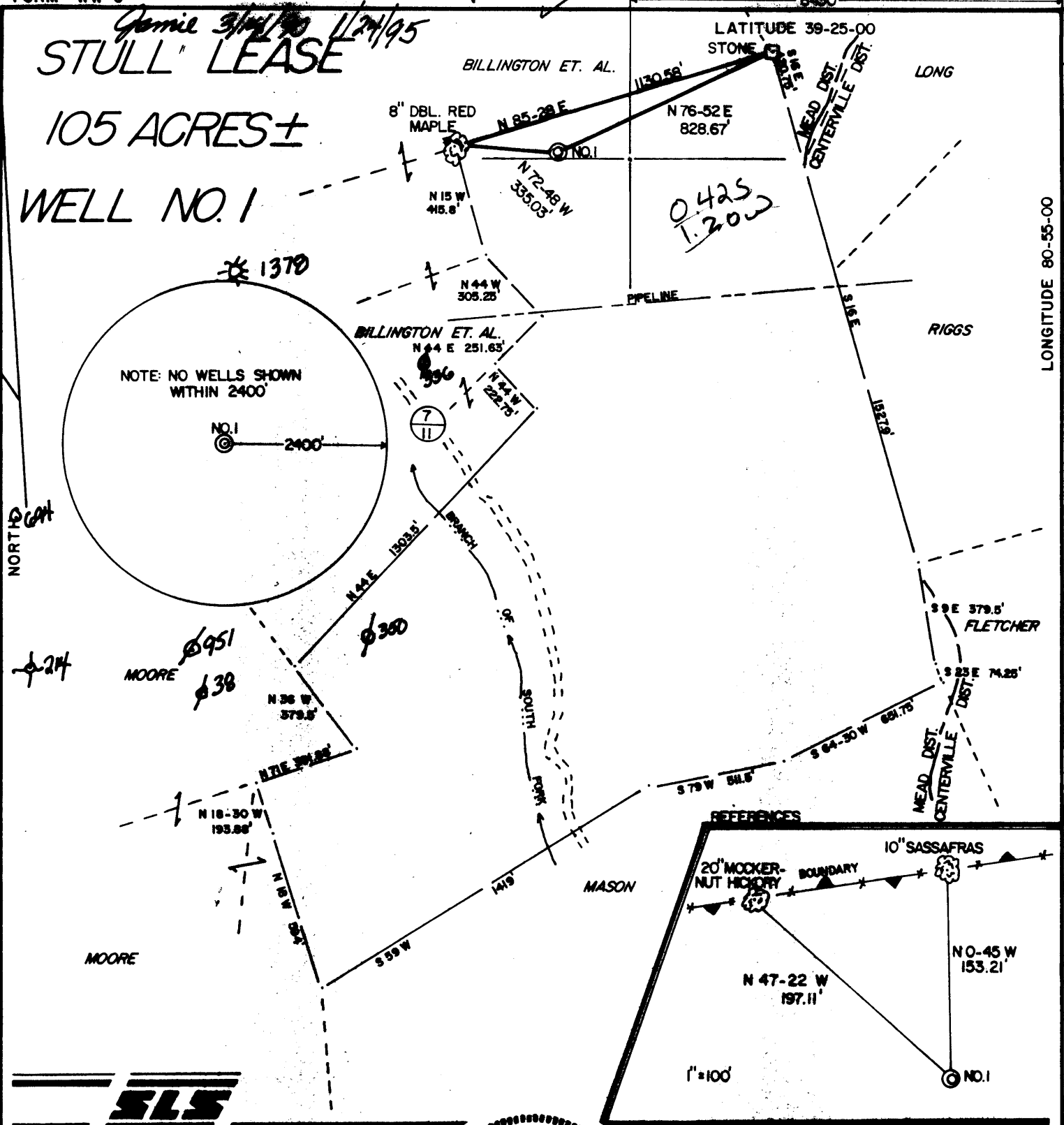


*Janie 3/1/90 1/27/95*  
**STULL' LEASE**

**105 ACRES ±**

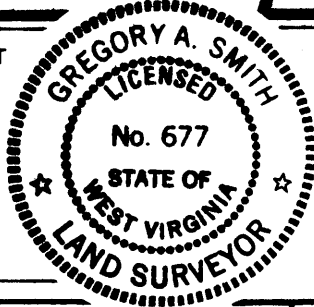
**WELL NO. 1**



NOTE: NO WELLS SHOWN WITHIN 2400'



