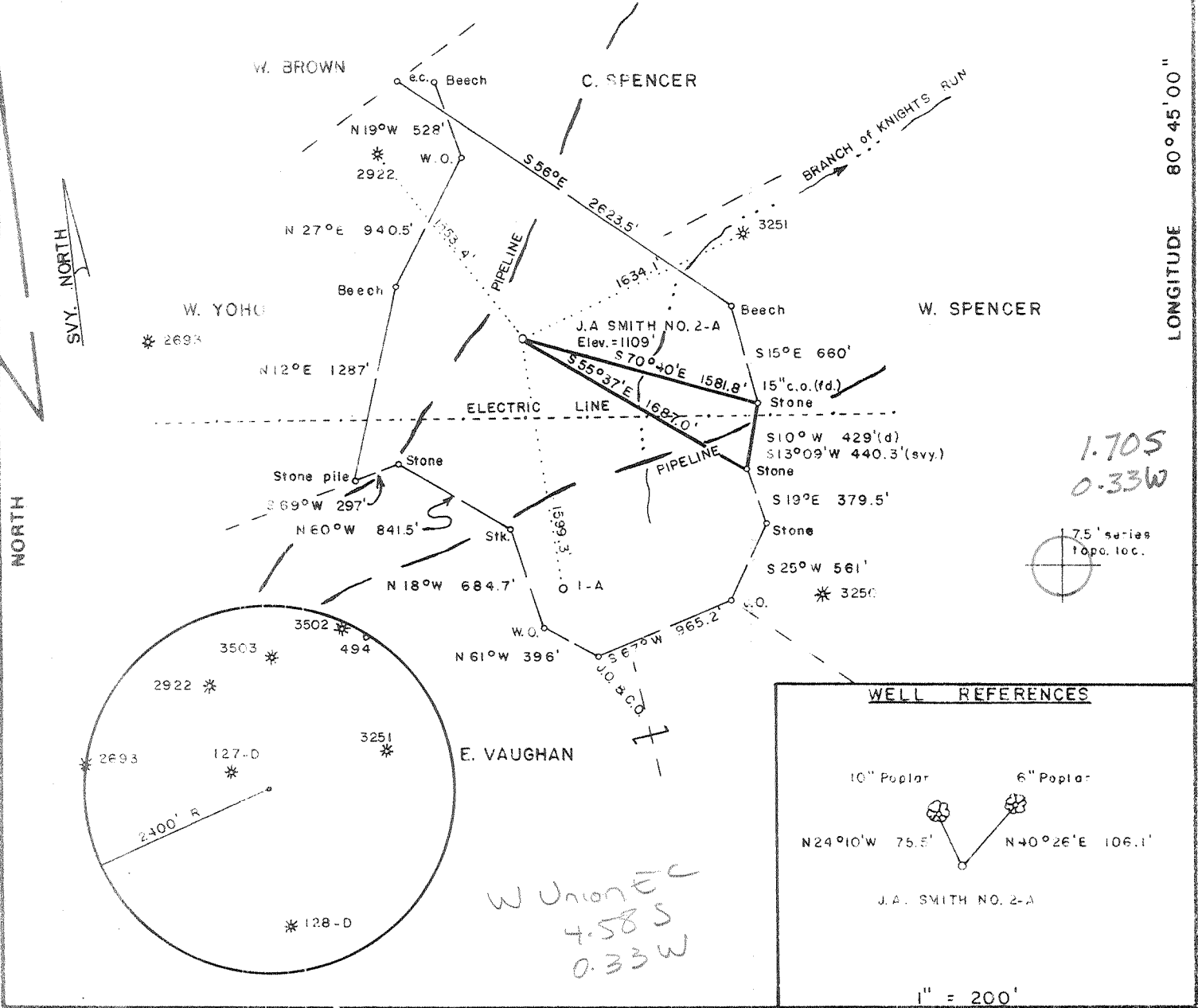


J. A. SMITH LEASE 162 AC. ±

LATITUDE 39° 22' 30"

JAMES PAUL GEARY, et al — 162 AC. ± SURF



FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION Top of Knob 1730' ±
N. of Loc. Elev. = 1307'

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.

Mark C. Echard
MARK C. ECHARD
(SIGNED)

R.P.E. _____ L.L.S. 490



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM IV-6 (8-78)

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

LOCATION: ELEVATION 1109' WATER SHED KNIGHTS RUN
DISTRICT GRANT 3 COUNTY DODDRIDGE
QUADRANGLE WEST UNION 7.5'

SURFACE OWNER JAMES PAUL GEARY, et al ACREAGE 162
OIL & GAS ROYALTY OWNER STANLEY H. SMITH, et al LEASE ACREAGE 162
LEASE NO. _____

PROPOSED WORK: DRILL 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 BENSON / RILEY ESTIMATED DEPTH 5400' ±
WELL OPERATOR D. A. C. DESIGNATED AGENT KENNETH MASON
ADDRESS P.O. BOX 99 ADDRESS P.O. BOX 99
ALMA, W.VA 26320 280 ALMA, W.VA 26320

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE NOVEMBER 15, 19 89
OPERATOR'S WELL NO. J.A. SMITH NO. 2-A
API WELL NO. 47-017-3765
STATE COUNTY PERMIT

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

Well Operator's Report of Well Work

Farm name: GEARY, JAMES P. Operator Well No.: JAS. SMITH 2-A

LOCATION: Elevation: 1109.00 Quadrangle: WEST UNION

District: GRANT County: DODDRIDGE
Latitude: 8930 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude 1690 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: DRILLING APPALACHIAN CORP
P. O. BOX 99
ALMA, WV 26320-0099

