

LONGITUDE 81°27'00" 13500' 005'

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:5500'  
 PROVEN SOURCE OF ELEVATION USGS Forks road 7100'± West of location EL. 1838

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) C. S. Valley Jr.  
 R.P.E. \_\_\_\_\_ U.S. 92

PLACE SEAL HERE

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



DATE FEB 15, 1989  
 OPERATOR'S WELL NO. RITTER 242  
 API WELL NO. Serial No. 117671

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1989.83 WATERSHED TILLEY BRANCH OF ROCKCASTLE CREEK  
 DISTRICT CENTER 3 COUNTY WYOMING  
 QUADRANGLE MC GRAW'S 466 087 of Mullens W.C.  
 SURFACE OWNER LUGAR LUMBER CO ACREAGE 100  
 OIL & GAS ROYALTY OWNER GEORGIA-PACIFIC LEASE ACREAGE 67244.09  
 LEASE NO. 4157

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMAT ON \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Devonian Shale ESTIMATED DEPTH 6905 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

APR 14 1989

COUNTY NAME PERMIT

DEEP WELL 6-6 ~~McGraws (548)~~ (250)

HT. HALL 48673 FORM WW-6

25  
109-1091  
Issued 4/11/89 Expires 4/11/91  
Page 1 of 1

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

- 1) Well Operator: Ashland Exploration, Inc. 2750, 3, 466  
W. M. Ritter Lumber Co.
- 2) Operator's Well Number: 242, Serial #117671 3) Elevation: 1989.83
- 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: 6905'KB feet
- 7) Approximate fresh water strata depths: 975'KB
- 8) Approximate salt water depths: 1465'KB
- 9) Approximate coal seam depths: None Operated
- 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	H40	65.0	30	30	CTS
Fresh Water						
Coal						38CSR18-113 38CSR18-112
Intermediate	8 5/8	J55	24.0	1515	1515	CTS 38CSR18-111
Production	5 1/2	J55	15.5	6905	6905	As Needed
Tubing	1.9	CW55	2.76	-	6855	Siphon
Liners						

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

RECEIVED  
MAR 09 1989

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

5  
566524  
Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond 50 Blanket  Agent  
(Type)

**RECEIVED**  
MAR 09 1989

- 1) Date: March 8, 1989
- 2) Operator's well number  
W. M. Ritter Lumber Co. #242, Serial #117671
- 3) API Well No: 47 - 109 - 1091  
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

- 4) Surface Owner(s) to be served:
  - (a) Name Lugar Lumber Company  
Address Box 250  
Oceana, WV 24870
  - (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (b) Coal Owner(s) with Declaration  
Name Georgia-Pacific Corp.  
Address 133 Peachtree  
Atlanta, GA 30303
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration  
Name Consol Land Development Company  
Address P.O. Box 1289  
Bluefield, VA 24605
- 6) Inspector Tim Bennett  
Address 525 Tiller Street  
Logan, WV 25601  
Telephone (304)- 792-7075

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.

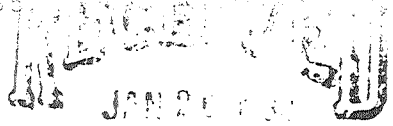
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, 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 8th day of March, 1989

Vicki W. Nonta Notary Public  
My commission expires November 23, 1990



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

DIVISION OF OIL AND GAS  
DEPARTMENT OF ENERGY  
Well Operator's Report of Well Work

Farm name: LUGAR LUMBER COMPANY Operator Well No.: 242-S-117671  
Minerals : GEORGIA-PACIFIC CORP.  
LOCATION: Elevation: 1989.83 Quadrangle: MCGRAWS

District: CENTER County: WYOMING  
Latitude: 13500 Feet South of 37 Deg. 40Min. 0 Sec.  
Longitude 8525 Feet West of 81 Deg. 27 Min. 30 Sec.

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

Agent: FORREST BURKETT

Inspector: RODNEY G. DILLON  
Permit Issued: 04/11/89  
Well work Commenced: 08/16/89  
Well work Completed: 01/16/90  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 6658'  
Fresh water depths (ft) 2 1/2" Stream @ 71', 471'.  
Salt water depths (ft) Approximately @ 1465' KB  
Is coal being mined in area (Y/N)? N  
Coal Depths (ft): Not noted during dril'g

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	26'	26'	17.7
11 3/4"	222'	222'	118
8 5/8"	1505'	1505'	472
5 1/2"	6623'	6623'	1307
2 3/8"	w/AD-1 Pkr.	@3192'KB	

OPEN FLOW DATA

Producing formation Big Lime Pay zone depth (ft) 3109'-3156'  
 Gas: Initial open flow 848 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow 1040 / 1838 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests 3 Hours  
 Static rock Pressure 400 psig (surface pressure) after 72 Hours

Second producing formation Deyonian Shale Gordon Pay zone depth (ft) 3990'-4000'  
 Gas: Initial open flow 0 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow 848 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests 3 Hours  
 Static rock Pressure 550 psig (surface pressure) after 72 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,  
Date: 1-25-90 Engineer Tech.

FORMATION OR ROCK TYPE

TOP

BASE

Sand & Shale	0	830	
Lower Lee Sand	830	1425	
Sand & Shale	1425	1634	
Ravenscliff	1634	1688	
Shale	1688	1707	
Avis Ls.	1707	1750	
Sand & Shale	1750	2473	
Lower Maxton	2473	2609	
Little Lime	2609	2699	
Pencil Cave	2699	2727	
Big Lime	2727	3201	
Shale	3201	3286	
Weir Section	3286	3501	
Shales	3501	3830	UD 3864
Coffee Shale	3830	3850	LH 3000
Berea	3850	3864	J 3650
Devonian Shale	3864	6643	A 5800
Gordon (3978-4000)			RH 6100
Onondaga Ls.	6643	TD	
DTD: 6658			
LTD: 6659			

WELL TREATMENT

Perf. L. Devonian Shale 26H/5951-6458. 75 Quality foam frac using 1000 gal 15% HCL w/Fe agent, 1000 gal 25% treated methanol, 89,600# 20/40 sand & 1,045,000 scf N<sub>2</sub> @ 45,000 scf/min. BD @ 3429#, ATP 3936# @ 50 bpm foam rate, MTP 4278#, BD ISIP w/foam pad 3100#, 15 min 377# & TF 495 bbls.

Perf. U. Devonian Shale 25H/5104-5588. 75 Quality foam frac using 1,000 gal 7 1/2% Fe acid, 1000 gal 25% treated methanol, 100,000# 20/40 sand & 819,000 scf N<sub>2</sub> @ 30,333 scf/min. BD @ 2770#, ATP 2468# @ 50 bpm foam rate, MTP 3004#, ISIP 1724#, 15 min 1406# & TF 411 bbls.

Perf. Gordon sands 25H/3990-4000. 75 Quality foam frac using 500 gal 15% inh Fe acid, 1,000 gal 25% treated methanol, 51,200# 20/40 sand & 339,000 scf N<sub>2</sub> @ 8300 scf/min. BD @ 1263#, ATP 1106# @ 25 BPM foam rate, MTP 1263#, ISIP 932, 15 min. 860# & TF 239 bbls.

Perf. Big Lime 41H/3109-3156. Acidize using 2000 gal 15% inh. Fe acid, 2000 gal 28% inh Fe acid & displace w/85bbls. treated wtr. BD @ 1000#, ATP 0 # @ 7Bpm rate, MTP 1000#, ISIP 0# & TF 180 bbls.

**RECEIVED**  
JAN 26 1980  
DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

page 2