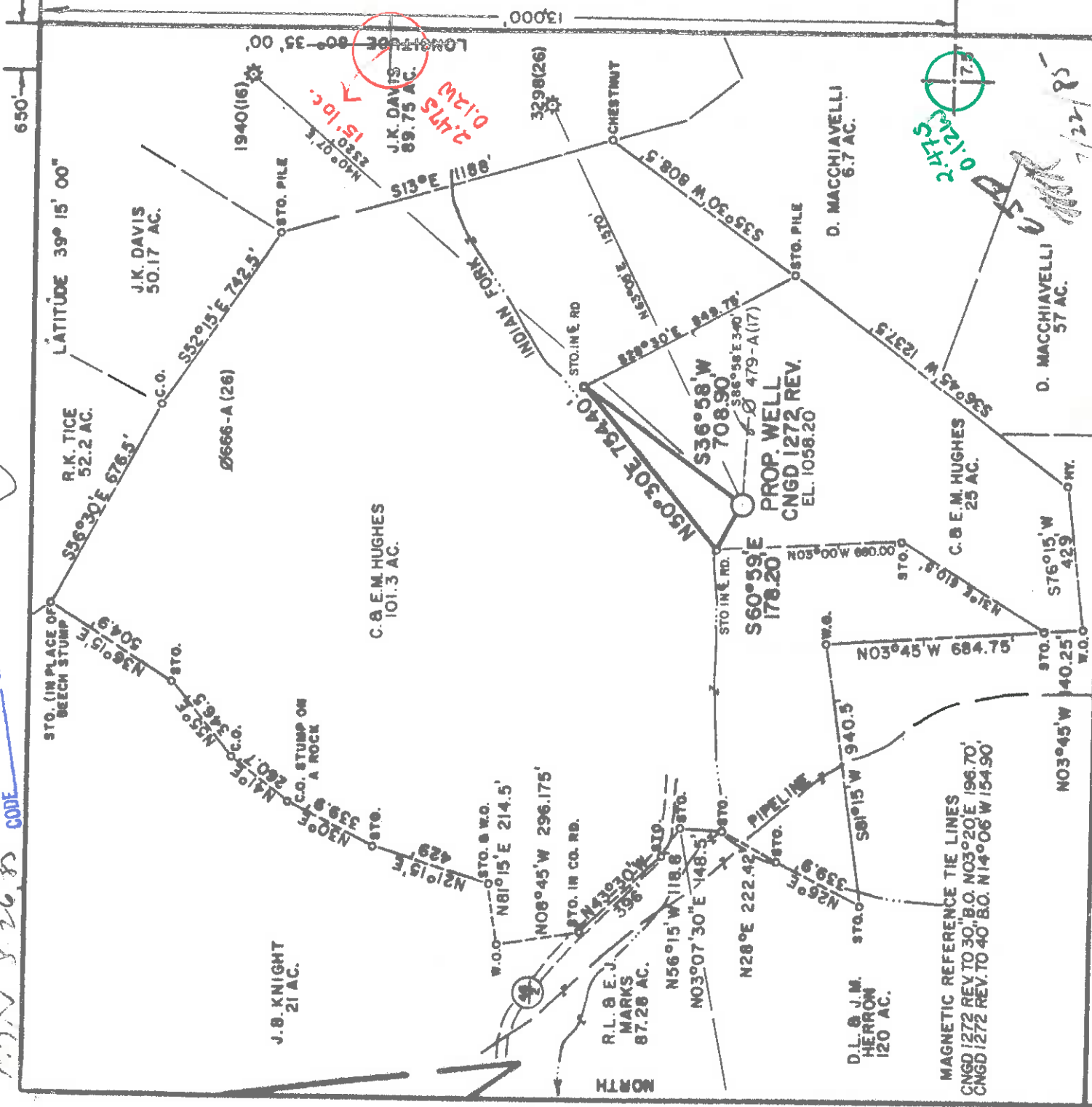


777 8 26 85 CODE

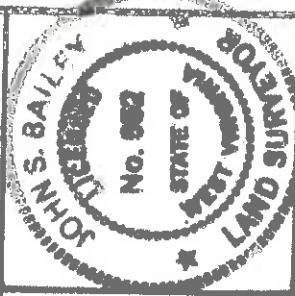
PLAN

CNW



FILE NO. MSES84-550
 DRAWN BY RVS-PAT
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION INT. CO. RTS. 45/2 & 46/3 2830 NW OF LOC. - EL. 974

