









10-8-94 hall

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

Well Operator's Report of Well Work

Farm Name: BEDFORD LAND COMPANY

mitting

Operator Well No.: 28-S-146841

Location:

District:

2,530.92

Quadrangle: PAX

Latitude:

Elevation:

Longitude:

VALLEY County: FAYETTE
10100 Feet South of 38 Deg. 0 Min. 0 Sec.
10450 Feet West of 81 Deg. 20 Min. 0 Sec.

Company:

ASHLAND EXPLORATION, INC. P.O. BOX 391, AT-9 ASHLAND, KY 41114-0391

Agent:

B. E. Widener

RODNEY DILLON inspector: 10-03-94 Permit Issued: 11-05-94 Well Work Commenced: Well Work Completed:

Verbal Plugging

Permission granted on: Cable _ Total Depth (feet) <u>4212</u> Fresh water depths (ft) Not Reported

Is coal being mined in area (Y/N)? N Coal Depths (ft): Not Reported

Salt water depths (ft) Not Reported

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 16"	38′	38′	11.8
8 ⁵ /8″	1124′	1124′	385.4
4½"	4160′	4160′	475.2
2 ³ /8"	_	4047′	
	•		

ODEN ELOW/ DATA	Gordon			4078-408 3468-34	
OPEN FLOW DATA	_M&U Wei	r			
Producing formation _	Big Lime		Pay zone der	oth (ft) <u>3199-32</u>	<u>08</u>
Gas: Initial open flow	351	MCF/d	Oil: Initial open flow	Bbl	
Final open flow	265	MCF/d nitial and final tests	Final open flow	Bbl	
Time of open flo	w between ir	nitial and final tests	3	Hou	
Static Rock Pressure	<u>276</u>	psig (sur	face pressure) after _	72 Hou	urs
Second producing form	mation	Salt Sand	Pay zone de	oth (ft) <u>1661-16</u>	<u>90</u>
Gas: Initial open flow	139	MCF/d	Oil: Initial open flow	Bb	l/d
Final open flow	118	MCF/d	Final open flow	Bb	l/d
Time of open flo	w between ir	nitial and final tests	3		
Static Rock Pressure _		psig (sur	face pressure) after _	<u>72</u> Ηοι	urs

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.

Ashland Exploration, Inc.

Sett Afmole 9/11/95 Date:

Scott A. Arnold, Asst. Eng.

Formation or Rock Type	Top	<u>Bottom</u>
Sand and Shale Salt Sand Pennington Fm. Princeton Ravencliff Avis Lime Upper Maxton Little Lime Big Lime Borden Big Injun Upper Weir Middle Weir Lower Weir Sunbury Shale Berea Devonian	0 1197 2143 2149 2331 2352 2507 2946 3045 3398 3466 3477 3554 3853 3873 3909	1197 2143 2946 2188 2339 2382 2946 3045 3340 3853 3425 3474 3523 3619 3873 3909 4074
Gordon TD	4074 4212	4212

DTD 4231 LTD 4212

Well Treatment

Perf Gordon $3\frac{1}{8}$ " HCG .37 jets 17H/4078-4086. 75-65Q foam frac Gordon using 500 gal 15% HCl-Fe acid, 60,100# 20/40 sand & 154,000 scf N2 @ 6579 scf/m. BD 1038, ATP 1036 @ 20 B/M foam, MTP 1174, ISIP 936, TF 140 Bbl.

Perf M. & U. Weir using 31/s" HCG .37 jets under lub 29H/3485-3499 & 11H/3468-3473. Set RBP @ 3565 under lub. 75-65 Q foam frac M. & U. Weir using 500 gal 15% HCl-Fe acid, 101,300# 20/40 sand & 335,000 scf $\rm N_2$ @ 101,174 scf/m. BD 1884, ATP 1830 @ 20 B/M Foam, MTP 2089, ISIP 2006, TF 186 Bbl.

