

State of West Virginia Division of Envi Section

Well Operator's

ironmental Protection of Oil and Gas	Reviewed TMG	
s Report of Well Wor	Recorded	

Farm name: GEORGIA-PACIFIC CO. Operator Well No.: ICC#D55-S140631

LOCATION:

Elevation: 1717.37

Quadrangle: DELBARTON

District: LEE

County: MINGO

Latitude: 8780 Feet South of 37 Deg. 42 Min. 30 Sec. Longitude: 4090 Feet West of 82 Deg. 7 Min. 30 Sec.

Company:

ASHLAND EXPLORATION, INC.

P. O. BOX 391, A1-6

ASHLAND, KY 41114-0391

Agent:

B. E. WIDENER

Inspector: OFIE HELMICK

Permit Issued: 06/29/92 Well work Commenced: Well work Completed: 08/06/92 10/20/92 Verbal Plugging: Permission granted on: Rotary X Cable Rig Total Depth (feet) 5460 Fresh water depths (ft) Damp @ 95' 1128' 3/4" fresh water Salt water depths (ft) None noted Is coal being mined in area (Y/N)? _ Coal Depths (ft): <u>435-437</u>, 481-483

			-
Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
16"	48'	48'	11.8
11 3/4"	996'	996'	620
8 5/8"	2971'	2971'	988
5 1/2"	5462'	5462'	528
1.9" @ 1.9" @	5392' w/ 3118'	R-4 pkr 0	3233' KB

OPEN FLOW DATA

Open mine at 858-862.

Producing formation <u>Dev. Shale/Berea</u> Pay zone depth (ft) <u>3850-5418</u> Gas: Initial open flow <u>0 MCF/d</u> Oil: Initial open flow <u>---</u> Bbl/d Final open flow <u>1192 MCF/d</u> Final open flow <u>---</u> Bbl/d Time of open flow between initial and final tests _____ Static rock pressure _____680#_ psig (surface pressure) after _____72

Second producing formation Big Lime Pay zone depth (ft) 3107-3113 Gas: Initial open flow 0 MCF/d Oil: Initial open flow --- Bbl/d Final open flow 349 MCF/d Final open flow --- Bbl/d Time of open flow between initial and final tests _____ Static rock Pressure _____675# psig (surface pressure) after _

ON BACK OF THIS FORM PUT THE FOLLOWING: 1. DETAILS OF PERFORATED INTERVALS, FRACTURING OF STIMULATING, PHYSICAL CHANGE, ETC. 2.) THE WELL LOG WHICH IS A SYSTEMATIC DETIALED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

ASHLAND EXPLORATION, INC.

James L. Stephens, Eng. Tech.

Formation on Rock Type	TOP	BASE
Sand and Shale Lee formation Pennington formation Little Lime Big Lime Borden formation Sunbury Shale Berea Devonian Shale Onondaga Ls	0 1558 2290 2906 2962 3220 3782 3815 3864 5457	1558 2290 2906 2962 3220 3782 3815 3864 5457

DTD 5460 LTD 5471

11 3/4" and 8 5/8" casing cemented to surface on primary job.

Well Treatment

Perf Rhinestreet 16H/5306-5418. N_2 frac using 300 gal 8% fe acid, 813,000 scf N_2 @ 101,000 scf/min. BD @ 3405#, ATP 4040#, MTP 4221# and ISIP 2994#.

Perf L. Huron 20H/4704-4978. N_2 frac using 350 gal 8% fe acid, 815,000 scf N_2 @ 110,000 scf/min. BD @ 3754#, ATP 3313#, MTP 3754# and ISIP 2074#.

Perf U. Dev. Shale/Berea 18H/3850-4239. N_2 frac using 550 gal 8% fe acid, 829,000 scf N_2 @ 107,000 scf/min. BD @ 3086#, ATP 3266#, MTP 3450# and ISIP 2308#.

Perf Big Lime 13H/3107-3113. 75 quality foam frac using 1000 gal 15% fe acid, 65,800# 20/40 sand, 448,000 scf N_2 @ 11,000 scf/min. BD @ 3087#, ATP 1983# @ 20 BPM foam rate, MTP 3087# and ISIP 1530#.



