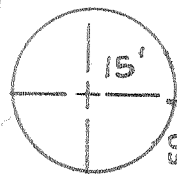


3/27/79

LATITUDE 39 15

1.28 S  
0.55 W

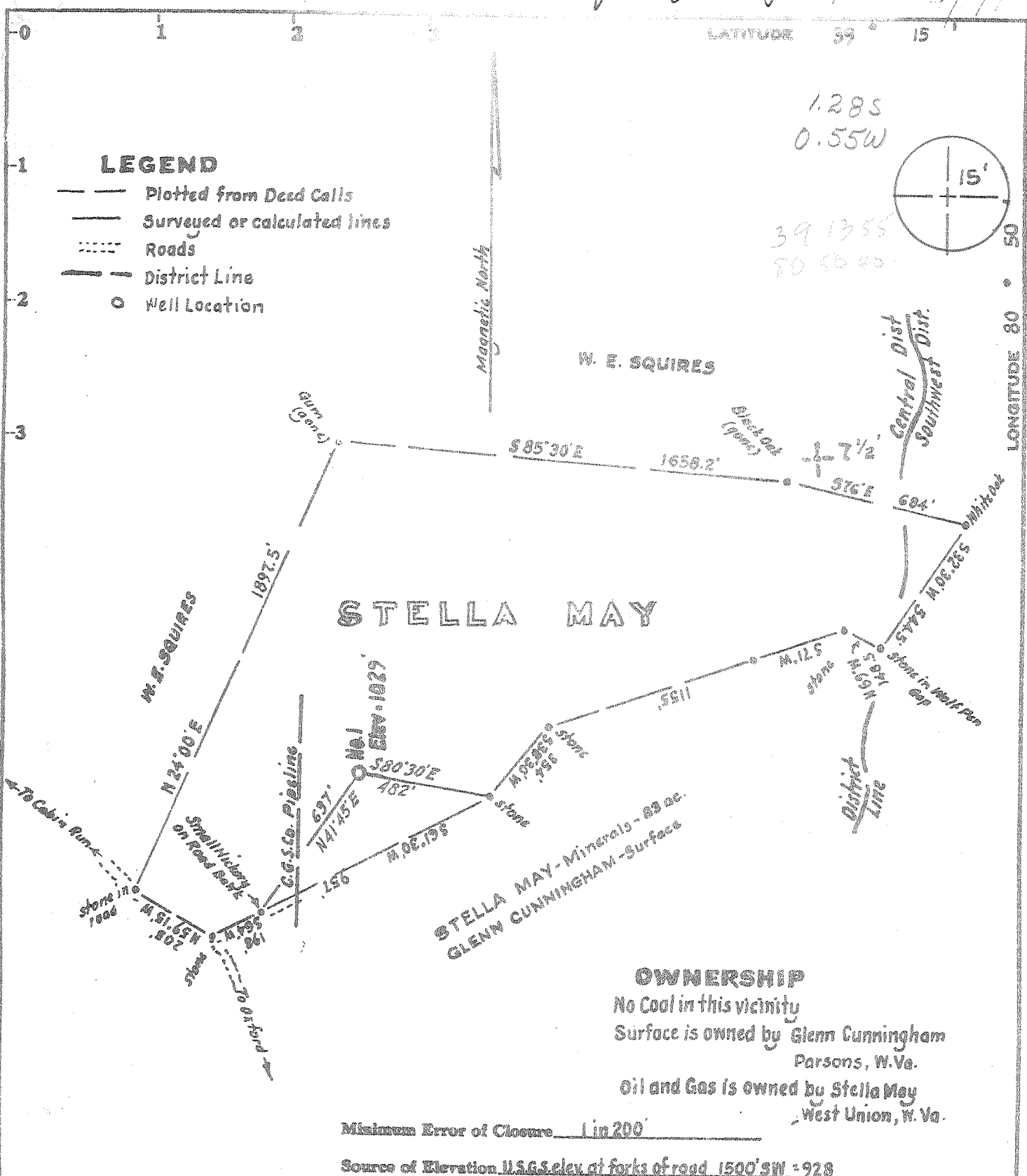
39 13 55  
80 50 40



LONGITUDE 80 50

**LEGEND**

- Plotted from Deed Calls
- Surveyed or calculated lines
- Roads
- District Line
- Well Location



**OWNERSHIP**

No Coal in this vicinity  
 Surface is owned by Glenn Cunningham  
 Parsons, W. Va.  
 Oil and Gas is owned by Stella May  
 West Union, W. Va.

Minimum Error of Closure 1 in 200

Source of Elevation U.S.G.S. elev. at forks of road 1500' SW = 928

- Fracture.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

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.

Signed: M. Shoups

Map No. \_\_\_\_\_ Squares: N S E W

Company UNITED OPERATING CO.  
 Address 600 Commerce Sq. Charleston, W. Va.  
 Farm Glenn Cunningham - Stella May  
 Tract \_\_\_\_\_ Acres 65.06 Lease No. \_\_\_\_\_  
 Well (Farm) No. One Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1029 NC  
 Quadrangle Oxford 7 1/2, Halbrook 15'  
 County Beddridge District Central  
 Engineer M. Shoups  
 Engineer's Registration No. 1227  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date March 28, 1979 Scale 1" = 500'

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

**WELL LOCATION MAP**  
 FILE NO. 47-017-2371

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.  
 - Denotes one inch spaces on border line of original tracing.

