

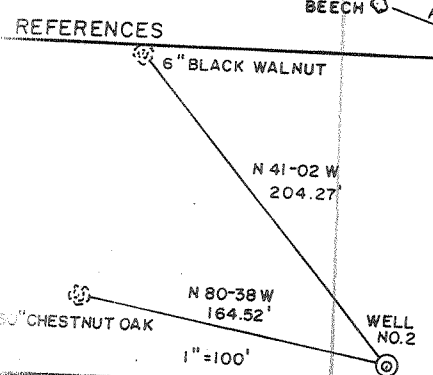
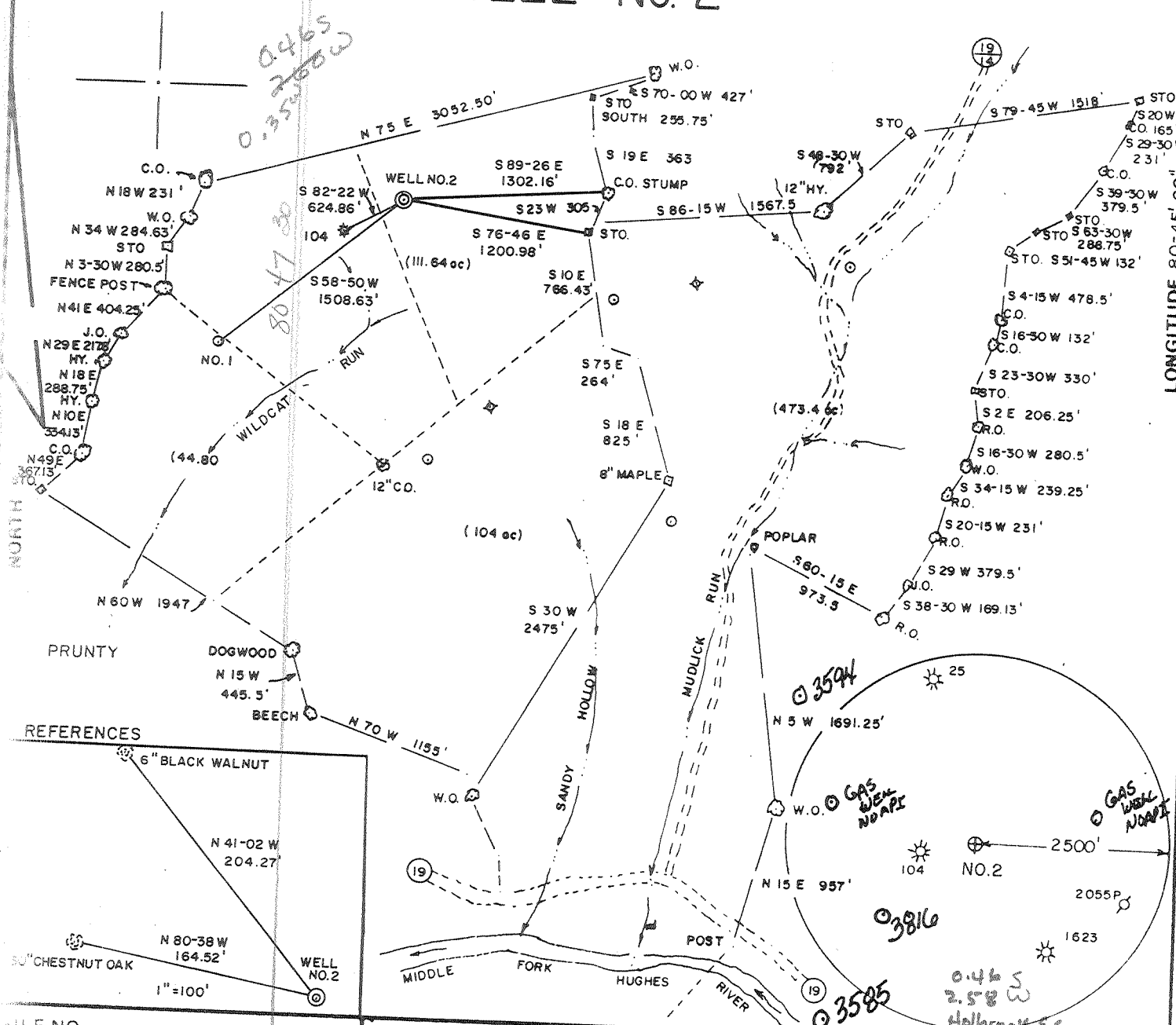
Jamie 5/4/90

