

Jamie 8/30/89

WELL NO. 1 (REVISED)

J.C. COTTRILL LEASE

ROBERTS et al

ASH

WITH ROAD

2" PIPE AT 20'

DILLON

N 44-45E 1161.01'

J.C. COTTRILL NO. 1 (REVISED)

S 6-00 W

S 23-37 W 1455.61'

S 16-01 W 1407.83'

1/2" REBAR

DRAIN

S 31-06 E 1318.60'

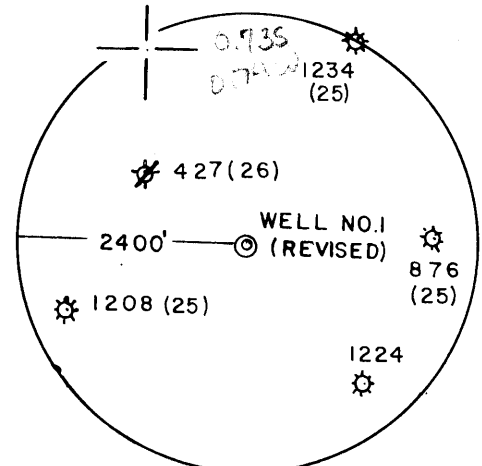
J.C. COTTRILL NO. 2 (REVISED) N 69-56 W 1930.38'

72.38 ACRES ±

DOAK

CAMP MISTAKE RUN

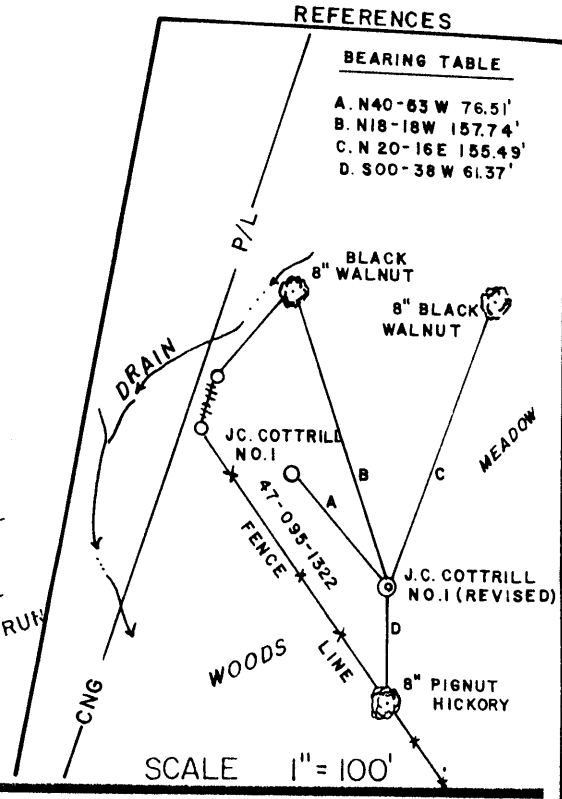
WILLIAMSON



REFERENCES

BEARING TABLE

- A. N40-63 W 76.51'
- B. N18-18 W 157.74'
- C. N 20-16 E 155.49'
- D. S00-38 W 61.37'

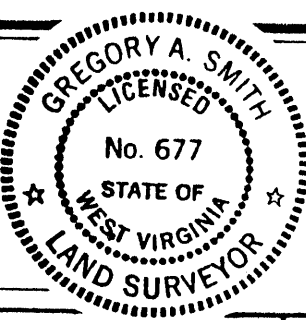


SCALE 1" = 100'



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. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE AUGUST 11, 1989
 OPERATORS WELL NO. J.C. COTTRILL NO. 1 (REVISED)
 API WELL NO. 47-095-1322 WVTY000801
 STATE COUNTY PERMIT
REVISED

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 2093 (28-25)
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. 996' 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 912' WATERSHED CAMP MISTAKE RUN
 DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE WEST UNION 7.5'
 SURFACE OWNER MARY E. ROBERTS & MARY J. KAHLER ACREAGE 72.38
 ROYALTY OWNER JACOB C. COTTRILL et. al. LEASE ACREAGE 72.38
 PROPOSED WORK: LEASE NO. WVO1782-
 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 BENSON ESTIMATED DEPTH 496'

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

SEP 1 1989

6-6 willbur(092)

3980'

