

20-Nov-92 API #47-59-01177

WN 1 2 93

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

Permitting Office of Oil & Com

Well Operator's Report of Well Work

Farm	name:	GEORGIA-PACIFIC	CORP.
T. CIT'III	manne:	GEORGIA-PACIFIC (	CORP.

Operator Well No.: D-51-S-140621

LOCATION: Elevation: 1449.09

Quadrangle: DELBARTON

District: LEE County: MINGO Latitude: 7250 Feet South of 37 Deg. 42 Min. 30 Sec. Longitude: 10300 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: 11/23/92 Well work Commenced: Well work Completed: 12/13/92 04/23/93 Verbal Plugging:

Permission granted on:
Rotary X Cable Rig
Total Depth (feet) 5139
Fresh water depths (ft) None Noted

Salt water depths (ft) 1590

Is coal being mined in area (Y/N)? N Coal Depths (ft): Open Mine @ 620 226-228, 256-258, 312-316, 365-368

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
16"	47 '	47 '	11.8
11-3/4"	6691	669'	472
8-5/8"	2625'	2625'	879
5-1/2"	5120'	5120'	412
2-3/8"	@ 4819'		

## OPEN FLOW DATA

Final open flow 0 MCF/d  Final open flow 1198 MCF/d  Time of open flow between initial and final test	Final open flow Bb	ol/d ol/d ours
Static rock pressure	pressure) after Ho	urs
Second producing formation Gas: Initial open flow MCF/d	Pay zone depth (ft)	
Final open flow MCF/d  Time of open flow between initial and final test	Final open flow Bb	ol/d ol/d
Static rock Pressure psig (surface	pressure) after Ho	ours

NOTE: 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.

For: ASHLAND EXPLORATION, INC.

By:	Jame of	Stepheno	James	L.	Stephens,	Enq.	Tech.
Date:	<u> </u>	•			4/93		

Formation of	or Rock Type	goT	<u>Base</u>
Sand and Shale Pennington U. Maxton M. Maxton Little Lime Big Lime Borden Sunbury Shale Berea	(base Lee Sand)	0 2032 2199 2372 2595 2650 2889 3466 3503	2032 2595 2226 2504 2650 2889 3466 3503 3568
Devonian Shale		3568	5115
Onondaga Ls.		5115	T.D.

DET-830

Drillers TD 5139 Loggers TD 5134

85/8 and 113/4 cmt't to surface on primary job.

Perf Rhinestreet Shale using .39 10 gram chgs. 1 spf sf @ 5054, 5046, 5038, 5026, 5017, 5014, 5006, 5003, 4982, 4978, 4974, 4972, 4957.  $N_2$  frac Rhinestreet using 200 gal. 7½% HCl - Fe acid & 800,000 SCF  $N_2$  @ 80000 SCF/min. BDP = 2860#. ATP = 4100#. MTP = 4360#. ISIP = 3111#.

Perf. L. Huron using SF HCG 1 SPF: 4655, 4640, 4631, 4620, 4616, 4603, 4599, 4582, 4575, 4562, 4550, 4544, 4539, 4513, 4500, 4480, 4452, 4430, 4421, 4416, 4386, 4375, 4312, 4304  $N_2$  frac L. Huron using 400 gal.  $7\frac{1}{2}$ % HCl - Fe acid & 901,000 SCF  $N_2$  @ 98000 SCF/min. BDP = 2860#. ATP = 2800#. MTP = 3170#. ISIP = 1800#.

Perf. U. Dev/Berea using SF HCG ISPF: 3931, 3904, 3891, 3881, 3868, 3852, 3840, 3818, 3806, 3793, 3780, 3770, 3759, 3749, 3693, 3670, 3663, 3642, 3565, 3553, 3550, 3506, 3504 N2 frac U. Dev/Berea using 500 gal. 8% Hcl-Fe acid, 950,000 SCF N<sub>2</sub> @ 100,000 SCF/min. BDP = 2480#. ATP = 3050#. MTP = 3100#. ISIP = 1900#.Perf L. Dev. Shale w/ 3½" HCG .39 jets SF @ 4584, 4573, 4565, 4548, 4545, 4524, 4519, 4514, 4503, 4500, 4481, 4478, 4428, 4400, 4380, 4346, 4339, 4324, 4288, 4286 (20 total shots). Pump 350 gal 7½% HCl-Fe acid and N<sub>2</sub> frac L. Dev. Shale using 860,000 scf N<sub>2</sub> @ 107,300 scf/min. BD 3415, ATP 3314, MTP 3415, ISIP 1809, TF 9 bbls. HLS

Perf U. Dev/Berea w/ 31/4" HCG .39 jets SF @ 3687, 3684, 3605, 3603, 3506, 3492, 3490, 3461, 3458, 3451, 3433, 3420, 3396, 3373, 3322, 3308, 3301, 3298, 3284, 3282 (20 total shots). HOWCO RBP set @ 3730. Pump 450 gal HCl-Fe acid.  $N_2$  frac U. Dev/Berea using 860,000 scf  $N_2$ . BD 4236, ATP 2910, ATP 106,300 scf/min. MTP 4236, ISIP 1351, TF 12 bbls.

