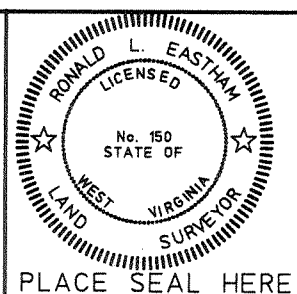


FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1: 56675
 PROVEN SOURCE OF ELEVATION U.S.C. & G.S. B.M. 'C-162'
 Elev. = 800.815

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 THE LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY

(SIGNED) Ronald L. Eastham
 R.P.E. _____ L.L.S. 150



STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION

DATE May 3 19 94
 OPERATOR'S WELL NO. 'A-2'
 API WELL NO. SN. 147631

47-059-1300
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 81350 WATER SHED Canebrake Branch of the Guyandotte River
 DISTRICT Stafford District COUNTY Mingo
 QUADRANGLE Mallory Gilbert C

SURFACE OWNER Mingo Wyoming Coal Land Company ACREAGE 2626.21
 OIL & GAS ROYALTY OWNER Mingo Wyoming Coal Land Company LEASE ACREAGE 300
 LEASE NO. 80564

PROPOSED WORK: DRILL ___ CONVERT X 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 Oriskany ESTIMATED DEPTH 5210' KB

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

FORM WW-6

COUNTY NAME
 PERMIT

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

Permitting Office of Oil & Gas Well Operator's Report of Well Work

Farm Name: GADDY ENGINEERING CO. Operator Well No.: A-2-S-147631

Location: Elevation: 813.50 Quadrangle: MALLORY

District: STAFFORD County: MINGO
Latitude: 7275 Feet South of 37 Deg. 40 Min. 0 Sec.
Longitude: 10300 Feet West of 81 Deg. 50 Min. 0 Sec.

Company: ASHLAND EXPLORATION, INC.
P.O. BOX 391, AT-9
ASHLAND, KY 41114-0391

Agent: B. E. Widener

Inspector: OFIE HELMICK
Permit Issued: 01-04-95
Well Work Commenced: 03-18-95
Well Work Completed: 06-30-95
Verbal Plugging
Permission granted on:
Rotary X Cable Rig
Total Depth (feet) 5210
Fresh water depths (ft) 197
Salt water depths (ft) 1135'

Table with 4 columns: Casing & Tubing, Used in Drilling, Left in Well, Cement Fill Up Cu. Ft. Rows include sizes 16", 11 3/4", 8 5/8", and 5 1/2" with corresponding drilling and cement data.

Is coal being mined in area (Y/N)? N
Coal Depths (ft): No Mineable Seams

OPEN FLOW DATA
Dev. Shale 3306-4486
Berea 3039-3052
Producing formation Big Lime Pay zone depth (ft) 2223-2427
Gas: Initial open flow 1622 MCF/d Oil: Initial open flow -- Bbl/d
Final open flow 1520 MCF/d Final open flow -- Bbl/d
Time of open flow between initial and final tests 3 Hours
Static Rock Pressure 420 psig (surface pressure) after 72 Hours
Second producing formation Oriskany Pay zone depth (ft) 5108-5111
Gas: Initial open flow 1475 MCF/d Oil: Initial open flow -- Bbl/d
Final open flow 569 MCF/d Final open flow -- Bbl/d
Time of open flow between initial and final tests 3 Hours
Static Rock Pressure 895 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: Daniel L. VanHoose Daniel L. VanHoose
Date: 07-11-95

<u>Formation on Rock Type</u>	<u>Top</u>	<u>Bottom</u>
Sand and Shale	0	490
Lee Formation	490	1266
Pennington Fm.	1266	2053
Upper Maxton	1446	1611
Middle Maxton	1774	1867
Lower Maxton	1985	2013
Little Lime	2053	2123
Big Lime	2123	2437
Borden	2437	3005
Weir	2543	2669
Sunbury Shale	3005	3034
Berea	3034	3060
Devonian	3060	5072
Upper Shale/Chag.	3060	4067
Lower Huron	4067	4497
Java	4497	4845
Rhinestreet	4845	5045
Marcellus	5045	5072
Onondaga	5072	5107
Oriskany	5107	5126
Helderberg	5126	5212
TD	5212	

