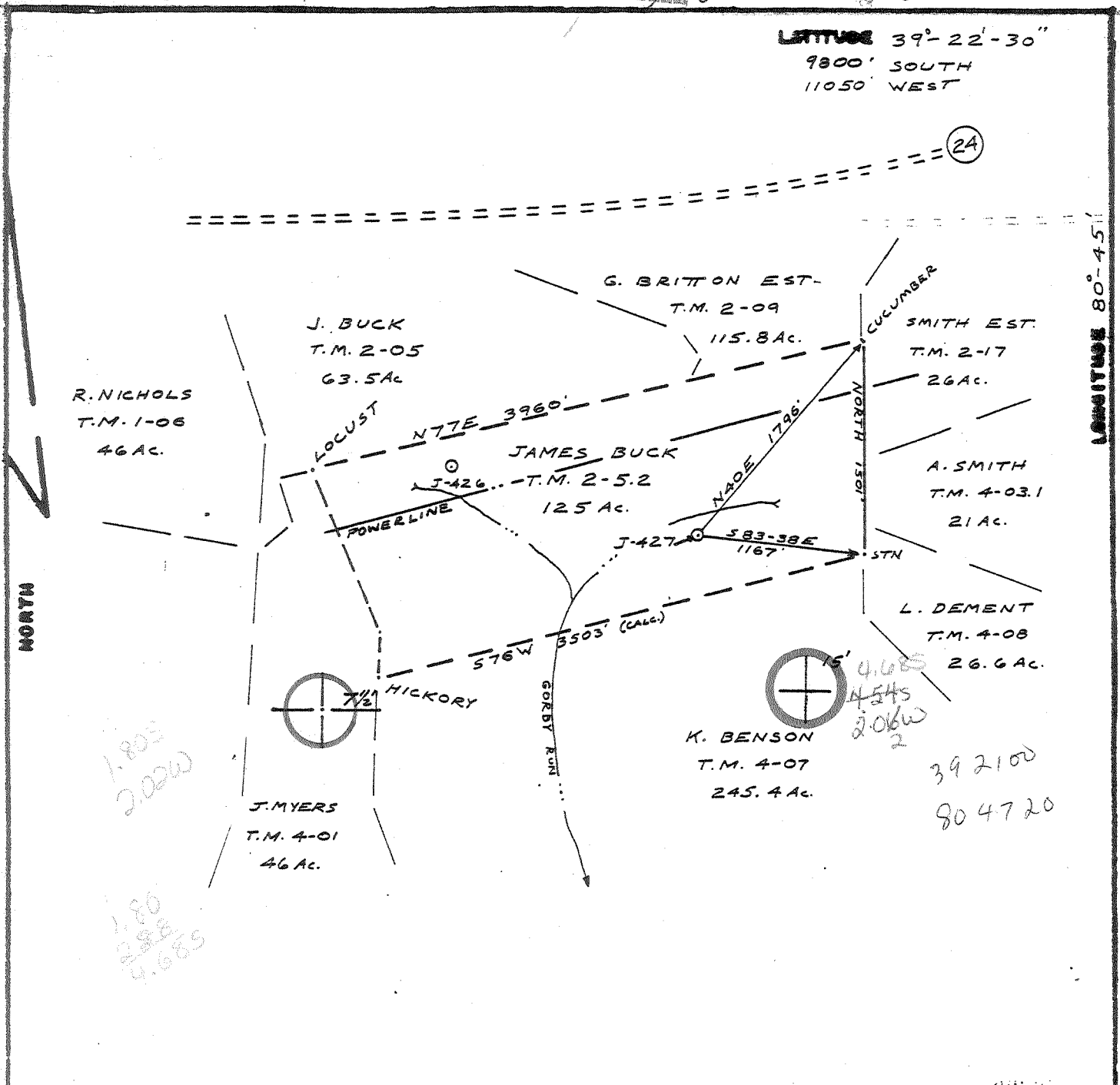


LETITUDE 39° 22' - 30"
9800' SOUTH
11050' WEST

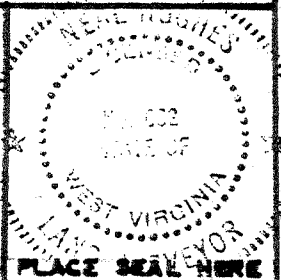


(24)