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
 A.P.E. J.S. 652



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6
 (8-79)



Department of Mines
 Oil & Gas Division

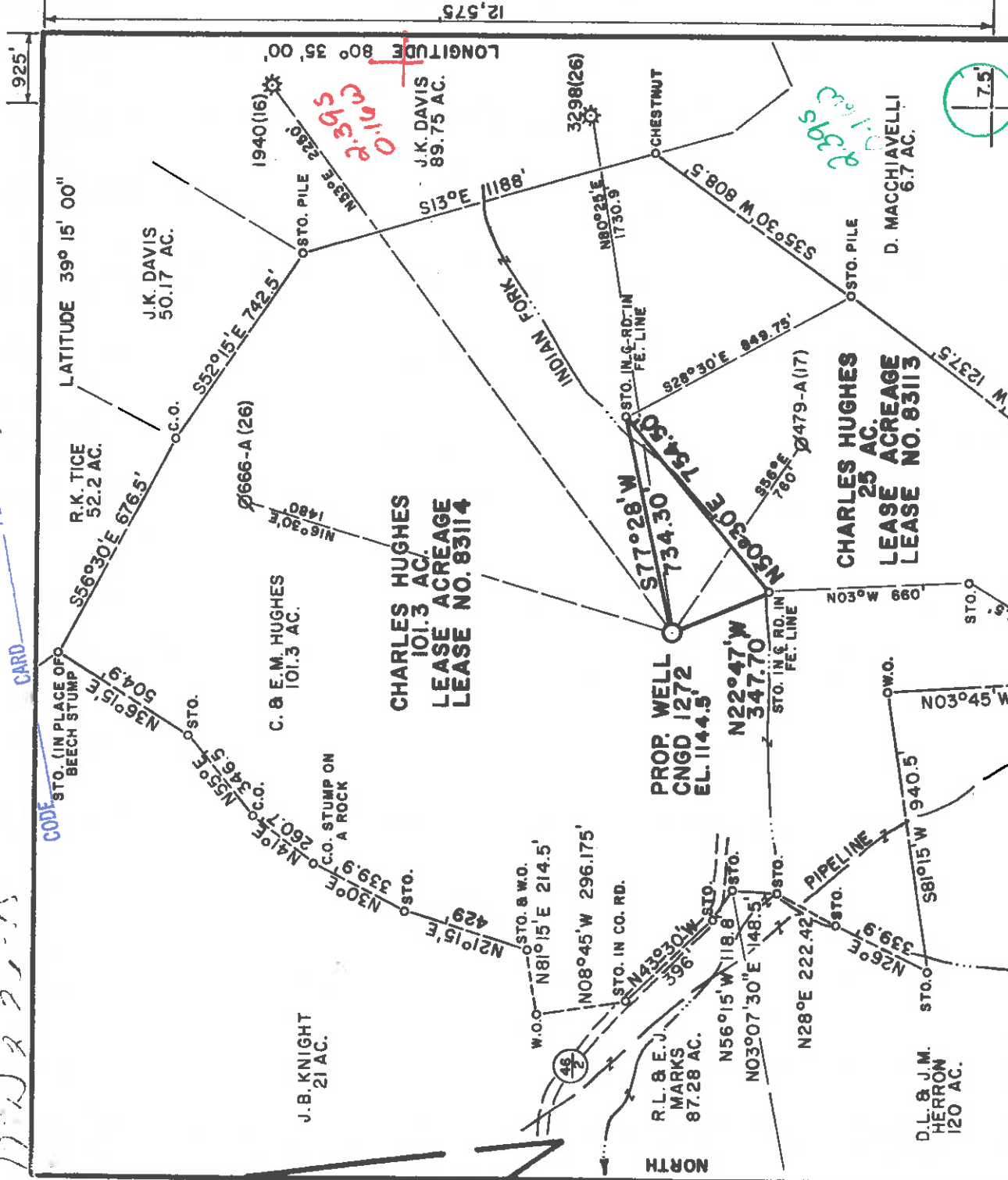
DATE JULY 19 85
 OPERATOR'S WELL NO. CNGD 1272 REV
 API WELL NO. 47-017-3408
 STATE WV COUNTY PUTNAM PERMIT 47-017-3408-REV

