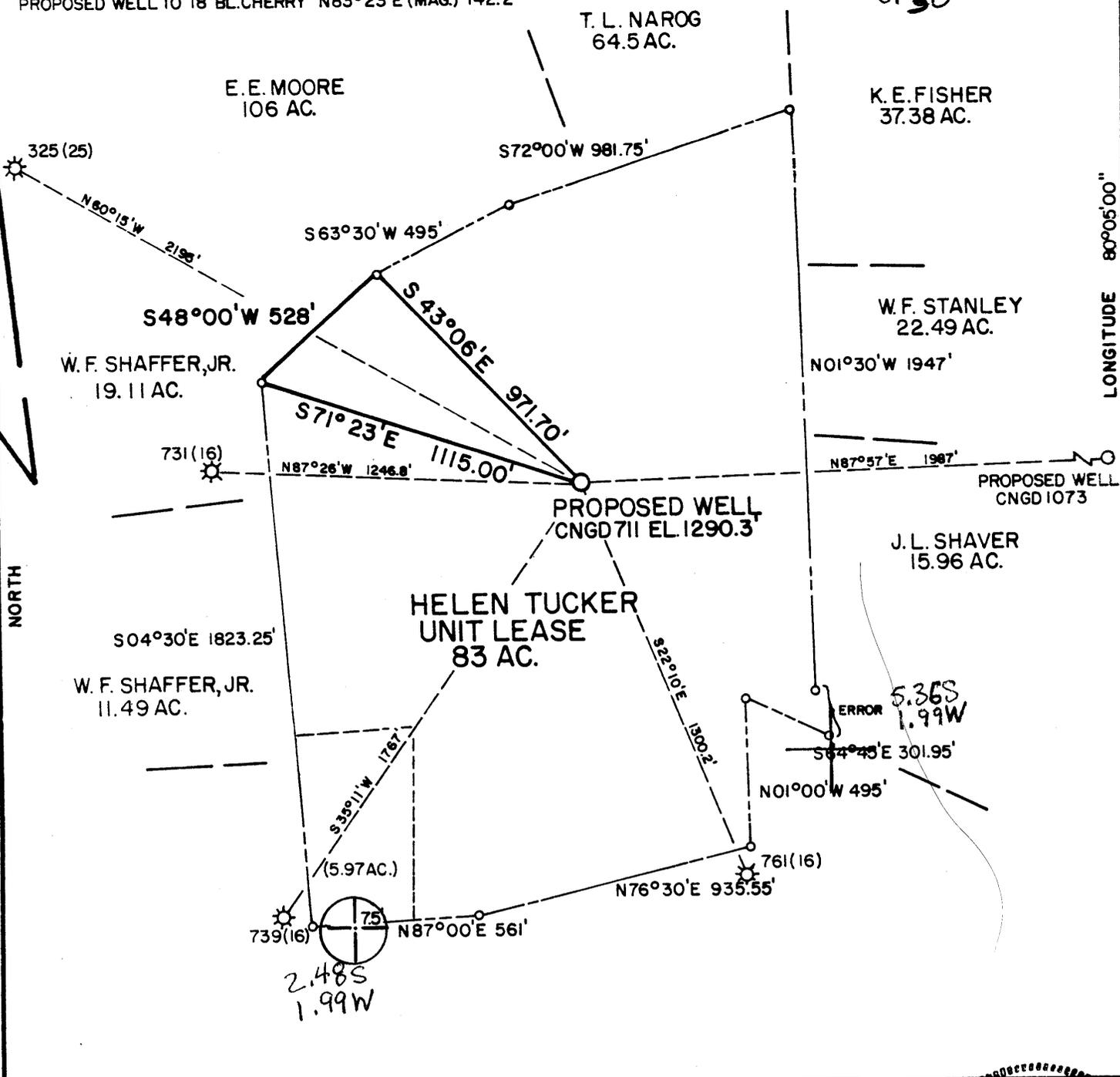


REFERENCE TIE LINES  
PROPOSED WELL TO 12<sup>th</sup> POP. N17°27'E (MAG.) 188.6'  
PROPOSED WELL TO 18<sup>th</sup> BL. CHERRY N83°23'E (MAG.) 142.2'

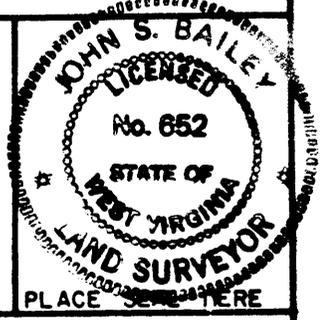
LATITUDE 39°27'30"  
39°30'

LONGITUDE 80°05'00"



FILE NO. MSES 84-384  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION RD. JCT RT. 88 & 88/1 EL. 1161

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 MINES.  
 (SIGNED) John S. Bailey  
 R. P. E. \_\_\_\_\_ P. L. S. 652



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6  
 (8-78)