LONGITUDE 80° 45'

FILE NO. J&J
DRAWING NO. J-427
SCALE 1"=1000'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION 887' @ ROAD INTERSECT

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) Neal Hughes
R.P.E. _____ L.L.S. 632



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



DATE Dec 5, 19 80
OPERATOR'S WELL NO J427
API WELL NO. 47-017-2921
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS", PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW _____
LOCATION: ELEVATION 1030' WATER SHED MIDDLE ISLAND CREEK
DISTRICT WEST UNION COUNTY DODDRIDGE
QUADRANGLE WEST UNION 7 1/2' EC 415'
SURFACE OWNER JAMES & WANDA BUCK ACRES 125
OIL & GAS ROYALTY OWNER FRED ASH LEASE ACRES 125
LEASE NO. K-825
PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE PLUS OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
PLUS AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION BENSON ESTIMATED DEPTH 5250
WELL OPERATOR J&J ENTERPRISES, INC DESIGNATED AGENT H.L. BARNETT
ADDRESS P.O. Box 48 ADDRESS P.O. Box 48
BUCKHANNON, WV 26201 BUCKHANNON, WV 26201

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

RECEIVED

DEC 3 1981

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

WELL TYPE: Oil _____ / Gas X / Liquid Injection _____ / Waste Disposal _____
(If "Gas", Production X / Underground storage _____ / Deep _____ / Shallow X)
LOCATION: Elevation: 1030 Watershed: Middle Island Creek
District: West Union County: Doddridge Quadrangle: West Union 7.5'
WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT James R. Willett
Address P.O. Box 48 Address P.O. Box 48
Buckhannon, WV 26201 Buckhannon, WV 26201

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

PERMIT ISSUED ON 10/23, 19 81 OIL & GAS INSPECTOR FOR THIS WORK:
(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Steve Casey
Address Rt. # 2, Box 232-D
Jane LEW, WV 26378

GEOLOGICAL TARGET FORMATION: Benson Depth 5027-31 feet
Depth of completed well, 5382 feet Rotary X / Cable Tools _____
Water strata depth: Fresh, 1450 feet; salt, 0 feet.
Coal seam depths: 685-90 Is coal being mined in the area? No
Work was commenced 11/7, 19 81, and completed 11/13, 19 81

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	11 ³ / ₄	H-40	42	x		30	30	0 sks.	Rands
Fresh water	8 ⁵ / ₈	ERW	23	x		1118.05	1118.05	300 sks.	
Coal	8 ⁵ / ₈	ERW	23	x		1118.05	1118.05	300 sks.	Sizes
Intermediate									
Production	4 ¹ / ₂	J-55	10.5	x		5103	5103	680 sks.	Depths set
Tubing									
Liners									Perforations:
									Top Bottom
									2303 2372
									5027 5031

OPEN FLOW DATA

Producing formation Benson Pay zone depth 5027 - 5031 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Combined Final open flow, 450 Mcf/d Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, 6 hours
Static rock pressure, 1400 psig (surface measurement) after 96 hours shut in
[If applicable due to multiple completion--]
Second producing formation Weir Pay zone depth 2303-72 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

Bottom Hole Pressure Static rock pressure, _____ psig (surface measurement) after _____ hours shut in
Pf=PweXGLS
 $t=60+(0.0075 \times 5103) + 459.7=558$ $x= \frac{1}{53.35} \times 558 = \frac{1}{29768}$ $=0.0000336$ Pf=1400 x 2.72 (0.0000336)
 $(0.676)(3667)(0.9) = 1400 \times 2.72 \times 0.07 = 1400 \times 1.07 = 1501$

DEC 16 1981

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

Benson: Perforations: 5027-31 (12 holes)

Fracturing: 100 sks. 80/100 sand:300 sks. 20/40 sand:500 Bbls. fluid.

Weir: Perforations: 2303-23 (6 holes) 2366-72 (8 holes)

Fracturing: 100 sks. 80/100 sand: 300 sks. 20/40 sand: 500 gal. acid:500 bbls.fluid.