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS", PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1058.20 WATER SHED INDIAN FORK
 DISTRICT GREENBRIER COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC 7.5' 1964(1976) ACRES 25
 SURFACE OWNER CHARLES & EVA MEDA HUGHES
 OIL & GAS ROYALTY OWNER CHARLES & EVA MEDA HUGHES, ET AL. LEASE ACREAGE 25
 LEASE NO. 83113
 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 5470'
 WELL OPERATOR C&G DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER RT. 2, BOX 698 PITTSBURGH, PA 15244
6-6 Meathouse Fork - 815101 (146)

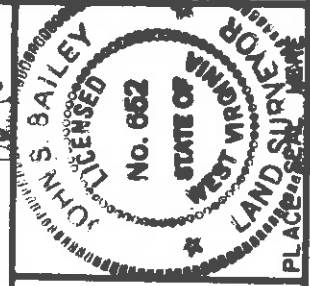
SEP 16 1985

11222-15



FILE NO. MSES84-550
 DRAWN BY PJD
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION INT. CO. RTS. 46/2 & 46/3
2800 NW OF LOC. - EL. 974'

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) J. L. Bailey 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 1, 1984
 OPERATOR'S WELL NO. CNGD 1272
 API WELL NO. 47-017
 STATE WV COUNTY PLACERS PERMIT 3408

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF 'GAS', PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1144.5 WATER SHED INDIAN FORK
 DISTRICT GREENBRIER COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC 7.5' 1964 (1976) Vadis 15' Net
 SURFACE OWNER CHARLES & EVA MEDA HUGHES ACREAGE 101.3
 OIL & GAS ROYALTY OWNER CHARLES & EVA MEDA HUGHES, ET AL. LEASE ACREAGE 101.3
 LEASE NO. 83114

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 5550'
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER ADDRESS RT. 2, BOX 698
117 PITTSBURGH, PA 15244 BRIDGEPORT, WV 26330
 PREPARED BY MCCO MAR 04 1985

PREPARED BY MCCO 1111

IV-35
(Rev 8-85)

NOV 7 - 1985

DIVISION OF OIL & GAS
DEPT. OF ENERGY



State of West Virginia
Department of Mines
Oil and Gas Division

Date: October 15, 1985
Operator's
Well No. CNGD WN 1272
Farm Hughes
API No. 47-017 - 3408

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: 1058.20 Watershed Indian Fork
District: Greenbrier County Doddridge Quadrangle Big Isaac

COMPANY CNG Development Company
ADDRESS P. O. Box 15746
Pittsburgh, PA 15244
DESIGNATED AGENT Gary A. Nicholas
ADDRESS Rt. 2 Box 698
Bridgport, WV 26130
SURFACE OWNER Charles & Eva Meda Hughes
ADDRESS Rt. 1 Box 368
Salem, WV 26426
MINERAL RIGHTS OWNER Charles & Eva Meda Hughes
ADDRESS Rt. 1 Box 368
Salem, WV 26426

OIL AND GAS INSPECTOR FOR THIS WORK
Mike Underwood ADDRESS Rt. 2 Box 114
Salem, WV 26426
PERMIT ISSUED Sept. 3, 1985
DRILLING COMMENCED Sept. 16, 1985
DRILLING COMPLETED Sept. 22, 1985
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON

Casing Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"	163	163	To Surf.
9 5/8			
8 5/8	1500	1500	To Surf.
7			
5 1/2			
4 1/2	5451	5451	550 ska
3			
2 -3/8	5191	5191	-----
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 5470 feet
Depth of completed well 5490 feet Rotary X / Cable Tools
Water strata depth: Fresh ³⁸/₈₀ feet; Salt feet
Coal seam depths: ⁵⁵⁻⁵⁷/₇₀₋₆₇₄ 1400 Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Alexander
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow 581 Mcf/d Final open flow Only a Trace Bbl/d
Time of open flow between initial and final tests 4 hours

