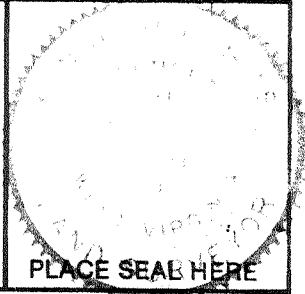


FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1:2500  
 PROVEN SOURCE OF ELEVATION NGS BM T-145  
 ELEV. 782.47'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.  
 (SIGNED) Kenneth D. Bios  
 R.P.E. \_\_\_\_\_ L.L.S. 837-SU



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



DATE DECEMBER 7, 19 90  
 OPERATOR'S WELL NO. GEORGIA-PACIFIC CORP.  
 API WELL NO. NO. B-2 S.N. 133651

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1292.09' WATER SHED MITCHELL BRANCH  
 DISTRICT MAGNOLIA COUNTY MINGO  
 QUADRANGLE BARNABUS  
 SURFACE OWNER GEORGIA-PACIFIC CORP. ACREAGE 4982.72  
 OIL & GAS ROYALTY OWNER GEORGIA-PACIFIC CORP. LEASE ACREAGE 2,748  
 LEASE NO. 81559  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5140' KB  
 WELL OPERATOR ASHLAND EXPLORATION INC. DESIGNATED AGENT FORREST BURKETT  
 ADDRESS P.O. BOX 391 ASHLAND, KY. 41114 ADDRESS P.O. BOX 379 BRENTON, WV. 24818

COUNTY NAME  
 PERMIT

DEEP WELL 6-6 Magnolia (265)

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Revised Tmg  
Recorded \_\_\_\_\_

**RECEIVED**  
Division of Energy

Well Operator's Report of Well Work

Farm name: GEORGIA-PACIFIC CORP Operator Well No.: B-2 S #133651  
LOCATION: Elevation: 1292.09 Quadrangle: BARNABUS  
District: MAGNOLIA County: MINGO  
Latitude: 13490 Feet South of 37 Deg. 40Min. 0 Sec.  
Longitude 9150 Feet West of 82 Deg. 5 Min. 0 Sec.

OCT 21 1991  
#133651  
Permitting  
Oil and Gas Section

Company: ASHLAND EXPLORATION, INC.  
P.O. BOX 391, A1-6  
ASHLAND, KY 41114-0391

Agent: FORREST BURKETT

Inspector: TIM BENNETT  
Permit Issued: 02/25/91  
Well work Commenced: 08-05-91  
Well work Completed: 10-01-91  
Verbal Plugging  
Permission granted on:  
Rotary x Cable \_\_\_\_\_ Rig  
Total Depth (feet) 5120  
Fresh water depths (ft) 128'  
517 (Map WV-12)  
Salt water depths (ft) None Noted  
767 (Map WV-12)  
Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 28-32

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	47'	47'	11.8
8 5/8"	2512'	2512'	1090
5 1/2"	5082'	5082'	420
1.9" tbg @	4986'		

OPEN FLOW DATA

Devonian Shale

Producing formation Berea Pay zone depth (ft) 3440-5039  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 985 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 Big Lime Pay zone depth (ft) 2624-2656  
Gas: Initial open flow 2110 MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 656 MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 3 Hours  
Static rock Pressure 40# psig (surface pressure) after 72 Hours

\*\* Note: The Big Lime will be natural producer between the 8 5/8 X 5 1/2" annulus.

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.

By: James L. Stephens James L. Stephens; Eng. Tech.  
Date: October 18, 1991

OCT 27 1991

<u>Formation or Rock Type</u>	<u>Top</u>	<u>Base</u>
Breathitt Formation	0	937
Lee Formation	937	1821
Pennington Formation	1821	2481
U. Maxton 2246-2338		
L. Maxton 2428-2451		
Little Lime	2481	2539
Big Lime	2539	2770
Borden Formation	2770	3395
Sunbury Shale	3395	3426
Berea	3426	3465
Devonian Shale	3465	5112
Onondaga Ls.	5112	TD

DTD 5120

LTD 5129

Well Treatment:

Perf Rhinestreet 16H/4945-5039. N . frac using 500 gal 7 1/2% inh fe acid and 909,000 SCF N . @ 73,760 SCF/min. BD @ 3286#, ATP 3949#, MTP 4000#, ISIP 2824#.

