

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE  $1'' = 400'$   
MINIMUM DEGREE OF ACCURACY 1 in 200  
PROVEN SOURCE OF ELEVATION USGS BM JET. 25 + 25/10, 885', USGS New Milton Quad.

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) Wayne D. Porlon  
R.P.E. \_\_\_\_\_ L.L.S. 624

PLACE SEAL HERE

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



DATE March 25, 1980  
OPERATOR'S WELL NO. Ea-1  
API WELL NO. \_\_\_\_\_  
47 - 017 - 2708-P  
STATE COUNTY PERMIT

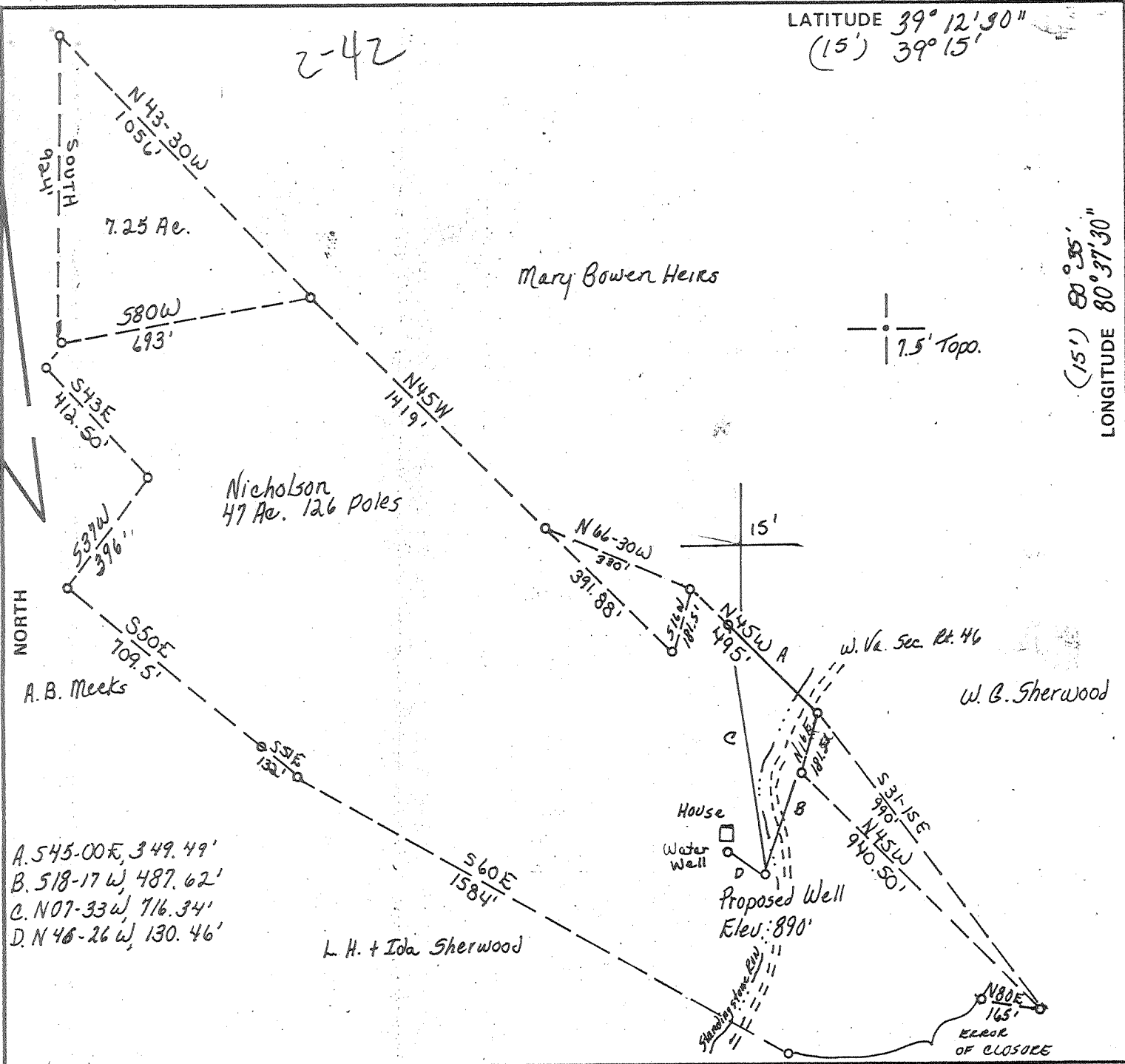
STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