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 FEBRUARY 14, 19 90  
OPERATORS WELL NO. STULL NO. 1  
API WELL NO. 47 - 095 - 1377.7  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 2239 (30-72)  
PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. 1294' SCALE 1"=500'

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



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

LOCATION: ELEVATION 1100' WATERSHED SOUTH FORK  
DISTRICT MEADE COUNTY TYLER QUADRANGLE MIDDLEBOURNE 7.5'

SURFACE OWNER CHARLES E. & SANDRA K. STULL ACREAGE 105 WU WU  
ROYALTY OWNER CHARLES E. & SANDRA K. STULL LEASE ACREAGE 105

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_ OTHER \_\_\_  
LEASE NO. \_\_\_

PHYSICAL CHANGE IN WELL (SPECIFY) Temporary plug square 4 1/2 feet no functions 5' x 4' other concrete plug 5' x 5' x 5' x 5' TARGET FORMATION BENSON  
ESTIMATED DEPTH 500' 5352'

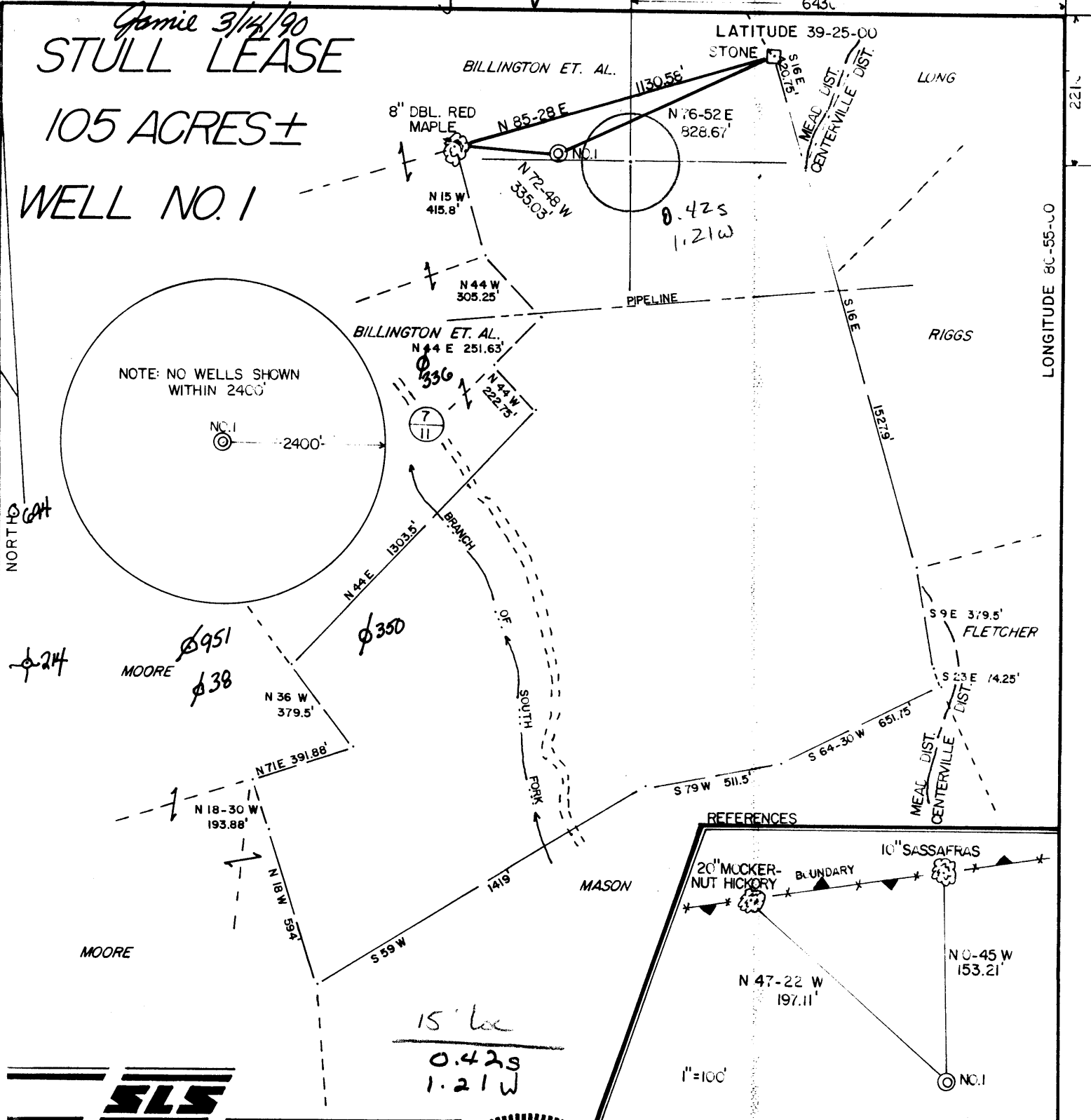
WELL OPERATOR Appalachian Energy Serv. DESIGNATED AGENT George Williams  
ADDRESS P.O. Box 490 ADDRESS Stull  
Drafton, W. 26354

