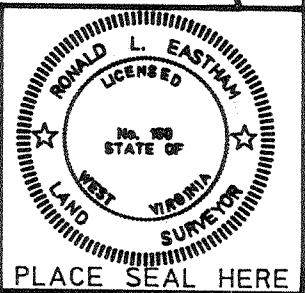


FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1:6084
PROVEN SOURCE OF ELEVATION Thin Seams Inc, Mine No. 1 Sta. 127, Elev. = 1588.13

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



STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION

DATE March 30, 1992
OPERATOR'S WELL NO. Mingo Oil & Gas Co.
API WELL NO. No. A-2, S.N. 140581

47-059-1166
STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1382.55 WATER SHED Harry's Branch of the Guyandotte River
DISTRICT Stafford 6 COUNTY Mingo
QUADRANGLE Gilbert #15 C

SURFACE OWNER Gilbert Imported Hardwoods ACREAGE 96.62
OIL & GAS ROYALTY OWNER Mingo Oil & Gas Company LEASE ACREAGE 1469
LEASE NO. 80538

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 INFORMATION Devonian Shale ESTIMATED DEPTH 5,785 KB.

WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Bobby E. Widener
ADDRESS P.O. Box 391 43 ADDRESS P.O. Box 379
DEEP WELL Ashland Ku 4114 Ashland Brenton Hwy 249E

JUN 10 1992

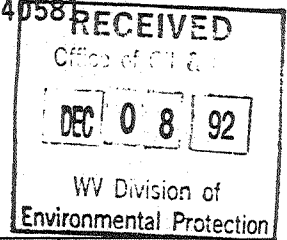
COUNTY NAME PERMIT

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm name: GILBERT IMPORTED HARDWOOD

Operator Well No.: A-2 S-140581

LOCATION: Elevation: 1382.55 Quadrangle: GILBERT
District: STAFFORD County: MINGO
Latitude: 3000 Feet South of 37 Deg. 37 Min. 30 Sec.
Longitude: 400 Feet West of 81 Deg. 50 Min. 0 Sec.



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

Agent: B. E. WIDENER

Inspector: OFIE HELMICK

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
20"	46'	46'	Driven
16"	93'	93'	11.8
8 5/8"	1785'	1785'	600
5 1/2"	5718'	5718'	628

Permit Issued: 05/27/92
Well work Commenced: 07/17/92
Well work Completed: 11/05/92
Verbal Plugging:
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5766
Fresh water depths (ft) _____
Hole damp @ 265'
Salt water depths (ft) _____
None noted
Is coal being mined in area (Y/N)? N
Coal Depths (ft): 350-352

OPEN FLOW DATA

Dev. Shale 3884-5647
Berea 3639-3658
Producing formation Big Lime Pay zone depth (ft) 3025-3040
Gas: Initial open flow 42 MCF/d Oil: Initial open flow --- Bbl/d
Final open flow 4260 MCF/d Final open flow --- Bbl/d
Time of open flow between initial and final tests 8* Hours
Static rock pressure 600# psig (surface pressure) after 24 Hours

* Test was taken while cleaning up well due to high gas volumes.

Second producing formation None Pay zone depth (ft) ---
Gas: Initial open flow --- MCF/d Oil: Initial open flow --- Bbl/d
Final open flow --- MCF/d Final open flow --- Bbl/d
Time of open flow between initial and final tests --- Hours
Static rock Pressure --- psig (surface pressure) after --- 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
Date: 12/01/92
Reviewed: TMG
Recorded: CH
James L. Stephens, Eng. Tech.

<u>Formation or Rock Type</u>	<u>TOP</u>	<u>BASE</u>
Sand and Shale	0	1350
Lee formation	1350	1900
Pennington formation	1900	3100
Ravenscliff 2052-2160		
U. Maxton 2454-2619		
M. Maxton 2734-2878		
L. Maxton 3028-3060		
Little Lime	3100	3212
Big Lime	3212	3534
Borden	3534	4082
Sunbury Shale	4082	4108
Berea	4108	4137
Devonian Shale	4137	6082
Onondaga Ls	6082	TD

DTD 6101
LTD 6100

8" and 11 3/4" casing cemented to surface on primary job.

Well Treatment

⁸³⁰
Perf Rhinestreet 13H/5906-6013. N₂ frac using 200 gal 8% fe acid, 603,000 scf N₂ @ 73,000 scf/min. BD @ 3640#, ATP 4000#, MTP 4260# and ISIP 3400#.

⁸¹³
Perf Huron 23H/5133-5535. N₂ frac using 500 gal 8% fe acid, 805,000 scf N₂ @ 102,000 scf/min. BD @ 2210#, ATP 2900#, MTP 3070# and ISIP 2000#.

⁴⁰⁴
Perf U. Dev. Shale 19H/4329-4652. N₂ frac using 500 gal 8% fe acid, 810,000 scf N₂ @ 100,000 scf/min. BD @ 1790#, ATP 2700#, MTP 2850# and ISIP 2100#.

Perf Berea 40H/4111-4132. 75 quality foam frac using 500 gal 18% fe acid, 58,400# 20/40 sand and 295,000 scf N₂ @ 9500 scf/min. BD @ 1238#, ATP 1176# @ 20 BPM foam rate, MTP 1298# and ISIP 1188#.

DF - 461

DET - 830

059-1166

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

Permitting
Office of Oil & Gas

Issued

Expires 05/27/94
2750 (6) 363

- 1) Well Operator: Ashland Exploration, Inc.
Mingo Oil & Gas Company
- 2) Operator's Well Number: A-2, Serial #140581 3) Elevation: 1383'
- 4) Well type: (a) Oil / or Gas X/
(b) If Gas: Production X/ Underground Storage /
Deep / Shallow X/
- 5) Proposed Target Formation(s): Devonian Shale
- 6) Proposed Total Depth: 5785'KB feet
- 7) Approximate fresh water strata depths: 418'KB (Map WV-12)
- 8) Approximate salt water depths: 768'KB (Map WV-12)
- 9) Approximate coal seam depths: Solid - No Seams Operated
- 10) Does land contain coal seams tributary to active mine? Yes / No X/
- 11) Proposed Well Work: Drill and Stimulate New Well
- 12)

OK

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	36.91	30	30	} 38CSR18-11.3 38CSR18-11.2.2
Fresh Water						
Coal	8 5/8	J55	24.0	1783	1783	CTS
Intermediate						} 38CSR18-11.1
Production	5 1/2	J55	15.5	5785	5785	
Tubing	1.9	J55	2.76	-	5735	Siphon
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

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

15695

55592

R
Environmental 1)
MW 1 1 2)
Permitting 3)
Office of Oil & Gas

Date: May 6, 1992
Operator's well number
Mingo Oil & Gas Co. #A-2, Serial #140581
API Well No: 47 - 059 - 1166
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 Gilbert Imported Hardwoods
Address P.O. Drawer D
Gilbert, WV 25621
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Ofie Halmick
Address P.O. Box 218
Fanrock, WV 24834
Telephone (304)-732-9135

5) (a) Coal Operator:
Name Lynn Land Company
Address P.O. Drawer D
Gilbert, WV 25621
(b) Coal Owner(s) with Declaration
Name Same as 4(a)
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name Lynn Land Company
Address P.O. Drawer D
Gilbert, WV 25621

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 6th day of May, 1992

W. B. W. Donta
My commission expires November 23, 1994 Notary Public