PL. CANCELLED

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
LOCATION: ELEVATION 890' WATER SHED Meathouse Fork  
DISTRICT Greenbrier COUNTY Doddridge  
QUADRANGLE New Milton 7.5 VADIS 15'  
SURFACE OWNER C. G. Nicholson ACREAGE 47 126 poles  
OIL & GAS ROYALTY OWNER C. G. Nicholson LEASE ACREAGE 47 126 poles  
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 DEVONIAN SHALE ESTIMATED DEPTH 5999  
WELL OPERATOR East American Energy Corp. DESIGNATED AGENT James C. Recht  
ADDRESS P.O. Box N ADDRESS P.O. Box N  
Glenville, W. Va. 26351 Glenville, W. Va. 26351

AUG 8 1980



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 FORM IV-6 (8-78)



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47 - 017 - 2708-P  
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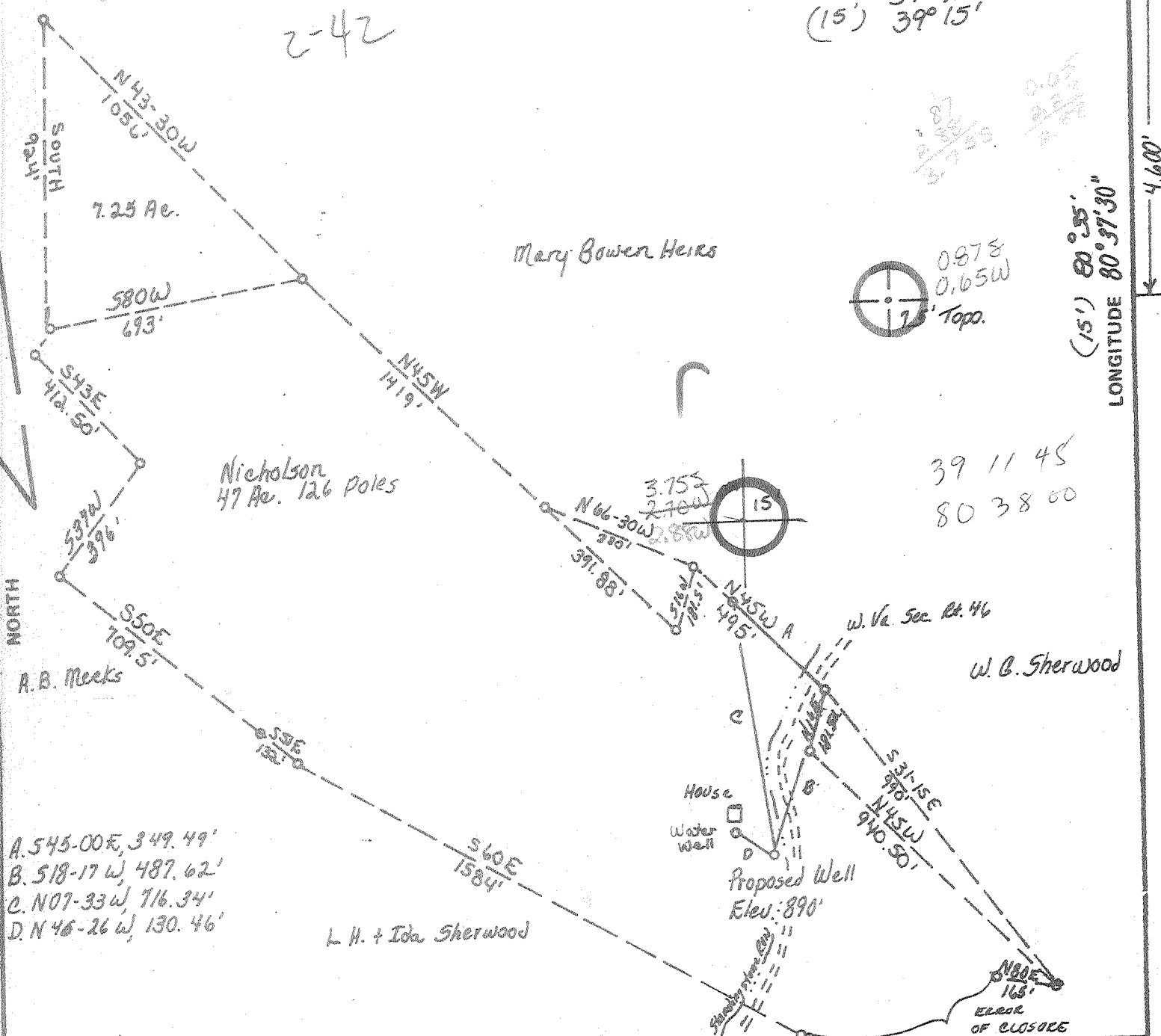
STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