COUNTY NAME TYLER PERMIT 1377

*Janie 3/14/90*  
**STULL LEASE**

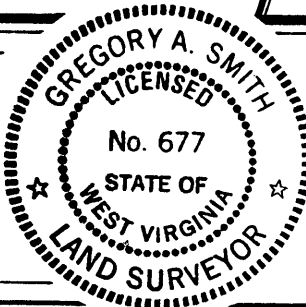
**105 ACRES ±**

**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 FEBRUARY 14, 19 90  
OPERATORS WELL NO. STULL NO. 1  
API WELL NO. 47 - 095 - 1377  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 2239 (30-72)  
PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. 1294' SCALE 1"=500'

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



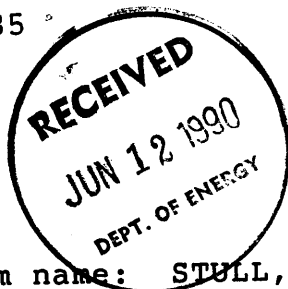
WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1100' WATERSHED SOUTH FORK West Union Wvc  
DISTRICT MEAD COUNTY TYLER QUADRANGLE MIDDLEBOURNE 7.5'

SURFACE OWNER CHARLES E. & SANDRA K. STULL ACREAGE 105  
ROYALTY OWNER CHARLES E. & SANDRA K. STULL LEASE ACREAGE 105

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 530'

WELL OPERATOR CHESTERFIELD ENERGY CORP. 103 DESIGNATED AGENT SAMUEL J. CANN  
ADDRESS 203 WEST MAIN ST. CLARKSBURG, WV. 26301 ADDRESS 203 WEST MAIN ST. CLARKSBURG, WV. 26301



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

Well Operator's Report of Well Work

Farm name: STULL, CHARLES E. ETUX. Operator Well No.: STULL #1

LOCATION: Elevation: 1100.00 Quadrangle: PENNSBORO

District: MEADE County: TYLER  
Latitude: 2210 Feet South of 39 Deg. 25Min. 0 Sec.  
Longitude 6430 Feet West of 80 Deg. 55 Min. 0 Sec.

Company: CHESTERFIELD ENERGY CORP.  
203 WEST MAIN STREET  
CLARKSBURG, WV 26301-0000

Agent: SAMUEL J. CANN

Inspector: GLEN P. ROBINSON  
Permit Issued: 03/16/90  
Well work Commenced: 04/28/90  
Well work Completed: 05/04/90  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary XX Cable \_\_\_\_\_ Rig  
Total Depth (feet) 5352  
Fresh water depths (ft) 109', 1585'

Salt water depths (ft) None

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): None

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11 3/4		36'	
8 5/8		1135'	335 sks
4 1/2		5296'	200 sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 5248'-5256'  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 231 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure 1080 psig (surface pressure) after 48 Hours

Second producing formation \_\_\_\_\_ 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 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.

Samuel J. Cann  
For: CHESTERFIELD ENERGY CORP.

