

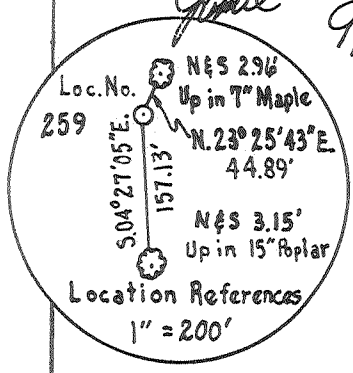
10,925'

LATITUDE 37° 40' 00"

LONGITUDE 81° 00' 18"

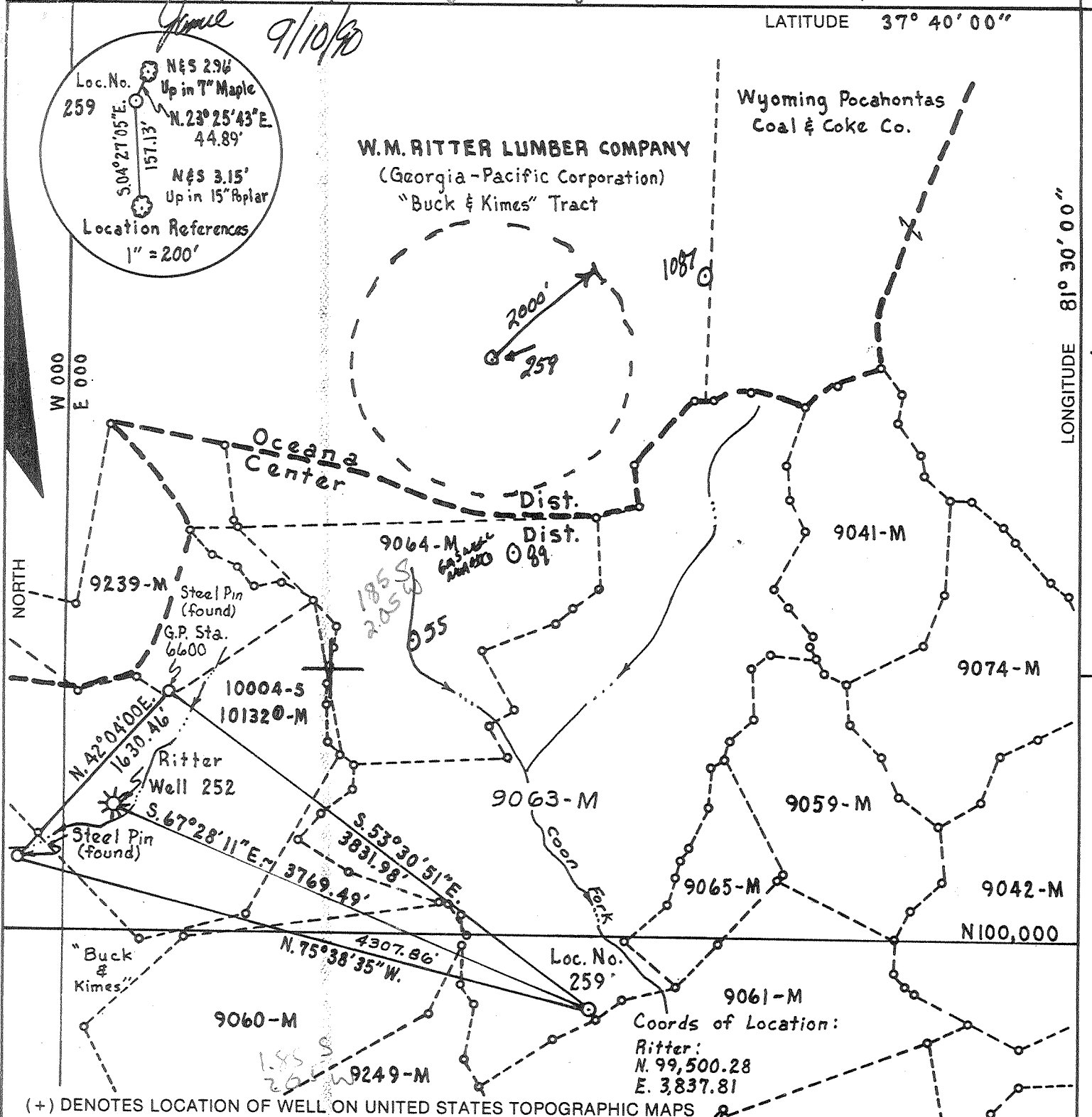
9,750'

