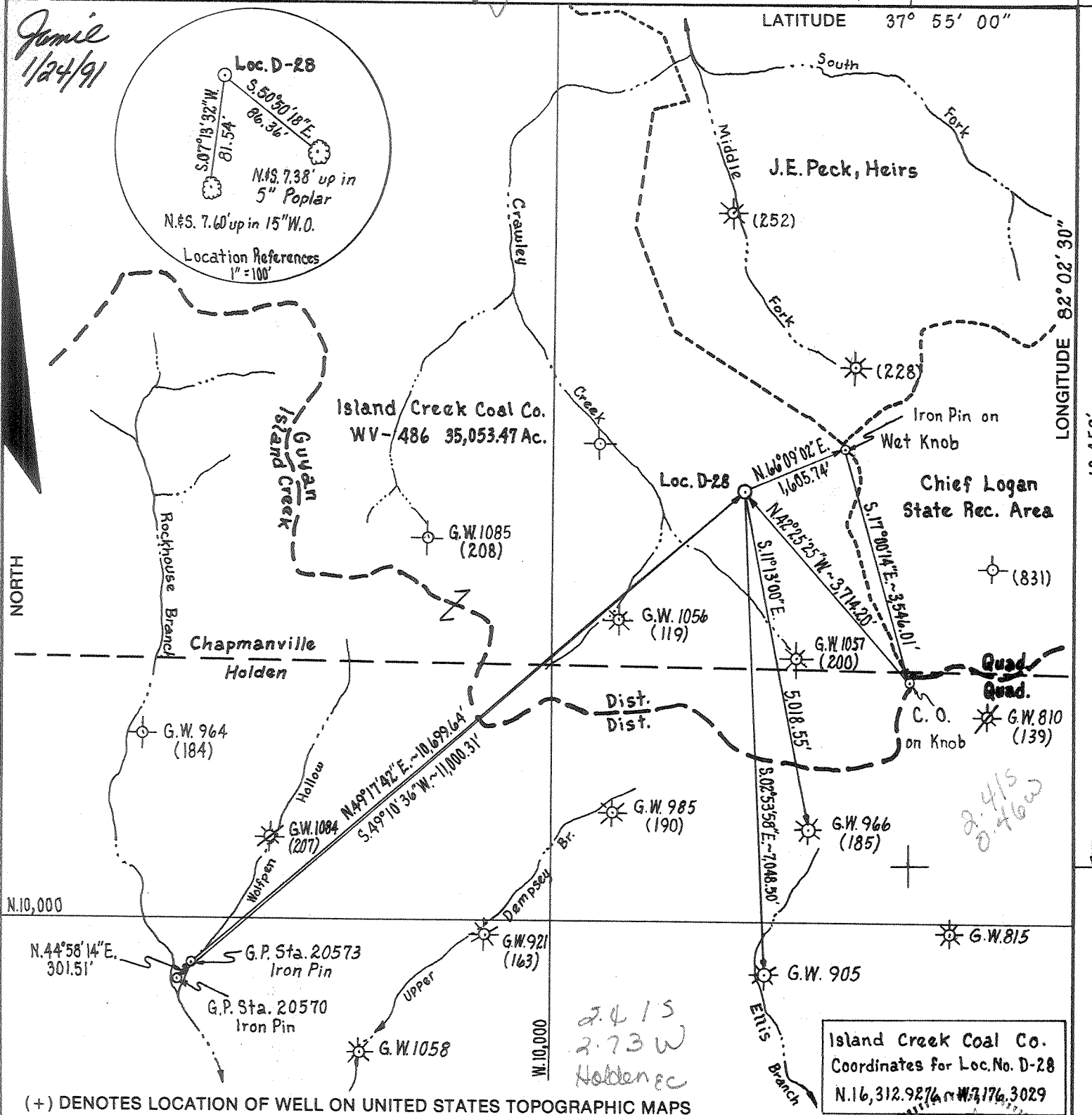
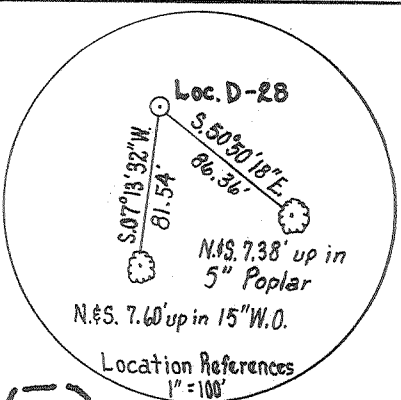