By: Samuel J. Cann  
Date: May 15, 1990

JUN 14 1990

JUN 18 1990

Benson: 75 Quality Foam Frac  
 8,000# 80/100 Sand  
 45,000# 20/40 Sand  
 540,000 SCF Nitrogen

Drilling Info:

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Dirt	0	150	3/4" stream water @ 109'
Sand & Shale	150	278	
Red Rock	278	340	
Sand & Shale	340	800	
Red Rock	800	1035	
Sand & Shale	1035	1948	
Big Lime	1948	2030	Gas Ck @ 2039' No Show
Injun	2030	2180	Gas Ck @ 2100' No Show
Sand & Shale	2180	2405	Gas Ck @ 2474' No Show
Weir	2405	2494	Gas Ck @ 3070' No Show
Shale	2494	2982	
Gordon	2982	3000	
Sand & Shale	3000	3532	
Balltown	3532	3587	
Shale	3587	4656	
Riley	4656	4700	
Shale	4700	5248	
Benson	5248	5256	
Shale	5256	5352	
TD			

GEOLOGICAL WELL RECORD DATA

COMPANY NAME: Appalachian Energy Development Company  
 WELL NAME: Stull #1  
 PERMIT NO.: 47- 95-01377 F

FORMATION	TOP	BOTTOM	NOTES
Big Lime	1956	2078	
Big Injun Sand	2032	2180	
Weir Sand	2338	2490	
*Berea Sand	2560	2564	
Gordon Sand	2866	2894	
*Fifth Sand	2984	2990	
*Warren Shale	3534	3584	

STIMULATION

Warren Sand 60 Q Foam 250 sack 20/40

Small Mouth Frac Plug @ 3060

Fifth Sand N2 Assist 250 sack 20/40

Large Month Frac Plug @ 2500

Weir Sand N2 Assist 250 sack 20/40

Solid Plug @ 4075 for Cement Squeeze

Cement Squeeze perforations at 4050.

Cement calculations indicate cement should be squeezed back up to 1700 feet. Work done on January 28, 1995.

Bond Log showed actual cement top at 1710 feet

Former Cement top at 3254 feet.

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

Issued 3/16/90  
Expires 3/16/92

- 1) Well Operator: CHESTERFIELD ENERGY CORP. <sup>165</sup> 9550 (4) 538
- 2) Operator's Well Number: STULL NO. 1 3) Elevation: 1100'
- 4) Well type: (a) Oil  / or Gas  /  
(b) If Gas: Production  / Underground Storage  /  
Deep  / Shallow  /
- 5) Proposed Target Formation(s): BENSON 435
- 6) Proposed Total Depth: 5300' feet
- 7) Approximate fresh water strata depths: 130', @ 533', 369'
- 8) Approximate salt water depths: N/A 3. 1238' - 1292'
- 9) Approximate coal seam depths: N/A friable coal between 4533'
- 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	
<u>H/R 2/28/90</u> Conductor	11 3/4			30'	0'	0
Fresh Water	8 5/8			1300'	1300'	BY RULE 38 CSR 18-11.3
Coal						
Intermediate						
Production	4 1/2			5300'	5300'	BY RULE 38 CSR 18-11.1
Tubing						
Liners						

RECEIVED  
MAR 28 1990

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

DIVISION OF OIL AND GAS  
DEPARTMENT OF ENERGY

9/5/90  
 Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond Security  Agent  
(Type)



DIVISION OF OIL & GAS <sup>3)</sup>  
DEPARTMENT OF ENERGY

Date: FEBRUARY 26, 1990  
Operator's well number  
STULL NO. 1  
API Well No: 47 - 095 - 1377  
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 CHARLES E. STULL etux.  
Address 225 BENNETT DRIVE  
WEIRTON, WV 26062  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector GLEN P. ROBINSON  
Address RT. 1 #6 MT. PLEASANT ESTATE  
MINERALWELLS, WV 26150  
Telephone (304)- 489-2736

5) (a) Coal Operator:  
Name N/A  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name N/A  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name N/A  
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  
XX 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 7 on the above named parties, by:  
\_\_\_\_\_ 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 CHESTERFIELD ENERGY CORP.  
By: [Signature]  
Its: VICE PRESIDENT of LAND & CONTRACTS  
Address 203 WEST MAIN STREET  
CLARKSBURG, WV 26301  
Telephone 623-5467

Subscribed and sworn before me this 27th day of FEBRUARY, 1990

[Signature] Notary Public  
My commission expires June 14, 1994