

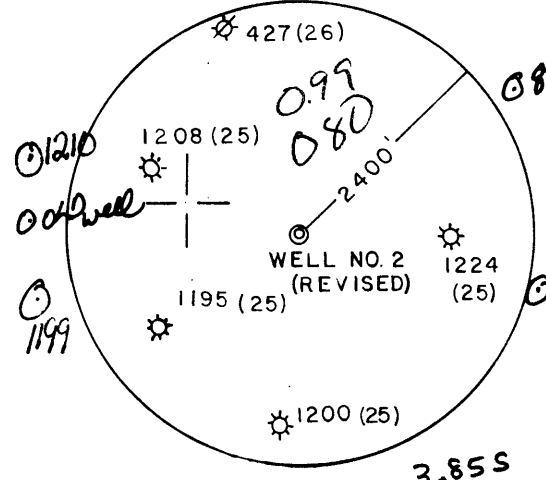
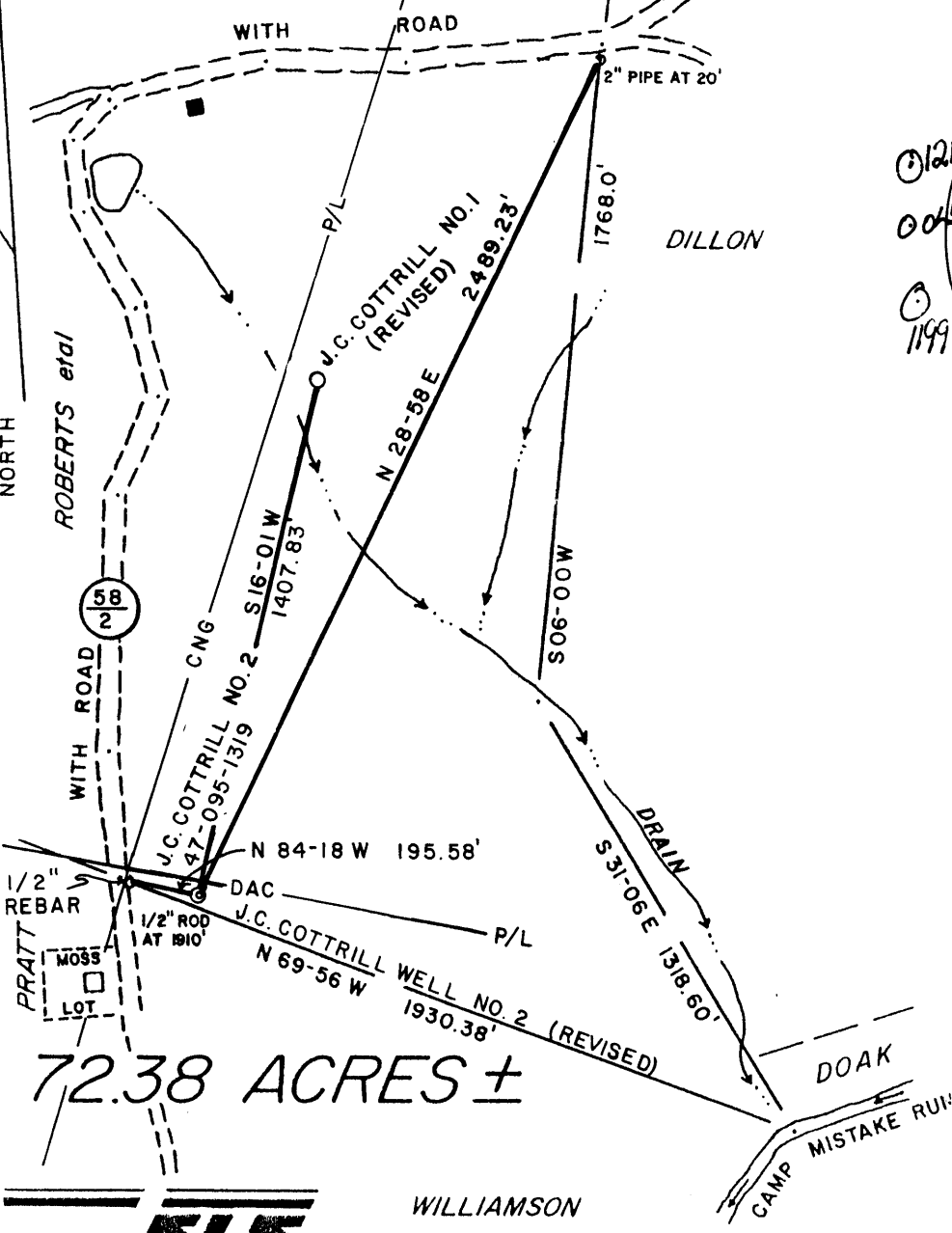
Janie 8/30/89