LATITUDE 30-22-30

Janie 1/18/89

WELL NO. 1

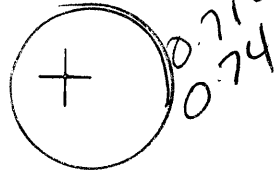
J.C. COTTRILL LEASE

ASH

ROBERTS et al

WITH ROAD

2" PIPE AT 20'



NORTH

ROBERTS et al

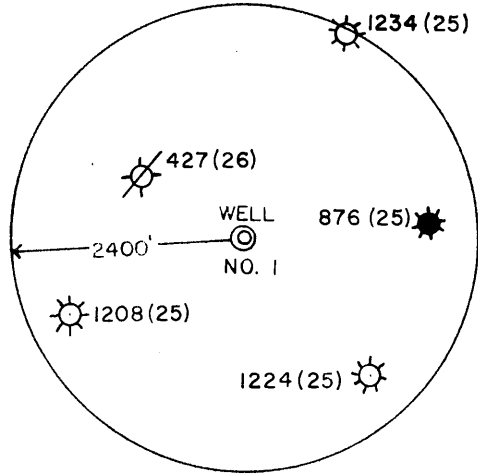
WELL NO. 1

N 48-32 E 1157.71'

DILLON

1768.0'

S 6-00 S



359 0.74

S 20-57 W 1490.15'

58/2

1/2" ROD AT 1910'

N 69-56 W

1930.38'

S 31-06 E 1318.60'

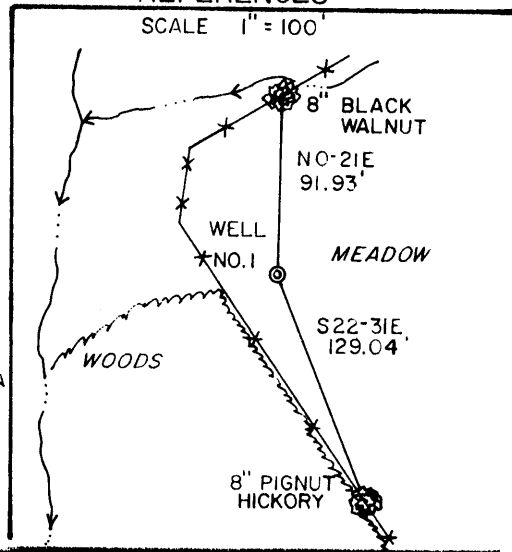
DOAK

CAMP MISTAKE RUN

72.38 ACRES ±

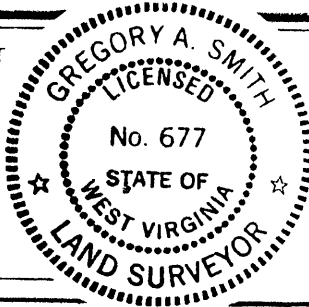
REFERENCES

SCALE 1" = 100'



WILLIAMSON

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L.L.S. 677 Gregory A. Smith

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

DATE JUNE 27, 19 89

OPERATORS WELL NO. J.C. COTTRILL NO. 1 WVTYL000801

API WELL NO. 47-095-1322 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 2093 (28-24) SCALE 1"=500' PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. 996'

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION



WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION X STORAGE DEEP SHALLOW X

LOCATION: ELEVATION 910' WATERSHED CAMP MISTAKE RUN DISTRICT CENTERVILLE 1 COUNTY TYLER QUADRANGLE WEST UNION 7.5' 671

SURFACE OWNER MARY E. ROBERTS & MARY J. KAHLER ACREAGE 72.38 ROYALTY OWNER JACOB C. COTTRILL et. al. LEASE ACREAGE 72.38

PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION BENSON ESTIMATED DEPTH 4960'

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

AUG 11 1989

259

00-05-08 LONGITUDE

COUNTY NAME PERMIT

575

WR-**RECEIVED**
SEP 19 1989

11-Aug-89
API # 47- 95-01322

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

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

Farm name: ROBERTS, MARY/MARY KAHLE Operator Well No.: J.C.COTTRILL #1

LOCATION: Elevation: 910.00 Quadrangle: WEST UNION

District: CENTERVILLE County: TYLER
Latitude: 3780 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude 3980 Feet West of 80 Deg. 50 Min. 0 Sec.

