

Janie 8/31/89

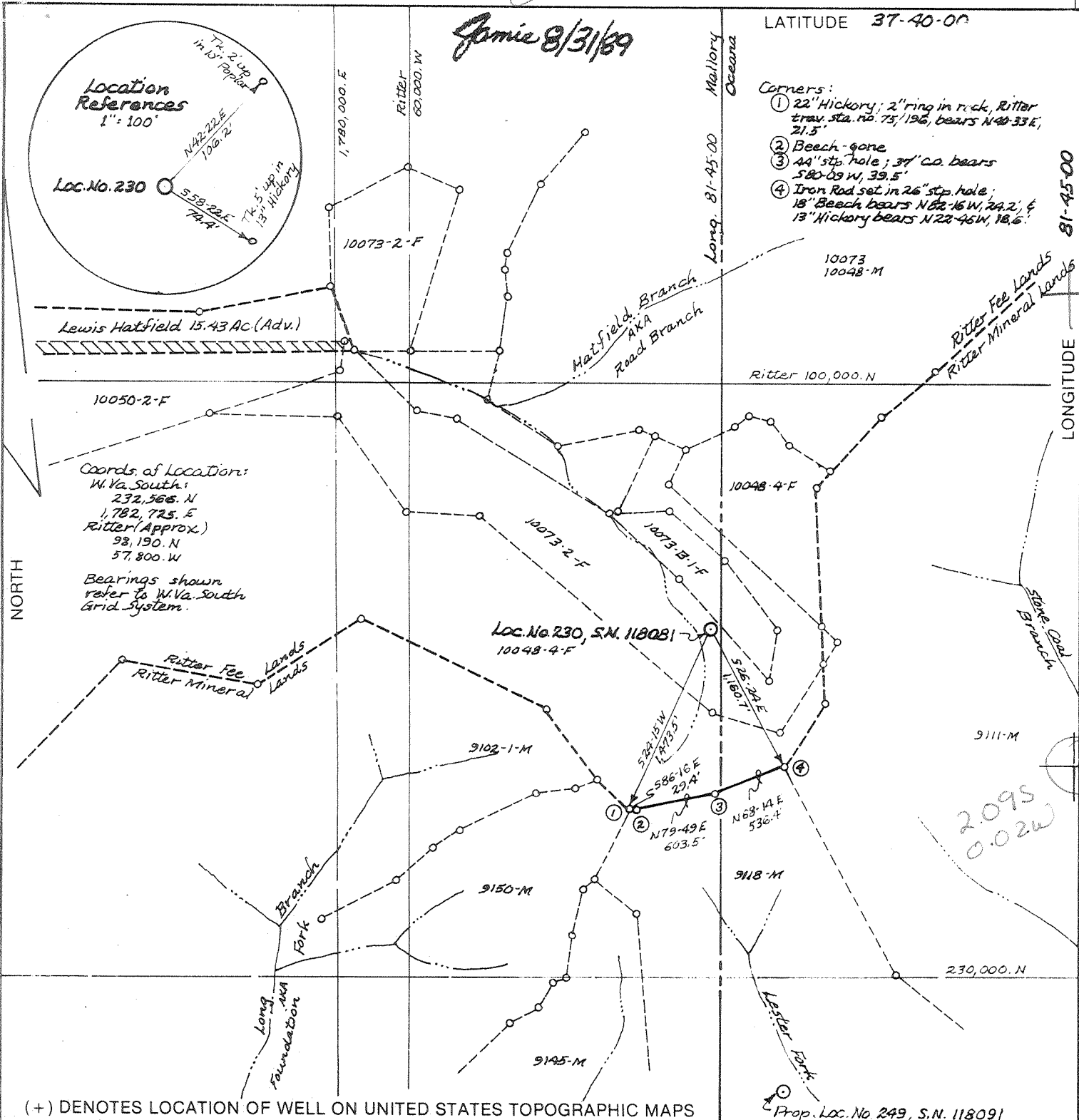
LATITUDE 37-40-00



- Corners:
1 22" Hickory; 2" ring in rock, Ritter trav. sta. no. 75/196, bears N40-33 E, 21.5'
2 Beech gone
3 44" stp. hole; 37" C.D. bears S80-09 W, 39.5'
4 Iron Rod set in 26" stp. hole; 18" Beech bears N52-16 W, 24.2'; 13" Hickory bears N22-46 W, 18.6'

NORTH

Coords. of Location:
W. Va. South:
232,366. N
1,782,725. E
Ritter (Approx.)
98,190. N
57,800. W
Bearings shown refer to W. Va. South Grid System.