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	12	
Brown sand & shale			12	85	1/4" stream @ 1450'
Gray sand and shale			85	140	
Sandy shale and red rock			140	235	Gas ck @ 2105 No show
Shale, sand and red rock			235	300	
Sandy shale and red rock			300	385	
White sand			385	395	Gas ck @ 3200 No show
Shale and gray sand			395	430	
Shale and sandy shale			430	590	Gas ck @ 5045 6/10-?
White sand			590	685	
Coal			685	690	
Lime and sand			690	720	
Shale and red rock			720	1080	
Gray sand			1080	1100	
Shale and red rock			1100	1135	
Shale and sand			1135	1625	
Shale and white sand			1625	1790	
Shale and little lime			1790	1915	
Big Lime			1915	2005	
Injun			2005	2035	
Shale & sand			2035	2303	
Weir			2303	2372	
Shale			2372	2540	
Sandy shale			2540	2715	
Sand & sandy shale			2715	2920	
Shale & sand			2920	3915	
Shale & sand			3915	4365	
Shale & sand			4365	4625	
Sand & shale			4625	5027	
Benson			5027	5031	
Shale & Brown sand			5031	5225	
Gray shale			5225	5265	
Gray sand			5265	5330 T.D	

(Attach separate sheets to complete as necessary.)

J & J Enterprises, Inc.

Well Operator

By

Peter Battles
Peter Battles Geologist

Its

NOTE: Regulation 2.02(4) 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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

RENEWAL Operator's Well No. J-427 RENEWAL API Well No. 47-017 2921-R State County Permit OLD NO. 2921 Shallow X /

WELL TYPE: Oil / Gas X / (If "Gas", Production X / Underground storage / Deep / Shallow X /) LOCATION: Elevation: 1030 Watershed: Middle Island Creek District: West Union County: Doddridge Quadrangle: West Union 7.5

WELL OPERATOR J&J Enterprises Inc Address P.O.Box 48 Buckhannon W.V. 26201

DESIGNATED AGENT H.L. Barnett Address P.O.Box 48 Buckhannon W.V. 26201

WELL & GAS LEASE OWNER Fred&Daisey Ash Address Alma W.V. 26320

COAL OPERATOR None Address

ACREAGE 125 SURFACE OWNER James&Wanda Buck Address Aldie Virginia 22001

COAL OWNER(S) WITH DECLARATION ON RECORD: Name James&Wanda Buck Address Aldie Virginia 22001

FIELD SALE (IF MADE) TO: Name Columbia Address

Name Address

WELL & GAS INSPECTOR TO BE NOTIFIED Name Paul Garrett Address 321 Beech St. Clarksburg W.V. 26301

COAL LESSEE WITH DECLARATION ON RECORD: Name none Address RECEIVED OCT 23 1981

OIL AND GAS DIVISION WV DEPARTMENT OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease X / other contract / dated Jan. 13, 1979; to the undersigned well operator from Fred&Daisy Ash

(If said deed, lease, or other contract has been recorded:) recorded on June 19, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil&Gas Lease No. 111 at page 562. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate X / 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 well operator, coal owner(s), and coal lessee are hereby notified that any notices 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.

Dated of this Permit Application and the enclosed plat and declaration plan have been mailed registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee 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 PHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION 101 WASHINGTON STREET EAST CHARLESTON, WV 25311

BLANKET BOND

J&J Enterprises Inc Well Operator

By Hewitt

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY: ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) S.W. Jack Drilling Co. Address P.O. Box 48 Buckhannon W.V. 26201

GEOLOGICAL TARGET FORMATION, Benson

Estimated depth of completed well, 5150 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 100 feet; salt, 1500 feet.

Approximate coal seam depths: none Is coal being mined in the area: Yes / No X

DRILLING AND TUBING PROGRAM

Table with columns: DRILLING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, 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.

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling renewed. This permit shall expire if operations have not commenced by 6-26-82

Signature of Deputy Director - Oil & Gas Division

Signature of Surveyor

This permit shall be issued 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 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.