DTD 5210

LTD 5212

Well Treatment

Perf Oriskany w/HCG .41 jets 4 spf from 5108-5111', 13H total. TIH & perf w/HCG .41 jets 2 spf from 5108-5111', 7H total (Total 20H/5108-5111'). Premix one tank 40#/1000 gal gel system & dump 500 gal 17.9% HCl-Fe acid. BD 1821, ISIP 550. Crosslink gel frac Oriskany using DS YF 240 crosslink @ 5 BPM, 26000# 20/40 ramped from 1-6 ppg (well screened out @ 6 ppg). MTP 6200, ATP 1975, ATR @ 5 BPM, ISIP 1500, TF 201 Bbls.

Perf. U. Dev. Shale using SF inHCG, ISPF @ 3730, 3729, 3680, 3642, 3607, 3578, 3550, 3549, 3511, 3507, 3487, 3472, 3376, 3369, 3368, 3359, 3350, 3335, 3309, 3306 — 20 H total.

Perf Berea w/4" HCG, 2 spf @ 3039-3052, 27H total. TIH & set Halliburton RBP @ 3095'. GT (Berea) 64/10 wtr 2" = 336 Mcf/d. Pump 500 gal 14.2% HCl-Fe acid and 65Q foam frac Berea w/86,800# 20/40 sand, 187,000 scf N₂ @ 6300 scf/m. BD @ 825#, ATP 800 @ 20 B/M foam, MTP 1135, ISIP 1020.

Perf Big Lime using .41 jets in 4" HCG 2 spf 21H/2417-2427 & 5H/2223-2225. Swb csg to 2445' - no fluid & no gas. 65Q foam acidized Big Lime using 3000 gal 26% HCl-Fe acid & 500 gal 15% HCl-Fe acid & 107,500 scf N₂ @ 7800 scf/m. BD @ 1840#, ATP 1375 @ 20 B/M foam, MTP 1840, ISIP 1050, 10 min 910.

RECEIVED
WV Division of
Environmental Protection
DEC 19 1994

- 1) Date: December 16, 1994
- 2) Operator's well number Serial #147631
Mingo Wyoming Coal Land Co. #A-2
- 3) API Well No: 47 - 059 - 1200
State - County - Permit

Permitting
Office of Oil & Gas

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 Gaddy Engineering Co., Agent
Address 945 4th Ave., Suite 300
Huntington, WV 25701
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name None
Address _____
 - (b) Coal Owner(s) with Declaration
Name Same as No. 4(a)
Address _____
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
Name Gilbert Imported Hardwoods
Address c/o Guyandotte Consultants, Inc.
Drawer 1920, Logan, WV 25601
- 6) Inspector Ofie Helmick
Address P.O. Box 398
Brenton, WV 24818-0398
Telephone (304)-732-9135

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.
BXC By: B. W. Fischer
 Its: Vice President
 Address P.O. Box 391
Ashland, KY 41114
 Telephone 606-329-5450

Subscribed and sworn before me this 16th day of December, 1994

Vicki W. Donta Notary Public
 My commission expires Nov. 23, 1998



STATE OF WEST VIRGINIA
OIL AND GAS CONSERVATION COMMISSION
#10 McJUNKIN ROAD
NITRO, WEST VIRGINIA 25143-2506

January 4, 1995

Division of Environmental Protection
Office of Oil and Gas
Nitro, West Virginia

Re: Application for Permit #47-059-01200 to drill deep well.

COMPANY: Ashland Exploration, Inc.

FARM: Mingo Wyoming Coal Land Company #A-2

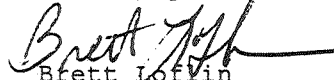
COUNTY: Mingo DISTRICT: Stafford QUAD: Mallory

The application of the above company is Approved for Oriskany.
(Approved or Disapproved)

Applicant has complied with the provisions of Chapter twenty-two, eight (22-8), of the Code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation Commission as follows:

- 1.) Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owner; **yes**
- 2.) Provided a tabulation of all deep wells within one mile of the proposed location, including the Api number of the deep well, well name, and the name and address of operator and; ***none**
- 3.) Provided a plat showing that the proposed location is a distance of **800** feet from the nearest unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

Sincerely,


Brett Loffin
Engineer III