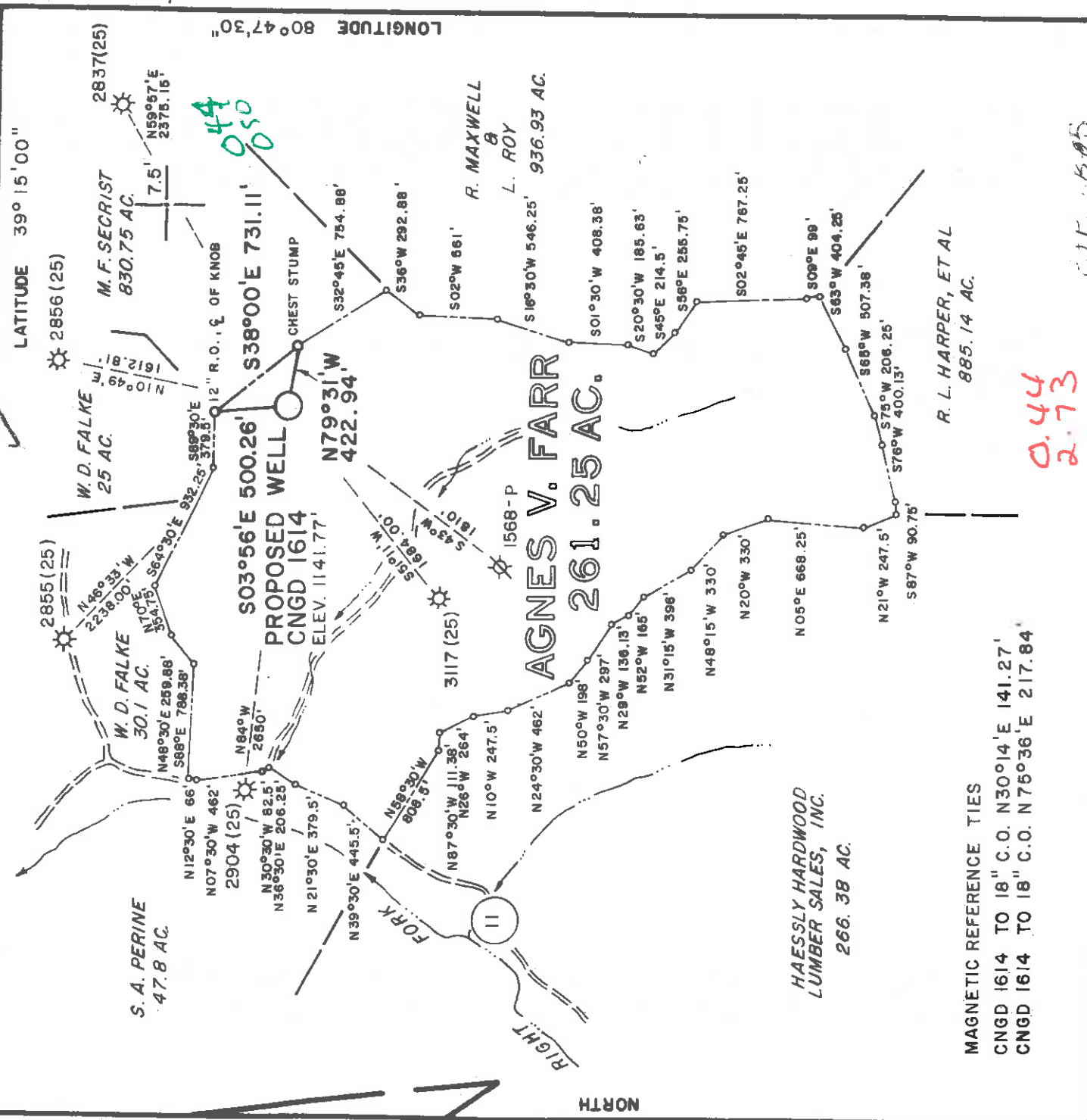


2,690

2,340



MAGNETIC REFERENCE TIES
 CNGD 1614 TO 18" C.O. N30°14'E 141.27'
 CNGD 1614 TO 18" C.O. N75°36'E 217.84'

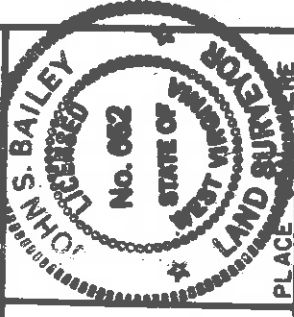
0.44
 2.73

FILE NO. MSES 84-581
 DRAWN BY SARC
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION BM IN CO. RT. 11 B DRIVE, ELEV. 881'