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

Date: May 3, 1979

FORM IV-35  
(Obverse)

Operator's  
Well No. Cunningham #1

[08-78]

WELL OPERATOR'S REPORT

API Well No. 47 - 017 - 2371

OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE State County Permit

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

LOCATION: Elevation: 1029 Watershed: Cabin Run  
District: Central County: Doddridge Quadrangle: Oxford 7 1/2

WELL OPERATOR United Operating Company  
Address 600 Commerce Square  
Charleston, WV 25301

DESIGNATED AGENT Jack L. Trittipo  
Address 600 Commerce Square  
Charleston, WV 25301

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 April 3, 1979

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: Weir Depth 2284-2404 feet

Depth of completed well, 2485 feet Rotary  / Cable Tools

Water strata depth: Fresh, 30/900 feet; salt, \_\_\_\_\_ feet.

Coal seam depths: None recorded Is coal being mined in the area? no

Work was commenced April 9, 1979, and completed April 14, 1979

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									Kinds
Fresh water	8-5/8	H	20	X			295	Circulated	
Coal									Sizes
Intermediate									
Production	4 1/2	K	10.5	X		0	2475	1000 feet 128 cu. ft.	Depths set
Tubing									
Liners									Perforations: 2286-2400

MAY - 4 1979

OPEN FLOW DATA

OIL & GAS DIVISION  
DEPT. OF MINES

Producing formation Weir Pay zone depth 2284-2404

Gas: Initial open flow, No test Mcf/d Oil: Initial open flow, No test Bbl/d  
Final open flow, 700 Mcf/d Final open flow, " Bbl/d

Time of open flow between initial and final tests, \_\_\_\_\_ hours

Static rock pressure, 960 psig (surface measurement) after 72 hours shut in

[If applicable due to multiple completion--]

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

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

MAY 22 1979

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

WEIR FRACTURED IN TWO STAGES - 450 bbl. crude oil in each stage.  
30,000# 80/100 sand - 50,000# 20/40 sand

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Sand-Shale	Grey	H	0	1400	
Sand	Grey	H	1400	1470	
Shale-sand stringers	Grey	H	1470	1750	
Shale	Grey	S	1750	1864	
Sand	Grey	H	1864	1898	
Shale	Grey	S	1898	1948	
Lime	Grey	H	1948	2050	
Big Injun	Grey	H	2050	2106	
Shale	Grey	S	2106	2284	
Water Sandstone	Grey	S	2284	2404	
Shale	Grey	S	2404	2485	T.D.

(Attach separate sheets to complete as necessary)

United Operating Company  
Well Operator

By Jack L. Trittipio  
Its 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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. Cunningham #1  
API Well No. 47-017-2371  
State County Perm

WELL TYPE: Oil \_\_\_ / Gas X /  
(If "Gas", Production X / Underground storage \_\_\_ / Deep \_\_\_ / Shallow \_\_\_)  
LOCATION: Elevation: 1029 Watershed: Cabin Run  
District: Central County: Doddridge Quadrangle: Oxford 7 1/2

WELL OPERATOR United Operating Company  
Address 600 Commerce Square  
Charleston, WV 25301

DESIGNATED AGENT Jack L. Trittipo  
Address 600 Commerce Square  
Charleston, WV 25301

OIL & GAS ROYALTY OWNER Stella May et al  
Address West Union  
West Virginia

COAL OPERATOR None  
Address: \_\_\_\_\_

ACREAGE 65.06  
SURFACE OWNER Glenn Cunningham  
Address P. O. Box 337  
Parson, WV 26287  
ACREAGE 65.06

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name na  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_

FIELD SALE (IF MADE) TO:  
Name \_\_\_\_\_  
Address \_\_\_\_\_

COAL LESSEE WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
**APR - 2 1979**

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, WV 26301

OIL & GAS DIVISION  
DEPT. OF MINES

*Tele: 622-3871*  
The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed \_\_\_ / lease X / other contract \_\_\_ / dated July 24, 1978, by the undersigned well operator from Stella May and Richard D. Cunningham

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

Recorded on Jan. 30, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 107 at page 378. A permit is requested as follows:

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 on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
1615 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET BOND

United Operating Company  
Well Operator  
By Jack L. Trittipo  
Its President

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) \_\_\_\_\_

Address \_\_\_\_\_

GEOLOGICAL TARGET FORMATION, Weir

Estimated depth of completed well, 2,500 feet Rotary X / Cable tools \_\_\_\_\_ /

Approximate water strata depths: Fresh, 60 feet; salt, \_\_\_\_\_ feet.

Approximate coal seam depths: none **Is coal being mined in the area?** Yes \_\_\_\_\_ / No \_\_\_\_\_ /

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									Kinds
Fresh water	8-5/8	H	20	X		300	300	circulated	
Coal									Sizes
Intermediate									
Production	4 1/2	K	10.5	X		0	2500	1,000'	Depths set
Tubing									
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 dwelling 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 12-3-79

*John R. [Signature]*

The Department of Mines, Oil and Gas Division 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 \_\_\_\_\_