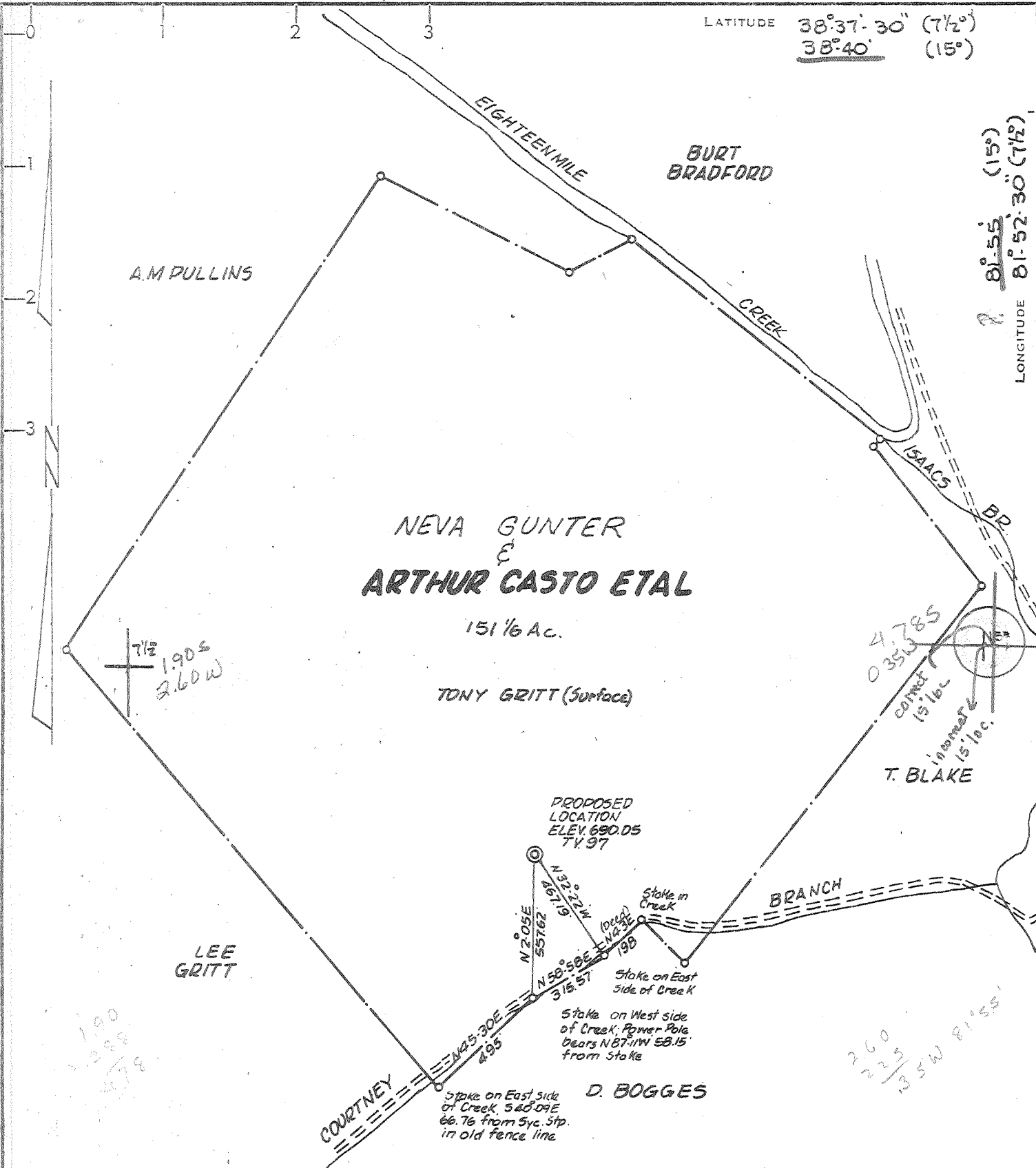


7291-379



CERTIFICATE

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."

Minimum degree of accuracy is one part in 300

Signed Frank J. Barker LL5 #289

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY TEAVEE OIL & GAS INC.
 ADDRESS 1901 KANAWHA VALLEY BUILDING, CHARLESTON, W.VA
 FARM ARTHUR CASTO ETAL, Neva Gunter (Tony Gritt surf)
 MAP _____ ACRES 151 1/6 LEASE NO. _____
 WELL (FARM) NO. 1 SERIAL NO. TV. 97
 ELEVATION (SPIRIT LEVEL) 690.05 WC
 QUADRANGLE WINFIELD 7 1/2° & 15°
 COUNTY POTNAM DISTRICT BUFFALO
 POINT OF PROVEN ELEVATION POT. WELL 778
 FILE NO. _____ DRAWING NO. _____
 DATE JUL. 20, 1978 SCALE 1" = 500 FT.

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
PUT-908
 FILE NO. _____ **AUG 16 1978**
 + DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS. SCALE 1 TO 62,500. LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.
 - DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

DEEP WELL 4550 Quaker 6.6 Midway-Extra (278)

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

Date 7/1/85, 19

FORM IV-35
(Obverse)

Operator's Well No. TV-97

WELL OPERATOR'S REPORT
OF

API Well No. 47 - 079 0908
State County Permit

[08-78]

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: 690 Watershed: Eighteen Mile Creek

District: Buffalo County: Putnam Quadrangle: Winfield 7.5

WELL OPERATOR Teavee Oil & Gas, Inc.
Address 1901 Kan. Valley Bank Bldg. Charleston, WV

DESIGNATED AGENT D. K. Bowers
Address 1901 Kan. Val. Bank. Bldg. Charleston, WV

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

RECEIVED
JUL 10 1985

PERMIT ISSUED ON 11/21/78, 19

OIL & GAS INSPECTOR FOR THIS WELL OIL & GAS DIVISION
Name C. Hiveley **DEPT. OF MINES**
Address Elkview, WV

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED _____, 19 _____)

GEOLOGICAL TARGET FORMATION: Oriskany Depth 4544

Depth of completed well, 4474 feet Rotary / Cable Tools

Water strata depth: Fresh, 80 feet; salt, 1191 feet.