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 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 890' WATER SHED Meathouse Fork  
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 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5999  
 WELL OPERATOR East American Energy Corp. DESIGNATED AGENT James C. Recht  
 ADDRESS P.O. Box N ADDRESS P.O. Box N  
Glenville, W. Va. 26351 Glenville, W. Va. 26351

MAY 18 1987

LATITUDE 39° 12' 30" (15') 39° 15'

LONGITUDE 80° 37' 30" (15') 80° 35'



A. 545-00E, 349.49'  
 B. 518-17W, 487.62'  
 C. N07-33W, 716.34'  
 D. N46-26W, 130.46'

L. H. + Ida Sherwood

Mary Bowen Heirs

Nicholson  
47 Ae. 126 Poles

39 11 45  
80 38 00



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 (SIGNED) Wayne D. Poelton  
 R.P.E. \_\_\_\_\_ L.L.S. 624

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



DATE March 25, 19 80  
 OPERATOR'S WELL NO. EA-1  
 API WELL NO. \_\_\_\_\_  
47 - 017 - 2708  
 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 890' WATER SHED Meathouse Fork  
 DISTRICT Greenbrier COUNTY Poddridge  
 QUADRANGLE New Milton 7.5 VADIS 15' NC  
 SURFACE OWNER C. G. Nicholson ACREAGE 47 126 poles  
 OIL & GAS ROYALTY OWNER C. G. Nicholson LEASE ACREAGE 47 126 poles  
 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 DEVONIAN SHALE ESTIMATED DEPTH 5999  
 WELL OPERATOR East American Energy Corp DESIGNATED AGENT James C. Recht  
 ADDRESS P.O. Box N ADDRESS P.O. Box N  
Glenville, W. Va. 26351 Glenville, W. Va. 26351

JUN 17 1980

6-4 New Milton South (307)

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OIL AND GAS DIVISION

Date August 8, 1980

Operator's  
Well No. EA #1 Nicholson

API Well No. 47 - 017 - 270  
State County Perr

FORM IV-35  
(Obverse)

[08-78]

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal   
(If "Gas", Production  / Underground storage  / Deep  / Shallow )

LOCATION: Elevation: 890 Watershed: Standing Stone Run  
District: Greenbrier County: Doddridge Quadrangle: New Milton

WELL OPERATOR Eastern American Energy Corporation DESIGNATED AGENT James C. Recht  
Address P.O. Box N Address P.O. Box N  
Glenville, WV 26351 Glenville, WV 26351

PERMITTED WORK: Drill  / Convert  / Drill deeper  / Redrill  / Fracture or stimulate   
Plug off old formation  / Perforate new formation   
Other physical change in well (specify) \_\_\_\_\_

PERMIT ISSUED ON 4/30, 1980

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED

Name Paul Garrett

Address 321 Beech Street.

Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Elk/Alexander Depth 5999 feet

Depth of completed well, 3418 feet Rotary  / Cable Tools

Water strata depth: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.

Coal seam depths: 533-543 Is coal being mined in the area? NO

Work was commenced 7/18, 1980, and completed 7/26/80, 1980

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor	13"	J-55	94		X	20'			Kinds
Fresh water	8-5/8	J-55	20	X		950	950	Surface	
Coal									Sizes
Intermediate									
Production	4 1/2	CW	10.5	X		34.8	3418	95 sks	Depths set
Tubing	1 1/2	H-40	2.5	X		----	3250		
Liners		6% gel						3418-4644	Perforations: Top Bottom
		Cement						4644-4852	
		6% gel						4852-5347	

OPEN FLOW DATA

Producing formation Warren Pay zone depth 3254-3301 feet

Gas: Initial open flow, 300 Mcf/d Oil: Initial open flow, N/A Bbl/d

Final open flow, 300 Mcf/d Final open flow, N/A Bbl/d

Time of open flow between initial and final tests, 4 hours

Static rock pressure, 800 psig (surface measurement) after 48 hours shut in

[If applicable due to multiple completion--]

Second producing formation \_\_\_\_\_ Pay zone depth \_\_\_\_\_ feet

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 measurement) after \_\_\_\_\_ hours shut in

APR 13 1981

017-2708

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

Perforations - 6-0.49" holes at 3298, 3297, 3283, 3281, 3279, 3263

Frac 15,000 lbs 80/100 sand, 20,000 lbs 20/40 sand 20 lbs/1000 gals  
WG-12, 15N, 1% KCL, 750 gals 15% HCL.

## WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Surface fill			0	15	
Sand, Shale & Red Rock			15	51	Water at 40'
Sand and Shale			51	119	
Red Rock			119	132	
Sand			132	150	
Red Rock and Shale			150	174	
Sand			175	215	
Sand & shale & Red Rock			215	315	
Sand			315	335	
Sand & shale			335	374	
Sand			374	382	
Sand & Shale			382	401	
Sand			401	473	
Sand & Shale			533	533	
Coal			533	543	
Sand & shale			543	579	
Sand			579	590	
Sand & shale			590	650	
Shale & Red Rock			650	740	
Sand & shale			740	777	
Shale & Red Rock			777	825	
Sand & Shale			825	880	
Shale & Red Rock			880	904	
Shale & Sand			904	940	

(see attached sheet)

(Attach separate sheets to complete as necessary)

EASTERN AMERICAN ENERGY CORPORATION  
Well OperatorBy *Tom Culp III*  
Its Vice President**NOTE:** Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."

017-2708

6

Shale	940	1085
Sand	1085	1140
Sand & Shale	1140	1855
Little Lime	-1866	1878
Shale	1878	1917
Big Lime	-1917	1992
Big Injun	1992	2067
Sand & Shale	2067	2140
Weir	2140	2218
Sand & Shale	2218	3254
Warren	3254	3301
Sand & Shale	3301	4840
Benson	-4840	4846
Sand & Shale	4846	5146
Elk	5146	5231
Sand & Shale	5231	5347
TD	5347	

Top & Log @ 1600'

~~All footage exploratory~~

APR 13 1981

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. C. G. Nicholson #1

API Well No. 47-017-2708  
State County Permit

WELL TYPE: Oil \_\_\_\_\_ / Gas X /

(If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow X /)

LOCATION: Elevation: 890

Watershed: Standing Stone Run

District: Greenbrier

County: Doddridge

Quadrangle: New Milton

WELL OPERATOR Eastern American Energy Corporation

DESIGNATED AGENT James C. Recht

Address P.O. Box N  
Glenville, WV 26351

Address P.O. Box #67  
Glenville, WV 26351

OIL & GAS ROYALTY OWNER C. G. Nicholson

COAL OPERATOR None

Address Standing Stone Run  
Doddridge County, WV

Address: \_\_\_\_\_

Acreage 47A

COAL OWNER(S) WITH DECLARATION ON RECORD

SURFACE OWNER C. G. Nicholson

Name \_\_\_\_\_

Address Standing Stone Run  
Doddridge County, WV

Address \_\_\_\_\_

Acreage 47A

Name \_\_\_\_\_

FIELD SALE (IF MADE) TO:

Address \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

COAL LESSEE WITH DECLARATION ON RECORD:

Name \_\_\_\_\_

Address \_\_\_\_\_

OIL & GAS INSPECTOR TO BE NOTIFIED

Name Paul Garrett

Address 321 Beech St.  
Clarksburg, WV 26301

Phone: 622-3871

The undersigned well operator is entitled to operate for oil or gas purposes at the \_\_\_\_\_ location under a deed \_\_\_\_\_ / lease \_\_\_\_\_ / other contract X / dated February 13, 1980.

Undersigned well operator from Clarence W. Mustschelknaus

If said deed, lease, or other contract has been recorded:]

Recorded on February 19, 1980, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 113 at page 279.

PROPOSED WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Fracture or stimulate \_\_\_\_\_ /

Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_ /

Other physical change in well (specify) \_\_\_\_\_

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee prior or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

**BLANKET BOND**

Eastern American Energy Corporation  
Well Operator

By F. H. McCullough III

Its Vice President

PLEASE SUBMIT COPIES OF ALL PHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
WASHINGTON STREET EAST  
CHARLESTON, WV 25311

PHONE: (304) 348-3092

[08-78]

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) S.W. Jack, Inc.  
Address Buckhannon, WV 26201  
Phone: 472-2161

GEOLOGICAL TARGET FORMATION, Devonian Shale

Estimated depth of completed well, 5999 feet Rotary X / Cable tools      /  
Approximate water strata depths: Fresh, 40 feet; salt,      feet.  
Approximate coal seam depths: unknown **Is coal being mined in the area:** Yes      / No X

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
	Size	Grade	Weight per ft	New	Used	For drilling			Left in well
Conductor	20	J-55	94 lb.		x	25	---	---	Kinds
Fresh water	8-5/8	J-55	20 lb.	x		950	950	Surface	
Coal									Sizes
Intermediate									
Production	4½	CW	10.5	x		5500	5500	300 sks.	Depths set
Tubing	1½	H-40	2.5	x		---	5300		
Liners									Perforations:
									Top Bottom

**NOTE:** Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or drilling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

**THIS PERMIT MUST BE POSTED AT THE WELL SITE**

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 1-8-81.

*[Signature]*

Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator      / owner      / lessee      / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date:     , 19    

By       
Its     

FILE  
DATE  
TIME  
TELE