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

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. 1 S. 652



Department of Mines
 Oil & Gas Division

DATE DECEMBER 20 19 84
 OPERATOR'S WELL NO. CNGD 1614
 API WELL NO. 47-017-3431-W
 STATE WV COUNTY PLUM PERMIT PLUM

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS", PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1141.77 WATER SHED RIGHT FORK

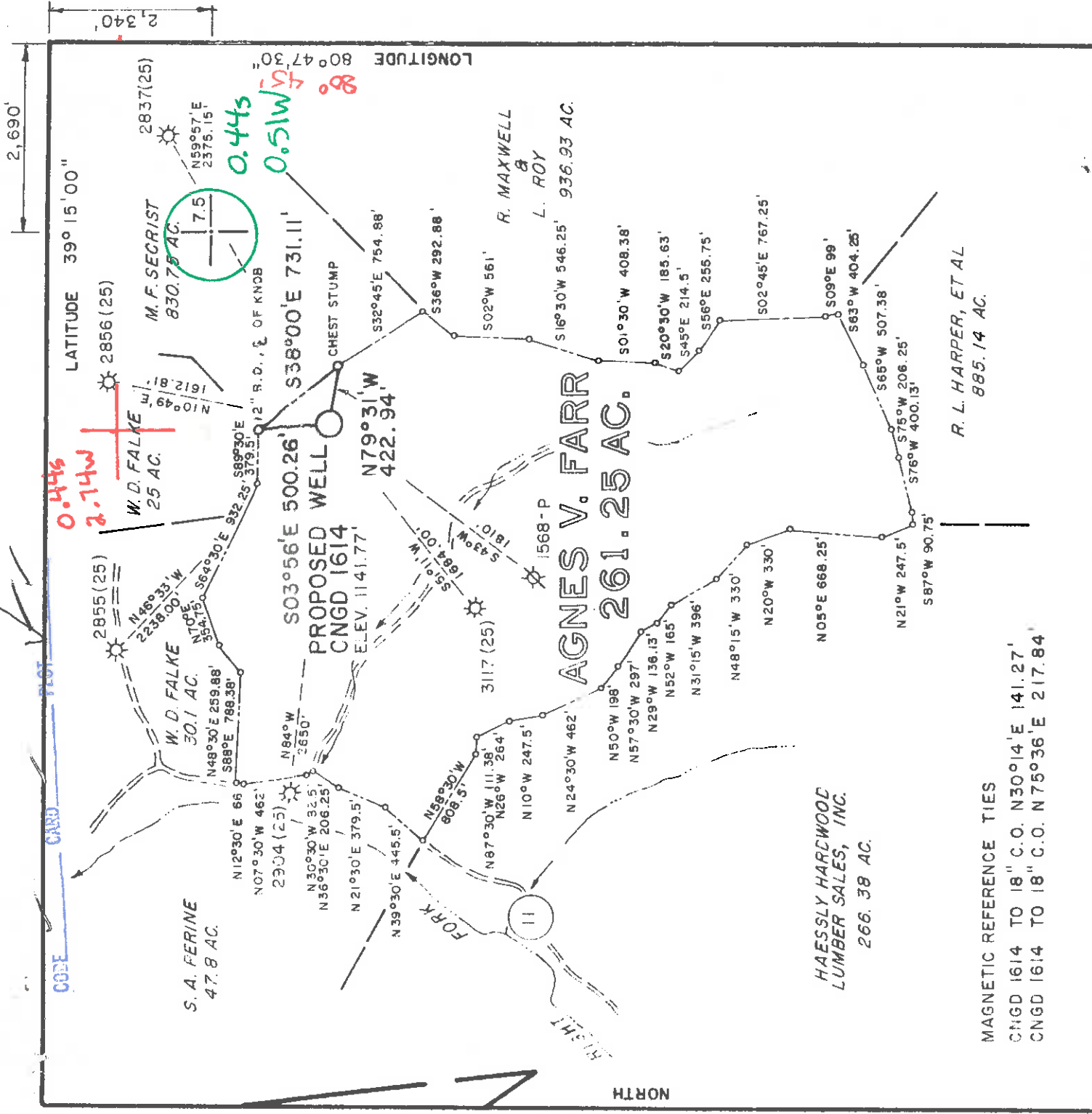
DISTRICT WEST UNION COUNTY DODDRIDGE
 QUADRANGLE OXFORD, WV 7.5' 1964 (1979)
 SURFACE OWNER ANDERSON H. II & ZOE K. WALTERS ACREAGE 261.25 ±
 OIL & GAS ROYALTY OWNER RUBY TERESA MAXWELL LEASE NO. 4783

PROPOSED WORK: DRILL 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 ALEXANDER ESTIMATED DEPTH 5375'
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER ADDRESS RT. 2, BOX 164
PITTSBURGH, PA 15244 ADDRESS BRIDGEPORT, WV 26330