LATITUDE 39-22-30

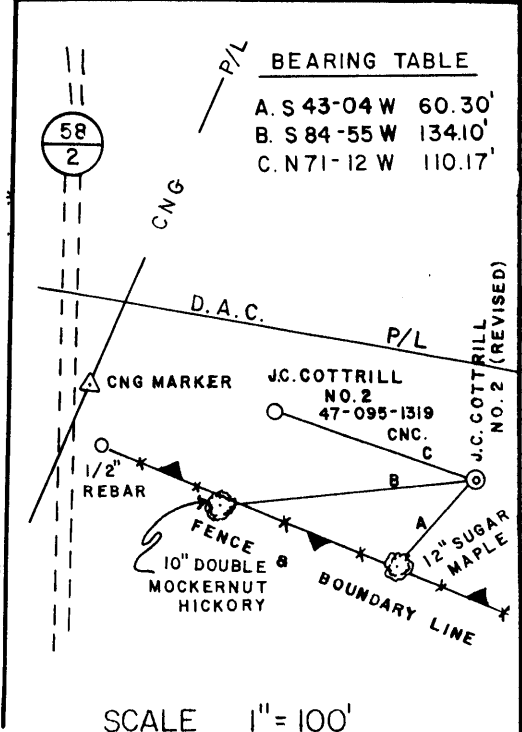
WELL NO. 2 (REVISED)

ROBERTS et al

J.C. COTTRILL LEASE



REFERENCES

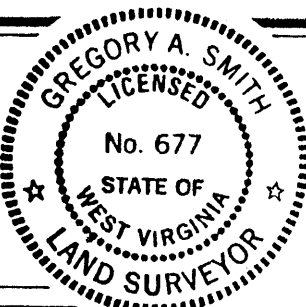


72.38 ACRES ±



WILLIAMSON

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, 19 89
 OPERATORS WELL NO. J.C. COTTRILL NO. 2 (REVISED)
 API WELL NO. 47-095-1319 WVTYL000802
 STATE WV COUNTY TYLER 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 "GAS" PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 993' 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: 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 5650' 1 1989

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

COUNTY NAME PERMIT

575

Janie 7/17/89

WELL NO. 2

J.C. COTTRILL LEASE

ASH

ROBERTS et al

WITH ROAD

2" PIPE AT 20'

DILLON

WELL NO. 1

N17-50E 1444.98'

N 31-27 E

2511.02'

1768.0'

S6-00 S

WITH ROAD

S79-54W 91.74'

WELL NO. 2

1/2" ROD AT 1910'

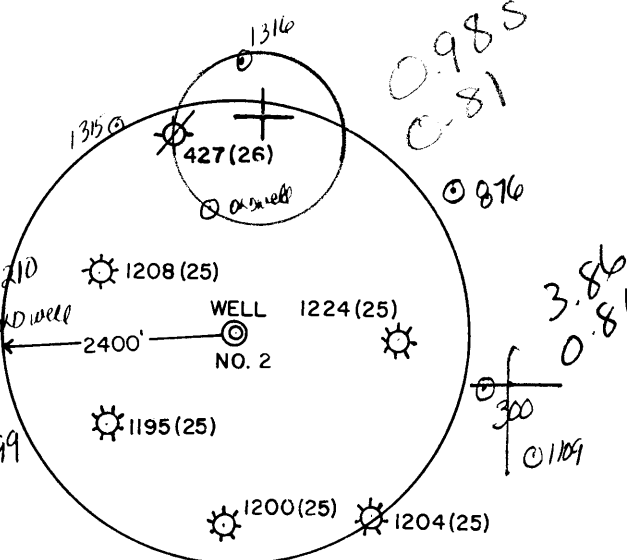
N 69-56 W

1930.38'