Coal seam depths: N/A Is coal being mined in the area? No

Work was commenced 7/29/78, 19, and completed 8/3/78, 19

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	REMARKS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								Kind
Fresh water	10 3/4"					167	167	85
Coal								Sizes
Intermediate	7					2171	2171	Bottom hole Packer
Production	3 1/2						4474	200 50/50 pozmix
Tubing								Deaths set
Liners								Perforations:
								Top Bottom

OPEN FLOW DATA

Producing formation Brown shale Pay zone depth 3535

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

Final open flow, 100 Mcf/d Final open flow, N/A Bbl/d

Time of open flow between initial and final tests, 72 hours

Static rock pressure, 400 psig (surface measurement) after 24 hours shut in.

[If applicable due to multiple completion--]

Second producing formation Marcellus shale Pay zone depth _____

Gas: Initial open flow, see above 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.

JUL 22 1985

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

Perforated intervals: 3410-3445 5 shots, 3538-3574, 5 shots, 3670-3705 5 shots, 3772-3807 5 shots, 4430-4450, 5 shots.

Treated with Foam Frac. 80/100 15,000 lbs. Maecellus, 20/40 30,000 lbs.

1000 gal. 15% HCl 530 MSCF 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
Surface			0.0	45	
Sand and red rock			45	100	Freshwater @80
Red rock			100	380	
Sand			380	415	
Slate			415	500	
Sand			500	529	
Slate			529	640	
Sand			640	681	
Slate			681	1169	
Slate & Shells			1169	1251	
Sand			1251	1290	
Salt sand			1290	1551	
Little lime			1551	1578	
Big lime			1578	1780	
Slate			1780	1840	
Big injun			1840	1905	
Slate			1905	2255	
Coffee shale			2255	2289	
Berea sand			2289	2318	
Slate & Shell			2318	3000	
Gray shale			3000	3535	
*Brown shale			3535	3928	Gas
White slate			3928	4276	
*Marcellus shale			4276	4428	Gas
*Corniferous lime			4428	4544	
*Oriskany sand			4544	4545	
Lime			4545	4576	Total depth

BAD CORES

E-LOG
KB = 700'
L. Horn 3526-3928
Jona 3928-4056
Ambolet 4056-4250
Ans. Intervenor 4150 - 4250
Rivingswood 4250 - 4391
Sanyea 4391 - 4432
Maecellus 4432 - 4442
Oriskany 4442 - ?

(Attach separate sheets to complete as necessary)

Teavee Oil & Gas Inc.

Well Operator

By

D. H. Bowen

Geologist

Its

7/1/85

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."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

RECEIVED
JUL 24 1978
OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

Surface Owner Tony Britt
Address Eleanor, W. Va.
Mineral Owner Neva Gunter and Frank Gunter
Address Cheshire, Ohio
Coal Owner Same
Address Same
Coal Operator Same
Address Same

DATE JUL 20, 1978
Company Teaves Oil & Gas, Inc.
Address 19th Fl. Kanawha Valley Bldg. Chas.
Farm Neva Gunter et Al Acres 151 1/6
Location (waters) 18 Mile Creek
Well No. TV #97 Elevation _____
District Buffalo County Putnam
Quadrangle Winfield

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 11-25-78.

INSPECTOR
TO BE NOTIFIED Martin Nichols
ADDRESS Clendenin, W.Va.
PHONE 548-6993

Robert H. Ford
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated June 23 1972 by Neva Gunter & Arthur Caste made to Teaves Oil & Gas, Inc. and recorded on the 11th day of August 1972, in Putnam County, Book 56 Page 678

NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address None day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

Very truly yours, [Signature]
(Sign Name) Teaves Oil & Gas, Inc.
Well Operator

W. VA. OIL & GAS CONSERVATION COMMISSION
513 WASHINGTON STREET, EAST
CHARLESTON, WEST VIRGINIA 25311

Address of Well Operator
19th fl. Kanawha Valley Bldg.
Street
Charleston, W. Va.
City or Town
West Virginia
State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

PUT-908 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

47-079

Signed by _____

[Signature]

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME FVA Drilling Co., Inc. NAME V. C. Smith
 ADDRESS P.O. Box 448, Elkview, W. Va. ADDRESS 1901 Kan. Valley Bldg. Chas. W. Va.
 TELEPHONE _____ TELEPHONE 342-2125
 ESTIMATED DEPTH OF COMPLETED WELL: _____ ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 TYPE OF WELL: OIL _____ GAS X COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10 <u>10 3/4</u>	<u>120</u>	<u>120</u>	<u>To surface</u>
9 - 5/8			
8 - 5/8			
7	<u>350</u>	<u>350</u>	<u>100 sacks</u>
5 1/2			
4 1/2			
3	<u>4550</u>	<u>4550</u>	Perf. Top <u>25 sacks</u>
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 40 FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS None known _____
 IS COAL BEING MINED IN THE AREA? No BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title