Perf Big Lime 3½" HCG .37 jets under lub 18H/3199-3208, 3H/3267-3268. RBP @ 3290 under lub 65Q foam acidized Big Lime using 2000 gal 30% HCl-Fe acid, 1000 gal 29% HCl-Fe acid & 500 gal 15% HCL-Fe acid, & 127,000 scf N_2 @ 8807 scf/m. BD 2728, ATP 2070 @ 20 B/M Foam, MTP 2728, ISIP 1544, TF 102.

Perf Salt Sand w/3½" HCG .37 jets 15H/1683-1690, and 17H/1661-1669. 75Q foam frac Salt Sand using 500 gal 15% HCl-Fe acid, 34,900# 20/40 sand, and 144,000 scf N_2 @ 7,972 scf/m. BD @ 1162, ATP 1478 @ 20 BPM foam, MTP 1695, ISIP 1549, TF 102 Bbl.

WV Division of Environmental Protection

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

JUN 07 1995

Permitting

Well Operator's Report of Well Work

Farm Namaile 10 Por Gas AND COMPANY

Operator Well No.: 28-S-146841

Location:

Quadrangle: PAX

District:

2,530.92

Latitude:

Elevation:

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VALLEY County: FAYETTE
10100 Feet South of 38 Deg. 0 Min. 0 Sec.
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ASHLAND EXPLORATION, INC.

P.O. BOX 391, AT-9 ASHLAND, KY 41114-0391

Agent:

B. E. Widener

Inspector:

RODNEY DILLON

Permit Issued:

10-03-94

Well Work Commenced: Well Work Completed:

<u>11-05-94</u> 02-23-95

Verbal Plugging

Permission granted on:

Rotary X Cable Total Depth (feet)

<u> 4212</u>

Fresh water depths (ft)

None Reported

Salt water depths (ft) None Reported

Is coal being mined in area (Y/N)?

Coal Depths (ft): None Reported

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 16"	48'	48'	11.8
8%	1134'	1134'	385.4
4 ½ "	4170'	4170'	475.2
2%"		4047'	

OPEN FLOW DATA Producing formation Gas: Initial open flow Final open flow	351 265	MCF/d	Final open flow		3499 3268 Bbl/d Bbl/d
Time of open flow	/ between initial and	l final tests	3		Hours
Static Rock Pressure _	160	_ psig (surrace	e pressure) atter	I	Hours
Second producing form Gas: Initial open flow Final open flow Time of open flow Static Rock Pressure	139 118 between initial and	MCF/d Oil: _ MCF/d F d final tests	Initial open flow inal open flow 3		Bbl/d

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> Ashland Exploration, Inc. For:

JUN 9 1995

Date:

Daniel L. VanHoose 06-02-95

Formation on Rock Type	Top	Bottom
Sand and Shale	0	1197
Salt Sand	1197	2143
Pennington Fm.	2143	2946
Princeton	2149	2188
Ravencliff	2331	2339
Avis Lime	2352	2382
Upper Maxton	2507	2946
Little Lime	2946	3045
Big Lime	3045	3340
Borden	3340	3853
Big Injun	3398	3425
Upper Weir	3466	3474
Middle Weir	3477	3523
Lower Weir	3554	3619
Sunbury Shale	3853	3873
Berea	3873	3909
Devonian	3909	4074
Gordon	4074	4212
TD	4212	

DTD 4231 LTD 4212

Well Treatment

Perf Gordon 3½" HCG .37 jets 17H/4078-4086. 75-65Q foam frac Gordon using 500 gal 15% HCl-Fe acid, 60,100# 20/40 sand & 154,000 scf N_2 @ 6579 scf/m. BD 1038, ATP 1036 @ 20 B/M foam, MTP 1174, ISIP 936, TF 140 Bbl.

