 BOY 345 CALTRY AND STATES	20-16 Cond.	20'	√2 ′0 '	Sanded In
ADDRESS RT. 1 BOX 345, SALEM, WV 26462 MINERAL RIGHTS CWNER ROSA NICHOLSON HEIRS	13-10"			
ADDRESS UNKNOWN	9 5/8			
OIL AND GAS INSPECTOR FOR THIS WORK	8 5/8	1239'	1239'	C.T.S.
MIKE UNDERWOODADDRESS SALEM, WV 26426	7			
PERMIT ISSUED 08/07/88	5 1/2			
DRILLING COMMENCED 09/11/88	4 1/2	5513'	5513'	500 sks
DRILLING COMPLETED 09/16/88	3			
IF APPLICABLE: PLUGGING OF DRY HOLE ON	2			
CONFINUOUS PROGRESSION FROM DRITLING OR	Liners			
REWORKING. VERBAL PERMISSION OBTAINED ON	used			
CEOLOGICAL MARGES	<u> </u>	·1		
GEOLOGICAL TARGET FORMATION ALEXANDER, BENSON	<u> </u>	Dept	lı 5800	feet
Depth of completed well 5591 feet R	otary	Cable	Tools_	
Water strata depth: Fresh45, 1568feet;	Salt	feet		,
Coal seam depths: 202 - 207	Is coal l	seing mine	d in the	area? NO
OPEN FLOW DATA				
Producing formation <u>ALEXANDER</u>	Pay	zone dept	lı 5350-	5430 fe∉t
Gas: Initial open flow SHOW Mcf/d	Oil: Ini	tial open	flow	- · Bbl/d
Final open flow 1581 Mcf/d	🦸 Film	nl. open fl	ow	- Bbl/d
Time of open flow between initia	al and fin	ml tests_	liot	ùs.
Static rock pressure 1600 psig(surface	neaswor	ent) after	72 how	s shut in
(If applicable due to multiple completion-				
Second producing formation BENSON	Pay	zone dept	1 <u>1</u> 5060-5	080 feet
Gas: Initial open flow SHOW Mcf/d	Oil: Init	ial open	flow	- Bb1/d
Final open flow 1581 Mcf/d	Oil: Fina	ul open fl	₩	Bbl/d
Time of open flow between initia	al and fin	al tests	iva	ıre
Static rock pressure 1600 psig(surface)	ieasuraiei	ıt) after_	72 lxx	s shut in

DETAILS OF PERFORMIED INTERVALS, FINCTURING OR STIMULATING, PHYSICAL CHARGE, ETC.

STAGE I - ALEXANDER (5353'-5426') 12 holes, 400 sks sand, 500 gal 15% HCL, 100 ...160 BBL 750 Foam.

STATE II - BENSON (5063'-5068') 13 holes, 400 sks sand, 500 gal 15% HCL, 160 BBL 750 Foam.

ORMATION COLOR HARD OR SOFT	TOP FEET	BOLLOW LEEL	REMAINS Including indication of all fres and salt water, coal, oil and ga
FILL SHALE & RED ROCK COAL SHALE & RED ROCK SAND SHALE SAND SHALE & SAND BIG LIME BIG INJUN SHALE SAND (50') SHALE SAND (GORDON) SAND & SHALE SPEECHLEY SHALE & SAND BENSON SHALE ALEXANDER SHALE ALEXANDER SHALE	0 12 202 207 1167 1282 1677 1704 2115 2170 2233 2774 2789 2850 2889 3460 3500 5050 5070 5386 5422	12 202 207 1167 1282 1677 1704 2115 2170 2233 2774 2789 2850 2889 3460 3500 5050 5050 5050 5070 5386 5422 5593 DTD	

(Attach separate sheets as necessary)

EXCEL ENERGY, INC.	
Well Operator	× . •
By: To Dacon	PRESIDENT
Date: 10/21/88	

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 end, encountered in the drilling of a well."

FORM WW-2B

0,1	1100	7	•
	Page	of	

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

				. ~	APPLICATIO		<u></u>				
1)	Well Ope	erator:	EXCEL	ENERGY, II	NC. 1657	0, 4, X	52,				
2)	Operator	's Well	Number:_	E-64		3) Ele	evation: 1090				
4)	Well typ	oe: (a)	0il_/	or Gas	5 <u>X</u> /						
		(b)	If Gas:	Production Deep	n_X/ Underg	round Storage Shallov					
5)	Proposed	l Target	Formation	n(s):	LEXANDER						
6)	Proposed Total Depth: 5800 feet										
7)	Approxim	nate fres	h water s	trata dept	hs:60,	800					
8)	Approxim	nate salt	water de	pths:							
9)	Approxim	nate coal	seam dep	ths: 2	00-05						
10)	Does lan	d contai	n coal se	ams tribut	ary to act	ive mine? Ye	es/ No_X_/				
11)	Proposed	Well Wo	rk: Dri	ll & Stimu	late						
12)		er e									
			CASIN	G AND TUBI	NG PROGRAM						
TYPE_		S	PECIFICAT	IONS	FOOTAGE I	NTERVALS	CEMENT				
		Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)				
Condu	ctor	11 3/4			3.0	0	SANDED IN				
Fresh	Water						38c3R-18-11.3				
Coal						P-15 V	a.k.				
<u>[nter</u>	mediate	8 5/8	***************************************	23	1190	1190	290 SKS				
Produ	ction	4 1/2		10.5#	5600	5600	38CSR-11.1				
<u> ubin</u>	g										
iner	S					0)50	TELLARIN				
ACKE	<u>RS</u> : Kin						L 22 1988				
-20	Siz Dep	es ths set _				DIVIŞIO	PN OF OIL & GAS				
Por Divison of Oil and Cas Use Only DEPARTMENT OF ENERGY											
Fee(s) paid: Well Work Permit Reclamation Fund WPCP											
#X)ı	Plat	JI- WW-9	WW-	2В 🗐 В	ond 5034	anket	Agent				
/	0	(V -	(Type)					