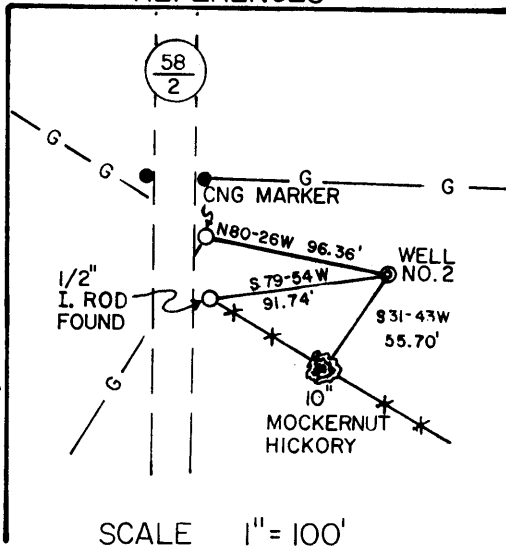
S 31-06 E 1318.60'

PRATT MOSS LOT

72.38 ACRES ±



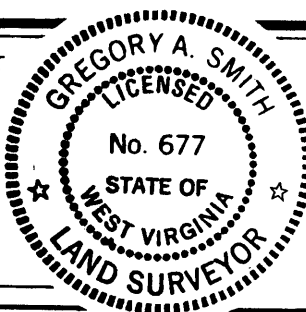
REFERENCES



SCALE 1" = 100'

WILLIAMSON

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 JUNE 27, 19 89

OPERATORS WELL NO. J.C. COTTRILL NO. 2
WVTYL00802

API WELL NO. 47 - 095 - 1319
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 2093 (28-24)
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 991' WATERSHED CAMP MISTAKE RUN

DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE WEST UNION 7.5' 621

SURFACE OWNER MARY E. ROBERTS & MARY J. KAHLER ACREAGE 72.38 133

ROYALTY OWNER JACOB C. COTTRILL et. al. LEASE ACREAGE 72.38 5

PROPOSED WORK: 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 5060'

WELL OPERATOR EASTERN AMERICAN ENERGY CORP. DESIGNATED AGENT JOHN M. PALETTI

ADDRESS BOX N GLENVILLE, WV. 26351 ADDRESS 501 56th. ST. CHARLESTON, WV. 25304

JUL 28 1989

259

LONGITUDE 80-50-00

COUNTY NAME PERMIT

575

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

OCT 21 1989

DIVISION OF OIL AND GAS
DEPARTMENT OF ENERGY

Well Operator's Report of Well Work

Farm name: ROBERTS, MARY/MARY KAHLE Operator Well No.: J.C.COTTRILL #2

LOCATION: Elevation: ~~991.00~~^{993-revised} Quadrangle: WEST UNION

District: CENTERVILLE County: TYLER
Latitude: 5180 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude 4310 Feet West of 80 Deg. 50 Min. 0 Sec.

