



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2,000'
 MINIMUM DEGREE OF ACCURACY 1 in 107,000
 PROVEN SOURCE OF ELEVATION Kanawha Coal Company.

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 MINES.

(SIGNED) John H. Burkett
 R.P.E. 1442 L.L.S. _____

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE June 20, 19 84
 OPERATOR'S WELL NO. 2-Set.#102301
 API WELL NO. _____
47 - 005 - 1442
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP SHALLOW ___
 LOCATION: ELEVATION 927.6 WATER SHED _____
 DISTRICT Peytona COUNTY Boone
 QUADRANGLE Rocine Peytona NW,
 SURFACE OWNER Dingess-Rum Coal Co. ACREAGE 2300 ±
 OIL & GAS ROYALTY OWNER Dingess-Rum Coal Co. LEASE ACREAGE 2348.2
 LEASE NO. 48013

PROPOSED WORK: DRILL 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 Newburg ESTIMATED DEPTH 5160
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
 ADDRESS P.O. Box 391 ADDRESS P.O. Box 156
Ashland, Ky. 41114 Brenton, WV. 24818

JUL 16 1984

DEEP WELL 3-6 Hershaw-Bull Creek (238) / Kan. For. notes



IV-35
(Rev 8-81)

Date 10/16/84
Operator's
Well No. 2
Farm Dingess-Rum
API No. 47 - 005 - 1442

State of West Virginia
Department of Mines
Oil and Gas Division

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production ___ / Underground Storage ___ / Deep X / Shallow ___ /)

LOCATION: Elevation: 927.6' Watershed Curtis Branch of Big Coal River
District: Peytona County Boone Quadrangle Racine

COMPANY Ashland Exploration, Inc.

ADDRESS P. O. Box 391, Ashland, Ky. 41114

DESIGNATED AGENT Forrest Burkett

ADDRESS Box 156 Brenton, WV 24818

SURFACE OWNER Dingess Rum Coal Co.

ADDRESS Box 185 McConnell, WV 25633

MINERAL RIGHTS OWNER Dingess Rum Coal Co.

ADDRESS Box 185, McConnell, WV 25633

OIL AND GAS INSPECTOR FOR THIS WORK Arthur

St. Clair ADDRESS Box 157 Brenton, WV 24818

PERMIT ISSUED 6/25/84

DRILLING COMMENCED 7/28/84

DRILLING COMPLETED 8/11/84

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	46'	46'	30 sks
9 5/8	1048'	1048'	325 sks
8 5/8			
7	4400'	4400'	270 sks
5 1/2			
4 1/2	5193'	5193'	100 sks
3			
2		4079'	
Liners used			

GEOLOGICAL TARGET FORMATION Newburg Depth 5160' feet

Depth of completed well 5194 feet Rotary X / Cable Tools _____

Water strata depth: Fresh _____ feet; Salt 764 feet

Coal seam depths: _____ Is coal being mined in the area? yes

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3386-4124 feet

Gas: Initial open flow 43 Mcf/d Oil: Initial open flow _____ Bbl/d

146 MCF IOF for well Final open flow 325 Mcf/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests 3 hours

Static rock pressure 1085 psig (surface measurement) after 168 hours shut in

(If applicable due to multiple completion--)

DEC 31 1984

Second producing formation Keener-Injun Pay zone depth 1405-1428 feet

Gas: Initial open flow 103 Mcf/d Oil: Initial open flow _____ Bbl/d

325 351 676 MCF POP for well Final open flow 351 Mcf/d Oil: Final open flow _____ Bbl/d

Time of open flow between initial and final tests 3 hours

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perf Newburg 20H/5096-5102 - Acidize Newburg using 500 gal 15% HCl. BD @ 4000#, ATP 3000# @ 3 B/M. 75 Q foam frac Newburg using 23,500# 20/40 sd & 880 SCF N₂. BD @ 5800#, ATP 6345# @ 6 B/M. MTP 6450#. Zone is isolated ✓
w/a Baker "NC" BP @ 4270'.

