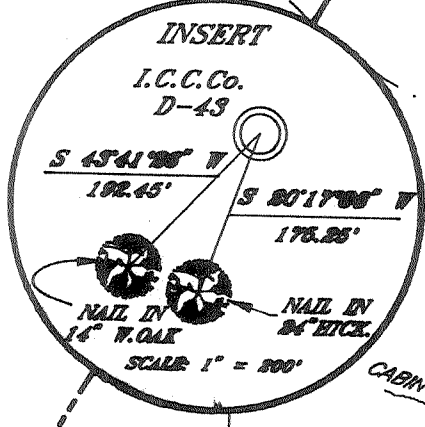
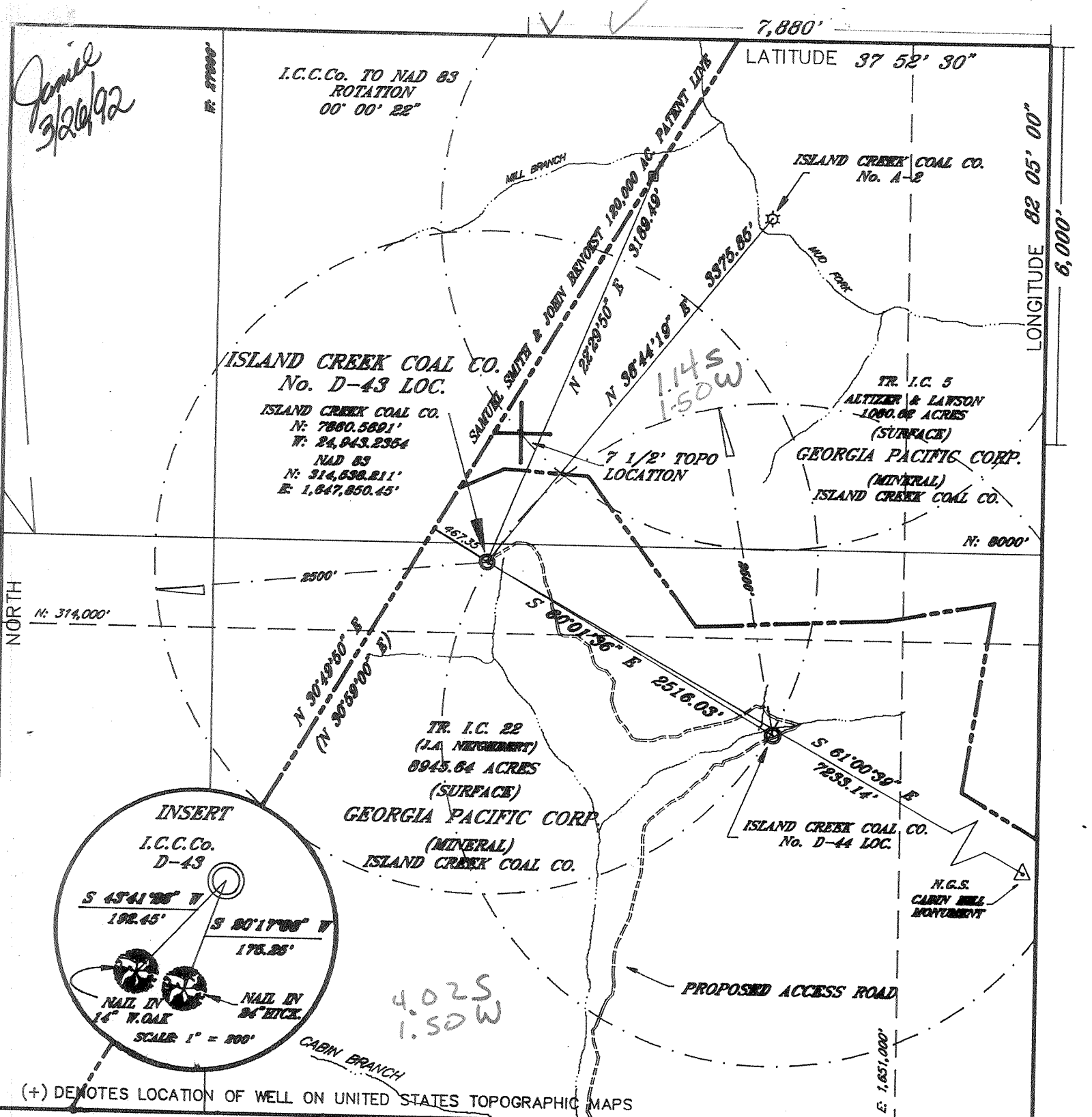
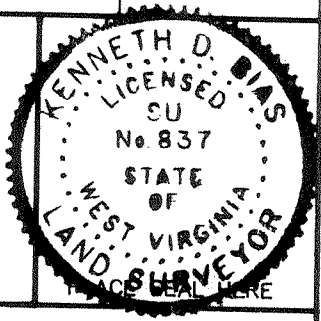