OWNED

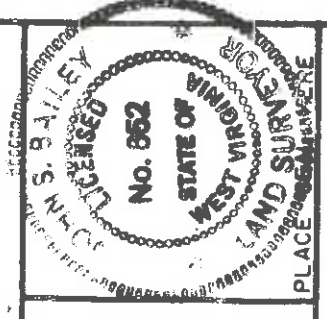
DODD 3431-W



MAGNETIC REFERENCE TIES
 CNGD 1614 TO 18" C.O. N30°14'E 141.27'
 CNGD 1614 TO 18" C.O. N75°36'E 217.84'

FILE NO. MSES 84-581
 DRAWN BY SARC
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION BM INT. CO. RT. 11 B DRIVE, ELEV. 881'

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) S. Bailey R.P.E. 652



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



Department of Mines
 Oil & Gas Division

DATE DECEMBER 20 19 84
 OPERATOR'S WELL NO. CNGD 1614
 API WELL NO. 47-017-3431
 STATE WEST VIRGINIA COUNTY PUTNAM PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS", PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1141.77' WATER SHED RIGHT FORK
 DISTRICT WEST UNION COUNTY DODDRIDGE
 QUADRANGLE OXFORD, WV 7.5' 1964 (1979) 326 Holbrook 058 NE3
 SURFACE OWNER ANDERSON H. II & ZOE K. WALTERS ACREAGE 261.25 ±
 OIL & GAS ROYALTY OWNER RUBY TERESA MAXWELL LEASE NO. 4783 LEASE ACREAGE 262

PROPOSED WORK: DRILL 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 ALEXANDER ESTIMATED DEPTH 5375'
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER ADDRESS RT. 2, BOX 164
PITTSBURGH, PA 15244 147 BRIDGEPORT, WV 26330
6-6 Straight Fork - Bluestone Creek (133)

MAY 13 1985

Plat No. 1111

Division
State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

JAN 20 1994

Permitting
Office of Oil & Gas
Well Operator's Report of Well Work

Farm name: WALTERS, ANDERSON & ZOE Operator Well No.: CNGP 1614

LOCATION: Elevation: 1,141.77 Quadrangle: OXFORD

District: WEST UNION County: DODDRIDGE
Latitude: 2340 Feet South of 39 Deg. 15Min. Sec.
Longitude 2690 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: CNG PRODUCING COMPANY

ROUTE 2, BOX 698
BRIDGEPORT, WV 26330-0698

Agent: RODNEY J. BIGGS

Inspector: MIKE UNDERWOOD
Permit Issued: 10/04/93
Well work Commenced: 10/29/93
Well work Completed: 01/13/94

Verbal Plugging
Permission granted on: _____
Rotary Cable _____ Rig

Total Depth (feet) _____
Fresh water depths (ft) _____

Salt water depths (ft) _____

Is coal being mined in area (Y/N)? _____
Coal Depths (ft): _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
NO ADDITIONAL CASING RAN IN WELL			

OPEN FLOW DATA

Speechley

Producing formation Balltown Pay zone depth (ft) 3280-3406
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow 3724-3726
 Final open flow 310 MCF/d Final open flow 3815-3825
 Time of open flow between initial and final tests NA Bbl/d
 Static rock Pressure 300 psig (surface pressure) after 1 Hours

*Commingled with existing production

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: Rodney J. Biggs, Manager
CNG PRODUCING COMPANY

By: RJ Biggs

Date: January 19, 1994

[Handwritten signature]

Spechley 3280-3406
Perf. Balltown 3724-3726, 4 shots; 3815-3825, 26 shots

Frac:	Balltown	Spechley
Broke Form.	1700	1690
Total Fl.	578 bbls	578 bbl
Total Sand	39,000#	45,000#
Ave. Rate	31 BPM	30 BPM
Ave. Press.	2000#	2040#
Sand Conc.	1-3	1-4
Frac Grad	.75	.73

TD 5385
DP - 424
DPT - 439

215<1

RECEIVED

JUN 2 1985 State of West Virginia

DEPT. OF MINING
Department of Mines
Oil and Gas Division

Date June 18, 1985
Operator's
Well No. CNGD.MN.161A
Farm Fair
API No. 47 - 017 - 3431

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 X / Underground Storage / Deep / Shallow Y /)

LOCATION: Elevation: 1141.7 Watershed _____ Right Fork _____
District: West Union County Doddridge Quadrangle Oxford, WV 7.5