Static rock pressure 1050 psig (surface measurement) after 24 hours shut in
(If applicable due to multiple completion--)

Second producing formation
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)

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

Superior Wireline Perf. Alexander 5203 - 27, 10 holes; Beneath 4893 - 97, 12 holes;
 Speechley 3495 - 3616, 10 holes; Warren 3328 - 49, 10 holes
 Halliburton 75Q Foam Frac - 1st stage - Break 2350, Ave. HHP 4, Ave BPM 16, Ave Pres. 3200,
 Max. Tr. Pres. 3280 psi, 500 gal MOD 202, 45,000# 20/40 Sand, Max Conc. 3, Total Fluid
 520 BBL, S L Fluid 440 BBL, ISIP 2750/N2, Total Nit. 550,000 SCF.
 2nd stage - Break 3500, Ave. HHP 4, Ave BPM 16, Ave. Pres. 3100 psi, Max. Tr. Pr. 3200 psi,
 500 gal MOD 202, 60,000# 20/40 Sand, Max. Conc. 3, Total Fluid 680 BBL, S L Fluid 560 BBL,
 ISIP 2570/N2, 550,000 SCF N2. 3rd stage - Break 1600, Ave. HHP 4, Ave BPM 20,
 Ave Pres 2600 psi, Max.Tr. Pres. 2740 psi, 500 gal MOD 202, 45,000# 20/40 Sand, Max Conc. 3,
 Total Fluid 540 BBL, SL Fluid 440 BBL, ISIP 2160/N2, 415,000 SCF N2.
 4th stage - Break 3350, Ave. HHP 4, Ave BPM 16, Ave Pres. 3200 psi, Max.Tr.Pres. 3730 psi,
 500 gal MOD 202, 40,000# 20/40 Sand, Max Conc. 3, Total Fluid 500 BBL, SL Fluid 400 BBL,
 ISIP 1350/water, 5 min 1200 psi, 386,000 SCF N2

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
KB - GL			0	10	Hole Damp @ 38'
Soil & Sand			10	55	1/2" stream @ 80'
Coal			55	57	2-1/2" stream @ 105'
Sand, Shale & RR			57	670	1/2 - 1" stream @ 1400'
Coal			670	674	
Sand, Shale & RR			674	1960	Coal @ 55 - 57 670 - 674
Lime			1960	2110	
Injun <i>ARB</i>			2110	2180	
Sand & Shale			2180	4910	
Benson			4910	4920	
Sand & Shale			4920	5496	<i>Alex. Q-T-D</i>
LOG TOPS ✓					
Injun <i>ARB</i>			2190	2132	
Weir			2352	2280	
Sunbury			2397	2397	
Berea			3200	2444	
Warren			3590	3290	
Speechley			4050	3620	
Balltown			4310	4203	
Bradford			4880	4404	
Benson			5050	4902	
Alexander				5122	

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY
Well Operator

By: *Harold Miller*

Date: October 15, 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
 strat, encountered in the drilling of a well."

RECEIVED



1) Date: January 28, 19 85
2) Operator's Well No.: 1272
3) API Well No. 47 - 017 - 3408
State County Permit

FEB 1 1985

OIL & GAS DIV.
DEPT. OF MINES
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
5) LOCATION: Elevation: 1144.5
District: Greenbrier
Underground storage Deep Shallow
Watershed: Indian Fork
County: Doddridge
6) WELL OPERATOR: CNG Development Company
Address c/o Paul W. Garrett, P.O. Box 15746
Pittsburgh, PA 15244
Quadrangle: Big Isaac
7) DESIGNATED AGENT: Gary Nicholas
Address: Rt. 2, Box 698, Bridgeport, WV 26330
8) OIL & GAS INSPECTOR TO BE NOTIFIED: Mike Underwood
Address: Rt. 2, Box 114
Salem, WV 26426
9) DRILLING CONTRACTOR: Sam Jack Drilling Co.
Address: P.O. Box 48
Buckhannon, WV 26201

10) PROPOSED WELL WORK: Drill deeper / Drill deeper / Redrill / Stimulate
Plug off old formation / Perforate new formation