MERT / F. MAXWELL No. 2

13,700'

LATITUDE 39-10-00

LONGITUDE 80-45-00



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. 1313'

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) Robert L. Davis
 R.P.E. _____ L.L.S. 800

PLACE SEAL HERE

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



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE MARCH 14th 19 90
 OPERATOR'S WELL NO. 2 (TWO)
 API WELL NO. WVD00001502
47 - 017 - 3817
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1210 WATER SHED MIDDLE FORK HUGHES RIVER
 DISTRICT SOUTH WEST 7 COUNTY DODDRIDGE
 QUADRANGLE OXFORD 7.5
 SURFACE OWNER FREDA GREATHOUSE ACREAGE 111.64
 OIL & GAS ROYALTY OWNER F. MAXWELL Hrs. LEASE ACREAGE 252
 LEASE NO. WV01974-4
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5325'
 WELL OPERATOR EASTERN AMERICAN ENERGY DESIGNATED AGENT JOHN M. PALETTI
 ADDRESS BOX N 259 GLENVILLE, WV 26351 ADDRESS 501, 56th STREET CHARLESTON, WV 25304

6-6 Straight Fork - Bluestone Creek (123)

MAY 11 1990

RECEIVED
Division of Energy

AUG 27 00

Permitting
Oil and Gas Section

API # 47- 17-03817

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

Well Operator's Report of Well Work

Farm name: GREATHOUSE, FREDA Operator Well No.: MERT/MAXWELL 2, F.

LOCATION: Elevation: 1210.00 Quadrangle: OXFORD

District: SOUTHWEST County: DODDRIDGE
Latitude: 2500 Feet South of 39 Deg. 10Min. 0 Sec.
Longitude 13700 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: EASTERN AMERICAN ENERGY C
P. O. BOX N
GLENVILLE, WV 26351-0000

Agent: DONALD C. SUPCOE

Inspector: MIKE UNDERWOOD
Permit Issued: 05/08/90
Well work Commenced: 06/05/90
Well work Completed: 06/21/90
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5320'
Fresh water depths (ft) 55', 275'

Salt water depths (ft) N/A

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	1352.90'	1352.90'	C.T.S.
4-1/2"	5292.35'	5292.35'	915
1-1/2"	---	5086.65'	---

OPEN FLOW DATA

Alexander, Benson/3rd Riley, 5140.5'-
Producing formation Riley (Commingled) Pay zone depth (ft) 5101.5'
Gas: Initial open flow 622 MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 492 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests 15 Hours
Static rock Pressure 880 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.
Rich Heffelfinger
By: Vice President - Regional Operations
Date: August 15, 1990