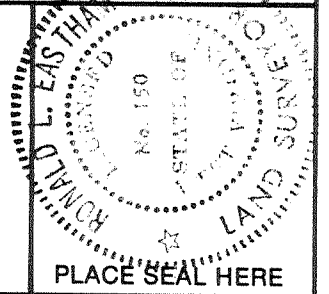
Jemie
1/24/91



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1:23,026
 PROVEN SOURCE OF ELEVATION U.S.C. & G.S. Bench Mark "N-144"; Elev. = 710.980

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) Ronald L. Coath
 R.P.E. _____ L.L.S. 150



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE Jan. 02, 19 91
 OPERATOR'S WELL NO. Island Creek D-28
 API WELL NO. _____ S.N. 133771
47 045 1155
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1386.6 WATERSHED Crawley Creek of the Guyandotte River
 DISTRICT Guyan COUNTY Logan
 QUADRANGLE Chapmanville
 SURFACE OWNER Georgia-Pacific Corporation ACREAGE 798.76
 OIL & GAS ROYALTY OWNER Island Creek Coal Co. LEASE ACREAGE 35,053.47
 LEASE NO. WV-486
 PROPOSED WORK: DRILL X 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 4,622' KB
 WELL OPERATOR Ashland Exploration DESIGNATED AGENT Forrest Burkatt
 ADDRESS P.O. Box 43 ADDRESS P.O. Box 379
Ashland, Ky. 41114 Brenton, W.V. 24818

FEB 8 1991

DEEP WELL 6-6 Logan-Holden-Dingess (274)

RECEIVED
OCT 19 92
WV Division of
Environmental Protection

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

Well Operator's Report of Well Work

Farm name: GEORGIA PACIFIC CORP Operator Well No.: D 28 S 133771

LOCATION: Elevation: 1386.60 Quadrangle: CHAPMANVILLE

District: GUYAN County: LOGAN
Latitude: 12450 Feet South of 37 Deg. 55Min. 0 Sec.
Longitude 2450 Feet West of 82 Deg. 2 Min. 30 Sec.

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

Agent: FORREST BURKETT

Inspector: TIM BENNETT
Permit Issued: 02/04/91
Well work Commenced: 04/19/91
Well work Completed: 06/10/91
Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) 4570'
Fresh water depths (ft) 1/2" stream @66'
approximately 576'
Salt water depths (ft) Approx. 1141'

| Casing & Tubing Size | Used in Drilling | Left in Well | Cement Fill U Cu. Ft |
|-------------------------------|------------------|--------------|----------------------|
| 16" | 37' | 37' | 11.8 |
| 8 5/8" | 1868' | 1868' | 845 |
| 5 1/2" | 4541' | 4541' | 662 |
| 1.9" @ 4422' KB w/Pkr @ 2788' | | | |
| 1.9" @ 2729' KB | | | |

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 64-72, 154-156, 216-219
297-309

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 2822-44
 Gas: Initial open flow 59 MCF/d Oil: Initial open flow _____ Bbl
 Final open flow 712 MCF/d Final open flow _____ Bbl
 Time of open flow between initial and final tests 3 Hou
 Static rock Pressure 350 psig (surface pressure) after 72 Hou
Berea 2703-27

Second producing formation Weir Pay zone depth (ft) 2202-22
 Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl
 Final open flow 1032 MCF/d Final open flow _____ Bbl
 Time of open flow between initial and final tests 3 Hou
 Static rock Pressure 320 psig (surface pressure) after 72 Hou

1744
mcf

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORAT INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WE LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATION INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

OCT 30 1992

For: ASHLAND EXPLORATION, INC.

Reviewed TMB
Recorded _____

By: James J. Stephens J. L. Stephens, Engr. Te
Date: 6/26/91

FORMATION OR ROCK TYPETOPBASE

| | | |
|----------------------|------|------------|
| Breathitt Formation | 0 | 911 |
| Lee Formation | 911 | 1488 |
| Pennington Formation | 1488 | 1886 |
| L. Maxton 1850-1864 | | |
| Little Lime | 1886 | 1937 |
| Big Lime | 1937 | 2134 |
| Borden Formation | 2134 | 2670 |
| Weir 2193-2226 | | |
| Sunbury Shale | 2670 | 2699 |
| Berea | 2669 | 2713 |
| Devonian Shale | 2713 | 4552 |
| Onondaga LS | 4552 | 451 TD 455 |

DTD 4570

LTD 4564

WELL TREATMENT

Perf L. Dev. Shale 18H/4341-4479 - N₂ frac using 500 gal 7 1/2% inh Fe acid, 800,000 SCF N₂ @ 96,500 SCF/min. BD @ 2600#, ATP 3750#, MTP 4150#, ISIP 2900#, 15 min 1490#

Perf M. Dev. Shale 23H/3733-4045. N₂ frac using 500 gal 7 1/2% Inh Fe acid, 805,000 SCF N₂ @ 98,000 SCF/min. BD @ 2990#, ATP 3050#, MTP 3170#, ISIP 1300# & 15 min. 102

