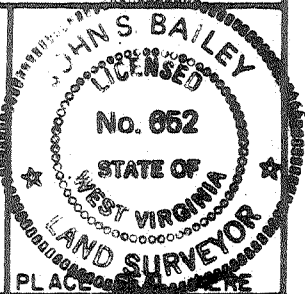


MAGNETIC REFERENCE TIE LINES
 PROPOSED WELL TO 30" FORKED BASSWOOD S49°14'E 114.23'
 PROPOSED WELL TO 33" FORKED W.O. S67°50'E 145.42'

FILE NO. MSES84-571
 DRAWN BY PJD
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION INT. CO. RT. 11/4 & PVT. RD. 1000' NE OF LOC. - EL. 860

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. _____ L. L. S. 652



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



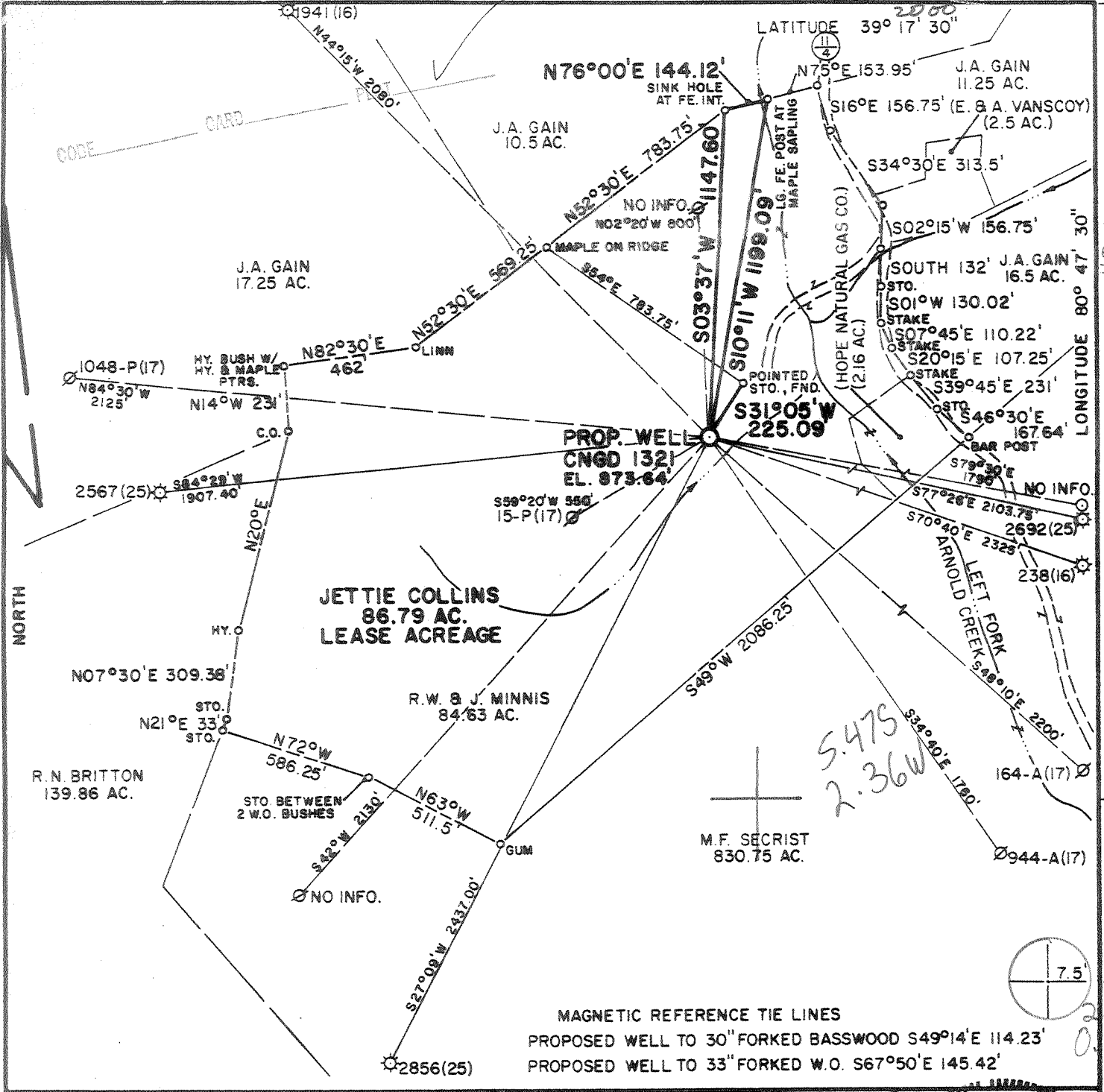
DATE NOVEMBER 15, 1984
 OPERATOR'S WELL NO. CNGD 1321
 API WELL NO. 47-017-3443-W
 STATE COUNTY PERMIT

