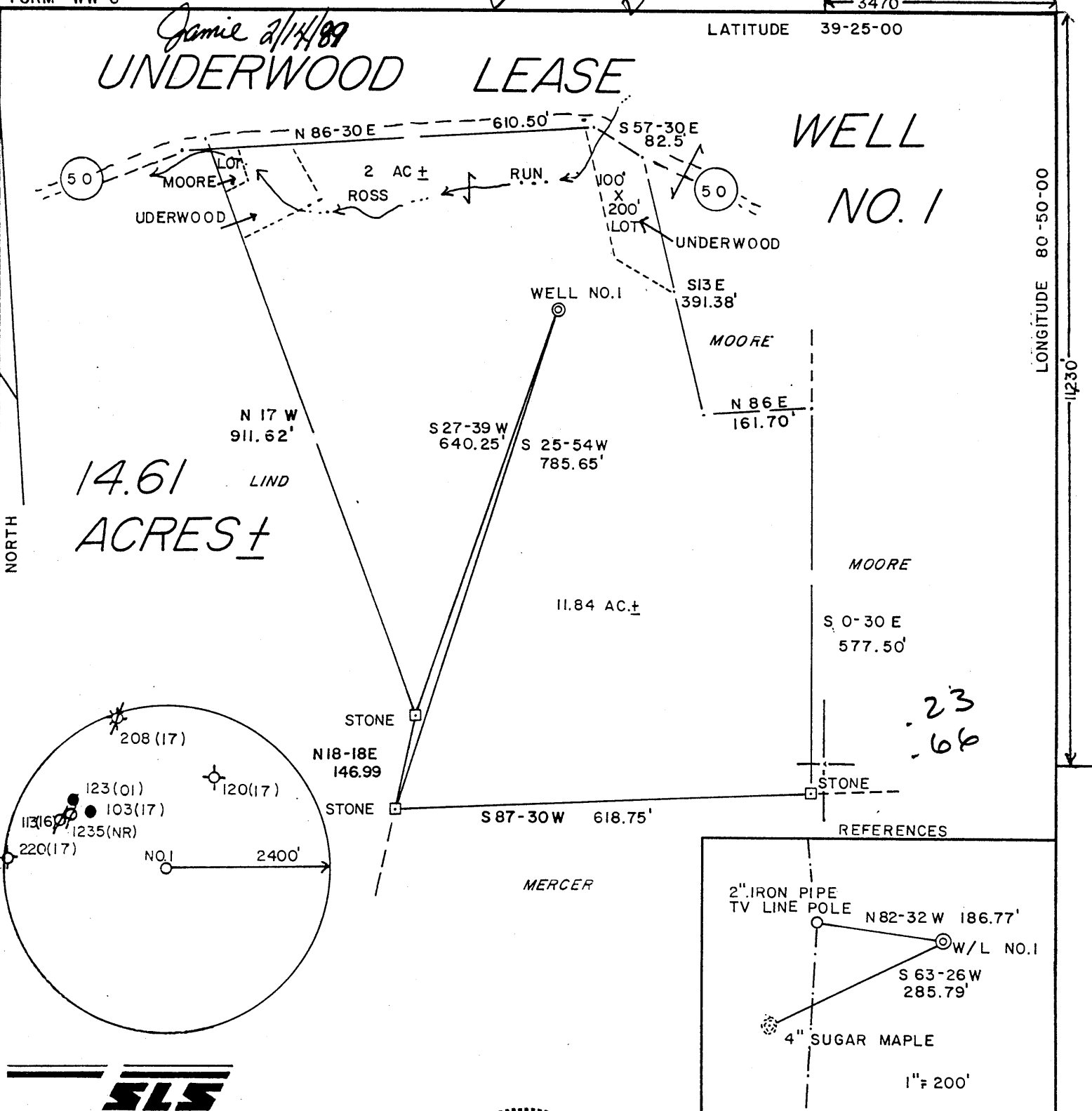
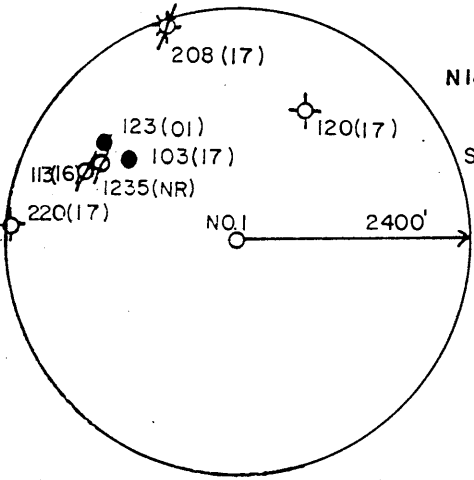


