



WR-35

DEPT. OF ENERGY inte of Mest Hirginia

Gil und Cas Bivision

Date	1/24/89	 	_
Operator	's		
Well No.	4	 	_
Farm	Kinney	 	
API No.	47- 095	 1241	

WELL OPERATOR'S REPORT

OF DRILLING, FRACTURING AND/OR STIMU	LATING, OI	R PHYSICAL	. CHANGE	
WEIL TYPE: Oil/ Gasx/ Liquid Injection (If "Gas," Productionx/ Undergrou	/ Waste	e Disposal e/ Deep	/ / Shai	llow <u>x</u> /)
LOCATION: Elevation: 1006 Watershed Sho	ort Run			
District: Centerville County Tyler		Quadrangle	Pennsbo	ro
COMPANY Associated to Francis Day Tra				
COMPANY Appalachian Energy Dev., Inc.	r		- 4.	Cerent
ADDRESS Rt. 2, Box 499, Grafton, WV 26354	Casing	Used in		fill up
DESIGNATED AGENT George R. Williams	Tubing	Drilling	in Well	Cu. ft.
ADDRESS Rt. 2, Box 499, Grafton, Wv 26354	Size			
SURFACE CWNER Richard Foley	20-16 Cond.			
ADDRESS _ Greenwood, WV 26360	13-10"	30	0	0
MINERAL RIGHTS CWNER Florence Brooks, et al	9 5/8			
ADDRESS Pennsboro, WV	8 5/8	1566	1566	Surface
OIL AND GAS INSPECTOR FOR THIS WORK Robert	7			
Lowther ADDRESS Middlebourne, WV	5 1/2	1		
PERMIT ISSUED 6/1/88	4 1/2	5257	5257	300 exe.
DRILLING COMMENCED 12/1/88	3	1		
DRILLING COMPLETED 12/7/88	2			
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR PEWORKING. VERBAL PERMISSION OBTAINED ON	Liners used			
GEOLOGICAL TARGET FORMATION Alexander/Benson	n/Rilev	Dep	oth_5164	feet
Depth of completed well 5486 feet				
Water strata depth: Fresh 410 feet;				
Coal seam depths: N/A				e area?No
	-			
OPEN FLOW DATA Producing formation Alexander/Benson/Ril	ev Da	v zona der	oth Soc no	rf feet
Gas: Initial open flow 65 Mcf/d	Oil. In	itial oper	o flav o	Detailabl/d
Final open flow 780 Mcf/d				
Time of open flow between init				
Static rock pressure 1675 psig(surface		ment) ard	er 48 no	urs shuc m
(If applicable due to multiple completion		,		Fanh
Second producing formation				
Gas: Initial open flow Mcf/d				
Final open flow Mcf/d				
Time of open flow between ini				
Static rock pressurepsig(surface	e masuro	ment) afte	r_ho	urs shut in

DETAILS OF PERFORATED INTERVALS, FRACTURE CHISTOPHIATING, PHYSICAL CHARGE, ETC.

- 1) Alexander perf 5164 86 w/ 18 holes. Frac w/30,000 sand in 410 bbls. water, using 83,000 SCF. $\rm N_2$.
- 2) Benson perf 4871-79 w/ 18 holes. Frac w/30,000# sand in 440 bbls. water, using 82,000 SCF $\rm N_{\rm 2}$
- 3) Riley perf 4475-4508 w/18 holes. Foam frac w/30,000# 20/40 sand in 636 bbls. 75 quality foam, using 453,000 SCF $\rm N_2$.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sand and Shale	0	480	
Red Rock	480	495	
Sand and Shale	495	1852	
Big Lime	1852	1930	DECEIVED
Big Injun	1930	2042	JAN 25 1989
Sand and Shale	2042	2216	DIVISION OF OUR & CAR
Weir	2216	2332	DEPARTMENT OF ENERGY
Sand and Shale	2332	4426	
Riley	4426	4512	
Shale	4512	4871	
Benson	4871	4879	·
Shale	4879	5163	
Alexander	5163	5189	
Shale	5189	5486	
TOTAL DEPTH		5486	

(Attach separate sheets as necessary)

APPALACHIAN ENERGY DEVELOPMENT, INC.		
Well Operator		
	,	
Ву:		
Date: 1724789 Williams		

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 on!, encountered in the drilling of a well."

