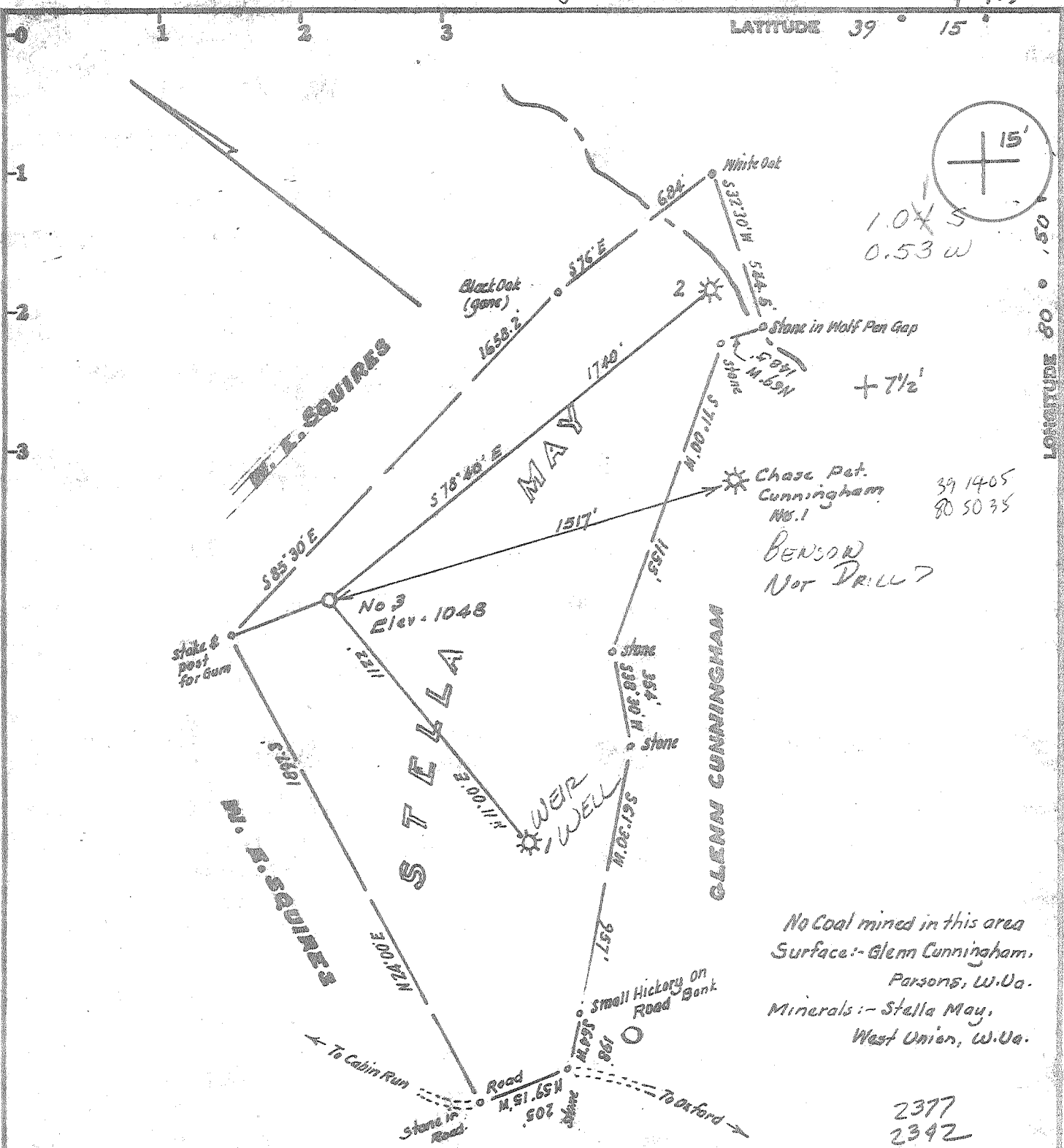


6/19/79



1.04 S  
0.53 W

39 1405  
80 50 35

BENSON  
NOT DRILL?

No Coal mined in this area  
Surface:- Glenn Cunningham,  
Parsons, W. Va.  
Minerals:- Stella May,  
West Union, W. Va.

2377  
2392  
2371

Minimum Error of Closure 1 in 200

Source of Elevation Elev Well No. 1 = 1029

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: [Signature]  
Squares: N S E W

Map No.

Company UNITED OPERATING CO.