COMPANY CNG Development Company
ADDRESS P. O. Box 15746
Pittsburgh, PA 15244
DESIGNATED AGENT Gary A. Nicholas
ADDRESS Rt. 2 Box 698
Bridgeport, WV 26330
SURFACE OWNER Anderson, H. II & Zoe K. Walters
4837 Hawkwood Trail
ADDRESS Winston-Salem, NC 27103

MINERAL RIGHTS OWNER Ruby Teresa Maxwell
405 Church Street
ADDRESS West Union, WV 26456

OIL AND GAS INSPECTOR FOR THIS WORK

Mike Underwood ADDRESS Rt. 2 Box 114
Salem, WV 26426

PERMIT ISSUED May 6, 1985

DRILLING COMMENCED May 30, 1985

DRILLING COMPLETED June 7, 1985

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

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
9 5/8	202	202	To Surf
8 5/8	1623	1623	To Surf
7			
5 1/2			
4 1/2	5349	5349	565 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 5375 feet
Depth of completed well 5385 feet Rotary X / Cable Tools _____
Water strata depth: Fresh 25' feet; Salt _____ feet
Coal seam depths: 523 - 525 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5157 - 5207 feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow 888 Mcf/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 400 psig (surface measurement) after 1 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 Oil: Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure _____ psig (surface measurement) after 0.8 hours shut in

(Continue on reverse side)

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

Superior ran CCL 7 perf. Alexander 5157 - 5207; 10 holes; .39
 Halliburton 75Q Foam Frac - Alexander - gel (#/Mgal) WG-11 - 30 premixed, Break (psi) 2700,
 Break Rate (bpm) 24, Avg. Tr.Pr. (psi) 2800, Max. Tr.Pr.(psi) 2860, Avg Rate (bpm) 16,
 HHP available 1000, S L Fluid (bbl foam) 448, Total Fluid (bbl) 653, 55,000# 20/40 Sand,
 ISIP w/water (psi) 1400, 5 min (psi) 1320, BHFP (psi) 3650, E2(SCF) 487,000

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 & Top Soil			0	10	3/4" stream water @ 25'
Sand, Shale & RR			10	523	1/2" stream water @ 400'
Coal			523	525	
Sand, Shale & RR			525	1820	
Lime			1820	1870	
Big Lime			1870	1935	
Sand & Shale			1935	5385	Alexander @ T.D.
<u>LOG TOP</u> ✓			1870	1945	
Big Lime			1945	2000	
Big Injun			2106	2276	
Weir			2367	2375	
Berea			3230	3290	
Spcl			3814	3824	
Bltn			4422	4455	
Bdff <i>Breadford</i>			5074	5084	
Leopold			5120	5220	
Alex					

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY
 Well Operator
 By: *Henry A. Williams*
 Date: June 18, 1965

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 ^{logs} encountered in the drilling of a well."



1) Date: April 1, 19 85
 2) Operator's Well No. 1614
 3) API Well No. 47-017-3431
 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
 B (If "Gas", Production Underground storage Deep Shallow
 5) LOCATION: Elevation: 1141.7 Watershed: Right Fork
 District: West Union County: Doddridge Quadrangle: Oxford, WV 7.5
 6) WELL OPERATOR CNG Development Company 7) DESIGNATED AGENT Gary Nicholas
 Address c/o Paul W. Garrett, P.O. Box 15746 Address Crosswind Corporate Park
Pittsburgh, PA 15244 Rt. 2, Box 698, Bridgeport, WV 26330
 8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Mike Underwood
 Address Rt. 2, box 114 Name Sam Jack Drilling Co.
Salem, WV 26426 Address P.O. Box 48
Buckhannon, WV 26201

10) PROPOSED WELL WORK: Drill deeper Redrill Stimulate
 Plug off old formation Perforate new formation
 Other physical change in well (specify) _____
 11) GEOLOGICAL TARGET FORMATION, Alexander
 12) Estimated depth of completed well, 5375 feet
 13) Approximate trata depths: Fresh, 1436 feet; salt, _____ feet.
 14) Approximate coal seam depths: 512, 1030, 1251 Is coal being mined in the area? Yes _____

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)
	Size	Gmde	Weight per ft.	For drilling	Left in well	
Conductor						
Fresh water	1-3/4	H-40	42	X		
Coal	3-5/8	X-42	23	X		
Intermediate	4-1/2	J-55	10.5	X		
Production	1-1/2	CN-55	2.75	X		
Tubing						
Liners						

Perforations: _____
 Top _____
 Bottom _____

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-017-3431 Date May 6 19 85

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 May 6, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>28</u>	<u>SW</u>	<u>MW</u>	<u>MW</u>	<u>7573</u>

Margaret J. Kavan
 Administrator, Office of Oil and Gas

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

See the reverse side of the APPLICANT'S COPY for instructions to the well operator. File