Department of Mines  
 Oil & Gas Division

DATE MAY 7, 19 84  
 OPERATOR'S WELL NO. CNGD 711  
 API WELL NO. \_\_\_\_\_  
47 - 049 - 0785  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS", PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X)  
 LOCATION: ELEVATION 1290.30' WATER SHED GOOSE CREEK  
 DISTRICT UNION 6 COUNTY MARION  
 QUADRANGLE FAIRMONT EAST 75 (1976) 342 FAIRMONT 041 NC2  
 SURFACE OWNER DAVID G. FRAZER ET. UX. ACREAGE 61.23  
 OIL & GAS ROYALTY OWNER DAVID G. FRAZER ET. AL. (HELEN TUCKER UNIT) LEASE ACREAGE 83  
 LEASE NO. 84130  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION BALLTOWN ESTIMATED DEPTH 3500'  
 WELL OPERATOR CNG DEVELOPMENT COMPANY 142 DESIGNATED AGENT GARY A. NICHOLAS  
 ADDRESS ONE PARK RIDGE CENTER PITTSBURGH, PA. 15244 ADDRESS CROSSWIND CORPORATE PARK BRIDGEPORT, W.V. 26330

JUN 11 1984



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

McCullough Ran Corrlog & Perforated 4th Sand 2074 - 2086; 10 holes (.41)  
Halliburton Fractured 4th Sand; 50,000# 20/40 Sand, 500 gals 10% MOD 202 Acid + 1000 gals Enwar

McCullough Perforated 50' Sand 1630 - 1719; 12 holes (.41)  
Halliburton Fractured 50' Sand 41,000# 20/40 Sand, 500 gals 15% MOD 202 + 1000 gals Enwar

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			0	10	Hole Wet @ 185'
Shale			10	48	Coal 385 - 390 Coal 520 - 525
Lime			48	60	
Sd & Sh			60	385	
Coal			385	390	
Sd & Sh			390	520	
Coal			520	525	
RR, Sd & Sh			525	1015	
Lime			1015	1030	
Big Lime			1030	1150	
Big Injun			1150	1263	
Sd & Sh			1263	3405	
See Attached Sheet for Log Tops				Balltown @T.D.	

(Attach separate sheets as necessary)

CNG Development Company

Well Operator

By: *Gary A. Hubler*

Date: July 23, 1984

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 ~~any~~, encountered in the drilling of a well."

CNGD Well No. 711  
H. Tucker  
Marion County, WV  
API No. 47-049-0785

pg 2

ELECTRIC LOG TOPS ✓

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>
Big Injun	1135	1227
Pocono	1242	1283
50'	1628	1735
30'	1744	1782
Gordon Stray/Gordon	1798	1929
4th	2028	2085
4th A	2100	2120
5th	2159	2207
Warren	2548	2577
Speechley	2848	2882
Balltown	2980	3210

**RECEIVED**

AUG 20 1984

OIL & GAS DIVISION  
DEPT. OF MINES

SEP 24 1984



1) Date: May 25, 19 84  
 2) Operator's Well No. CNGD 711  
 3) API Well No. 47 - 049 - 0785  
 State \_\_\_\_\_ County \_\_\_\_\_ Permit \_\_\_\_\_

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES, OIL AND GAS DIVISION  
APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil \_\_\_\_\_ / Gas X /  
 B (If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow X /)
- 5) LOCATION: Elevation: 1290.3 Watershed: Goose Creek  
 District: Union County: Marion Quadrangle: Fairmont West
- 6) WELL OPERATOR CNG Development Company 7) DESIGNATED AGENT Mr. Gary Nicholas  
 Address c/o Paul Garrett, PO Box 15746 Address Crosswind Corporate Park  
Pittsburgh, PA 15244 Rt. 2, Box 698, Bridgeport, WV 26301
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Mr. Donald Ellis Name S. W. Jack Drilling Company  
 Address P. O. Box 47 Address P O Box 48  
Blenmont, WV 26134 Buckhannon, WV 26201
- 10) PROPOSED WELL WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate X  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, 4th Sand  
 12) Estimated depth of completed well, 3400 feet  
 13) Approximate strata depths: Fresh, 202, 316, 656, 951 feet; salt, \_\_\_\_\_ feet.  
 14) Approximate coal seam depths: 169-173, 251-255, Is coal being mined in the area? Yes \_\_\_\_\_
- 15) CASING AND TUBING PROGRAM 387-392, 520-524

**RECEIVED**  
 MAY 29 1984  
 OIL & GAS DIVISION  
 No. X  
 DEPT. OF MINES

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	11-3/4	H-40	42	X		40	40	To surface	By Rule 15.05
Coal									Sizes
Intermediate	8-5/8	X-42	23	X		1050	1050	To surface	By Rule 15.05
Production	4-1/2	J-55	10.5	X		3400	3400	200-400 sks	Depths set
Tubing	1-1/2	CN-55	2.75	X					
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-049-0785 Date June 6, 19 84

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires June 6, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>6</u>	Agent: <u>[Signature]</u>	Plat: <u>[Signature]</u>	Casing: <u>[Signature]</u>	Fee: <u>002-908</u>
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[Signature]  
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.