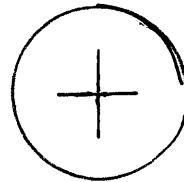


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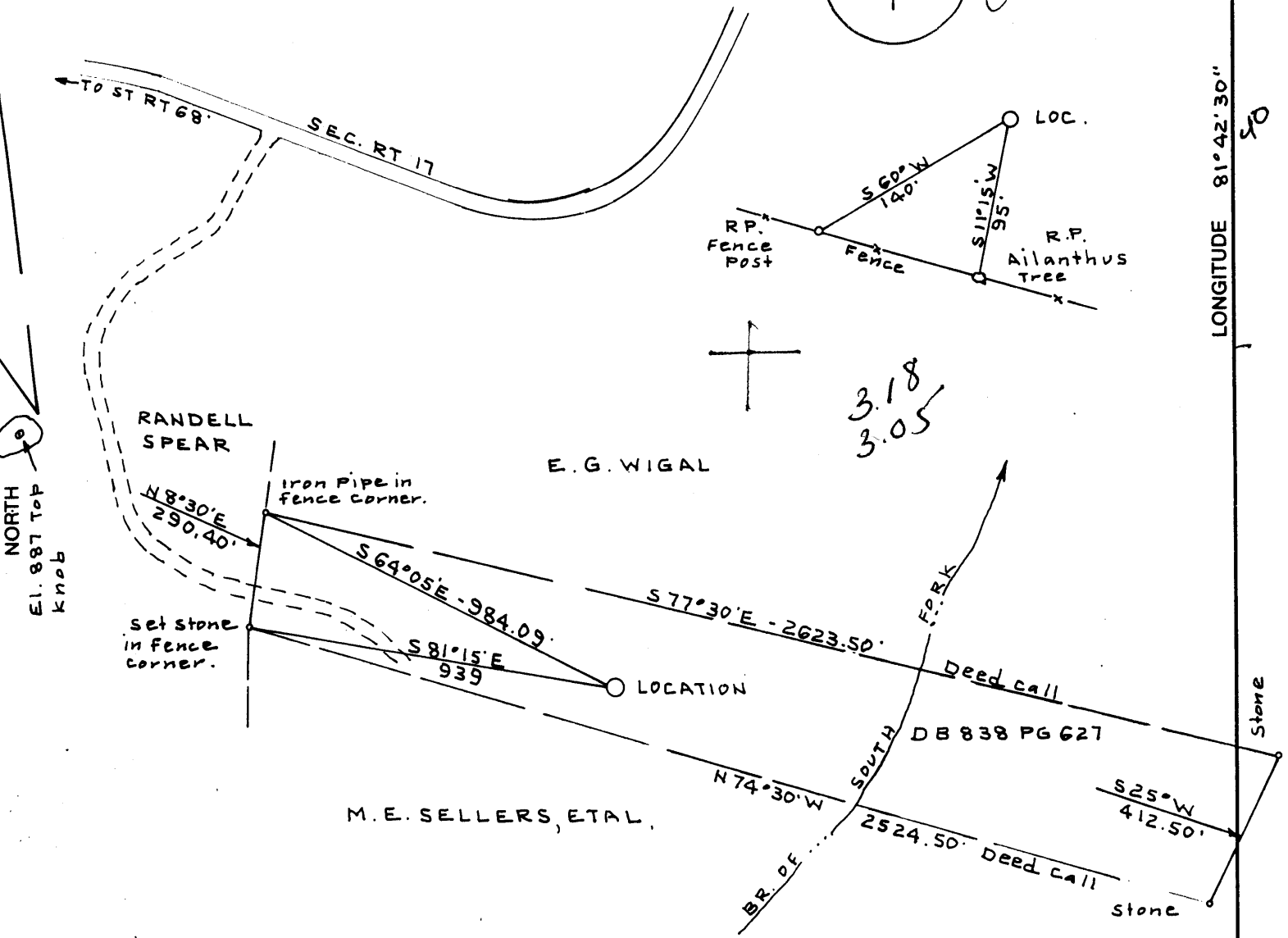
4300.10

LATITUDE 39°07'30"



0.30
0.80

LONGITUDE 81°42'30"



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

FILE NO. BK 114 PG 82
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION Top knob 1600't
N.W. location EL. 887'

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.
 (SIGNED) C. D. Valley Jr.
 R.P.E. _____ L.L.S. 92

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE APRIL 29, 1989
 OPERATOR'S WELL NO. SPEAR N°1
 API WELL NO. _____
47 - 107 - 1445
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 846.0' WATERSHED SOUTH FORK LEE CREEK
 DISTRICT HARRIS 2 COUNTY WOOD
 QUADRANGLE POND CREEK WV-OHIO 553 009 4 Belleville Wc
 SURFACE OWNER RANDALL P & JUDY A. SPEAR ACREAGE 21.70
 OIL & GAS ROYALTY OWNER RANDALL P & JUDY A. SPEAR LEASE ACREAGE 20
 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) _____

