

Hopkins Fork-Torrolls

IV-35 (Rev 8-81)

State of Mesi Hirginia Well No.

Department of Mines Oil und Gas Pivision Date 2/8/83
Operator's
Well No. 4
Farm F. W. Pritchard
API No. 47 - 005 - 1397

FEB 21 1983

WELL OPERATOR'S REPORT

RECEIVE

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE EB 1 0 1983

	TOTALL TING,	OR PHYSICA	AP CHYNCE	FD = 0 130	3		
WEIL TYPE: Oil / Gas x / Liquid Injection / Waste Disposal / (If "Gas," Production x / Underground Storage / Deep / Shallow /)							
LOCATION: Elevation: 1675.3 Watershed T	wo mile b	ranch of Wi	nite Oak				
District: Sherman County Boom	ie	_Quadrangl	€ Sylves	Coal ter	Rive		
COMPANY ASHLAND EXPLORATION, INC.							
ADDRESS P.O. Box 391 Ashland, KY 41114	Casing	Used in	T - 6:	Cement	7		
DESIGNATED AGENT Forrest Burkett	Tubing	•	Left	fill up			
ADDRESS Box 156 Brenton, WV 24818	Size	Drilling	nu Mell	Cu. ft.	7		
SURFACE OWNER F.W. Pritchard et al	20-16 Cond.						
ADDRESS P.O. Box 393 Charleston, WV 25392	13-10"	30'	201		-		
MINERAL RIGHTS OWNER F. W. Pritchard et al	9 5/8	30	30'	20 sks	-		
ADDRESS P.O. Box 393 Charleston, WV 24818	8 5/8	21701	01-01		4		
OIL AND GAS INSPECTOR FOR THIS WORK Aurther		2170'	2170'	445 s ks	-		
St. Clair ADDRESS Box 157 Brenton, WV 24818	7				-		
PERMIT ISSUED 7-14-83 52	5 1/2	 					
DRILLING COMMENCED 8-14-83 82	4 1/2	6294	6294'	260 sks			
DRILLING COMPLETED 8-24-83 ST	3						
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REPORKING. VERBAL PERMISSION OBTAINED ON	Liners used				and the state of t		
GEOLOGICAL TARGET FORMATION Onondaga Lime		Denti	h 6280				
Depth of completed well 6305' feet Ro	otarv v		Ma-1-	feet			
Water strata depth: Fresh 267' feet;	Salt 17011	_/ Cable feet	1001s				
			.				
	re court	eing mined	i in the	area? Yes			
OPEN FLOW DATA Producing formation Devonian Shale	37	•					
Gas: Initial open flow 726 Ncf/d C	ray	zone deptr	1 5853	14/ feet			
				Bbl/d			
	rina	l open flo	XV	Bbl/d			
Time of open flow between initia	i and fin	al tests_	3 ກວເນ	cs			
Static rock pressure 1150 psig(surface)	measuronu	nt) after_					
The confidence of the confiden)		34-26	150 - 300 7 204-332/			
Second producing formation Weir/Big Lime	Pay :	zone depth	2000	feet			
Gas: Initial open flow 789 Mcf/d O	il: Initi	ial open f	JON	Bbl/d			
Final open flow 630 Mcf/d 0				Bbl/d			
Time of open flow between initial	l and fina	d tests	3 hour	ន			
Static rock pressure 610 psig(surface m	easurchent	after 3	84 hours	shut in			

LTD

6305

DENVILS OF PERFORATED INTERVALS, FRECTURING OR STREULATING, PHYSICAL CHARGE, ETC. Perf Devonian Shale 40H/5853-6141-Foam Frac w/75 quality foam 50,000# 20/40 sd & 848 mcf N2 @ 40 B/M BD @ 3500#, ATP 3482#, MTP 3800#, ISIP 1575#

Perf Weir 50H/3204-3321-Foam Frac w/75 quality foam 50 M# 20/40 sd & 442 mcf $\rm N_2$ @ 45 B/M BD @ 2200#, ATP 2418#, ISIP 1400#

Perf Big Lime 20H/2850-3007 - Acidize w/3000 gal 15% HCl BD @ 1200#, ATP 2000# @ 13 B/M ISIP 1600#

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fres and salt water, coal, oil and ga
Sandy Shale	0	450	Fresh water @ 267
Sand	450	500	
Shale & Sand	500	890	
Sand	890	1095	
Shale	1095	1155	
Sand & Shale	1155	1315	
· Shale	1315	1365	
Sand & Shale	1365	1520	•
Sand	1520	1675	
Shale	1675	1721	
Salt Sand	1721	2110	Salt water @ 1721
Shale & Sand	2110	2203	was nathr & 1/41
Upper Maxton	2203	2289	
Shale	2289	2303	•
Middle Maxton	2303	2359	
Shale	2359	2460	
Stray Sand	2460	2600	Sale water @ 2587
Shale & Sand	2600	26 52	SULL WELLE C AJU!
Lower Maxton	2652	26 80	
Shale	2680	2700	
Little Linc	2700	2772	
Pencil Cave	2772	2776	
Big Lime	2776	3038	
Injun	3038	3077	
Shale	3077	3135	
Weir	3135	3337	·
Shale	3337	3476	
Coffee Shale	3476	3498	•
Berea	3498	3525	
Devonian Shale	3525	3734	
Gordon	3734	3738	
Devonian Shale	3738	6277	
Onondaga L.S.	6277	TD	
1960 - Company - 1960 -			6332
			3525
0			2807 expl. flg.
DTD (6332)			

(Attach separate sheets as necessary)

ASHLAND EXPLORATION, INC.

