

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1,000'
MINIMUM DEGREE OF ACCURACY 1:15,485
PROVEN SOURCE OF ELEVATION U.S.C. & G.S., BM "R-44"
Elev. = 1369.709

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. East

R.P.E. _____ L.L.S. 150

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE October 24, 19 91
OPERATOR'S WELL NO. W.M. Ritter Lumber Co.
API WELL NO. 270, S.N. 136861
47 - 109 - 1237
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 1334.06 WATERSHED Laurel Fork of Clear Fork of the Guyandotte River
DISTRICT Oceana COUNTY Wyoming
QUADRANGLE Matheny Pineville NC

SURFACE OWNER Ashby Godby Lugar, Jr., etal ACREAGE 7.92
OIL & GAS ROYALTY OWNER Georgia-Pacific Corporation LEASE ACREAGE 67,244.09
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) _____

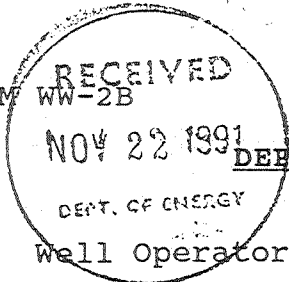
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___

TARGET FORMATION Devonian Shale ESTIMATED DEPTH 5814 KB

WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT B.E. Widener
ADDRESS P.O. Box 391 ADDRESS P.O. Box 379
Ashland, Ky. 41114 Brenton, W.V. 24818

COUNTY NAME
PERMIT

270 & 271 Well - 6-6 Man-Oceana (2166)



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

- 1) Well Operator: 0043 Ashland Exploration, Inc. 2750 (6) 463
W.M. Ritter Lumber Co.
- 2) Operator's Well Number: 270, Serial #136861 3) Elevation: 1334.1
- 4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production X / Underground Storage /
Deep / Shallow X /
- 5) Proposed Target Formation(s): 441 Devonian Shale
- 6) Proposed Total Depth: 5814' KB feet
- 7) Approximate fresh water strata depths: 369' KB (Map WV-12) @ 126' 353' 46' etc
- 8) Approximate salt water depths: 769' KB (Map WV-12) @ 930'
- 9) Approximate coal seam depths: Solid - No Seams Operated
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
71'-72' 700'-704' 927'-939'
- 11) Proposed Well Work: Drill and Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

401
13273

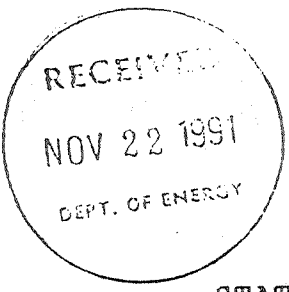
TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu.ft.)
Conductor	16	LS	36.91	30	30	CTS
Fresh Water						38CSR18-11.5
Coal						38CSR18-11.2
Intermediate	8 5/8	J55	24.0	1285	1285	CTS
Production	5 1/2	J55	15.5	5814	5814	AS NEEDED
Tubing	1.9	J55	2.76	-	5764	SIPHON
Liners						38CSR18-11.4

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

506390
29

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



1) Date: November 21, 1991
2) Operator's well number
W.M. Ritter Lumber Co. #270, Serial #136861
3) API Well No: 47 - 109 - 1237
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 Cleatus C. Osborne
Address P.O. Box 351
Oceana, WV 24870
(b) Name Frederick A. Lugar
Address P.O. Box 250
Oceana, WV 24870
(c) Name _____
Address _____

6) Inspector Rodney Dillon
Address P.O. Box 131
Bradley, WV 25818
Telephone (304)-877-2912

5) (a) Coal Operator:
Name N/A
Address _____

(b) Coal Owner(s) with Declaration
Name Georgia-Pacific Corp.
Address General Delivery
Wyoming, WV 24898
Name _____
Address _____

(c) Coal Lessee with Declaration
Name Rawl Sales & Processing Co.
Address P.O. Box 722
Matewan, WV 25678

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

Subscribed and sworn before me this 21st day of November, 1991

 Notary Public
My commission expires November 23, 1994

RECI

WR-35

WV Div
Environmental

JUN 0 4

Permitting
Office of Oil

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

09-Dec-91
API # 47-109-01237

Reviewed TMG
Recorded _____

Well Operator's Report of Well Work

Farm name: OSBORNE, CLEATUS C. ETAL

Operator Well No.: 270-S-136861

LOCATION: Elevation: 1334.06
District: OCEANA
Latitude: 12200 Feet South of 37
Longitude: 8400 Feet West of 81

Quadrangle: MATHENY
County: WYOMING
Deg. 42 Min. 30 Sec.
Deg. 35 Min. 0 Sec.