Perf Big Lime w/ 4" HCG 2SPF 8H/2723-2726, 10H/2700-2704, 8H/2656-2660, 6H/2633-2635, 10H/2580-2584, 6H/2571-2573, 6H/2558-2560 (54 shots total). Foam frac Big Lime 4-16 ppg ramp @ 750 foam using 52,500# 20/40 sand; 270,000 scf  $\rm N_2$  @ 9243 scf/min, and 1000 gal 16% HCI-Fe acid. BD 2465, ATP 1368, ATR @ 20 BPM foam, MTP 2465, ISIP 1356, TF 140 bbls.

£-5%,

FORM WW-REC Environmental Protection Page 1 of 1 STATE OF WEST VIRGINIA DEPORTMENT OF ENERGY, DIVISION OF OIL AND GAS Expuse 11/23/94 WELL WORK PERMIT APPLICATION 2750 321 Ashland Exploration, Inc. 1) Island Creek Coal Co. Operator's Well Number: <u>D-51, Serial #140621</u> 3) Elevation: 1449.1 2) Well type: Oil / Gas\_X/ 4) (a) or Production\_X/ Underground Storage\_\_/ (b) If Gas: Deep\_\_/ Shallow X/ Culture ! 5) Proposed Target Formation(s): <u>Devonian Shale</u> Proposed Total Depth: 5110'KB feet 6) Approximate fresh water strata depths: 183', 331', 413' 7) Approximate salt water depths: 1346', 1775', 2010', 2025' 8) Upper Cedar Grove - Mined Out at 549' Approximate coal seam depths: Lowest Seam is at a depth of 739' 9) Does land contain coal seams tributary to active mine? Yes\_\_\_/ No\_X\_/ 10) Proposed Well Work: Drill and Stimulate New Well 11) 12) CASING AND TUBING PROGRAM FOOTAGE INTERVALS CEMENT TYPE SPECIFICATIONS Left in Fill-up Size Grade Weight For well (cu.ft.) drilling per ft. 30 30 CTS Conductor LS 39.61 16 Fresh Water 6094 Coal 11 3/4 H - 4042.0 609 CTS 2079 4 CTS Intermediate 8 5/8 J-55 24.0 2079 AS NEEDED Production 5 1/2 J-55 15.5 5110 5110 🦟 5000 SIPHON J-55 2.76 Tubing 1.9 Liners PACKERS : Kind Sizes Depths set For Division of Oil and Gas Use Only

Well Work Permit Reclamation Fund

Bond \_

Fee(s) paid:

Page	1 of _2_	REC	Division of 1	) Date: November 3, 1992		
	WW2-A	Environm	ental Protection 2	Operator's well number Island Creek Coal Co. #D-51, Serial #140621		
(09/8	7)		A 6 97			
		UA s	, ,	State - County - Permit		
		8	of Oil & God	beate county remit		
			STATE OF .V	EST VIRGINIA		
		DEPARTMEN		DIVISION OF OIL AND GAS		
				3		
		NOTICE AN	<u>ID APPLICATIO</u>	N FOR A WELL WORK PERMIT		
				5) () 6 3 0 a a a b a a a		
4)			be served:			
-	(a) Name	General Del	ific Corp.	Name N/A Address		
	Address _	Wyoming, WV	24898	Address		
	(b) Name			(b) Coal Owner(s) with Declaration		
	Address			Name Island Creek Coal Company		
				Address P.O. Box 840		
				Holden, WV 25625		
	Address _			Name		
				Address		
6.3	T	Ofic Ucl	mialr	(c) Coal Lessee with Declaration		
6)	Inspector	P.O. Box	. 11Q	Name Hobet Mining, Inc.		
	Address _	Fanrock.	WV 24834	Address P.O. Box 305		
	Telephone	(304)73		Madison, WV 25130		
	~	-				
		TO THE PER	RSON(S) NAME	O ABOVE TAKE NOTICE THAT:		
	Included	is the lea	se or lease:	s or other continuing contract or		
cont:	racts by v	which I no.	ld the right	to extract oil and gas <u>OR</u> quired by Chapter 22B, Article 1,		
Gec+				rginia (see page 2)		
Dece	T certify	v that as i	required und	er Chapter 22B of the West Virginia Code		
I ha	ve served	copies of	this notice	and application, a location plat, and		
acco	mpanying o	locuments	pages 1 thro	ugh 2 on the above named parties by:		
	Pers	sonal Serv	ice (Affidav	it attached)		
				d postal receipt attached)		
	Pub	lication (1	Notice of Pu	blication attached)		
	· 1			22D 20 GGD 11-19 I rayon		
+- +	I have re	ead and und	ierstand Char	pter 22B and 38 CSR 11-18, and I agree permit issued under this application.		
LO L	ne cerms o	under ne	nalty of law	that I have personally examined and am		
fami	liar with	the inform	mation submi	tted on this application form and all		
atta	chments,	and that be	ased on my i	nquiry of those individuals immediately		
resp	onsible f	or obtaini	ng the infor	mation, I believe that the information		
is t	is true, accurate, and complete.					
I am aware that there are significant penalties for submitting false						
info	rmation,	including '		ity of fine and imprisonment.		
			Well Opera	tor Ashland Exploration, Inc.		
	•			Mark Parks W. Warfan BKC erations Manager		
			Address P.			
				hland, KY 41114		
			Telephone	606-329-5989		
Subs	cribed an	d sworn be		3rd day of November , 1992		
	11.13	. /// /.	1 -			
	Mike	W. NO	ma	Notary Public		
Мус	ommission	expires	November 23, 1	.994		