*Janice  
3/26/92*



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 : 2500  
 PROVEN SOURCE OF ELEVATION N.G.S. BM G-144  
 ELEV. 737.27'

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. Bias*  
 R.P.E. \_\_\_\_\_ L.L.S. 837-SU



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE JAN. 28, 19 92  
 OPERATOR'S WELL NO. ISLAND CREEK COAL CO. NO. D-43 LOC. S.N. 140071  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1399.58' WATER SHED CABIN BR. OF COPPERAS MINE FK. OF ISLAND CR. OF GUYANDOTTE RIVER  
 DISTRICT ISLAND CREEK COUNTY LOGAN  
 QUADRANGLE HOLDEN  
 SURFACE OWNER GEORGIA PACIFIC CORP. ACREAGE 8945.64  
 OIL & GAS ROYALTY OWNER ISLAND CREEK COAL CO. LEASE ACREAGE 8945.64 AC. P/O 35,053.0 AC.  
 LEASE NO. 80662  
 PROPOSED WORK: DRILL  CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE  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 4,640'  
 WELL OPERATOR ASHLAND EXPLORATION, INC. DESIGNATED AGENT BOBBY E. WIDENER  
 ADDRESS P.O. BOX 391 ASHLAND, KY. 41114 ADDRESS P.O. BOX 379 BRENTON, WY. 24818

*DEEP WELL l.l. Logan-Holden Diggins (274)*

COUNTY NAME PERMIT

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

Reviewed TM6  
Recorded \_\_\_\_\_

Well Operator's Report of Well Work

Farm name: GEORGIA-PACIFIC CO. Operator Well No.: D-43-S-140071

LOCATION: Elevation: 1399.58 Quadrangle: HOLDEN

District: ISLAND CREEK County: LOGAN  
Latitude: 6000 Feet South of 37 Deg. 52 Min. 30 Sec.  
Longitude: 7880 Feet West of 82 Deg. 5 Min. 0 Sec.

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

Agent: B. E. WIDENER

Inspector: OFIE HELMICK

Permit Issued: 03/30/92  
Well work Commenced: 05/29/92  
Well work Completed: 07/23/92

Verbal Plugging: \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 4528  
Fresh water depths (ft) \_\_\_\_\_  
Damp @ 128'

Salt water depths (ft) \_\_\_\_\_  
1/2" stream @ 1960', Damp @ 1245'

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 216-217, 267-271,  
305-307, 367-370, 425-427, 454-456

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
16"	40'	40'	17.7
11 3/4"	561'	561'	430
8 5/8"	2055'	2055'	696
5 1/2"	4492'	4492'	555
2 3/8"	@ 4396'KB		

OPEN FLOW DATA

Producing formation Dev. Shale Pay zone depth (ft) 2921-4437  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow --- Bbl/d  
Final open flow 536 MCF/d Final open flow --- Bbl/d  
Time of open flow between initial and final tests 3 Hours  
Static rock pressure 385# psig (surface pressure) after 72 Hours

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

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.