Jamie 2/14/89
UNDERWOOD LEASE

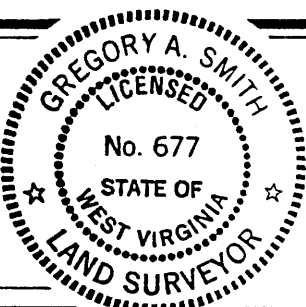
WELL NO. 1



NORTH



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.



L.L.S. 677 *Gregory A. Smith*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JANUARY 27, 19 89
 OPERATORS WELL NO. UNDERWOOD NO.1
 API WELL NO. 47 - 095 - 01283D
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1990 (26-40)
 PROVEN SOURCE OF ELEVATION BENCH MARK ELEV. 734' SCALE 1" = 200'

WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 McJUNKIN ROAD
 NITRO, WEST VIRGINIA 25143-2506

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 863' WATERSHED ROSS RUN
 DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE SHIRLEY 7.5'
 SURFACE OWNER BRUCE SMITH et ux ACREAGE 11.84
 ROYALTY OWNER PAUL UNDEWOOD et al LEASE ACREAGE 11.84 OF 14.61
 PROPOSED WORK: LEASE NO. _____
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER _____
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BENSON
 ESTIMATED DEPTH 5270'

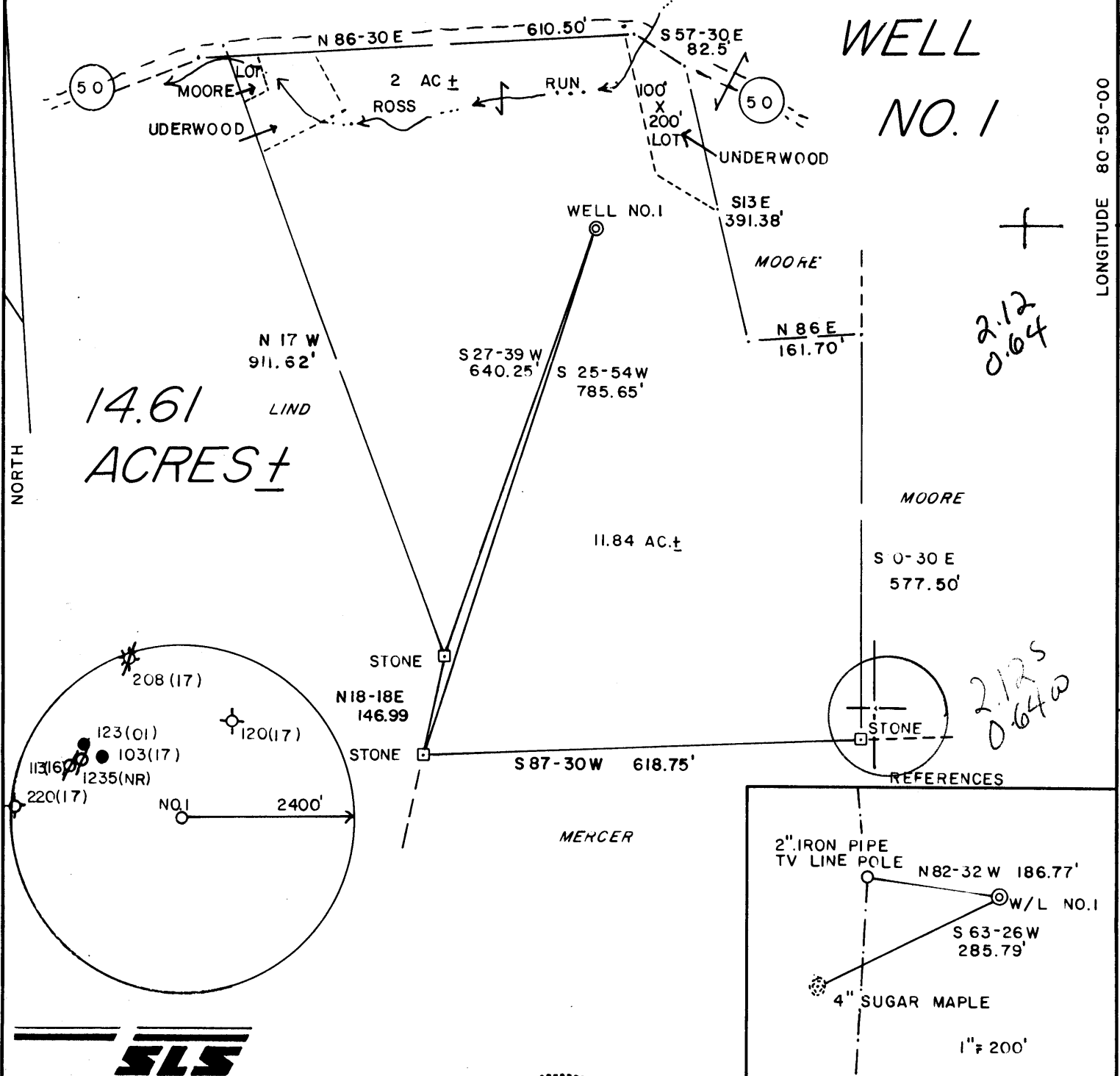
COUNTY NAME **TYLER**
PERMIT **1283 D**

WELL OPERATOR Dominion Appalachian Dev DESIGNATED AGENT Jan Chapman
 ADDRESS PO Box 1248 Jane Lew, WV 26378 ADDRESS PO Box 1248, Jane Lew WV 26378

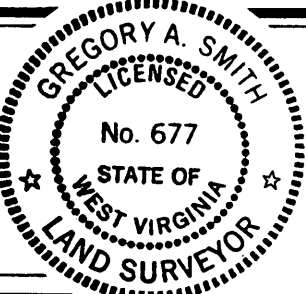
UNDERWOOD LEASE

Janie 2/14/89

WELL NO. 1



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.




L.L.S. 677 *Gregory A. Smith*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JANUARY 27, 19 89
 OPERATORS WELL NO. UNDERWOOD NO. 1
 API WELL NO. 47 - 095 - 1283
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1990 (26-40)