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

FILE NO. 62-45
DRAWING NO. ~
SCALE 1" = 1,000'
MINIMUM DEGREE OF ACCURACY 1:23,580
PROVEN SOURCE OF ELEVATION U.S.C.E. Mon. No. 11-R-74 @ Guyandotte Campground, R.D. Bailey Lake.

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) George Mary Corn
R.P.E. 3999 L.L.S.

PLACE SEAL HERE

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION



DATE August 23, 19 89
OPERATOR'S WELL NO. W.M. Ritter Lumber
API WELL NO. Co. No. 230 - Serial No. 118081
47 109 STATE COUNTY PERMIT

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
(IF "GAS,") PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION 1526.1 WATER SHED Hatfield Branch of Big Cub Creek - Guyandotte River
DISTRICT Clear Fork 4 COUNTY Wyoming
QUADRANGLE Mallery 454 049 6 Gilbert EC
SURFACE OWNER Georgia-Pacific Corp. ACREAGE 40,000+
OIL & GAS ROYALTY OWNER Georgia-Pacific Corp. LEASE ACREAGE 67,244.
LEASE NO. 4157

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 5846 KB
WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett SEP 15 1989
ADDRESS P.O. Box 391 43 Ashland, Ky. 41114 ADDRESS P.O. Box 156 Brenton, W. Va. 24818

DEEP WELL 6-6 Man-Oceana (266)

FORM WW-6

COUNTY NAME PERMIT

47-109-1111
 Issued 9/13/89 Expires 9/13/91

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

- 1) Well Operator: Ashland Exploration, Inc. *2750 (4) 454*
 W. M. Ritter Lumber Co.
- 2) Operator's Well Number: 230, Serial No. 118081 3) Elevation: 1526.1
- 4) Well type: (a) Oil / or Gas /
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow /
- 5) Proposed Target Formation(s): Devonian Shale *4d1*
- 6) Proposed Total Depth: 5846'KB feet
- 7) Approximate fresh water strata depths: 412', 431', 1126', 487'
- 8) Approximate salt water depths: 1606'KB
- 9) Approximate coal seam depths: None Worked *749-759' 77'-90'*
- 10) Does land contain coal seams tributary to active mine? Yes / No *740'-745' 350'-353' 1360'-1363'*
- 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						} <i>38CSR18-11.3</i> <i>38CSR18-11.2.2</i>
Coal						
Intermediate	8 5/8	J55	24.0	1656	1656	CTS
Production	5 1/2	J55	15.5	5846	5846	<i>38CSR18-11.1</i> As Needed
Tubing	1.9	J55	2.76	-	5796	Siphon
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

RECEIVED
 AUG 25 1989

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

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

RECEIVED
AUG 25 1989

- 1) Date: August 24, 1989
- 2) Operator's well number
W.M. Ritter Lumber Co. #230, Serial #118081
- 3) API Well No: 47 - 109 - 1111
State - County - Permit

**DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY**

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- | | |
|---|--|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Georgia-Pacific Corp.</u>
Address <u>133 Peachtree</u>
<u>Atlanta, GA 30303</u></p> <p>(b) Name _____
Address _____</p> <p>(c) Name _____
Address _____</p> | <p>5) (a) Coal Operator:</p> <p>Name <u>None</u>
Address _____</p> <p>(b) Coal Owner(s) with Declaration
Name <u>Georgia-Pacific Corp.</u>
Address <u>133 Peachtree</u>
<u>Atlanta, GA 30303</u></p> <p>Name _____
Address _____</p> |
| <p>6) Inspector <u>Rodney Dillon</u>
Address <u>P.O. Box 1526</u>
<u>Sophia, WV 25921</u>
Telephone <u>(304)-683-3989</u></p> | <p>(c) Coal Lessee with Declaration
Name <u>Island Creek Corp.</u>
Address <u>P.O. Box 840</u>
<u>Holden, WV 25625</u></p> |

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.

