

State of West Virginia RGY d Gas

	DEPARTME	TN	OF	ENE
Reviewed TMG	Division	of	Oil	and

inergy

Recorded\_\_\_

Well Operator's Report of Well Work

Farm name: COLE & CRANE REAL ESTATE Operator Well No.: B-11R-S-133441

LOCATION: Elevation: 1303.65 Quadrangle: HOLDEN

District: ISLAND CREEK County: LOGAN

Latitude: 15100 Feet South of 37 Deg. 47Min. 30 Sec. Longitude 7370 Feet West of 82 Deg. 0 Min. 0 Sec.

Company: ASHLAND EXPLORATION, INC.

P.O. BOX 391, A1-6

ASHLAND, KY 41114-0391

Agent: FORREST BURKETT

Inspector: TIM BENNETT

Permit Issued: 04/01/91

Well work Commenced:

06-20-91

Well work Completed:

10-10-91

Verbal Plugging

Permission granted on:

Rotary X Cable

Total Depth (feet) 5194
Fresh water depths (ft) None noted

(WV - Map - 12 478')Salt water depths (ft) Damp @ 1830'

(WV Map 828') Is coal being mined in area (Y/N)?<sub>N</sub>

Coal Depths (ft): Open Mine 440-450'

	· .		<u> (1)                                 </u>	
1	Casing	Used in		Cement
-	Tubing	Drilling	in Well	Fill Up   Cu. Ft.
-	Size			
	16"	41 *	41"	11.8
	11 3/4"	496'	496'	295
	8 5/8"	2499 *	2499	750
	5 1/2"	5168'	5168	474
	1.9" tbg @	5042' КВ		
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## OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 3343-5112 Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d Final open flow 1032 MCF/d Final open flow 0 Bbl/d Time of open flow between initial and final tests 3 Hours Static rock Pressure 805# psig (surface pressure) after 72 Hours

Second producing formation None Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow Time of open flow between initial and final tests 0 Hours Static rock Pressure 0 psig (surface pressure) after

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.

For: ASHLAND EXPLORATION, INC.

James L. Stephens, Eng. Tech. Date:

October 18, 1991

Formation or Rock Type	Top	Base	
Sand & Shale (Base Lee Formation)	0	1935	
Pennington Formation  Maxton 2277-2327	1935	2421	
Little Lime	2421	2541	
Big Lime	2541	2815	
Borden Formation	2815	3309	00 33 49
Sunbury Shale	3309	3339	L+ 4350
Berea	3339	3349	r acts act acts
Devonian Shale	3349	5175	7 4800
Onondaga Ls.	5175	TD	4 4750
DTD 5194			RK 5150
LTD 5190			

## Well Treatment:

Perf Rhinestreet 20H/4857-5112. N frac using 500 gal 8% fe inh acid and 803,000 SCF N @ 97,000 SCF/min. BD @ 2420#, ATP 3050#, MTP 3090#, ISIP 2200#.

Perf Huron 20H/4216-4657. N, frac using 500 gal 8 1/2% inh fe acid and 808,000 SCF N, @ 99,000 SCF/min. BD @ 3850#, ATP 3200#, MTP 3850#, ISIP 2000#, 15 min 1430#.

Perf Chagrin 20H/3343-3809. N, frac using 500 gal 8 1/2% inh fe acid and 810,000 SCF N, @ 99,000 SCF/min. BD 3800#, ATP 2800#, MTP 4060#, ISIP 1500#, 15 min 1310#.

FORM WW-2B

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

1)	Well Ope	rator: As	hland Explo	ा ५३ pration, Inc	. 2750 (5	1 401		_
2)	Operator's Well Number: Albert H. Cole Trustee #B-11R 3) Elevation: 1303.6					<u> 5</u> 5		
4)	Well type: (a) Oil_/ or Gas_X/							
	(b) If Gas: Production $X$ / Underground Storage/ Shallow $X$ /							
5)	Proposed Target Formation(s): Devonian Shale							
6)	Proposed	Total D	epth:	5245 *KB	feet			
7)	Approxim	ate fres	h water s	trata dept	hs: 478'KB	(Map WV-12)	Mittelle as Business and an arrangement of the second of t	-
8)	Approxim	ate salt	water de	pths: 823	B'KB (Map WV-	12)		_
9)	Approxim	ate coal	seam dep	ths: Cedar (	Grove - Elev.	920' - Mined O	ut	-
10)	Does lan	d contai	n coal se	ams tribut	ary to act	ive mine? Ye	s/ No_X_/	
11)	Proposed	Well Wo	rk: Drill	and Stimulat	e (New Well)			
12)	12) CASING AND TUBING PROGRAM							
TYPE		S	PECIFICAT	IONS	FOOTAGE II	TERVALS	CEMENT	
		Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)	
Condu	ctor	16	LS	42.0	30	30	CTS	_
Fresh	Water					$\mathcal{C}$	380SR18-11.8	
<u>Coal</u>		11 3/4	H40	42.0	444	444	OCCS1318-11, 2,	حَ
Inter	mediate	8 5/8	J55	24.0	2490	2490	CTS	
Produ	ction	5 1/2	J55	15.5	5245	5245	SKKSH-/-/ As Needed	
Tubin	ġ	1.9	J55	2.76		5195	Siphon	
Liner	5					REC		
PACKERS: Kind								
Sizes								
For Divison of Oil and Gas Use Only								

Page Form (09/8	1 of 2 WW2-A 7)	2	2)	Operator's well number Serial Albert H. Cole Trustee, etal #B-11R, #133441 API Well No: 470451160
				State - County - Permit
				VIRGINIA VISION OF OIL AND GAS
		NOTICE AND APPLICATION	ON FO	DR A WELL WORK PERMIT MAR 1 3 9;
4)	(a) Name (Address	P.O. Box 610 Omar, WV 25638	rust	5) (a) Coal Operator: Name W-P Coal Company Address P.O. Box 570 Omar, WV 25638
	(b) Name Address			(b) Coal Owner(s) with Declaration Name Same as No. 4(a)
	(c) Name			Address
	Address _			Name
	***************************************			Address
	Address _	Route 2 Box 61-B Chapmanville, WV 25508		(c) Coal Lessee with Declaration Name Same as No. 5(a) Address
	Telephone	(304) - 855-7705		
	8	TO THE PERSON(S) NAMED	) ABO	VE TAKE NOTICE THAT:
X Secti I hav	acts by will acts on 8(d) or 8(d) or 1 certify e served or 2 panying do 2 Cert	hich I hold the right is the information rec f the Code of West Vir that as required unde copies of this notice	to equire gini er Ch and igh it at left pos	apter 22B of the West Virginia Code application, a location plat, and 2 on the above named parties, by: tached)
famil attac respois tr	e terms and I certify iar with the homents, and insible for ue, accurate	nd conditions of any punder penalty of law the information submited that based on my in cotaining the informate, and complete.	ermi that ted quir atio	22B and 38 CSR 11-18, and I agree t issued under this application. I have personally examined and am on this application form and all y of those individuals immediately n, I believe that the information
infor	I am aware	that there are signi	fica	nt penalties for submitting false
INTOL	mation, in			f fine and imprisonment.  Ashland Exploration, And.
		By: <u>J. T.</u>	Melli	nger lell-91 8xc
		Its: <u>Vice P</u> Address <u>P.O</u>	<u>reside</u> . Box	91 ent
		. Ash	land.	KY 41114
Subsc	ribed and	Telephone _ sworn before me this	606-33 11th	29-5450 day ofMarch , 19 91
	1/1. L.	· III Wasta		
Му со	mmission e	expires November 23, 19	994	Notary Public