 PROVEN SOURCE OF ELEVATION BENCH MARK ELEV. 734' SCALE 1" = 200'

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION



WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 863' WATERSHED ROSS RUN West Union C
 DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE SHIRLEY 7.5' 607
 SURFACE OWNER BRUCE SMITH et ux ACREAGE 11.84 133
 ROYALTY OWNER PAUL UNDEWOOD et al LEASE ACREAGE 11.84 OF 14.61 5
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BENSON ESTIMATED DEPTH 5100' FEB 17 1989

WELL OPERATOR ANVIL OIL CO., INC. 0048 DESIGNATED AGENT JUSTIN HENDERSON
 ADDRESS P.O. BOX 1230 FAIRMONT, WV 26554-1230 ADDRESS P.O. BOX 1230 FAIRMONT, WV 26554-1230

S7S

COUNTY NAME PERMIT

WR-35 RECEIVED
Office of Oil & Gas
Permitting
JAN 03 2000
WV Division of
Environmental Protection

21-Oct-98
API # 47- 95-01283 D

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

Reviewed K

Well Operator's Report of Well Work

Farm name: SMITH, BRUCE & VERONICA Operator Well No.: UNDERWOOD #1

LOCATION: Elevation: 863.00 Quadrangle: SHIRLEY

District: CENTERVILLE County: TYLER
Latitude: 11230 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 3470 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: DOMINION APPALACHIAN DEVE
P. O. BOX 1248
JANE LEW, WV 26378-0000

Agent: JOHN T. HASKINS

Inspector: MIKE UNDERWOOD
Permit Issued: 10/21/98
Well work Commenced: 9/3/99
Well work Completed: 9/22/99
Verbal Plugging _____
Permission granted on: _____
Rotary Cable Rig _____
Total Depth (feet) _____
Fresh water depths (ft) _____
Salt water depths (ft) _____