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			01	7 .700	Page	1_of_1
STATE OF WEST VIRGINIA IDAGE IN 1003/94						
Permitting WELL WORK PERMIT APPLICATION Expires 10/03/96						
Office of Oil & Gas		4		150	(g) 53	
) Well Operator	r:Ashland		.,	150 (<i>y</i>	
l) Operator's W	ell Number:		and Compan	•	3) Fle	vation: <u>2530.9</u>
., Operator s 11		207 001101 11	110011			
Well type:	(a) Oil/	or Ga	s_X_/			
(b) If Gas: Production_X_/ Underground Storage/						
		Deep_			ow_X_/	
Proposed Targ	get Formation	(s): <u>Gord</u>				
Proposed Tot	al Depth:	4222	feet			
7) Approximate	fresh water st	trata denth	s: None Re	enorted		
// Approximate	Hesii watei si	irata doptin	3. <u>140110 110</u>	portou		
3) Approximate	salt water der				0041 D ::	11: 10:
3) Ammayimata	No. 2 Gas - coal seam der				- 881' Depth	- Mined Out,
Approximate	coal seam de	Juis: <u>Lay</u> i	6 - 1074 D	Sprii - Millied	<u> </u>	
10) Does land co	ontain coal sea	ams tributai	y to active i	nine? Yes	/ No_X_/	
12) TYPE	CD I	<u>CASING A</u> ECIFICATIO	ND TUBING		INTERVALS	CEMENT
IIFE				TOOTAGE		
	Size	Grade	Weight	For	Left in	Fill-up
		 	per ft.	drilling	well	(cu.ft.)
Conductor	16	LS	42	30	30	CTS SESHIBIT
Fresh Water					 	38(58/8/1-
Coal	11 3/4	H-40	42	1134	1134	cfs
Intermediate	8 5/8	J-55	24	2282	2282	CTS
Production	-4-1/2	J-55	10.5	4222	4222 -	AS REQUIRED
Tubing	2 3/8	J-55	. 4.7		4100	SIPHON
Liners						38CS.R8411.
	•					·
	i s					
-	ths set					
4/0						
□ Fee(s) p	/ h			Gas Use Only	/\ .	
Fee(s) p	paid:	ell Work Pe	ermit	Reclamation		WPCP
LS/Plat	₩w-9 (WW-2	B Bond	Dunge	e St	Agent
Agent (Type)						

Page 1 of 2 Form WW2-A (09/87) ile Copy

RECEIVED	1
RECEIVED WY Division of Environmental Protection	_

SEP 1 6 1994,

1) Date: September 14, 1994

2) Operator's well number

Bedford Land Co. #28. Serial #146841

API Well No: 47 - 019 - 0688

State - County - Permit

Permitting Office of Oil & Gas

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

3)

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4)	Surface Owner(s) to be served: (a) Name	
	Address One Carbon Square	Address
	Chesapeake, WV 25315	
	(b) Name	(b) Coal Owner(s) with Declaration
	Address	Name Same as No. 4(a)
		Address
	(c) Name	-
	Address	Name
		Address
6)	Inspector <u>Rodney Dillon</u>	(c) Coal Lessee with Declaration
	Address P.O. Box 131	Name <u>None</u>
	Bradley. WV 25818	Address
	Telephone (304)-877-2912	
	TO THE PERSON(S) NAMED AT	BOVE TAKE NOTICE THAT:
		•
	Included is the lease or leases or	
	racts by which I hold the right to	
	Included is the information requir	
Sect	ion 8(d) of the Code of West Virgin	
		Chapter 22B of the West Virginia Code
I ha	ve served copies of this notice and	d application, a location plat, and
acco		2 on the above named parties, by:
	Personal Service (Affidavit	
	X Certified Mail (Postmarked po	
	Publication (Notice of Public	cation attached;
	I have read and understand Chapter	c 22B and 38 CSR 11-18, and I agree
to t	he terms and conditions of any peri	mit issued under this application.
	I certify under penalty of law that	at I have personally examined and am
fami	liar with the information submitted	on this application form and all
atta	chments, and that based on my inqu	iry of those individuals immediately
resp	onsible for obtaining the informat	ion, I believe that the information
	rue, accurate, and complete.	
		cant penalties for submitting false
info	rmation, including the possibility	
	Well Operator	Ashland Exploration, Inc.
	By: Don K. Cunr	
	Its: Senior F	
	Address P.O. 1	
		nd, KY 41114
	Telephone 60	6-329-3870
ubs	scribed and sworn before me this 14	th day of September , 19 94
	Viele W. Nonta	Notary Public
My c	commission expires November 23, 199	