Department of Mines
 Oil & Gas Division

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS", PRODUCTION X STORAGE DEEP SHALLOW X)
 LOCATION: ELEVATION 873.64 WATER SHED LEFT FORK - ARNOLD CREEK
 DISTRICT WEST UNION COUNTY DODDRIDGE
 QUADRANGLE WEST UNION 7.5' 1961(1976) SE
 SURFACE OWNER RICHARD W. & JOAN MINNIS ACREAGE 84.63
 OIL & GAS ROYALTY OWNER RICHARD W. & JOAN MINNIS LEASE ACREAGE 86.79
 LEASE NO. 71450
 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 ALEXANDER ESTIMATED DEPTH 5160'
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER PITTSBURGH, PA 15244 ADDRESS RT. 2, BOX 698 BRIDGEPORT, WV 26330

OWWO 6-6 Straight Fork - Bluestone Creek (133)

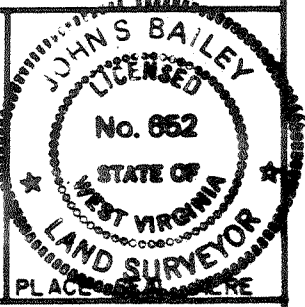
DODD 3445-W



MAGNETIC REFERENCE TIE LINES
 PROPOSED WELL TO 30" FORKED BASSWOOD S49°14'E 114.23'
 PROPOSED WELL TO 33" FORKED W.O. S67°50'E 145.42'

FILE NO. MSES84-571
 DRAWN BY PJD
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION INT. CO. RT. 11/4 & PVT. RD. 1000 NE OF LOC. - EL. 860

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. _____ L. L. S. 652



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



Department of Mines
 Oil & Gas Division

DATE NOVEMBER 15, 1984
 OPERATOR'S WELL NO. CNGD 1321
 API WELL NO. 47 - 017 - 3445
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS", PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X)
 LOCATION: ELEVATION 873.64' WATER SHED LEFT FORK - ARNOLD CREEK
 DISTRICT WEST UNION 8 COUNTY DODDRIDGE
 QUADRANGLE WEST UNION 7.5' 1961(1976) 671 West Union 133 SE 9
 SURFACE OWNER RICHARD W. & JOAN MINNIS ACREAGE 84.63
 OIL & GAS ROYALTY OWNER RICHARD W. & JOAN MINNIS LEASE ACREAGE 86.79
 LEASE NO. 71450
 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 ALEXANDER ESTIMATED DEPTH 5160'
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER ADDRESS RT. 2, BOX 698
PITTSBURGH, PA 15244 BRIDGEPORT, WV 26330

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DEC 19 1985



DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia
Department of Mines
Oil and Gas Division

Date December 5, 1985
Operator's
Well No. CNGD WN 1321
Farm Minnis
API No. 47 - 017 - 3445

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 X /)

LOCATION: Elevation: 873.64 Watershed Left Fork-Arnold Creek
District: West Union County Doddridge Quadrangle West Union

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 Richard W. & Joan Minnis
ADDRESS 1322 North Astor Street
Chicago, IL 60610
MINERAL RIGHTS OWNER Richard W. & Joan Minnis
ADDRESS 1322 North Astor Street
Chicago, IL 60610
OIL AND GAS INSPECTOR FOR THIS WORK
Mike Underwood ADDRESS Rt. 2 Box 114
Salem, WV 26426
PERMIT ISSUED July 3, 1985
DRILLING COMMENCED Nov. 8, 1985
DRILLING COMPLETED Nov. 14, 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.			
13-10"	121	121	65 sks
9 5/8			
8 5/8	928	928	100 sks
7			
5 1/2			
4 1/2	5057	5057	300 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 5160 feet
Depth of completed well 5182 feet Rotary X / Cable Tools
Water strata depth: Fresh 400 feet; Salt feet
Coal seam depths: Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 4893-4931 feet
Gas: Initial open flow 750 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 1200 psig (surface measurement) after 24 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 hours shut in

(Continue on reverse side)

DEC 30 1985

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

Perforate Alexander with 3-3/8" expendable guns 4882-4893, 18 holes, 4907-4914, 14 holes, 4928-4931, 8 holes, .47 Alpha jets. Halliburton acidize Break 1200, 16 bbls/min, ISI 1040, 5 min 1000, used 2000 gals 15% FE Acid & 80 1-1/4" balls 1.3 specific gravity for complete ballout @ 4000#

Halliburton Foam Frac 75Q-Alexander - Break 1200#, Avg TPSI 3000, Avg Rate 25 BPM, ISI 1600, 5 min 1500, used 500 gals 15% FE Acid & 140,000 20/40 Sand and 865,000 SCFN2

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Top Soil			0	5	Hole Damp @ 40'
Sand, Shale & RR			5	1660	1" stream water @ 400'
Big Lime			1660	1715	
Sand & Shale			1715	5182	TD. alex @ TD
<u>LOG TOPS</u> ✓					
Big Injun			1670	1750	
Weir			1902	2010	
Gantz			2103	2111	
Gordon Stray			2318	2349	
Warren			2965	3016	
Lower Warren			3035	3130	
Benson			4603	4607	
Alexander			4858	4940	

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY

Well Operator

By:

Date:

December 9, 1985

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."