Is coal being mined in area (Y/N)? _____
Coal Depths (ft): _____

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11 3/4"	No Change * See original WR-35		
8 5/8"	No Change * See original WR-35		
4 1/2"		4864.7'	675 Sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4794'-4800'
Gas: Initial open flow TSTM MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 160 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 150 psig (surface pressure) after 12 Hours

Second producing formation Big Injun Keener Pay zone depth (ft) 1856-1892'
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

* Commingled

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: Larry J. Cavallo
DOMINION APPALACHIAN DEVELOPMENT, INC.

By: Larry J. Cavallo; Manager of Engineering
Date: 12/30/99

TYL 1283 D

3	STAGE(S)	750 foam	FRAC	DATE	9/21/99	
ES	PERFS		HOLES	BBL	BP	ISIP
Benson	4794-4800'		16	314 (75Q)	1845	1708
Big Injun	1856-1892'		16	262 (75Q)	2678	1862
Keener	1790-1797'		16	262 (75Q)	1734	2518
ATION	COLOR		HARD/SOFT	TOP	BOTTOM	REMARKS

WR-35 RECEIVED
Office of Oil & Gas
Permitting
JAN 03 2000
WV Division of
Environmental Protection

21-Oct-98
API # 47- 95-01283 D

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

Reviewed K

Well Operator's Report of Well Work

Farm name: SMITH, BRUCE & VERONICA Operator Well No.: UNDERWOOD #1

LOCATION: Elevation: 863.00 Quadrangle: SHIRLEY

District: CENTERVILLE County: TYLER
Latitude: 11230 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 3470 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: DOMINION APPALACHIAN DEVE
P. O. BOX 1248
JANE LEW, WV 26378-0000

Agent: JOHN T. HASKINS

Inspector: MIKE UNDERWOOD
Permit Issued: 10/21/98
Well work Commenced: 9/3/99
Well work Completed: 9/22/99
Verbal Plugging
Permission granted on: _____
Rotary Cable Rig
Total Depth (feet) _____
Fresh water depths (ft) _____

Salt water depths (ft) _____

Is coal being mined in area (Y/N)? _____
Coal Depths (ft): _____

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11 3/4"	No Change * See original WR-35		
8 5/8"	No Change * See original WR-35		
4 1/2"		4864.7'	675 Sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4794'-4800'
Gas: Initial open flow TSTM MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 160 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 150 psig (surface pressure) after 12 Hours

Second producing formation Big Injun Keener Pay zone depth (ft) 1856-1892' / 1790-1797'
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

* Commingled

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.

Larry J. Cavallo
For: DOMINION APPALACHIAN DEVELOPMENT, INC.

By: Larry J. Cavallo; Manager of Engineering
Date: 12/30/99

FEB 18 2000

TYL 1283 D

3	STAGE(S)	750 foam	FRAC	DATE	9/21/99	
ES	PERFS		HOLES	BBL	BP	ISIP
Benson	4794-4800'		16	314 (75Q)	1845	1708
Big Injun	1856-1892'		16	262 (75Q)	2678	1862
Keener	1790-1797'		16	262 (75Q)	1734	2518
ATION	COLOR		HARD/SOFT	TOP	BOTTOM	REMARKS

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

Well Operator's Report of Well Work

Farm name: SMITH, BRUCE & VERONICA Operator Well No.: UNDERWOOD 1

LOCATION: Elevation: 863.00 Quadrangle: SHIRLEY

District: CENTERVILLE County: TYLER
Latitude: 11230 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 3470 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: ANVIL OIL CO., INC.
P. O. BOX 1230
FAIRMONT, WV 26554-1230

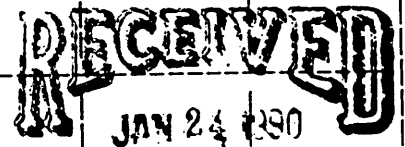
Agent: JUSTIN L. HENDERSON

Inspector: GLEN P. ROBINSON
Permit Issued: 02/14/89
Well work Commenced: 2/20/89
Well work Completed: 2/28/89
Verbal Plugging
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) _____
Fresh water depths (ft) 40 140

Salt water depths (ft) 1650

Is coal being mined in area (Y/N)? _____
Coal Depths (ft): _____

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11-3/4	121.55	121.55	60 sks
8-5/8	1729.80	1729.80	380 sks



DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

OPEN FLOW DATA *N*

Producing formation Benson Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 60 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure _____ psig (surface pressure) after 48 Hours

Second producing formation Riley Pay zone depth (ft) _____
Gas: Initial open flow small 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 4 Hours
Static rock Pressure _____ psig (surface pressure) after 48 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: ANVIL OIL CO., INC.