Perf U. Dev. Shale 16H/2822-2998. N₂ frac using 500 gal 7 1/2% Inh Fe acid, 810,000 SCF N₂ @ 100,000 SCF/min. BD @ 3090#, ATP 3300#, MTP 3310#, ISIP 1400#, 15 min 630#

Perf Berea 15H/2703-2710. 75 quality foam frac the Berea using 300 gal 16% Inh Fe acid, 50,000# 20/40 sand & 300,000 SCF N₂ @ 7000 SCF/min. BD @ 1150#, ATP 1175# @ 20 bpm foam rate, MTP 1390#, ISIP 770#, 15 min 610# & TF 230 bbls.

Perf Weir 12H/2202-2226. 75 Quality foam frac U. Weir using 1000 gal 15% HCl Fe acid & 30 Lo dense perf balls for breakdown. BD @ 1170# @ 11-12 BPM. Foam frac using 81,000# 20/40 sand, 330,000 SCF N₂ @ 9600 SCF/min, ATP 1060# @ 30 BPM foam rate, MTP 1100#, ISIP 800#, 15 min 710# & TF 350 bbl.

045-1153
Issued 02/04/91

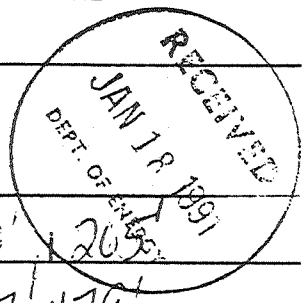
FORM WW-2B

Page 1 of 1

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

Expires 02/04/93

- 1) Well Operator: Ashland Exploration, Inc. 2750 (4) 288
Island Creek Coal
- 2) Operator's Well Number: D-28, Serial #133771 3) Elevation: 1386.6'
- 4) Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Devonian Shale
- 6) Proposed Total Depth: 4622' KB feet 238' 181'
- 7) Approximate fresh water strata depths: 576' KB (Map WV-12)
- 8) Approximate salt water depths: 1141' 786' KB (Map WV-12) 1756' 205'
- 9) Approximate coal seam depths: Not Operated - Solid Coal 177'-179'
205'-207'
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: Drill & Stimulate New Well
- 12)



CASING AND TUBING PROGRAM

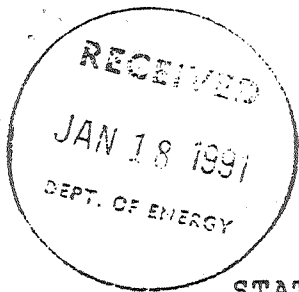
| TYPE | SPECIFICATIONS | | FOOTAGE INTERVALS | | | CEMENT |
|--------------|----------------|-------|-------------------|--------------|--------------|---|
| | Size | Grade | Weight per ft. | For drilling | Left in well | Fill-up (cu. ft.) |
| Conductor | 16 | LS | 42.0 | 30 | 30 | CTS |
| Fresh Water | | | | | | 38CSR18-11.5 |
| Coal | | | | | | 38CSR18-11.5 CTS W/Lead Cl "A" (2%Gel, 3% CaCl) Tail W/100 sx (3%Ca) |
| Intermediate | 8 5/8 | J55 | 24.0 | 1897 | 1897 | 38CSR18-11.1 As Needed |
| Production | 5 1/2 | J55 | 15.5 | 4622 | 4622 | |
| Tubing | 1.9 | J55 | 2.76 | - | 4572 | Siphon |
| Liners | | | | | | |

PACKERS : Kind _____
Sizes _____
Depths set _____

506072

For Division of Oil and Gas Use Only

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



- 1) Date: January 16, 1991
- 2) Operator's well number
Island Creek Coal Co. #D-28, Serial #133771
- 3) API Well No: 47 - 045 - 1155
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
Wyoming, WV 24898
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name _____
Address _____
 - (b) Coal Owner(s) with Declaration
Name Island Creek Corp.
Address P.O. Box 840
Holden, WV 25625
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Tim Bennett
Address Rt. 2 Box 61-B
Chapmanville, WV 25508
Telephone (304)-855-7705

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)

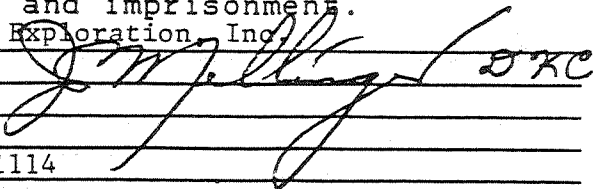
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 2 on the above named parties, by:

- _____ 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 16th day of January, 1991

Thick W. Donta Notary Public
 My commission expires November 23, 1994