SEP 6 1990

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

3-STAGE FOAM FRAC

- Stage 1: Alexander - 13 holes (5140.5'-5101.5') Breakdown 2260 psi, 65 Quality foam, 20 lbs/1000 gals Gel, 55,400 lbs 20/40 sand, 500 gals 15% HCl, 549,900 scf of N₂
- Stage 2: Benson/3rd Riley - 12 holes (4828.5'-4741') Breakdown 1100 psi, 65 Quality foam, 20 lbs/1000 gals Gel, 5000 lbs 80/100 sand, 51,600 lbs 20/40 sand, 500 gals 15% HCl, 824,100 scf of N₂
- Stage 3: Riley - 12 holes (4431.5'-4417') Breakdown 3280 psi, 70 Quality foam, 20 lbs/1000 gals Gel, 5000 lbs 80/100 sand, 32,000 lbs 20/40 sand, 500 gals 15% HCl, 590,900 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	5	Hole damp @ 55'
Sandy Shale			5	30	1" stream water @ 275'
Sand			30	90	
Sandy Shale			90	240	
Sand			240	260	<u>GAS CHECKS:</u>
Sandy Shale			260	275	1900' - No show
Sand			275	280	1993' - No show
Sandy Shale			280	535	2115' - No show
Sand			535	545	2393' - No show
Sandy Shale			545	675	2701' - 48/10 thru 1" w/water
Red Rock			675	780	3164' - 8/10 thru 2" w/water
Sandy Shale			780	1848	3288' - 8/10 thru 2" w/water
Little Lime			1848	1860	3441' - 6/10 thru 2" w/water
Sand and Shale			1860	1900	3813' - 4/10 thru 2" w/water
Big Lime			1900	1960	4308' - 4/10 thru 2" w/water
Big Injun			1960	2033	4493' - 4/10 thru 2" w/water
Shale with Minor Sand			2033	2156	4735' - 4/10 thru 2" w/water
Weir			2156	2338	4889' - 8/10 thru 2" w/water
Shale			2338	2368	5012' - 8/10 thru 2" w/water
Berea			2368	2372	5197' - 8/10 thru 2" w/water
Shale with Minor Sand			2372	3216	1 Tubing Down - 10/10 thru 1" w/wat
Warren			3216	3265	D.C. - 10/10 thru 1" w/water
Shale with Some Sand			3265	4389	
Riley			4389	4439	
Shale with Minor Sand			4439	4734	
3rd Riley			4734	4770	
Sandy Shale			4770	4825	
Benson			4825	4857	
Sandy Shale			4857	5066	
Alexander			5066	5172	
Sandy Shale			5172	5323 T.D.	

17. 3817
Issued 5/8/90

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

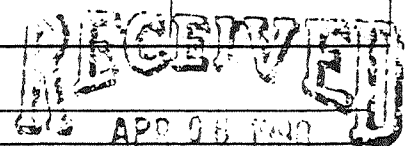
Expires 5/8/92

- 1) Well Operator: Eastern American Energy Corporation ²⁵⁹ 14980 (7) 525
- 2) Operator's Well Number: Mert/F. Maxwell #2 - WVDOD001502 3) Elevation: 1210'
- 4) Well type: (a) Oil / or Gas XX/
(b) If Gas: Production XX/ Underground Storage /
Deep / Shallow XX/
- 5) Proposed Target Formation(s): Alexander ⁴³⁹
- 6) Proposed Total Depth: 5325 feet
- 7) Approximate fresh water strata depths: 189', 310', 890', 295'
- 8) Approximate salt water depths: None ^{1145'}
- 9) Approximate coal seam depths: 970' ^{954'-958' Coal Blossom}
- 10) Does land contain coal seams tributary to active mine? Yes / No XX/
- 11) Proposed Well Work: Drill and complete new well.
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 "	F-25	37.5	30'	-----	
Fresh Water	8-5/8"	J-55	20.0	1360'	1360'	C.T.S. 38CSR18-11.3
Coal						38CSR18-11.2.2
Intermediate						
Production	4-1/2"	J-55	10.5	5230'	5230'	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 DEPARTMENT OF ENERGY

10/174
8
Fee(s) paid: Well Work Permit Reclamation Fund WPCP
Plat WW-9 WW-2B Bond Surety Blanket Agent
(Type)

RECORDED
APR 06 1990

Page 1 of 8
Form WW2-A
(09/87)
File Copy

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date: March 27, 1990
Operator's well number
Mert/F. Maxwell #2 - WVDOD001502
API Well No: 47 - 017 - 3817
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 Freda Greathouse
Address Rt. 1, Box 108
New Milton, WV 26411
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Mike Underwood
Address Rt. 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 _____
(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)

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 *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, 1990

My commission expires July 2, 1996 *Jo Lorraine Rowe* Notary Public