AUG 21 1992

By: James L. Stephens James L. Stephens, Eng. Tech.  
Date: 8/12/92

<u>Formation on Rock Type</u>	<u>TOP</u>	<u>BASE</u>
Sand and Shale	0	1086
Lee formation	1086	1560
Pennington formation	1560	1952
Maxton 1800-1884		
Little Lime	1952	2012
Big Lime	2012	2224
Borden formation	2224	2784
Sunbury Shale	2784	2817
Berea	2817	2830
Devonian Shale	2830	4510
Onondaga Ls	4510	TD

DTD 4528

LTD 4526

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

### Well Treatment

Perf Rhinestreet 14H/4259-4437. N<sub>2</sub> frac using 250 gal 7 1/2% fe acid, 807,000 scf N<sub>2</sub> @ 103,500 scf/min. BD @ 2532#, ATP 3472#, MTP 3609# and ISIP 2275#.

Perf Huron 21H/3776-4045. N<sub>2</sub> frac using 300 gal 7 1/2% fe acid, 807,000 scf N<sub>2</sub> @ 105,100 scf/min. BD @ 4044#, ATP 3054#, MTP 4044# and ISIP 1818#.

Perf U. Dev. Shale 21H/2921-3276. N<sub>2</sub> frac using 450 gal 7 1/2% fe acid, 810,000 scf N<sub>2</sub> @ 107,000 scf/min. BD @ 2308#, ATP 2715#, MTP 2817# and ISIP 1387#.

RECEIVED

045-1184

FORM ~~WV-12~~ 12 REC'D  
DEPT. OF ENERGY

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

Issued 3/30/92  
Expires 3/30/94  
275° 5 401

- 1) Well Operator: <sup>413</sup> Ashland Exploration, Inc. Island Creek Coal Company
- 2) Operator's Well Number: D-43, Serial #140071 3) Elevation: 1399.6
- 4) Well type: (a) Oil\_\_\_/ or Gas\_X/  
(b) If Gas: Production\_X/ Underground Storage\_\_\_/  
Deep\_\_\_/ Shallow\_X/
- 5) Proposed Target Formation(s): <sup>411</sup> Devonian Shale
- 6) Proposed Total Depth: 4640' feet
- 7) Approximate fresh water strata depths: 509'KB Elev of Base (Map WV-12)
- 8) Approximate salt water depths: 809'KB Elev of Top (Map WV-12)
- 9) Approximate coal seam depths: Solid No Seams Operated
- 10) Does land contain coal seams tributary to active mine? Yes\_\_\_/ No\_X/
- 11) Proposed Well Work: Drill and Stimulate New Well
- 12)

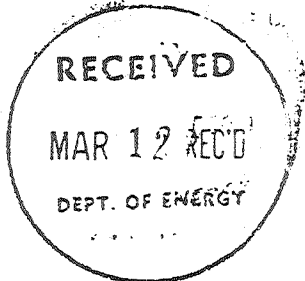
CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu.ft.)
Conductor	16	LS	36.91	30	30	CTS
Fresh Water	11 3/4	H40	42.0	559	559	CTS
Coal						38CSR18/11.3 38CSR18/11.2
Intermediate	8 5/8	J55	24.0	2085	2085	CTS
Production	5 1/2	J55	15.50	4640	4640	AS NEEDED
Tubing	1.9	J55	2.76	-	4590	SIPHON
Liners						38CSR18/11.1

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 Intertek  Agent  
 (Type)



- 1) Date: March 11, 1992
- 2) Operator's well number  
Island Creek Coal #D-43, Serial #140071
- 3) API Well No: 47 - 045 - 1184  
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
  - (a) Name Georgia-Pacific Corp.  
Address Jerry Crouse, General Delivery  
Wyoming, WV 24898
  - (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (b) Coal Owner(s) with Declaration
    - Name Island Creek Coal Company
    - Address P.O. Box 840  
Holden, WV 25625
    - Name \_\_\_\_\_
    - Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration
    - Name \_\_\_\_\_
    - Address \_\_\_\_\_
- 6) Inspector Ofie Helmick  
Address P.O. Box 218  
Fanrock, WV 24834  
Telephone (304)- 732-9135

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: W. Mark Parks *W. Mark Parks* OKC  
 Its: Operations Manager  
 Address P.O. Box 391  
Ashland, KY 41114  
 Telephone 606-329-5989

Subscribed and sworn before me this 11th day of March, 1992

*David W. South* Notary Public  
 My commission expires November 23, 1994