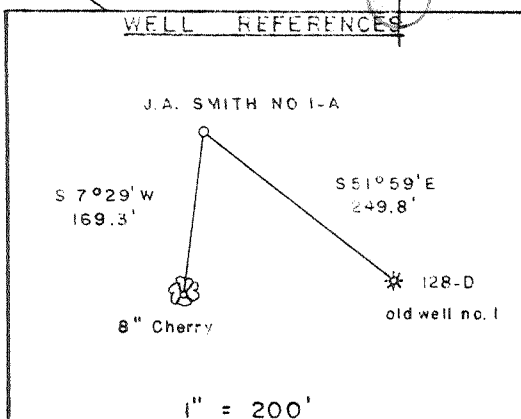
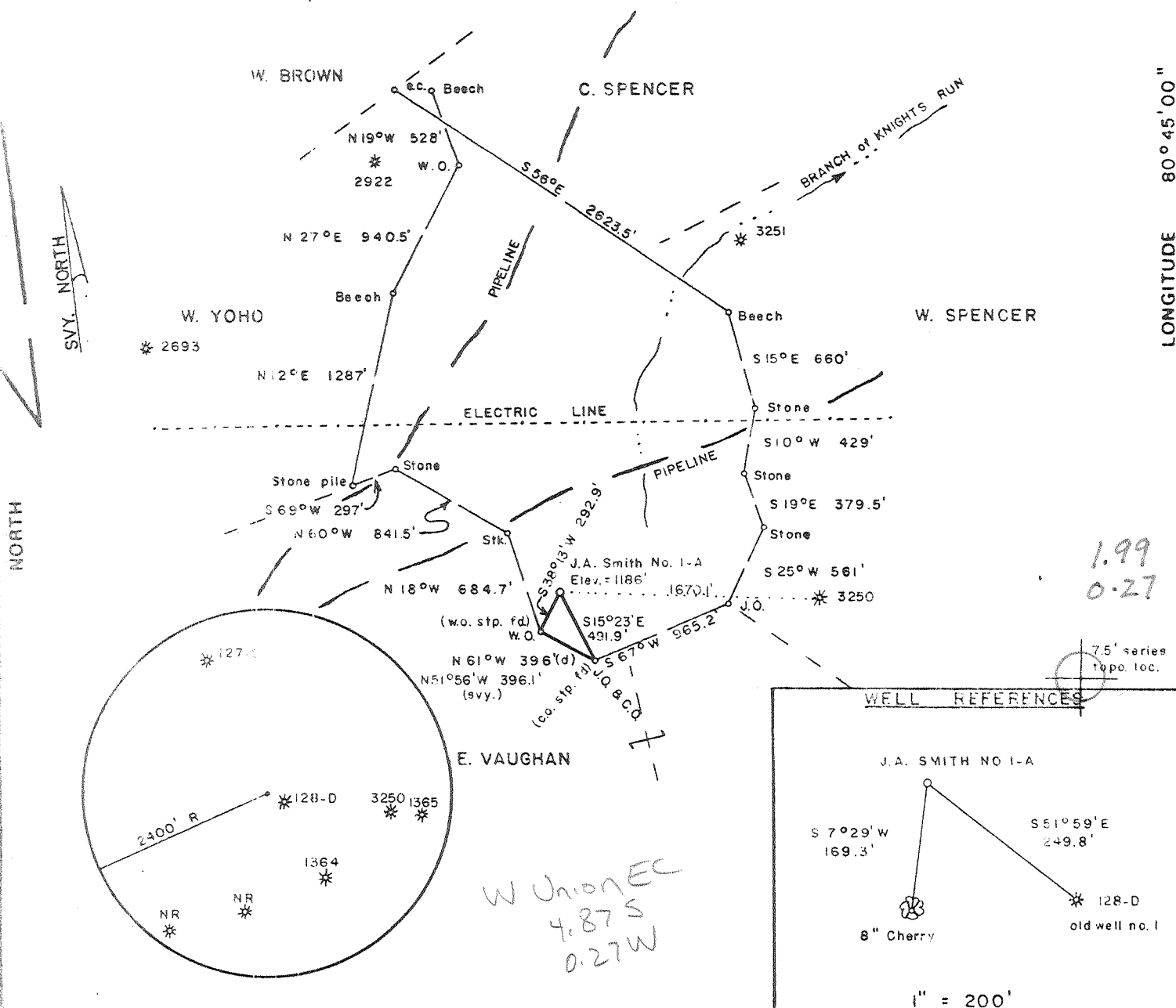


J. A. SMITH LEASE 162 AC. ±

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 3250' ±
 N of Loc. Elev. = 130'

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) Mark C. Echard
 MARK C. ECHARD
 R.P.E. _____ L.L.S. 490

