

2.81
2.15

LEEMAN MAXWELL
171A

5.695
2.15W

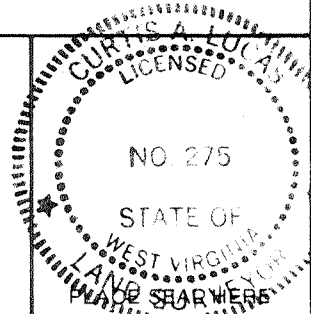
LOCATION REFERENCE

S 44° 12' W 173.9' HY
N 80° 50' E 121.2' WO

FILE NO. _____
 MAP N19 SQS S14 E5
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1 in 200'
 PROVEN SOURCE OF ELEVATION D. YOUNG NO. 1 (47-033-1547) EL. 1152.01

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) Curtis A. Lucas
 CURTIS A. LUCAS LLS 275



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE DECEMBER 22 19 89
 FARM VARNER NO. 1
 API WELL NO.

47 - 033 - 3694
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 1290.4 WATER SHED HALL'S RUN
 DISTRICT TENMILE COUNTY HARRISON
 QUADRANGLE SALEM Centerpoint SE

SURFACE OWNER JAMES A. VARNER ACREAGE 13.08
 OIL & GAS ROYALTY OWNER JAMES A. VARNER LEASE ACREAGE 36.5

LEASE NO. _____
 PROPOSED WORK: DRILL X 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 ALEXANDER ESTIMATED DEPTH 5700 6-6 Meathouse Fork-Bristol (146)
 WELL OPERATOR INTERSTATE DRILLING INC DESIGNATED AGENT KENNETH L. POTE
 ADDRESS RT 3, BOX 89-V WESTON WV 26452 ADDRESS RT 3, BOX 89-V WESTON WV 26452
 4/1 JAN 19 1990

RECEIVED
MAR 16 1990

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

Well Operator's Report of Well Work

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
Farm Name: VARNER JAMES A. Operator Well No.: VARNER #1

LOCATION: Elevation: 1290.40 Quadrangle: SALEM

District: TENMILE County: HARRISON
Latitude: 14825 Feet South of 39 Deg. 17Min. 30 Sec.
Longitude: 11320 Feet West of 80 Deg. 30 Min. 0 Sec.

Company: INTERSTATE DRILLING, INC.
ROUTE 3, BOX 89-V
WESTON, WV 26452-9620

Agent: KENNETH L. POTE

Inspector: STEVE CASEY
Permit Issued: 01/16/90
Well work Commenced: 02/13/90
Well work Completed: 02/21/90
Verbal Plugging _____
Permission granted on: _____
Rotary x Cable _____ Rig _____
Total Depth (feet) 5617'
Fresh water depths (ft) 349'

Salt water depths (ft) _____

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 250'-254'; 590'-595'

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11-3/4"	16'		
8-5/8"	1368.85'	1368.85'	355 Sks.
4-1/2"	5188.20'	5188.20'	480 Sks.

OPEN FLOW DATA

Producing formation Riley and Benson Pay zone depth (ft) 4963'-5094'
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 396 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 850 psig (surface pressure) after 4 Hours

Second producing formation Balltown; Bradford; Speechley & Warren Pay zone depth (ft) 3096'-4227'
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

*Co-mingled with First Stage

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: INTERSTATE DRILLING, INC

By: [Signature]
Date: March 5, 1990

MAR 22 1990

033-3694

DETAILS OF PERFORATED INTERVALS, FRACTURING, OR STIMULATING, PHYSICAL CHANGE:

-Stage Foam Frac:

1st Stage: 4963'-5094' w/13 Holes; 5,000 Lbs. 80/100; 40,000 Lbs. 20/40; 119 Bbls. Foam; 555,000 S.C.F. Nitrogen

2nd Stage: 4227'-4551' w/15 Holes; 5,000 Lbs. 80/100; 26,000 Lbs. 20/40; 91 Bbls. Foam; 403,000 S.C.F. Nitrogen

3rd Stage: 3676'-4059' w/17 Holes; 30,000 Lbs. 20/40; 88 Bbls. Foam; 403,000 S.C.F. Nitrogen

4th Stage: 3096'-3136' w/11 Holes; 25,000 Lbs. 20/40; 78 Bbls. Foam; 358,000 S.C.F. Nitrogen