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

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11-3/4"	131'	131'	C.T.S.
8-5/8"	1109.10'	1109.10'	C.T.S.
4-1/2"	4885.75'	4885.75'	900
1-1/2"	---	4777.95'	---

Agent: DONALD C. SUPCOE

Inspector: GLEN P. ROBINSON
Permit Issued: 08/11/89
Well work Commenced: 08/28/89
Well work Completed: 09/11/89
Verbal Plugging _____
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5127'
Fresh water depths (ft) 48', 60', 171',
540'
Salt water depths (ft) 1210'

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

OPEN FLOW DATA

Producing formation Benson, Riley (Commingled) Pay zone depth (ft) 4800'
Gas: Initial open flow 209 MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 189 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests 15 Hours
Static rock Pressure 950 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: September 15, 1989

(REVERSE)

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

2 STAGE FOAM FRAC

STAGE 1: Benson: 8 holes (4800-'4794') Breakdown 1750 psi, 60 Quality foam, 30 lbs/1000 gals Gel, 5,000 lbs. 80/100 sand, 35,000 lbs. 20/40 sand, 500 gals 15% HCl, 606,000 scf of N₂

STAGE 2: Riley: 12 holes (4418'-4373') Breakdown 1465 psi, 60 Quality foam, 30 lbs/1000 gals Gel, 5,000 lbs. 80/100 sand, 30,000 lbs. 20/40 sand, 500 gals 15% HCl, 522,000 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
Clay and Fill			0	20	Damp @ 48'
Sand			20	80	
Sand, Shale and Red Rock			80	171	Damp @ 171'
Sand and Shale			171	305	
Sand, Shale and Red Rock			305	1024	1/2" stream water @ 540'
Sand and Shale			1024	1714	2" stream water @ 1355'
Little Lime			1714	1730	
Shale			1730	1756	
Big Lime			1756	1814	
Big Injun			1814	1950	<u>GAS CHECKS:</u>
Shale			1950	2116	2113' - No show
Weir			2116	2230	2330' - 80/10 thru 1/2" w/water
Sand and Shale			2230	3225	3168' - 60/10 thru 1/2" w/water
Warren			3225	3271	3324' - 60/10 thru 1/2" w/water
Sand and Shale			3271	4370	3823' - 70/10 thru 1/2" w/water
Riley			4370	4423	4318' - 60/10 thru 1/2" w/water
Sand and Shale			4423	4792	4473' - 50/10 thru 1" w/water
Benson			4792	4802	4877' - 100/10 thru 1" w/water
Sand and Shale			4802	5127 T.D.	T.D. - 40/10 thru 1" w/water D.C. - 40/10 thru 1" w/water

(Attach separate sheets as necessary)

0951322

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

- 1) Well Operator: Eastern American Energy Corporation ²⁵¹ 14980 (1) 67
- 2) Operator's Well Number: J.C. COTTRILL #1 - WVTYL000801 3) Elevation: 910'
- 4) Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Benson 435
- 6) Proposed Total Depth: 4960 feet
- 7) Approximate fresh water strata depths: 70', 95', 460'
- 8) Approximate salt water depths: ~~1375'~~
- 9) Approximate coal seam depths: None
- 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
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11"	F-25	37.5	120'	120'	C.T.S.
Fresh Water	8 5/8"	J-55	20.0	1435'	1435'	C.T.S. 38CSR18-11.3
Coal						38CSR18-11.2 2
Intermediate						
Production	4 1/2"	J-55	10.5	4880'	4880'	38CSR18-11.1
Tubing	1 1/2"	H-40	2.75			
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

RECEIVED
JUL 07 1989

For Division of Oil and Gas Use Only DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

4607 15
Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Blum Agent

RECEIVED
JUL 07 1989

Date: July 3, 1989
Operator's well number
J.C. COTTRILL #1 - WVTYL000801
API Well No: 47 - 095 - 1322
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 Mary E. Roberts & Mary J. Kahle
Address Middlebourne, WV 26149
- (b) Name _____
Address _____
- (c) Name _____
Address _____
- 5) (a) Coal Operator:
Name None
Address _____
- (b) Coal Owner(s) with Declaration
Name _____
Address _____
- Name _____
Address _____
- (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Glen P. Robinson
Address Rt. 1, #6 Mt. Pleasant Est.
Mineralwells, 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
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
Its: Designated Agent
Address P.O. Box N
Glenville, WV 26351
Telephone (304) 462-5781

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

J. Lorraine Rowe Notary Public
My commission expires July 2, 1996