Agent: KENNETH R. MASON

Inspector: MIKE UNDERWOOD
Permit Issued: 12/05/89
Well work Commenced: DECEMBER 23, 1989
Well work Completed: APRIL 23, 1990
Verbal Plugging
Permission granted on: _____
Rotary _____ Cable _____ Rig
Total Depth (feet) _____
Fresh water depths (ft) 60

Salt water depths (ft) 1380, 1440

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8	1412	1412	290 SK
4 1/2	5233	5233	1393' 245 SK

OPEN FLOW DATA

Producing formation BENSON SANDSTONE Pay zone depth (ft) 5139.0
Gas: Initial open flow SHOW MCF/d Oil: Initial open flow - Bbl/d
Final open flow 227 MCF/d Final open flow - Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 1600 psig (surface pressure) after 72 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.

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Division of Energy
MAY 09 1990

For: DRILLING APPALACHIAN CORP.

MAY 11 1990

By: Kenneth R. Mason
Date: 4/25/90

GEOLOGICAL WELL RECORD DATA

PERMIT NUMBER: 47-0174-3765

	TOP	BOTTOM	
SOIL	0	25	
BROKEN SAND	25	255	
SANDS AND SHALES	255	1033	
LITTLE DUNKARD SAND	1177	1214	
BIG DUNKARD SAND	1344	1389	SALT WATER
1ST SALT SAND	1603	1683	
2ND SALT SAND	1791	1868	
3RD SALT SAND	1924	1957	
MAXON	1983	2012	
BIG LIME	2056	2130	
BIG INJUN SAND	2130	2244	
WEIR	2404	2476	
BEREA SAND	2595	2598	
GORDON SAND	2816	2854	SHOW GAS
WARREN	3472	3522	SHOW GAS
RILEY	4664	4722	
BENSON	5139	5142	SHOW GAS
TOTAL DEPTH	5281		

WELL TREATMENT SCHEDULE

Benson Sand 5139 - 5142 Perforated with 15 holes
 Formation Break Down 3157 PSI

Nitrogen Foam 60 Quality
 Average Treating Rate 17 barrels per min
 285 barrels of gel treated water
 300 sacks of 20/40 sand
 50 sacks of 80/100 sand
 361,000 scf of Nitrogen

Average Treating Pressure 3050 PSI

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 Division of Energy
 MAY 09 90
 Permitting
 Oil and Gas Section

47-011-3100

Issued 12/05/89

Expires 12/05/91 Page 2 of 5

FORM WW-2B

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

- 1) Well Operator: DRILLING APPALACHIAN CORPORATION
2) Operator's Well Number: JAMES A. SMITH #2-A 3) Elevation: 1109'
4) Well type: (a) Oil X/ or Gas X/
(b) If Gas: Production X/ Underground Storage /
Deep / Shallow X/
5) Proposed Target Formation(s): BENSON/RILEY
6) Proposed Total Depth: 5400± feet
7) Approximate fresh water strata depths:
8) Approximate salt water depths:
9) Approximate coal seam depths:
10) Does land contain coal seams tributary to active mine? Yes / No X/
11) Proposed Well Work: DRILL, STIMULATE, PERFORATE NEW FORMATION
12)

CASING AND TUBING PROGRAM

Table with 7 columns: TYPE, SPECIFICATIONS (Size, Grade, Weight per ft.), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT (Fill-up (cu. ft.)). Rows include Conductor, Fresh Water, Coal, Intermediate, Production, Tubing, Liners.

RECEIVED
DEC 05 1989

PACKERS : Kind
Sizes
Depths set

For Division of Oil and Gas Use Only

DIVISION OF OIL AND GAS
DEPARTMENT OF ENERGY

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

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DEC 03 1989
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

1) Date: Nov. 27, 1989
2) Operator's well number
J. A. SMITH #2-A
3) API Well No: 47 - 017 - 3765
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:	5) (a) Coal Operator:
(a) Name <u>James P. Geary</u>	Name <u>---</u>
Address <u>%Geary and Geary</u>	Address <u>_____</u>
<u>104 N. Main St, Petersburg, WV 26847</u>	
(b) Name <u>T. H. Lantz</u>	(b) Coal Owner(s) with Declaration
Address <u>(same as above)</u>	Name <u>---</u>
	Address <u>_____</u>
(c) Name <u>Leon J. Wilson</u>	Name <u>_____</u>
Address <u>(same as above)</u>	Address <u>_____</u>
6) Inspector <u>Mike Underwood</u>	(c) Coal Lessee with Declaration
Address <u>Rt. 2, Box 135</u>	Name <u>---</u>
<u>Salem, WV 26426</u>	Address <u>_____</u>
Telephone (304)- <u>782-1043</u>	

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 5 on the above named parties, by:

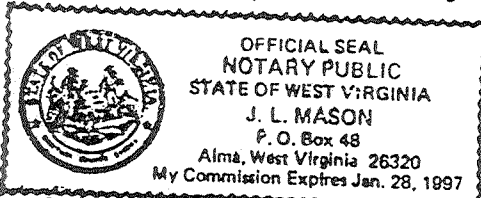
- Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

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 DRILLING APPALACHIAN CORPORATION
 By: Kenneth P. Wilson
 Its: President
 Address P. O. Box 99
Alma, WV 26320-0099
 Telephone (304) 758-4638



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

My commission expires 1/28/97 Notary Public