Arinet Street
Perf Dev. Shale 25H/4124-4220. N₂ frac using 250 gal 15% HCl & 600,000 SCF N₂. BD @ 3450' @ 60,000 SCF/min.

Huron
Perf Dev. Shale 20H/3386-3406. N₂ frac using 250 gal 15% HCl & 1,200,000 SCF N₂. BD @ 3620#, ATP 3450# @ 60,000 SCF/min.

Perf Keener ~~Injun~~ 20H/1405-1428. Dump 500 gal 28% HCl. 75 Q foam frac using 30,000# 20/50 sd, 319,000 SCF N₂, 167 bbl TL&FW, 123 Bbl. TSLF. BD @ 2200#, ATP 2000# @ 20 B/M foam. MTP 2200#. WELL LOG ISIP 1400#.

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Silty Sand			0	255	
Shale			255	345	
Sand w/silt stringers			345	1005	
Shale			1005	1094	
L. Maxton			1094	1142	
L. Lime			1142	1212	
Pencil Cave			1212	1215	
Big Lime			1215	1380	
Shale			1380	1404	
Injun			1404	1431	
Borden Shale			1431	1834	
Coffee Shale			1834	1860	
Berea			1860	1866	
Devonian Shale			1866	2101	
Gordon			2101	2133	
Devonian Shale			2133	4362	
Onondaga LS			4362	4447	
Oriskany			4447	4494	
Onondaga <i>Helderburg</i>			4494	5096	
Newburg			5096	5104	
Onondaga <i>McKenzie</i>			5104	TD	
DTD 5188					
LTD 5194					

4362 DOWN
928 elev
3434

5188
4494
694 elev

(Attach separate sheets as necessary)

ASHLAND EXPLORATION, INC.

Well Operator

By: *Clayton J. Wynn*

Date: October 16, 1984

Note: Regulation 2.02(i) provides as follows:

"The term 'well' or 'well log' shall..."



1) Date: June 20, 19 84
 2) Operator's Dingess-Rum Coal Co.
 Well No. 2, Serial No. 102301
 3) API Well No. 47 - 005 - 1442
 State _____ County _____ Permit _____

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS DIVISION
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil _____ / Gas X /
 B (If "Gas", Production X / Underground storage _____ / Deep X / Shallow _____)
 5) LOCATION: Elevation: 927.6' Watershed: Curtis Branch of Big Coal River (KC20)
 District: Peytona County: Boone Quadrangle: Racine
 6) WELL OPERATOR Ashland Exploration, Inc. 7) DESIGNATED AGENT Forrest Burkett
 Address P. O. Box 391 Address P. O. Box 156
Ashland, KY 41114 Brenton, WV 24818
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Arthur St. Clair Name Ray Resources Drilling Company
 Address P. O. Box 157 Address 2101 Washington St., East
Brenton, WV 24818 Charleston, WV 25311
 10) PROPOSED WELL WORK: Drill X / Drill deeper _____ / Redrill _____ / Stimulate X /
 Plug off old formation _____ / Perforate new formation X /
 Other physical change in well (specify) _____
 11) GEOLOGICAL TARGET FORMATION, Newburg
 12) Estimated depth of completed well, 5160' feet top of _____
 13) Approximate strata depths: Fresh, _____ feet; salt, salt sand feet.
 14) Approximate coal seam depths: Unknown Is coal being mined in the area? Yes X / No _____

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	13 3/8	H-40	48	X		30	30	15 sks.	Kinds
Fresh water									
Coal	9 5/8	H-40	32.3	X		1000	1000	Circulate to surface	NEAT
Intermediate	7	K-55	23	X		4350	4350	200 sks	
Production	4 1/2	N-80	11.6	X		5160	5160	As Required	Depths set by rule 15.01
Tubing									
Liners									

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-005-1442

July 9, 19 84
 Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires July 9, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>Blanket</u>	Agent: <u>MW</u>	Plat: <u>MW</u>	Casing: <u>MW</u>	Fee: <u>567 046</u>
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T. J. ...
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.