COUNTY NAME
 PERMIT

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION BEREA ESTIMATED DEPTH 2600'
 WELL OPERATOR H.D. WELLS OIL & GAS EXP & DEVDL DESIGNATED AGENT H. D. WELLS
 ADDRESS P.O. BOX 1785 CHARLESTON WV. 25326 ADDRESS P.O. BOX 1785 CHARLESTON WV. 25326

JUN 30 1989

943

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

Well Operator's Report of Well Work

Farm name: SPEARS, RANDALL P. Operator Well No.: SPEARS #1

LOCATION: Elevation: 846.00 Quadrangle: POND CREEK

District: HARRIS County: WOOD
Latitude: 1650 Feet South of 39 Deg. 7 Min. 30 Sec.
Longitude 4300 Feet West of 81 Deg. 42 Min. 30 Sec.

Company: WELLS, H. D. OIL & GAS EX
POST OFFICE BOX 1785
CHARLESTON, WV 25326-0000

Agent: HARLEY D. WELLS

Inspector: GLEN P. ROBINSON
Permit Issued: 06/26/89
Well work Commenced: 7/15/89
Well work Completed: 7/22/89
Verbal Plugging
Permission granted on: _____
Rotary _____ Cable _____ Rig _____
Total Depth (feet) 2240
Fresh water depths (ft) 185

Salt water depths (ft) 1150

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8	490'	490'	140 sks
5 1/2	2246'	2246'	70 sks

RECEIVED
AUG 15 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

OPEN FLOW DATA

Producing formation Berea Pay zone depth (ft) 2120
Gas: Initial open flow 30 MCF/d Oil: Initial open flow show Bbl/d
Final open flow 40 MCF/d Final open flow 2 Bbl/d
Time of open flow between initial and final tests 8 Hours
Static rock Pressure 485 psig (surface pressure) after 4 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.

For: WELLS, H. D. OIL & GAS EXP. & DEV. INC.

By: [Signature]
Date: 8/7/89

AUG 18 1989

Perf: Berea 2120'-2122' 16 holes

Foam Frac: 50,000 lbs. 20/40 sand
250 gal. methanol
450,000 scf. nitrogen

Formation	Top Ft.	Bottom Ft.	
Clay Red	0	120	
Shale Dark	120	190	Fresh Water @ 185'
Sand & Shale	190	550	
Red Rock	550	825	
Shale	825	1100	
Sand-Salt	1100	1300	Salt Water @ 1150'
Shale	1300	1700	
Injun Sand	1700	1775	
Shale	1775	2120	
Berea	2120	2122	
Shale	2122	2240	Total Depth

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

1445-
Shh1

AUG 18 1989

17-107-1445

Issued 6/26/89 Expires 6/26/91

FORM WW-2B

Page 1 of 1

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

- 1) Well Operator: H. D. Wells Oil & Gas Exp. & Dev., Inc. *52900, 2, 552*
- 2) Operator's Well Number: _____ Spears #1 _____ 3) Elevation: 846'
- 4) Well type: (a) Oil ___ / or Gas x /
(b) If Gas: Production x / Underground Storage ___ /
Deep ___ / Shallow ___ /
- 5) Proposed Target Formation(s): Devonian Shale
- 6) Proposed Total Depth: 3800 feet
- 7) Approximate fresh water strata depths: 95', 146', 421'
- 8) Approximate salt water depths: 1100', 1552
- 9) Approximate coal seam depths: n/a OK.
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No x /
- 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						<i>Cement to surface</i>
Fresh Water	9-5/8"	J55		475'	475'	200 sacks <i>38CSR18-11.3</i>
Coal						
Intermediate	7"	J55		2000'	2000'	100 sacks <i>38CSR18-11.2.2</i>
Production	4-1/2"	J55		3800'	3800'	1500 ft. <i>38CSR18-11.1</i>
Tubing						
Liners						

9029

PACKERS : Kind _____
Sizes _____
Depths set _____

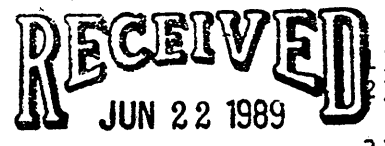
RECEIVED JUN 22 1989

5201
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14

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Fee(s) paid: *14* Well Work Permit *14* Reclamation Fund *14* WPCP
 Plat *14* WW-9 *14* WW-2B *14* Bond *Blanket 50. sure.* Agent
 (Type)



Date: May 3, 1989
Operator's well number
Spears #1
3) API Well No: 47 - 107 - 1445
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 Randall P. Spears
Address Route 1
Belleville, WV 26133
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 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 _____
- 6) Inspector Glen P. Robinson
Address Rt. 1, #6 Mt. Pleasant Estate
Mineral Wells, WV 26150
Telephone (304)- 489-9162

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

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:

- 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, H. D. Wells Oil & Gas Exp. & Dev., Inc.
By: [Signature]
Its: President
Address P.O. Box 1785
Charleston, WV 25326
Telephone (304) 346-2829

Subscribed and sworn before me this 3rd day of May, 1989

[Signature] Notary Public
My commission expires November 20, 1995