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

Agent: DONALD C. SUPCOE

Inspector: GLEN P. ROBINSON
Permit Issued: 07/25/89
Well work Commenced: 09/11/89
Well work Completed: 09/23/89
Verbal Plugging
Permission granted on:
Rotary Cable _____ Rig _____
Total Depth (feet) 5,141'
Fresh water depths (ft) 40', 196', 400'
Salt water depths (ft) 1350', 1432',
1601'
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.
11-3/4"	131'	131'	C.T.S.
8-5/8"	1205.05'	1205.05'	C.T.S.
4-1/2"	4979.50'	4979.50'	915
1-1/2"	---	4858'	---

OPEN FLOW DATA

(Commingled) 4877.5'-
 Producing formation Benson, Riley, Warren Pay zone depth (ft) 3315.5'
 Gas: Initial open flow 581 MCF/d Oil: Initial open flow N/A Bbl/d
 Final open flow 499 MCF/d Final open flow N/A Bbl/d
 Time of open flow between initial and final tests 15 Hours
 Static rock Pressure 1300 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: October 18, 1989

NOV 03 1989

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

3-STAGE FOAM FRAC:

- STAGE 1: Benson - 9 holes (4877.5'-4872') Breakdown 2340 psi, 60 Quality foam, 30 lbs/1000 gals Gel, 5,000 lbs 80/100 sand, 40,000 lbs 20/40 sand, 500 gals 15% HCl, 528,000 scf of N₂
- STAGE 2: Riley - 13 holes (4495.5'-4450.5') Breakdown 2815 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, 523,000 scf of N₂
- STAGE 3: Warren - 13 holes (3345.5'-3315.5') Breakdown 2230 psi, 60 Quality foam, 30 lbs/1000 gals Gel, 5,000 lbs 80/100 sand, 20,000 lbs 20/40 sand, 650 gals 28% HCl, 404,000 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
Fill & Clay			0	20	1/2" stream water @ 40'
Sand, Shale & Red Rock			20	226	1/2" stream water @ 196'
Shale and Red Rock			226	255	
Sand, Shale and Red Rock			255	390	
Sand			390	430	1/2" stream water @ 400'
Red Rock			430	525	
Sand & Shale			525	721	
Shale and Red Rock			721	1063	
Sand			1063	1084	
Shale and Red Rock			1084	1218	
Sand and Shale			1218	1415	Damp @ 1350'
Sand			1415	1509	1/2" stream water @ 1432'
Sand and Shale			1509	1796	1/2" stream water @ 1601'
Little Lime			1796	1813	
Shale			1813	1835	
Big Lime			1835	1894	<u>GAS CHECKS:</u>
Big Injun			1894	2041	1949' - No show
Shale			2041	2192	2108' - 40/10 thru 2" w/water
Weir			2192	2306	2300' - 1/4" stream oil
Sand and Shale			2306	3302	2390' - 40/10 thru 2" w/water
Warren			3302	3352	2894' - 36/10 thru 2" w/water
Sand and Shale			3352	4435	3308' - 38/10 thru 2" w/water
Riley			4435	4514	4416' - 40/10 thru 2" w/water
Sand and Shale			4514	4868	4825' - 40/10 thru 2" w/water
Benson			4868	4880	4950' - 40/10 thru 2" w/water
Shale			4880	5141 T.D.	

RECEIVED
OCT 21 1988

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

4202

23

095-1319
Issued 7/25/89 Expires 7/25/9

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

- 1) Well Operator: Eastern American Energy Corporation 14980 (1) 670
- 2) Operator's Well Number: J.C. COTTRILL #2 - WVTYL000802 3) Elevation: 991'
- 4) Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Benson
- 6) Proposed Total Depth: 5060 feet
- 7) Approximate fresh water strata depths: 253', 408'
- 8) Approximate salt water depths: ~~XXXXXX~~ 1460'
- 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	1515'	1515'	C.T.S.
Coal						38CSR18-11.3 38CSR18-11.2 2
Intermediate						
Production	4 1/2"	J-55	10.5	4975'	4975'	38CSR18-11.1
Tubing	1 1/2"	H-40	2.75			
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

RECEIVED
JUL 04 1989

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

4608 15
Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Blanket cover Agent
(Type)

RECEIVED
JUL 07 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

- 1) Date: July 3, 1989
- 2) Operator's well number
J.C. COTTRILL #2 - WVTYL000802
- 3) API Well No: 47 - 095 - 1319
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 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

My commission expires July 2, 1996
Ja. Loraine Lowe Notary Public