11) GEOLOGICAL TARGET FORMATION, Alexander
12) Estimated depth of completed well, 5550 feet
13) Approximate trata depths: Fresh, 2229 feet; salt, 1522 feet;
14) Approximate coal seam depths: 2229 feet. 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		
Conductor							
Fresh water	11-3/4	H-40	42	X		22540	To Surface
Coal							By rule 15.05
Intermediate	8-5/8	X-42	23	X		1625	To Surface
Production	4-1/2	J-55	10.5	X		5550	By Rule 15.05
Tubing	1-1/2	CN-55	2.75	X		200-400	Depths set
Liners							By rule 15.01

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-017-3408 Date February 26, 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 February 26, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
28	MW	MW/MW		6083

Margaret J. Lane
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



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

4) WELL TYPE: A Oil Gas
 B (If "Gas", Production
 5) LOCATION: Elevation: 1058 Undergrnd storage Indian Fork Shallow
 District: Greenbrier 4
 6) WELL OPERATOR: Development Co. CODE: 10110 7) DESIGNATED AGENT: Big Isaac 252
 Address c/o Paul W. Garrett, P.O. Box 15746
 Address: Pittsburgh, PA 15244 142
 8) OIL & GAS INSPECTOR TO BE NOTIFIED: Mike Underwood
 Name: Mike Underwood
 Address: Route 2, Box 114
 Address: Salem, WV 26426
 9) DRILLING CONTRACTOR: Sam Jack Drilling Co.
 Name: Sam Jack Drilling Co.
 Address: P.O. Box 48
 Address: 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, 5470 feet
 13) Approximate true depths: Fresh, 54, 644 feet; salt, 1393 feet
 14) Approximate coal seam depths: _____ feet
 15) CASING AND TUBING PROGRAM Is coal being mined in the area? Yes No

CASING OR TUBING TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used		
Conductor							
Fresh water	1-3/4	H-40	42		X	160	To Surface
Coal							By Rule 15.05
Intermediate	8-5/8	X-42	23		X	1500	To Surface
Production	4-1/2	J-55	10.5		X	5470	To Surface
Tubing	1-1/2	CN-55	2.75		X	200-400	By Rule 15.05
Liners							By Rule 15.01
							Perforations:
							Top
							Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-017-3408 *AEZ* Date September 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.
 Permit expires September 3, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPCP	S&E	Other
	AE	MW	MW	9765			

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.
 Director, Division of Oil and Gas



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

4) WELL TYPE: A Oil Gas
B (If "Gas", Production /
Elevation: 1058
District: Greenbrier
5) LOCATION: Underground storage Deep Shallow
Watershed: Indian Fork
County: Doddridge
6) WELL OPERATOR: CNG Development Co. CODE: 10110 7) DESIGNATED AGENT Gary Nicholas
Address c/o Paul W. Garrett, P.O. Box 15746 142
Pittsburgh, PA 15244
Address Crosswind Corporate Park
Rt. 2, Box 698, Bridgeport, WV 26330
8) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Mike Underwood
Address Route 2, Box 114
Salem, WV 26426
9) DRILLING CONTRACTOR:
Name Sam Jack Drilling Co.
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 439
12) Estimated depth of completed well, 5470 feet
13) Approximate trata depths: Fresh, 54, 644 feet; salt, 1393 feet.
14) Approximate coal seam depths: 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												
Fresh water	11-3/4	H-40	42		X		160	160	To Surface		By Rule 15.05	
Coal												
Intermediate	8-5/8	X-42	23		X		1500	1500	To Surface		By Rule 15.05	
Production	4-1/2	J-55	10.5		X		5470	5470	200-400		Depths set	
Tubing	1-1/2	CN-55	2.75		X						By Rule 15.01	
Liners											Perforations:	
											Top	Bottom

Permit number 47-017-3408 Frac
OFFICE USE ONLY
DRILLING PERMIT
September 3, 1985 Date

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 September 3, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPCP	S&E	Other
	ALB	MA	MW	9765	<input checked="" type="checkbox"/>		

NOTE: Keep one copy of this permit posted at the drilling location.
Director, Division of Oil and Gas
See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

