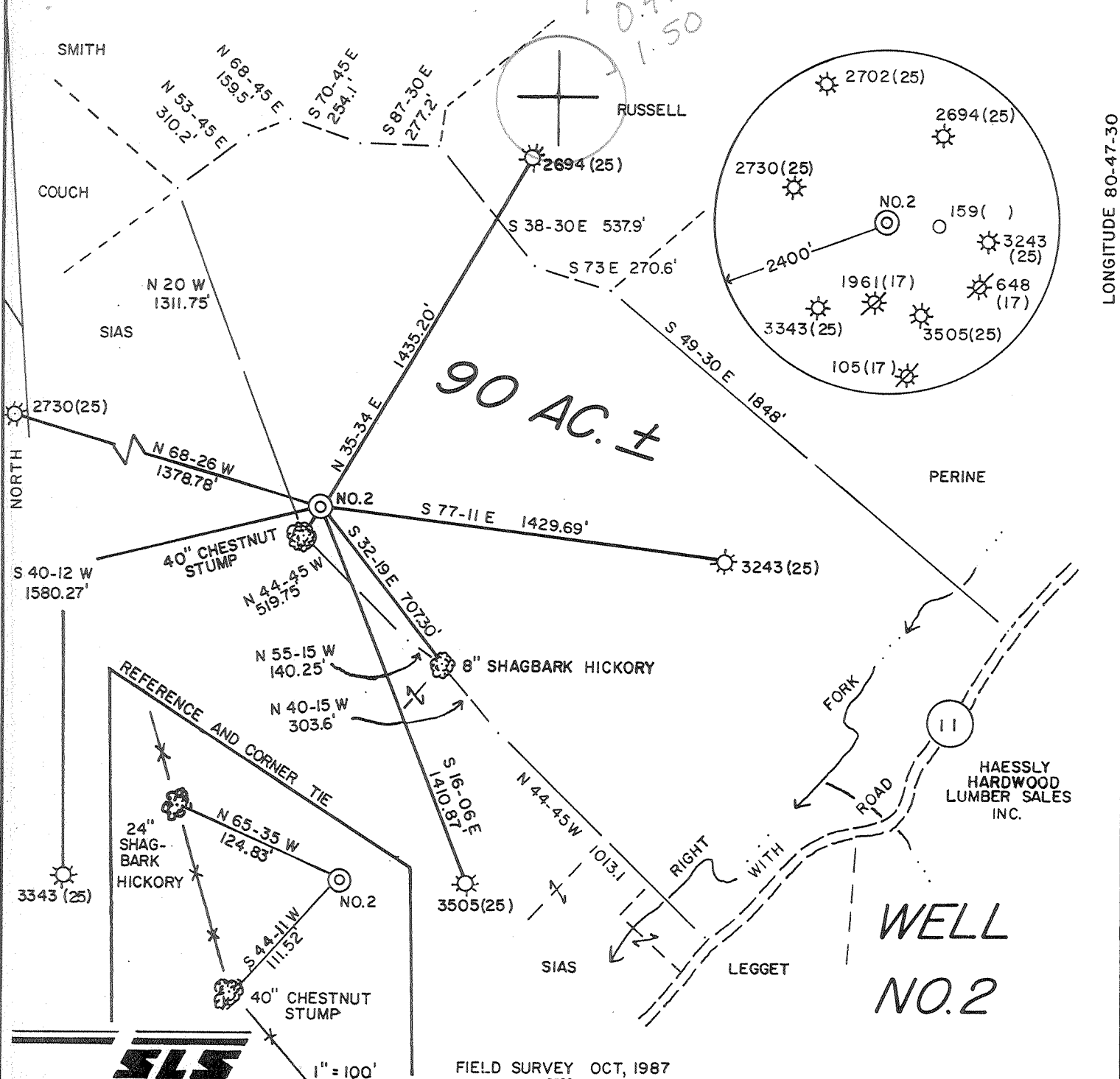


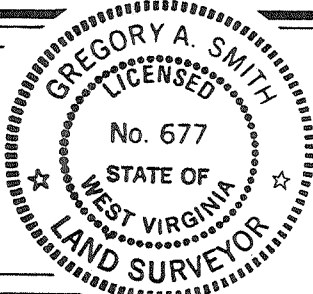
STINESPRING LEASE



FIELD SURVEY OCT, 1987

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. Gregory A. Smith
677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE MARCH 21, 19 89
 OPERATORS WELL NO. STINESPRING NO.2
 WVDODD000802
 API WELL NO. 47 - 017 - 3711
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1755 (22-74)
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 1228' 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 1104' WATERSHED RIGHT FORK OF ARNOLDS CREEK Halbrook NE
 DISTRICT WEST UNION 8 COUNTY DODDRIDGE QUADRANGLE OXFORD 7.5' 526
 SURFACE OWNER CHARTER D. & MARY J. STINESPRING ACREAGE 90 058
 ROYALTY OWNER CHARTER D. & MARY J. STINESPRING LEASE ACREAGE 90 3
 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 ALEXANDER
 ESTIMATED DEPTH 5300'

WELL OPERATOR EASTERN AMERICAN ENERGY CORP DESIGNATED AGENT JOHN M. PALETTI
 ADDRESS BOX N GLENNVILLE, WV 26351 ADDRESS 501 56TH ST. CHARLESTON, WV 25304