Address 600 Commerce Square, Charleston, West Va

Farm Stella May

Tract \_\_\_\_\_ Acres 65.06 Lease No. \_\_\_\_\_

Well (Farm) No. Three Serial No. \_\_\_\_\_

Elevation (Spirit Level) 1048' NC

Quadrangle Oxford 7 1/2, Holbrook 15'

County Doddridge District Central

Engineer [Signature]

Engineer's Registration No. 1227

File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_

Date June 14, 1976 Scale 1" = 500'

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

### WELL LOCATION MAP

FILE NO. 47-017-2445

+ Denotes location of well on United States Topographic Maps, scale 1 to 25,000, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

5-5 STRAIGHT FORK - BLUESTONE CK

JUL 17 1979

AUG 01 1979

Date: July 30, 1979

Operator's Well No. Cunningham #3

API Well No. 47 - 017 - 2445  
State County Permit

OIL & GAS DIVISION  
DEPT. OF MINES

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

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

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

LOCATION: Elevation: 1048 Watershed: Cabin Run  
District: Central County: Doddridge Quadrangle: Oxford 7 1/2

WELL OPERATOR United Operating Company DESIGNATED AGENT Jack L. Trittipo  
Address 600 Commerce Square Address 600 Commerce Square  
Charleston, WV 25301 Charleston, WV 25301

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

PERMIT ISSUED ON June 19, 19 79

OIL & GAS INSPECTOR FOR THIS WORK:

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

Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, WV 622-3861

GEOLOGICAL TARGET FORMATION: Elk Depth 5150 feet  
Depth of completed well, 5278 feet Rotary X / Cable Tools \_\_\_  
Water strata depth: Fresh, 20 feet; salt, \_\_\_ feet.  
Coal seam depths: None Is coal being mined in the area? No  
Work was commenced July 10, 19 79, and completed July 26, 19 79

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		
Conductor	11-3/4	H			X	30	0	Kinds
Fresh water								Sizes
Coal								
Intermediate	8-5/8	H	24	X		726	726	circulated
Production	4-1/2	K	9.5	X		0	5250	2,500 ft. Depths set
Tubing								fillup
Liners								Perforations:
								Top Bottom
								3702 4106
								5164 5214

OPEN FLOW DATA

Producing formation Elk-Riley Pay zone depth 5151-5214 feet  
Gas: Initial open flow, NT Mcf/d Oil: Initial open flow, NA Bbl/d  
Final open flow, 2,100 Mcf/d Final open flow, \_\_\_ Bbl/d  
Time of open flow between initial and final tests, 3 hours  
Static rock pressure, 1700 psig (surface measurement) after \_\_\_ 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

(Continue on reverse side)

AUG 13 1979

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

Perforated 5164-5214. Fractured with 600 bbls. treated water, 30,000# 80/100 sand, 30,000# 20/40 sand.

Perforated 3702-4106. Limited entry. Fraced with 600 bbls. treated water, 30,000# 20/40 sand, 20,000# 20/40 sand.

WELL LOG

FORMATION	Color	Hard or Soft	S		Remarks Including indication of all fresh and salt water, coal, oil and gas
			Top Feet	Bottom Feet	
Sand-Shale	Grey	Soft	0	1890	
Lime	Grey	Hard	1890	1992	
Big Injun	Grey	Soft	1992	2055	
Shale	Grey	Soft	2055	2232	
Weir	Grey	Soft	2232	2352	
Shale	Grey	Soft	2352	3702	
Sand	Grey	Soft	3702	3710	
Shale	Grey	Soft	3710	3864	
Sand	Grey	Soft	3864	3888	
Shale	Grey	Soft	3888	4048	
Sand	Grey	Soft	4048	4120	
Shale-some sand stringers	Grey	Soft	4120	5152	
Elk S. S.	Grey	Soft	5152	5214	
Shale	Grey	Soft	5214	5276	T.D.

(Attach separate sheets to complete as necessary)

United Operating Company  
Well Operator  
By Jack L. Trittipa  
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."

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

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil  / Gas  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow  /)  
LOCATION: Elevation: 1048 Watershed: Cabin Run  
District: Central County: Doddridge Quadrangle: Oxford 7 1/2

WELL OPERATOR United Operating Co. DESIGNATED AGENT Jack L. Tritt  
Address 600 Commerce Bldg. Address Same  
Charleston, WV 25301

OIL & GAS ROYALTY OWNER Stella May  
Address West Union  
WV

COAL OPERATOR \_\_\_\_\_  
Address \_\_\_\_\_

ACREAGE \_\_\_\_\_  
SURFACE OWNER Glenn Cunningham  
Address Parsons  
W. Va.  
ACREAGE \_\_\_\_\_

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

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

COAL LESSEE WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
Address \_\_\_\_\_

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, WV 622-3801

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed  / lease  / other contract  / dated July 24, 1978, to the undersigned well operator from Stella Cunningham May & 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  / 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

RECEIVED  
JUN 19 1979

OIL & GAS DIVISION  
DEPT. OF MINES  
BLANKET BOND

United Operating Company  
Well Operator  
By Jack L. Tritt  
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, Benson-Elk

Estimated depth of completed well, 5400 feet Rotary X / Cable tools \_\_\_\_\_ /

Approximate water strata depths: Fresh, 20 feet; salt, \_\_\_\_\_ feet.

Approximate coal seam depths: N/A 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									Kinds
Fresh water									
Coal									Sizes
Intermediate	8-5/8	H	24	X		600	600	circulated	
Production	4-1/2	K or ERW	10.5	X		0	5400+	2000' fill	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 2-19-80.

Robert H. [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 \_\_\_\_\_