Page	1 of
Form	WW2-A
(09/8	7)
File	Copy

DIE			W	
47	JUL	22	1988	ارلال

1) 2)

3)

Date: <u>JULY 12, 1988</u> Operator's well number

E-64
API Well No: 47 - 017 - 3664 State - County - Permit

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

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

	NOTICE AND APPLICATIO	N FOR A WELL WORK PERMIT
4)	Surface Owner(s) to be served: (a) Name <u>JEFFREY A.MILLS</u> Address	5) (a) Coal Operator: Name Address
	(b) NameAddress	Name <u>WILLIS G. TETRICK, JR.</u>
	(c) NameAddress	
6).	Inspector <u>MIKE UNDERWOOD</u> Address <u>RT. 2 BOX 114</u> SALEM, WV 26426 Telephone (304)- 782-1043	NameAddress
	TO THE PERSON(S) NAMED	ABOVE TAKE NOTICE THAT:
X Sect I ha	ave served copies of this notice ompanying documents pages 1 throu Personal Service (Affidavi X Certified Mail (Postmarked Publication (Notice of Pub	uired by Chapter 22B, Article 1, ginia (see page 2) r Chapter 22B of the West Virginia Code and application, a location plat, and gh on the above named parties, by: t attached) postal receipt attached)
fami atta resp is t	I have read and understand Chap the terms and conditions of any p I certify under penalty of law iliar with the information submit achments, and that based on my in consible for obtaining the inform	ter 22B and 38 CSR 11-18, and I agree ermit issued under this application. that I have personally examined and am ted on this application form and all quiry of those individuals immediately ation, I believe that the information ficant penalties for submitting false ty of fine and imprisonment.
ZVIS *	NOTARY PUBLIC Its: STATE OF WEST VIRGINIA Address KELLY R. OSBORN 901 W. Main St., Suite 201 Bridgeport, W. Ve. 26330 Telephone	PRESIDENT P.O. BOX 1020 BRIDGEPORT, WV 26330 (304)-842-6927,
នរំរៀន	actibed and sewern before me this	12TH day of /.IMI.Y , 19_88 Notary Public
Mv	commission expires 7-16-96	THE TOTAL PUBLIC

CEMENT

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

Issued	07/28/97
Expus	07/28/99

	Well Operator: Exploration Partners Producing Company 1458	5 9 752
	Operator's Well Number: E-64 (Nicholson)	3) Elevation: 1090
٦,	Well type: (a) Oil/ or Gas x/	
	(b) If Gas: Production x/ Underground Storage Deep / Shallow	
5)	Proposed Target Formation(s): Alexander 6	
6)	Proposed Total Depth: 5800'	Environmental Protection
7)	Approximate fresh water strata depths: 60, 800	3 1996
8)	Approximate salt water depths: N/A	25
91)	Approximate coal seam depths: 200-05	Office of Oil & Gas
10)	Doses land contain seams tributary to active mine? Yes /	No X / - :
11)	Proposed Well Work: FRAC (RILEY, BALLTOWN, SPEECHLEY)	Liter
12)	CASING AND TUBING PROGRAM	ENOUG.

TYPE SPECIFICATIONS FOOTAGE INTERVALS

Weight For Left in Fill - up Size Grade per ft Drilling Well (cu. ft) 11 3/4 Conductor 30 0 Sanded In Fresh Water Coal 23 Intermediate 8 5/8 1190 5600 Production 4 1/2 10.5# 5600 400 sks Tubing Liners

PACKERS :	لمستع					-
PHCKEKS:	Sizes_					
121	Depths	set				
70.1				of Oil and Gas		
) paid:		[] Well Work Pe	rmit []] Reclamation Fund	[] WPCP
[] Plat] WW-9	[] WW-2B	[] Bond	(Type)	[] Agent

nage	L	0	تم	
Form	hlh	12	-A	
(10) =9	31)			

RECEIVED **Environmental Protection**

JUN 28 1996

1) Date: June 13, 1996

2) Operator's Well Number

E-64 (Nicholson)

3) API Well No: 47-017 - 3664-F state-county-permit

Permitting Office of AH& Gas WEST VIRGINIA

DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT ______

4) Surface owner(s) to be served:

(a) Name Jeffrey A. Mills Address Rt. 1 Box 345

Salem WV 26426

(b) Name

Address

(c) Name Address

6) Inspector Mike Underwood Address Rt. 2 Box 114 Salem WV 26426

Telephone

5) (a) Coal Operator:

Name Address

(b) Coal Owner(s) with Declaration Name Willis G. Tetrick, Jr.

Address PO Box 267

Clarksburg WV 26302

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	bу	which	I	hold
the	right to	ex1	tract	cil	and	gas <u>OR</u>										

 $_{ imes}$ Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents page 1 through ____ on the above named parties, by:

Personal Service (Affidavit attached)

x Certified Mail (Postmarked postal receipt attached)

Publication (Notice of Publication attached)

I have read and understand Chapter 22B 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 Exploration Partners Producing Co. By: don's A. Ferrari

Its: Vice President Address: P.O. Box 1245

Bridgeport, WV 26330

Telephone: (304) 842-8777

Subscribed and sworp before me on this 13 day of June, 1996

Ruth Ann Rigdon Juth Jam Jugalon Notary Public

My commission expirés July 29, 2002