June 9/10/90



W.M. RITTER LUMBER COMPANY
(Georgia-Pacific Corporation)
"Buck & Kimes" Tract

Wyoming Pocahontas
Coal & Coke Co.



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

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1,000'
MINIMUM DEGREE OF ACCURACY 1:10,959
PROVEN SOURCE OF ELEVATION U.S.G.S. B.M.
"32 AFK" Elev. = 1775.37

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

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE August 14, 19 90
OPERATOR'S WELL NO. W.M. Ritter Lumber Co
API WELL NO. NO. 259, S.N. 130901
47 - 109 - 1161
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1847.33 WATER SHED Coon Fork of Rockcastle Creek of Guyandotte River
DISTRICT Center 3 COUNTY Wyoming
QUADRANGLE Matheny Pinnacle EC

SURFACE OWNER Ivan D. Halsey, et al ACREAGE 263 ±
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 Gordon ESTIMATED DEPTH 3812' KB
WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
ADDRESS P.O. Box 391 ADDRESS P.O. Box 379
Ashland, KY. 41114 Brenton, W.V. 24818

COUNTY NAME
PERMIT

DEEP WELL 6-6 acreage (259) (259)

FORM WW-6
H.T. HALL 48673

AUG 29 90

109-1161
Issued 9/18/90

FORM WW-2B

Permitting
Oil and Gas Section
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

Page 1 of 1

Expires 9/18/92

- 1) Well Operator: Ashland Exploration, Inc. 2750 (3) 463
- 2) Operator's Well Number: 259, Serial #130901 3) Elevation: 1847.3
- 4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production X / Underground Storage /
Deep / Shallow X /
- 5) Proposed Target Formation(s): Gordon
- 6) Proposed Total Depth: 3812'KB feet
- 7) Approximate fresh water strata depths: - 240'?
- 8) Approximate salt water depths: 1207'KB *OK*
- 9) Approximate coal seam depths: Solid - Not Operated *868-872'*
? 270'-273'
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 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						} 38CSR18-11.3 38CSR18-11.2
Coal						
Intermediate	8 5/8	J55	24.0	1257	1257	CTS
Production	4 1/2	J55	10.5	3812	3812	38CSR18-11.1 As Needed
Tubing	2 3/8	J55	4.7	-	3762	Siphon
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

506976
24

For Division of Oil and Gas Use Only

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

1) Date: August 28, 1990
2) Operator's well number
W.M. Ritter Lumber Co. #259, Serial #130901
3) API Well No: 47 - 109 - 1161
State - County Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

AUG 29 90
Permit
Oil and Gas

- | | |
|---|---|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Ernest Halsey Estate(Ivan</u>
Address <u>2609 Bland Road Halsey)</u>
<u>Bluefield, WV 24701</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>(c) Coal Lessee with Declaration
Name <u>Robinson-Phillips Coal Company</u>
Address <u>P.O. Drawer G</u>
<u>Welch, WV 24801</u></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> | |

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 28th day of August, 19 90

Tickie W. Donta
My commission expires November 23, 1990 Notary Public

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

Well Operator's Report of Well Work

Farm name: HALSEY, ERNEST - ESTATE Operator Well No.: 259 S#130901
W.M.R. Her

LOCATION: Elevation: 1847.30 Quadrangle: MATHENY

District: CENTER County: WYOMING
Latitude: 9750 Feet South of 37 Deg. 40Min. 0 Sec.
Longitude: 10925 Feet West of 81 Deg. 30 Min. 0 Sec.