RECORD OF REGULAR FORMATIONS AND PRODUCTION

ill			0'	10'	Sand&Shale Gray	Med	1231'	1253'	
R&Shale Red	Soft		10'	16'	Sand Gray	Hard	1253'	1360'	
and Gray	Hard		16'	75'	SandyShale Gray	Med	1360'	1533'	
and, Shale and					Sand Gray	Hard	1533'	1540'	
RedRock Red&Gray	Med		75'	102'	Sand&Shale Gray	Med	1540'	1932'	
and Gray	Hard		102'	127'	Sand Gray	Hard	1932'	2051'	
and&Shale Gray	Med		127'	250'	SandyShale Gray	Med	2051'	2076'	Oil Odor @ 2076'
Coal Black	Soft		250'	254'	Sand&Lime Gray	Hard	2076'	2115'	
and&Shale Gray	Med		254'	282'	SandyShale Gray	Med	2115'	2137'	
and Gray	Hard		282'	389'	BigLime Gray	Hard	2137'	2225'	Gas Odor @ 2225'
R&Shale Red&Gray	Med		389'	400'	InjunSand White	Med	2225'	2325'	GasCk.@ 2245'-44/10 - 2" w/Merc.
and&Shale Gray	Med		400'	498'	Sand&Shale Gray	Med	2325'	2775'	GasCk.@ 2398'-22/10 - 2" w/Merc.
Shale Gray	Soft		498'	526'					GasCk.@ 2709'-18/10 - 2" w/Merc.
and&Shale Gray	Med		526'	590'	Sand White	Hard	2775'	2795'	
Coal Black	Soft		590'	595'	Sand&Shale Gray	Med	2795'	2981'	GasCk.@ 2894'-20/10 - 2" w/Merc.
and&Shale Gray	Med		595'	632'	Sand Gray	Med	2981'	3005'	
and Gray	Hard		632'	657'	Shale&Sand Gray	Med	3005'	3442'	GasCk.@ 3106'-20/10 - 2" w/Merc.
and&Shale Gray	Med		657'	778'	Sand Gray	Hard	3442'	3472'	
and Gray	Hard		778'	811'	SandyShale Gray	Med	3472'	3579'	
and, Shale and					Sand&Shale Gray	Med	3579'	4952'	GasCk.@ 3661'-18/10 - 2" w/Merc.
RedRock Gray&Red	Med		811'	1063'					GasCk.@ 4002'-18/10 - 2" w/Merc.
and&Shale Gray	Hard		1063'	1070'	Sand Lt.Brown	Med	4952'	4973'	
Shale&RR Gray/Red	Med		1070'	1094'	SandyShale Gray	Med	4973'	4996'	
and&Shale Gray	Med		1094'	1194'	Sand Lt.Brown	Med	4996'	5002'	
and Gray	Hard		1194'	1212'	SandyShale Gray	Med	5002'	5068'	
SandyShale Gray	Soft		1212'	1231'	Benson Dk.Brown	Hard	5068'	5087'	
					SandyShale Gray	Med	5087'	5310'	GasCk.@ 5121'-18/10 - 2" w/Merc.
					Sand Brown	Med	5310'	5370'	
					Sand&Shale Gray	Med	5370'	5617'	GasCk.@ TD - 22/10 - 2" w/Merc.
					TotalDepth		5617'		

10056

INTERSTATE DRILLING, INC.
WESTON, WEST VIRGINIA

033-3694
 Issued 11/16/90
 Expires 11/16/92
 Page 1 of 1

FORM WW-2B

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

- 1) Well Operator: Interstate Drilling, Inc. ⁴¹¹ 23950 (9) 595
- 2) Operator's Well Number: Varner #1 3) Elevation: 1290'
- 4) Well type: (a) Oil / or Gas /
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow /
- 5) Proposed Target Formation(s): Alexander ⁴³⁹
- 6) Proposed Total Depth: 5700 feet
- 7) Approximate fresh water strata depths: 160 feet
- 8) Approximate salt water depths: _____
- 9) Approximate coal seam depths: 350 feet, 700 feet
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: Drill and Stimulate
- 12)

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 DEC 29 1990
 DIVISION OF OIL AND GAS
 DEPARTMENT OF ENERGY

CASING AND TUBING PROGRAM

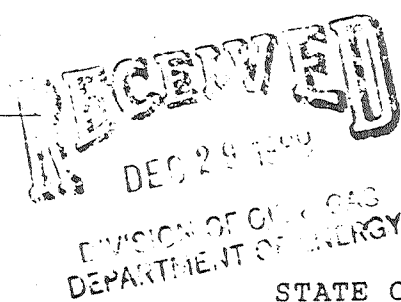
TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11-3/4"			20'	0'	
Fresh Water						
Coal						
Intermediate	8-5/8"	H	20/23#	1350'	1350'	Cement To Surface
Production	4-1/2"	J55	10.5#		5600'	
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

7253
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond \$50 Surety Agent
 (Type)

10056



1) Date: December 27, 1989
2) Operator's well number
Varner #1
3) API Well No: 47 - 033 - 3694
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 James A. Varner
Address Rt. 2, Box 133
Bristol, WV 26332
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Steve Casey
Address Rt. 2, Box 232-D
Jane Lew, WV 26378
Telephone (304)- 745-4888

5) (a) Coal Operator:
Name Willis G. Tetrick
Address Union National Bank Center
Clarksburg, WV 26301
(b) Coal Owner(s) with Declaration
Name _____
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

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 _____ on the above named parties, by:
x Personal Service (Affidavit attached)
x(Coal) 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 Interstate Drilling, Inc.
By: [Signature]
Its: Secretary-Treasurer/Manager of Operations
Address Rt. 3, Box 89-V
Weston, WV 26452
Telephone 304-269-6441

Subscribed and sworn before me this 27th day of December, 1989

[Signature] Notary Public
My commission expires October 31, 1994