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-427

API Well No. 47-017-2921 State County Permit

WELL TYPE: Oil / Gas X / (If "Gas", Production X / Underground storage / Deep / Shallow X /)

LOCATION: Elevation: 1030 Watershed: Middle Island Creek District: West Union County: Doddridge Quadrangle: West Union 7.5

WELL OPERATOR J&J Enterprises Inc Address P.O.Box 48 Buckhannon W.V. 26201

DESIGNATED AGENT H.L. Barnett Address P.O.Box 48 Buckhannon W.V. 26201

OIL & GAS JOINTLY OWNER Fred&Daisey Ash Address Alma W.V. 26320

COAL OPERATOR None Address

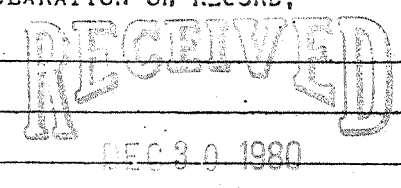
ACREAGE 125 SURFACE OWNER James&Wanda Buck Address Aldie Virginia 22001

COAL OWNER(S) WITH DECLARATION ON RECORD; Name James&Wanda Buck Address Aldie Virginia 22001

FIELD SALE (IF MADE) TO: Name Columbia Address

COAL LESSEE WITH DECLARATION ON RECORD; Name none Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name Paul Garrett Address 321 Beech St. Clarksburg W.V. 26301



OIL & GAS DIVISION DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease X / other contract / dated Jan. 13, 19 79; to the undersigned well operator from Fred&Daisy Ash. If said deed, lease, or other contract has been recorded:]

Recorded on June 19, 19 79, in the office of the Clerk of the County Commission of Doddridge county, West Virginia, in Oil&Gas Lease # 111 at page 562. A permit is requested as follows:

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

--plans as shown on the work order on the reverse side hereof.

The above named well operator, coal owner(s), and coal lessee are hereby notified that any changes 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 100 WASHINGTON STREET EAST CHARLESTON, WV 25311

BLANKET BOND

J&J Enterprises Inc Well Operator

By [Signature]

IV-2
erse)

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

Date: Dec. 29, 19 80

78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-427
API Well No. 47-017 2921
State County Permit

PE: Oil / Gas /
(If "Gas", Production / Underground storage / Deep / Shallow /)
Elevation: 1030 Watershed: Middle Island Creek
District: West Union County: Doddridge Quadrangle: West Union 7.5

OPERATOR J&J Enterprises Inc
Address P.O.Box 48
Buckhannon W.V. 26201

DESIGNATED AGENT H.L. Barnett
Address P.O.Box 48
Buckhannon W.V. 26201

AS OWNER Fred&Daisey Ash
Address Alma W.V. 26320

COAL OPERATOR None
Address _____

OWNER James&Wanda Buck
Address Aldie Virginia 22001

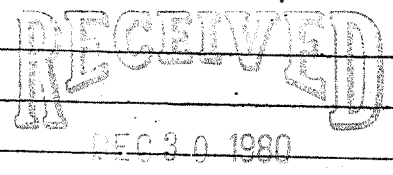
COAL OWNER(S) WITH DECLARATION ON RECORD:
Name James&Wanda Buck
Address Aldie Virginia 22001

LE (IF MADE) TO: Columbia

Name _____
Address _____

S INSPECTOR TO BE NOTIFIED Paul Garrett
Address 321 Beech St.
Clarksburg W.V. 26301

COAL LESSEE WITH DECLARATION ON RECORD:
Name none
Address _____



OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above under a deed / lease / other contract / dated Jan. 13, 19 79, to the named well operator from Fred&Daisy Ash
(If deed, lease, or other contract has been recorded:)

on June 19, 19 79, in the office of the Clerk of the County Commission of Doddridge West Virginia, in Oil&Gas Lease No. 111 at page 562. A permit is requested as follows:
WORK: Drill / Drill deeper / Redrill / Fracture or stimulate /

Plug off old formation / Perforate new formation /
Other physical change in well (specify) _____

as planned as shown on the work order on the reverse side hereof.

The above named well operator, coal owner(s), and coal lessee are hereby notified that any they wish to make or are required to make by Code § 22-4-3 must be filed with the Department 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 or delivered by hand to the above named coal operator, coal owner(s), and coal lessee. The fee of the mailing or delivery of this Permit Application to the Department of Mines at _____, West Virginia.

PERMIT COPIES OF ALL
LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS
REGULATION COMMISSION
1000 MAIN STREET EAST
MARTINSBURG, WV 25401

BLANKET BOND

J&J Enterprises Inc
Well Operator

By Steve Butcher