COUNTY NAME PERMIT

RECEIVED
SEP 19 1989

14-Apr-89
API # 47-17-03711

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

DIVISION OF OIL & GAS
DEPT. OF ENERGY Well Operator's Report of Well Work

Farm name: STINESPRING, CHARTER Operator Well No.: STINESPRING 2

LOCATION: Elevation: 1104.00 Quadrangle: OXFORD

District: WESTUNION County: DODDRIDGE
Latitude: 2540 Feet South of 39 Deg. 15Min. 0 Sec.
Longitude 7990 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: EASTERN AMERICAN ENERGY C.
501 56TH ST.
CHARLESTON, WV 25304-0000

Agent: DONALD C. SUPCOE

Inspector: MIKE UNDERWOOD
Permit Issued: 04/14/89
Well work Commenced: 06/05/89
Well work Completed: 06/11/89
Verbal Plugging
Permission granted on: _____
Rotary Cable _____ Rig _____
Total Depth (feet) 5470'
Fresh water depths (ft) 360', 1435'
Salt water depths (ft) None

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 340'-3444'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	1230.65'	1230.65'	C.T.C.
4-1/2"	5272.20'	5272.20'	600
1-1/2"	----	5171.50'	---

OPEN FLOW DATA

Speechley, Warren (Commingled)

Producing formation Alexander, Riley, Balltown, Pay zone depth (ft) 5205.5'-3251'
Gas: Initial open flow 750 MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 696 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests 12 Hours
Static rock Pressure 1250 psig (surface pressure) after 24 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: Rich Heffelfinger
EASTERN AMERICAN ENERGY CORP.

By: Rich Heffelfinger, Vice President - Regional Operations
Date: September 13, 1989

SEP 25 1989

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.
4-STAGE FOAM FRAC

- STAGE 1: Alexander: 13 holes (5205.5'-5165') Breakdown 3100 psi, 60 quality foam, 50,000 lbs. 20/40 sand, 500 gals 15% HCl, 551,400 scf of N₂
- STAGE 2: Riley: 10 holes (4470'-4438') Breakdown 2110 psi, 75 quality foam, 24,000 lbs. 20/40 sand, 500 gals 15% HCl, 586,400 scf of N₂
- STAGE 3: Balltown: 10 holes (3841'-3772') Breakdown 2660 psi, 75 quality foam, 25,000 lbs. 20/40 sand, 500 gals 15% HCl, 585,900 scf of N₂
- STAGE 4: Speechley/Warren: 13 holes (3414'-3251') Breakdown 1300 psi, 75 quality foam, 22,300 lbs. 20/40 sand, 650 gals 28% HCl, 523,300 scf of N₂

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Soil			0	15	1" Stream of water @ 360'
Sand and Sandy Shale			15	140	
Sandy Shale and Red Rock			140	218	1" stream of water @ 1435'
Sand			218	340	
Coal			340	344	
Sand and Sandy Shale			344	1840	
Limestone			1840	1870	<u>GAS CHECKS:</u>
Sand and Shale			1870	1896	1904' - 18/20 thru 1" w/water
Big Lime			1896	1957	3195' - No show
Sand and Shale			1957	2030	3347' - 10/10 thru 1" w/water
Shale			2030	2186	4149' - 20/10-50/10 thru 1" w/water
Sand and Siltstone			2186	2307	4450' - 40/10 thru 1" w/water
Shale with Trace of Sand, Warren			2307	3244	4946' - 20/10-50/10 thru 1" w/water
Shale and Siltstone			3244	3316	5316' - 20/10-40/10 thru 1" w/water
Speechley			3316	3409	
Shale and Siltstone			3409	3425	
Balltown			3425	3807	
Shale and Siltstone			3807	3848	
Riley			3848	4409	
Shale and Siltstone			4409	4476	
Benson			4476	4887	
Shale with Trace of Sand			4887	4906	
Alexander			4906	5118	
Shale			5118	5211	
			5211	5470	T.D.

017 3711

(Attach separate sheets as necessary)

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

- 1) Well Operator: Eastern American Energy Corporation
- 2) Operator's Well Number: STINESPRING #2 - WVDOD000802 3) Elevation: 1,100
- 4) Well type: (a) Oil / or Gas /
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow /
- 5) Proposed Target Formation(s): Alexander
- 6) Proposed Total Depth: 5,300 feet
- 7) Approximate fresh water strata depths: 175, 538, 1003
- 8) Approximate salt water depths: None
- 9) Approximate coal seam depths: 517
- 10) Does land contain coal seams tributary to active mine? Yes / No
- 11) Proposed Well Work: Drill and complete new well.
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT Fill-up (cu. ft.)
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11"	E-25	37.5		-----	
Fresh Water	8 5/8"	J-55	20.0	1,204	1,204	38CSR18-11.2
Coal						38CSR18-11.2
Intermediate						
Production	4 1/2"	J-55	10.5	5,220	5,220	38CSR18-11.1
Tubing	1 1/2"	H-40	2.75			
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPC
 Plat WW-9 WW-2B Bond _____ Age
 (Type)

RECEIVED
APR 12 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date: April 7, 1989
Operator's well number
STINESPRING #2 - WVDOD000802
API Well No: 47 - 017 - 3711
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 Charter Stinespring
Address Box 264
West Union, WV 26456
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Mike Underwood
Address Route 2, Box 135
Salem, WV 26426
Telephone (304)-782-1043

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
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 8 on the above named parties, by:

- Personal Service (Affidavit attached)
 - XX Certified Mail (Postmarked postal receipt attached)
 - Publication (Notice of Publication attached)
- Surface Owner &
Inspector Hand-Delivered

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 Eastern American Energy Corporation
By: John M. Paletti
Its: Designated Agent
Address P.O. Box N
Glenville, WV 26351
Telephone (304) 462-5781

Subscribed and sworn before me this 29th day of March, 1989

Jo Lorraine Lowe Notary Public
My commission expires July 2, 1996