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

Agent: B. E. WIDENER

Inspector: RODNEY G. DILLON

Permit Issued: 12/09/91
Well work Commenced: 02/07/92
Well work Completed: 05/26/92

Verbal Plugging:
Permission granted on: _____

Rotary X Cable _____ Rig _____
Total Depth (feet) 5896

Fresh water depths (ft) 47' damp
1" stream 170', 5" stream @ 260,

6" stream 350'

Salt water depths (ft) None noted
Is coal being mined in area (Y/N)? N
Coal Depths (ft): None noted

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
16"	47'	47'	17.7
11 3/4"	307'	307'	177
8 5/8"	1288'	1288'	404
5 1/2"	5845'	5845'	989
1.9" @ 1.9" @	5702' 2879'	w/ Pkr @ KB	2917' KB

OPEN FLOW DATA

Producing formation Devonian Shale/Gordon Pay zone depth (ft) 3438-5775

Gas: Initial open flow -0- MCF/d Oil: Initial open flow --- Bbl/d

Final open flow 873 MCF/d Final open flow --- Bbl/d

Time of open flow between initial and final tests 3 Hours

Static rock pressure 800# psig (surface pressure) after 72 Hours

Big Lime

2385-2625

Second producing formation Princeton/Ravenscliff Pay zone depth (ft) 1371-1484

Gas: Initial open flow -0- MCF/d Oil: Initial open flow --- Bbl/d

Final open flow 929 MCF/d Final open flow --- Bbl/d

Time of open flow between initial and final tests 3 Hours

Static rock Pressure 480# psig (surface pressure) after 72 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.

By: James L. Stephens James L. Stephens, Eng. Tech.
Date: 6/3/92

JUN 16 1992

<u>Formation on Rock Type</u>	<u>TOP</u>	<u>BASE</u>
Sand and Shale (Base Lee Fm)	0	1194
Pennington formation	1194	2184
Princeton 1321-1376		
Ravenscliff 1436-1487		
Stray Maxton 1577-1606		
M. Maxton 1881-1927		
L. Maxton 2094-2133		
Little Lime	2184	2261
Big Lime	2261	2674
Borden formation	2674	3233
Weir 2791-2898		
Sunbury Shale	3233	3251
Berea	3251	3288
Devonian Shale	3288	5875
Gordon 3425-3445		
Onondaga Ls.	5875	TD

Well Treatment

Perf Rhinestreet Shale 22H/5373-5775. N₂ frac using 500 gal 7½% inh fe acid, 796,000 scf N₂ @ 95,400 scf/min. BD 3411#, MTP 3722#, ATP 3685# and ISIP 2646#.

Perf L. Huron 18H/4800-5025. N₂ frac using 500 gal 7½% inh fe acid, 793,000 scf N₂ @ 90,165 scf/min. BD @ 3886#, ATP 3592#, ISIP 2589#.

Perf U. Shale 20H/4357-4569. N₂ frac using 500 gal 7½% fe acid, 800,000 scf N₂ @ 97,768 scf/min. BD @ 3428#, MTP 4000#, ATP 3440# and ISIP 2467#.

Perf Chagrin and Gordon 20H/3438-3880. N₂ frac using 500 gal 7½% fe acid, 794,000 scf N₂ @ 85,000 scf/min. BD @ 2638#, MTP 3206#, ATP 3097 and ISIP 1733.

Perf Weir 15H/2880-2884. 75 quality foam frac Weir using 286,000 scf N₂ @ 6000 scf/min w/ 90 quality prepad and 55,600# 20/40 sand. BD @ 1348#, MTP 1591#, ATP 1439# @ 20 BPM foam rate and ISIP 1316#.

Perf Big Lime 12H/2385-2625. Foam acidize using 500 gal 15% fe acid, 242,000 scf N₂ @ 5000 scf/min. and 8000 gal 27% inh fe acid @ 5 bpm acid rate. BD @ 1310#, ATP 1150#, MTP 1310# and ISIP 1180#.

Perf Princeton/Ravenscliff 12H/1371-1484. 75 quality foam frac using 1000 gal 15% fe acid, 33,000 scf N₂ @ 10,000 scf/min. BD @ 2700#, MTP 4024#, and ISIP 4000# w/ perf balls frac using 453,000 scf N₂ @ 12000 scf/min, 66,000 # 20/40 sand. 20# gel system ATP 2800# @ 32 bpm, MTP 3560# and ISIP 2850#.