Perf Huron 20H/4261-4652. N . frac using 500 gal 7 1/2% inh fe acid and 909,000 SCF N . @ 86,459 SCF/min. BD @ 3369#, ATP 3877#, MTP 3986#, ISIP 2366#.

Perf Chagrin/Berea 20H/3440-3786. N . frac using 500 gal 7 1/2% fe inh acid and 917,000 SCF N . @ 88,000 SCF/min. BD 3209#, ATP 3942#, MTP 4008#, ISIP 2032#, 15 min 1320#.

Big Lime will be produced naturally up the 8 5/8" X 5 1/2" annulus.

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Division of Energy

059-1144  
Issued 2/25/93

FORM WW-2B

Page 1 of 1

Expires 2/25/93

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

Permitting **WELL WORK PERMIT APPLICATION**  
Oil and Gas Section

- 1) Well Operator: Ashland Exploration, Inc. 2750 (5) 232  
Georgia-Pacific Corp.
- 2) Operator's Well Number: B-2, Serial #133651 3) Elevation: 1292.09
- 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: 5140'KB feet
- 7) Approximate fresh water strata depths: 517'KB (Map WV-12)
- 8) Approximate salt water depths: 767'KB (Map WV-12)
- 9) Approximate coal seam depths: Upper Cedar Grove; Elev. 1010' - Mined Out  
Lower Cedar Grove; Elev. 930' - Mined Out
- 10) Does land contain coal seams tributary to active mine? Yes    / No X /
- 11) Proposed Well Work: *Drill & 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	42.0	30	30	CTS
Fresh Water						38CS18-1/2-3 38CS18-1/2-2.5
Coal	11 3/4	H40	42.0	422	422	
Intermediate	8 5/8	J55	24.0	2472	2472	CTS
Production	5 1/2	J55	15.5	5140	5140	As Needed
Tubing	1.9	J55	2.76	-	5090	38CS18-1/2-1 Siphon
Liners						

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

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

06096  
#5

- 1) Date: February 3, 1991
- 2) Operator's well number  
Georgia-Pacific Corp. #B-2, Serial #133651
- 3) API Well No: 47 - 059 - 1144  
State - County - Permit

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

RECEIVED  
Division of Oil and Gas

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

FEB 05 91

- 4) Surface Owner(s) to be served:
  - (a) Name Georgia-Pacific Corp.  
Address Jerry Crouse  
Wyoming, WV 24898
  - (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_

- 5) (a) Coal Operator:
  - Name Island Creek Coal Company
  - Address P.O. Box 840  
Holden, WV 25625
- (b) Coal Owner(s) with Declaration
  - Name Georgia-Pacific Corp.
  - Address Jerry Crouse  
Wyoming, WV 24898
  - Name \_\_\_\_\_
  - Address \_\_\_\_\_

- 6) Inspector Tim Bennett  
Address Rt. 2, Box 61-B  
Chapmanville, WV 25508  
Telephone (304)-855--705

- (c) Coal Lessee with Declaration
  - Name Island Creek Coal Company
  - Address ~~XXXXXXXXXXXX~~ P.O. Box 840  
Holden, WV 25625

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
x Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 2 on the above named parties, by:

- \_\_\_\_\_ Personal Service (Affidavit attached)
- x Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Ashland Exploration, Inc.  
 By: J. T. Mellinger  
 Its: Vice President  
 Address P.O. Box 391  
Ashland, KY 41114  
 Telephone 606-329-5450

Subscribed and sworn before me this 3rd day of February, 1991

Thick W. Santa

Notary Public

My commission expires November 23, 1994