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

Perforate Alexander with 3-3/8" expendable guns 4882-4893, 18 holes, 4907-4914, 14 holes, 4928-4931, 8 hole, .47 Alpha jets. Halliburton acidize Break 1200, 16 bbls/min, ISI 1040, 5 min 1000, used 2000 gals 15% FE Acid & 80 1-1/4" balls 1.3 specific gravity for complete ballout @ 4000#
Halliburton Foam Frac 75Q Alexander - Break 1200#, Avg TPSI 3000, Avg Rate 25 BPM, ISI 1600, 5 min 1500, used 500 gals 15% FE Acid & 140,000 20/40 Sand and 865,000 SCFN2

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Top Soil			0	5	Hole Damp @ 40'
Sand, Shale & RR			5	1660	1" stream water @ 400'
Big Lime			1660	1715	
Sand & Shale			1715	5182	TD. alex @ TD
<u>LOG TOPS</u> ✓					
Big Injun			1670	1750	
Weir			1902	2010	
Gantz			2103	2111	
Gordon Stray			2318	2349	
Warren			2965	3016	
Lower Warren			3035	3130	
Benson			4603	4607	
Alexander			4858	4940	

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY

Well Operator

By: *Gary S. [Signature]*

Date: December 9, 1985

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 [unclear], encountered in the drilling of a well."

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

10 23
Accounting
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: MINNIS, RICHARD W. Operator Well No.: CNGP 1321

LOCATION: Elevation: 873.64 Quadrangle: WEST UNION

District: WEST UNION County: DODDRIDGE
Latitude: 13640 Feet South of 39 Deg. 17Min. 30 Sec.
Longitude: 710 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: 11/08/93
Well work Completed: 11/29/93
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 in well			

OPEN FLOW DATA

Producing formation Speechley Pay zone depth (ft) 2996-3128
Gordon 2334-2348
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow * 231 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
 *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: R. J. Biggs
Date: December 7, 1993

DEC 7 1993
AL
12 8 93

Perforated Speechley 2996-3128, 28 holes
Gordon 2334-2348, 25 holes

Water Frac:

Total Fluid bbls	477	426
Total Sand	45,000#	30,000#
Total Acid	500 gal	500 gal
Ave Rate - BPM	31	27
Ave Pres.	2100#	2650#
Broke Fm.	1630#	2700#
Frac Grad psi/ft	.81	1.16

TD 5182

DF 424

DF 439

FORM NO. 2 (B)
(Obverse)
7-83

FILE COPY

RECEIVED

JUN 11 1985



1) Date: June 3, 19 85

2) Operator's Well No. 1321

3) API Well No. 47 -017-3445
State County Permit

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

OIL & GAS DIVISION
DEPT. OF MINES

- 4) WELL TYPE: A Oil Gas X
B (If "Gas", Production X / Underground storage / Deep / Shallow X /)
- 5) LOCATION: Elevation: 873.64 Watershed: Left Fork-Arnold Creek
District: West Union County: Doddridge Quadrangle: West Union
- 6) WELL OPERATOR CNG Development Company (42) 7) DESIGNATED AGENT Gary Nicholas
Address One Park Ridge Center P.O. Box 15746 Address Crosswind Corporate Park Rte 2 Box 698
Pittsburgh, PA 15244 10110 Bridgeport, W. VA 26330
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
Name Mike Underwood Name Sam Jack Drilling Company
Address Route 2 Box 114 Address P.O. Box 48
Salem, WV 26426 Buckhannon, W. VA 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, Alexander (439)
- 12) Estimated depth of completed well, 5160 feet
- 13) Approximate trata depths: Fresh, - feet; salt, feet.
- 14) Approximate coal seam depths: 287 Is coal being mined in the area? Yes / No

15) 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	11-3/4	H-40	42	X		<u>100</u>	<u>100</u>	To Surface	By Rule 15.05
Coal									Sizes
Intermediate	8-5/8	X-42	23	X		900	900	To Surface	By Rule 15.05
Production	4-1/2	J-55	10.5	X		5160	5160	200-400	Depths set
Tubing	1-1/2	CN-55	2.75	X					By Rule 15.01
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-017-3445 Date July 3 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. July 3, 1987
Permit expires unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	Fee:
<u>28</u>	<u>ALB</u>	<u>MW</u>	<u>MW</u>	<u>8711</u>

Margaret J. Hesse
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