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

Agent: FORREST BURKETT

Inspector: RODNEY G. DILLON
Permit Issued: 09/18/90
Well work Commenced: 12/9/90
Well work Completed: 3/13/91
Verbal Plugging _____
Permission granted on: _____
Rotary x Cable _____ Rig _____
Total Depth (feet) 6584
Fresh water depths (ft) 1" stream 30'
1 1/2" stream @ 95'. 390'
Salt water depths (ft) approximate
1207'
Is coal being mined in area (Y/N)? N
Coal Depths (ft): not noted while drl'g

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	45'	45'	11.8
11 3/4"	265'	265'	147
8 5/8"	1284'	1284'	376
5 1/2"	6485'	6485'	724
2 3/8"	tbg @ 6251' KB	w/ADL-1	Pkr @ 3071' KB

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 4832-6307
Gordon Pay zone depth (ft) 3606-3807
 Gas: Initial open flow 60/192 MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow 1468/1277 MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests 3 Hours
 Static rock Pressure 775 psig (surface pressure) after 72 Hours

Second producing formation G Pay zone depth (ft) 3020-3040
Borden Pay zone depth (ft) _____
 Gas: Initial open flow 132 MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow 409 MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests 3 Hours
 Static rock Pressure 590 psig (surface pressure) after 72 Hours

*Comments on back

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.

RECEIVED
Division of Energy
APR 0 1 91
On the 1st day of April 1991

For: ASHLAND EXPLORATION, INC.

By: James L. Stephens J. L. Stephens, Engr. Tech.
Date: March 20, 1991

APR 12 1991

<u>FORMATION OR ROCK TYPE</u>	<u>TOP</u>	<u>BASE</u>
Sand & Shale (Base Lee Formation)	0	1222
Pennington Formation	1222	2363
Ravenscliff 1442-1527		
Avis Lime 1540-1580		
M. Maxton 1948-2041		
Stray Maxton 2127-2195		
Little Lime	2363	2487
Big Lime	2487	2926
Borden	2926	3503
U. Weir 3086-3104		
L. Weir 3136-3179		
Sunbury Shale	3503	3519
Berea	3519	3539
Devonian Shale	3539	6552
Faulted Gordon 3602-3637		
Faulted Berea 3637-3655		
Gordon 3774-3816		
Oncodaga LS	6552	TD

DTD 6584

LTD 6569

WELL TREATMENT

Perf Dev. Shale 17H/4832-6307. ^{2H 2h} N₂ frac using 206,000 SCF N₂ @ 57,300 SCF/min. BD @ 1822#, ATP 3575#, MTP 4300#, ISIP 4100# & 15 min 3200#. Shut down and order additional acid. Perf U. Dev. Shale & pump 1000 gal 15% inh Fe acid. N₂ frac both Shale zones using 3,008,000 SCF N₂ @ 89,700 SCF/min with 750 gal 8% inh Fe acid. BD @ 3305#, ATP 3609#, MTP 3750#, ISIP 2312# & 15 min 2027#.

Perf Gordon 25H/3792-3807 - 75 Q foam frac using 250 gal 15% inh Fe acid, 61,100# 20/40 sand, 341,000 SCF N₂ @ 8700 SCF/min. BD @ 1307#, ATP 1166# @ 25 BPM foam rate, MTP 1307#, ISIP 920#, 15 min 835# & TF 256 bbls.

Perf Faulted Gordon 29H/3606-3632. N₂ frac using 615,000 SCF N₂ @ 62,000 SCF/min. BD @ 2770#, ATP 2600#, MTP 2770#, ISIP 2000# & 15 min 1200#.

Perf Borden Shale 30H/3020-3040. ^{Poc. Weir?} N₂ frac using 620,000 SCF N₂ @ 60,000 SCF/min. BD @ 2240#, ATP 1650#, MTP 2240#, ISIP 1200# & 15 min 970#.

*Due to high gas volumes, Ashland would like to produce the well to deplete the high volumes of gas. Then within the permitted time, do a squeeze job and stimulate an upper zone. We would like to do this operation using this permit or an extension of this permit.

RECEIVED

Division of Energy

APR 01 91

Permitting
Oil and Gas Section

1652