Well Operator

By: Linek S. Hina, Engineering Technician

Date: 2/8/83

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 earl, encountered in the drilling of a well."



Well No.	4, Serial No090511	
Farm_	F. W. Prichard et al	
API #47	- 005 - 1397	
Date	June 28, 1982	

STATE OF WEST VIRGINIA OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil / Gas X /	
(If "Gas", Production X / U	Inderground storage / Deep X / Shallow /
	shed: Twomile Branch of White Oak Cr. of Big Coal River Y: Boone Quadrangle: Sylvester
WELL OPERATOR <u>Ashland Exploration, Inc.</u> Address P. O. Box 391	DESIGNATED AGENT Forrest Burkett Address P. O. Box 156
Ashland, KY 41114	Brenton, WV 24818
ROYALTY OWNER F. W. Prichard et al Address P. O. Box 393	COAL OPERATOR Cedar Coal Company Address Box 548
Charleston, WV 25392 Acreage 2762.75	Cabin Creek, WV 25035 COAL OWNER(S) WITH DECLARATION ON RECORD:
SURFACE OWNER F. W. Prichard et al Address P. O. Box 393	NAME F. W. Prichard et al Address Same
Charleston, WV 25392 Acreage 2762.75	NAME Address
FIELD SALE (IF MADE) TO: NAME	Address
Address	COAL LESSEE WITH DECLARATION ON RECORD: NAME Cedar Coal Company
DIL AND GAS INSPECTOR TO BE NOTIFIED:	Address Box 548 Cabin Creek, WV 25035 Colors D
NAME Arthur St. Clair Address P. O. Box 157	JUN 2 9 1982
Brenton, WV 24818 Telephone (304) 732-6227	OIL AND GAS DIVISION WY DEPARTMENT OF MINES
to the undersigned well operator from F. (If said deed, lease, or other contract h	
Boone County, West Virginia, i	n <u>Lease</u> Book at page <u>580</u> . A permit is
PROPOSED WORK: Drill X / Drill Deep	er / Redrill / Fracture or stimulate X / / Perforate new formation / in well (specify)
The above named coal operator, coal owner objection they wish to make or are requir Department of Mines within fifteen (15) dopies of this Permit Application and the mailed by registered mail or delivered by	the work order on the reverse side hereof. (s), and coal lessee are hereby notified that any ed to make by Code \$22-4-3 must be filed with the ays after receipt of this Application by the Dept. enclosed plat and reclamation plan have been hand to the above named coal operator, coal ownday of the mailing or delivery of this Application West Virginia.
PLEASE SUBMIT COPIES OF ALL SEOPHYSICAL LOGS DIRECTLY TO:	Ashland Exploration, Inc.
VEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION	By: Well Operator
GHARLESTON, WV 25311 Telephone - 304/348-3092	John H. Burtnett Its: Regional Civil Engineer

(Revised 3-81)

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:

	AC	TUAL II	YFORMAT	TON MUST	BE S	UBMIT.	TED ON FO	RM	IV-35	JPON COMPLETI	ON
	DRILLING CO	NTRACTO	OR (IF	KNOWN)	Ray	Resou	rces Dril	lin	g Compa	ny	
			Α	ddress_	210	l Wash	ington St	ree	t, East	White the second of the second	
				• *************************************	Cha	rlesto	n, WV 2	531	1		
	Approxim Approxim	d depth ate was	n of co ter str al seam	mp <mark>leted</mark> ata dept	well_ hs: _BC0	6280 Fresh gen gi	ges/ .			ry X / Cabl salt, Top of Salt Sa	feet.
	CASTNO AND	TUBING									
	CASING OR TUBING TYPE	**************************************	SPE	CIFICATI Weight	ONS		8			CEMENT FILL- UP OR SACKS	PACKERS
		Size	<u> </u>	per ft	New	Used	ling	ĺ	Well	Cubic ft.	
	Conductor	<u> 13_3/8</u>	H-40	48	 x 	 	3) (136)	30		· · · · · · · · · · · · · · · · · · ·	Kinds
	Fresh water Coal				 	 	800'	-	8001	CTS	
		1 8 5/8	K-55	24	Х		1770	+-	1770	043	DIZES
	Production			10.5	T X	 	6280	 	6280	Circulate As Required	Denths set
	Tubing	; ,	11177	1 10.7	1 25	1	0200	1	0200	AS REQUIFED	I Deptils see
	Liners				1	†		T			Perforations:
										1	Top Bottom
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	Date:			9			**************************************				4
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T. Carlotte Co.											