095- 1241

FORM WW-2B

Issued 6/10/88 Exercis 6/10/90

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

			WELL WU	397	REFUICATION	2325	1 538
1)	Well Oper	ator:	Appala	<u>ichian Energy</u>	<u>Development</u>	Inc. 2325	11/1000
2)	Operator'	s Well N	lumber:	Kinney No). 4	3) Ele	vation: 1006'
4).		we make the second		or Gas	and a		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			eta	Deep		ound Storage Shallow	
5)	Proposed	Target I	Pormation	(s):/	Alexander 4	39	4. A. (1)
6)	Proposed	Total De	epth:	5990	feet	. Highward S	1 754 . 75 (1)
7)	Approxima	ate fres	n water s	trata dept	hs:	45'	
8)	Approxim	ate salt	water de	pths:		N/A	Parameter Control March 1997
9)	Approxim	ate coal	seam dep	ths:		N/A	
10)							es/ No_X_/
11)				& Stimulate			
12)							·
			CASIN	IG AND TUBI	NG PROGRAM		
TYPE		S	PECIFICAT	CIONS	FOOTAGE IN	ITERVALS	CEMENT
		Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Cond	luctor	11 3/4			301	0'	0 Sks. CTS or 38 CSF
	sh Water	8 5/8			1581'	1581'	18-11.3
	- L						
1	ermediate				1		CTS or 38 CSR
	uction	4½			5990'	5990'	18-11.1
Tub	:						
Line						(6)	FORTONE
\	KERS : Kin	ođ					15 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
PACI	Siz	es				777	<u> </u>
120	Dep	ths set		f 0:3	and Car Hee		IVISION OF OIL & GAS
1/1/	1,741	C.	1///		and Gas Use	•	· (VI
	Fee(s)	aja: 💆	(\\//	Work Permi	Bond <u>506</u>	lamation Fun	Agent
The state of the s	Plat	3 ww-9	WW	-2B	Bond <u>Jo</u>	(Type)	

DECEIVE	Date: May 20 1028
Page 1 of 8 M	Operatoria voli number
Page 1 of 8 JUN 02 1988 1)	Date: May 20, 1988 Operator's well number
(09/87)	Kinney No. 4 API Well No: 47 - 095 - 1241
File Copy DIVISION OF OIL & GAS 3)	API Well No: 47 - <u>095</u> - <u>1241</u>
DIVISION OF OIL & GAS	State - County - Permit
DEPARTMENT OF ENERGY	
STATE OF WEST	WIDCINIA
STATE OF WEST	VIRGINIA
DEPARTMENT OF ENERGY, DI	AIRION OF OIL WAD GVP
and the company of th	
NOTICE AND APPLICATION F	OR A WELL WORK PERMIT
4) Surface Owner(s) to be served:	5) (a) Coal Operator:
4) Surface Owner(s) to be served:	Name N/A
(a) Name Richard C. & Gail A. Foley	Name N/A
Address Rt. 2. Box 70-B	Address
Greenwood, WV 26360	
(b) Name	(b) Coal Owner(s) with Declaration
Address	NameN/A
Address	Address
	Madicob
(c) Name	None
Address	Name
	Address
6) Inspector Robert Lowther	(c) Coal Lessee with Declaration
Cononal Dolivory	Name N/A
Address General Delivery	Address
Middlebourne, WV 26149	Address
Telephone (304)- 758 - 4764	
	•
	and the same of th
TO THE PERSON(S) NAMED A	BOVE TAKE NOTICE THAT:
TO THE PERSON(S) NAMED A	
Included is the lease or leases of	other continuing contract or
Included is the lease or leases or	other continuing contract or extract oil and gas <u>OR</u>
Included is the lease or leases or contracts by which I hold the right to	c other continuing contract or extract oil and gas <u>OR</u> red by Chapter 22B, Article 1,
Included is the lease or leases or contracts by which I hold the right to Y Included is the information requirements of the Code of West Virginian	e other continuing contract or extract oil and gas <u>OR</u> red by Chapter 22B, Article 1, oil (see page 2)
Included is the lease or leases or contracts by which I hold the right to Y Included is the information requirements. Section 8(d) of the Code of West Virging I continue that as required under the code of the c	other continuing contract or extract oil and gas <u>OR</u> red by Chapter 22B, Article 1, nia (see page 2) Chapter 22B of the West Virginia Code
Included is the lease or leases or contracts by which I hold the right to Y Included is the information required section 8(d) of the Code of West Virgin I certify that as required under the served copies of this notice and	c other continuing contract or extract oil and gas <u>OR</u> red by Chapter 22B, Article 1, nia (see page 2) Chapter 22B of the <u>West Virginia Code</u> application, a location plat, and
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Its: President

Address Rt. 2. Box 499

Grafton. WV 26354

Telephone (304) 265 - 4147

Subscribed and sworn before me this 20th day of May

My commission expires

19<u>88</u>

_Notary Public