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE NOVEMBER 15, 19 89
 OPERATOR'S WELL NO. J.A. SMITH NO. 1-A
 API WELL NO. 47-017-3764
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1186' WATER SHED KNIGHTS RUN
 DISTRICT GRANT 3 COUNTY DODDRIDGE
 QUADRANGLE WEST UNION 75' ± 15' EC
 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 RIENSON/RILEY ESTIMATED DEPTH 5400'
 WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON
 ADDRESS P.O. BOX 99 ALMA, W.VA. 26320 ADDRESS P.O. BOX 99
280

6-6 Swiger (Flint Run) (097) DEC 08 1989

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 1-A

LOCATION: Elevation: 1186.00 Quadrangle: WEST UNION

District: GRANT County: DODDRIDGE
Latitude: 10490 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude 1390 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: 12/09/89
Well work Completed: 12/30/89
Verbal Plugging
Permission granted on: _____
Rotary Cable Rig
Total Depth (feet) _____
Fresh water depths (ft) 65

Salt water depths (ft) 1414

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			TO SURFACE
8 7/8	1268	1268	290 SK
4 1/2		5238	1300' 254 SK

OPEN FLOW DATA

Producing formation BENSON SAND Pay zone depth (ft) 5200-04
Gas: Initial open flow SHOW MCF/d Oil: Initial open flow - Bbl/d
Final open flow 292 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 26 Hours
Static rock Pressure 1650 psig (surface pressure) after _____ Hours

Second producing formation RILEY SAND Pay zone depth (ft) 4754-80
Gas: Initial open flow - MCF/d Oil: Initial open flow - Bbl/d
Final open flow INCLUDED 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.

For: DRILLING APPALACHIAN CORP.

By: Kenneth R. Mason
Date: 1/4/90

GEOLOGICAL WELL RECORD DATA

PERMIT NUMBER: 47-0174-3764

	TOP	BOTTOM	
SOIL	0	25	
BROKEN SAND	25	275	
SANDS AND SHALES	275	1085	
LITTLE DUNKARD SAND	1238	1260	
BIG DUNKARD SAND	1402	1438	SALT WATER
1ST SALT SAND	1654	1722	
2ND SALT SAND	1818	1934	
3RD SALT SAND	1970	2006	
MAXON	2078	2104	
BIG LIME	2122	2176	
BIG INJUN SAND	2185	2312	SHOW GAS
WEIR	2466	2542	
BEREA SAND	2677	2680	
GORDON SAND	2887	2917	SHOW GAS
FIFTH SAND	3040	3044	
WARREN	3534	3582	
RILEY	4740	4780	SHOW GAS
BENSON	5200	5204	SHOW GAS
TOTAL DEPTH	5302		

WELL TREATMENT SCHEDULE

Benson Sand 5201 - 5204 Perforated with 16 holes
 Formation Break Down 2160 PSI

Hydraulic frac with Nitrogen assist
 Average Treating Rate 19 barrels per min
 435 barrels of gel treated water
 250 sacks of 20/40 sand
 50 sacks of 80/100 sand
 70,000 scf of Nitrogen

Average Treating Pressure 2160 PSI

Riley Sand 4754 - 4780 Perforated with 16 holes
 Formation Break Down 2150 PSI

Hydraulic frac with Nitrogen assist
 Average Treating Rate 17 barrels per min
 208 barrels of gel treated water
 45 sacks of 20/40 sand
 30 sacks of 80/100 sand
 27,000 scf of Nitrogen

Average Treating Pressure 2600 PSI

RECEIVED
DEC 05 1989

1) Date: Nov. 27, 1989
2) Operator's well number
J. A. SMITH #1-A
3) API Well No: 47 - 017 - 3764
State - County - Permit

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
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 P. Geary
Address %Geary and Geary
104 N. Main St., Petersburg, WV 26847
 - (b) Name T. H. Lantz
Address (same as above)
 - (c) Name Leon J. Wilson
Address (Same as above)
- 5) (a) Coal Operator:
Name ---
Address ---
- (b) Coal Owner(s) with Declaration
Name ---
Address ---
- (c) Coal Lessee with Declaration
Name ---
Address ---
- 6) Inspector Mike Underwood
Address Rt. 2, Box 135
Salem, WV 26426
Telephone (304)-782-1043

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)

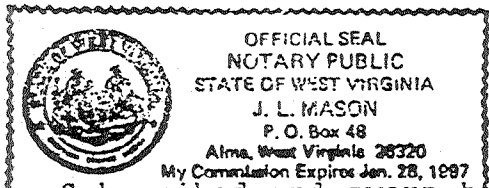
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 5 on the above named parties, by:
--- Personal Service (Affidavit attached)
--- Certified Mail (Postmarked postal receipt 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. Adams*
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

J. L. Mason Notary Public
My commission expires 1/28/97