	DECEIVED 059- 1/69					
FORM	WW-RECEIVED STATE OF WEST VIRGINIA Page 1 of 1 6/29/92					
	THE DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS					
	WELL WORK PERMIT APPLICATION Expuse 6/29/94					
1)	Well Operator: Gas Ashland Exploration, Inc. 2750 (4) 321					
2)	Island Creek Coal Co. Operator's Well Number: <u>D-55, Serial #140631</u> 3) Elevation: <u>1717</u>					
4)	Well type: (a) Oil/ or Gas_X/					
	(b) If Gas: Production_X/ Underground Storage/ Deep/ Shallow_X/					
5)	Proposed Target Formation(s): Devonian Shale					
6)	Proposed Total Depth: 5460' feet					
7)	Approximate fresh water strata depths: 588', 630'KB					
8)	Approximate salt water depths: 1600'KB					
9)	Upper Cedar Grove 878'KB, Mined Out Lowest Seam 1068'KB Approximate coal seam depths: <u>Lower Cedar Grove 907'KB Mined Out</u>					
10)	Does land contain coal seams tributary to active mine? Yes/ No_X_/					
11)	Proposed Well Work: Drill and Stimulate New Well					
12)						
	CASING AND TUBING PROGRAM					

TYPE	SPECIFICATIONS			FOOTAGE	INTERVALS	CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu.ft.)
Conductor	16	LS	36.91	40	40	CTS
Fresh Water						3858/811
Coal	11 3/4	H40	42.0	967	967 ♣	СТŞ
Intermediate	8 5/8	J55	24.0	2347	2347~	3965 P1911,2.
Production	5 1/2	J55	15.5	5460	5460◀	AS NEEDED
Tubing	1.9	J55	2.76	-	5410	SIPHON
Liners						-38CSR18-11. V

Dillera							38658/8-111
PACKERS	: Kind Sizes_						
40	Depths	set					
7.1,		For	Division of	Oil and	d Gas Us	e Only	***************************************
7		\mathcal{A}					\bigcirc .

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
Plat WW-9 WW-2B Bond Acuil, Market Agent
(Type)

RECEIVED						
KEW DIVISION OF						
irnmenta	Date: Tuna 0 1000					
Form WW2-A (1)	Date: June 9, 1992 Operator's well number					
(09/87)	Operator's well number Island Creek Coal Company #D-55, Serial #1406 API Well No: 47 - 59 - 1169					
Permittee 3)	API Well No: 47 - 59 - 1169					
Office C	State - County - Permit					
DEPARTMENT OF ENERGY,	ST VIRGINIA DIVISION OF OIL AND GAS FOR A WELL WORK PERMIT					
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						
4) Surface Owner(s) to be served:	5) (a) Coal Operator:					
(a) Name <u>Georgia-Pacific Corp.</u>	Name					
Address <u>General Delivery</u> Wyoming, WV 24898	Address					
(b) Name	(b) Coal Owner(s) with Declaration					
Address	NameIsland Creek Coal Company					
	5 J J J J J J J J J J J J J J J J J J J					
(c) Name	Holden, WV 25625					
Address	Name					
	Address					
6) Inspector Ofie Helmick	(c) Coal Lessee with Declaration					
Address P. O. Box 218	Name Hobet Mining, Inc.					
Sanrock, WV 24834	Address P. O. Box 305					
Telephone (304) - 732-9135	Madison, WV 25130					
Included is the lease or leases contracts by which I hold the right t Included is the information requirection 8(d) of the Code of West Virg	o extract oil and gas OR ired by Chapter 22B, Article 1, inia (see page 2) Chapter 22B of the West Virginia Code nd application, a location plat, and h on the above named parties, by: attached) postal receipt attached)					
rubileacion (Notice of Publ						
to the terms and conditions of any pe	hat I have personally examined and am ed on this application form and all uiry of those individuals immediately					
I am aware that there are signif information, including the possibility	icant penalties for submitting false v of fine and imprisonment					
Well Operato	Ashland Exploration, Inc.					
By: W. Mark Parks W. Whither 5xC						
Its: Operations Manager						
Address P.O. Box 391						
Ashl	and, KY 41114					
Telephone 6	06-329-5989					
Subscribed and sworn before me this _	9 day of June, 1992					

My commission expires My commission expires November 14, 1993

Notary Public