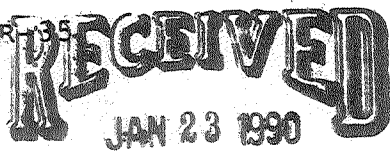
Well Operator Ashland Exploration, Inc.
By: J. T. Mellinger
 Its: Manager Eastern Region
 Address P.O. Box 391
Ashland, KY 41114
 Telephone (606) 329-5450

Subscribed and sworn before me this 24th day of August, 19 89

Vicki W. South

Notary Public

My commission expires November 23, 1990



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

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Well Operator's Report of Well Work

Farm name: GEORGIA-PACIFIC CORP. Operator Well No.: 230-S-118081

LOCATION: Elevation: 1526.10 Quadrangle: MALLORY

District: CLEAR FORK County: WYOMING
Latitude: 11070 Feet South of 37 Deg. 40Min. 0 Sec.
Longitude 90 Feet West of 81 Deg. 45 Min. 0 Sec.

Company: ASHLAND EXPLORATION, INC.
P. O. BOX 391
ASHLAND, KY 41114-0000

Agent: FORREST BURKETT

Inspector: RODNEY G. DILLON
Permit Issued: 09/13/89
Well work Commenced: 09/21/89
Well work Completed: 01/10/90
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 6012'
Fresh water depths (ft) 412', 431',
1126', 487'
Salt water depths (ft) Approximate
depth 1606'
Is coal being mined in area (Y/N)? N
Coal Depths (ft): Not noted while drlg.

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	25'	25'	17.7
8-5/8"	1667'	1667'	649
5-1/2"	5972'	5972'	1178
1.9"		4898'	

OPEN FLOW DATA

Devonian Shale 4900-4925
 Producing formation Berea Pay zone depth (ft) 3648-3670
 Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow 450 MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests 3 Hours
 Static rock Pressure 495# psig (surface pressure) after 72 Hours

Second producing formation 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 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, Jr. James L. Stephens, Jr. Eng. Tech.
Date: 1-18-90

RECEIVED
 DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

Formation or Rock Type	Top	Base
Sand & Shales	0	1268
Lee Sands	1268	1653
Sand & Shales	1653	1863
Ravenscliff	1863	1912
Shale	1912	1989
Avis LS	1989	2024
Shale	2024	2060
Stray Maxton	2060	2152
Sand & Shale	2152	2548
L. Maxton	2548	2587
Shale	2587	2629
L. Lime	2629	2711
Pencil Cave	2711	2736
Big Lime	2736	3066
Shale	3066	3178
Weir Section	3178	3284
Shale	3284	3618
Coffee Chale	3618	3638
Berea	3638	3684
Devonian Shale	3684	5986
Onondaga	5986	TD

RECEIVED
 JAN 23 1990
 DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

DTD: 6012
 LTD: 6002

Well Treatment

Perf U. Devonian Shale 25H/4900-4925. 75 Quality foam frac using 1000 gal 8% Fe inh acid, 1000 gal 25% treated methanol, 135,000# 20/40 sand & 1,013,000 scf N₂ @ 28,000 scf/min. BD @ 1900#, ATP 2250# @ 50 bpm foam rate, MTP @ 2500#, ISIP 1360# & TF 610 bbls.

Perf Berea Sands 45H/3648-3670. 75 Quality foam frac using 500 gal 15% inh Fe acid, 1000 gal 25% treated methanol, 60,000# 20/40 sand & 372,000 scf N₂ @ 10,300 scf/min. BD @ 1629#, ATP 1472# @ 25 bpm foam rate, MTP 4461#, ISIP 4461, 15 min 3975# & TF 335 bbls. Well screened off on flush.

UD 3684
 H 4850
 J 5500
 A 5600
 Z_n 5900