By: *[Signature]*
Date: 2-17-89

FEB 02 1990

No 4 1/2" Permian Well came in Natural from Benson
 4844' They did not frac well. Jan 1/27/90

*Use vertical correction
 by multiplying of
 grad.*

Well treated as follows:

Benson perforated from 4844 with 14 holes, fracked with 400 sks sand,
500 bbls treated fluid, Aug rate 22 bpm, Aug psi 2450

Riley perforated from _____ with _____ holes, fracked with _____ sks sand,
 _____ bbls treated fluid, Aug. rate _____ bbls pm. Aug psi _____

Electric log tops

Big Lime-----1790
 Berea-----2340
 Riley-----
 Benson-----4844

RR	0-----10
shale	10-----25
sand	25-----30
shale	30-----45
RR	45-----60
shale/RR	60-----154
sand/shale	154-----224
coal	224-----236
shale	236-----318
RR	318-----349
coal	349-----352
shale/RR	352-----529
coal	529-----534
sand	534-----550
RR/shale	550-----1236
sand/shale	1236-----1402
coal	1402-----1410
sand/shale	1410-----1470
coal	1470-----1481
shale	1481-----1643
sand	1643-----1692
shale	1692-----5009

wet 199

RECEIVED
 JAN 24 1990

DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

1446

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

- 1) Well Operator: Anvil Oil Co. *2275, 1, C&G*
- 2) Operator's Well Number: Underwood #1 3) Elevation: 863
- 4) Well type: (a) Oil or Gas
 (b) If Gas: Production Underground Storage
 Deep Shallow
- 5) Proposed Target Formation(s): Sanson
- 6) Proposed Total Depth: 5200 feet
- 7) Approximate fresh water strata depths: 85, 220', 135'
- 8) Approximate salt water depths: 1600 1630' - 1645'
- 9) Approximate coal seam depths: 218'-219' None 534'-535' 531'-532'
- 10) Does land contain coal seams tributary to active mine? Yes No
- 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
Conductor	11 3/4		42#	120	120	to surface
Fresh Water						
Coal						
Intermediate	8 5/8		20#	1750	1735	38CSR18-11.2
Production	4 1/2		10.5#	5050	4900	38CSR18-11.3 38CSR18-11.1
Tubing						
Liners						

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 FEB 14 1989

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

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

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FEB 14 1989

DIVISION OF OIL & GAS³
DEPARTMENT OF ENERGY

Date: 2-1-89
Operator's well number
Underwood #1
API Well No: 47 - 095 - 1283
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- | | |
|--|--|
| <p>4) Surface Owner(s) to be served:
 (a) Name <u>Bruce & Veronica Smith</u>
 Address <u>HCR 74, Box 71</u>
 <u>Alma, WV 26320</u>
 (b) Name _____
 Address _____
 (c) Name _____
 Address _____</p> | <p>5) (a) Coal Operator:
 Name _____
 Address _____
 (b) Coal Owner(s) with Declaration
 Name _____
 Address _____
 Name _____
 Address _____
 (c) Coal Lessee with Declaration
 Name _____
 Address _____</p> |
| <p>6) Inspector _____
 Address _____
 Telephone (304)- _____</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 _____ on the above named parties, by:

- X Personal Service (Affidavit attached)
- _____ 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 Anvil Oil Co., Inc.
By: Justin L. Henderson *[Signature]*
Its: President
Address P.O. Box 1230
Fairmont, WV 26554
Telephone (304) 363-1362

Subscribed and sworn before me this 1st day of February, 1989

[Signature]
My commission expires 7/8/90
Notary Public
[Signature]
Commissioner for
W. V.