

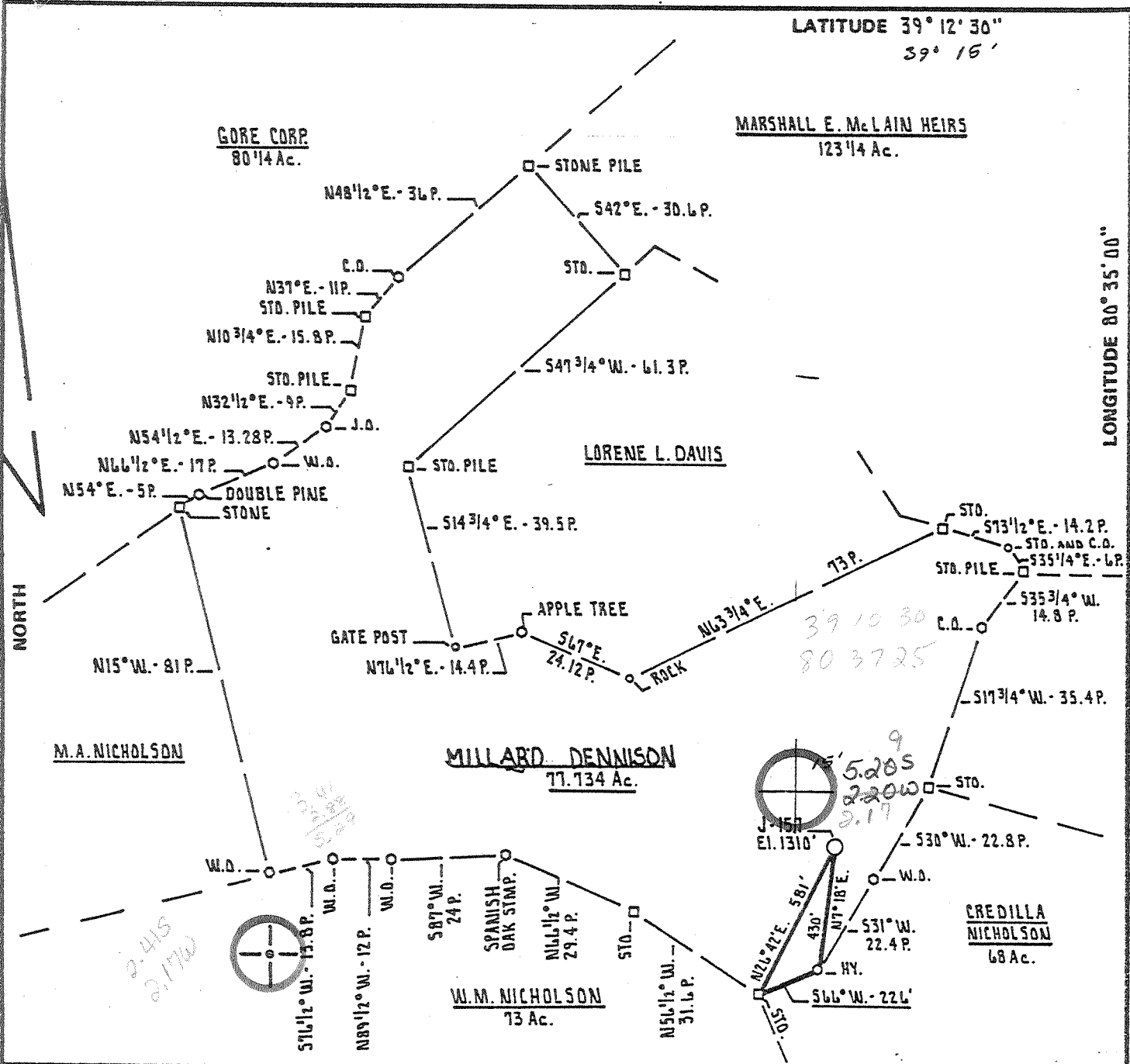
cl 2/13

Plot Card USD

11,800'

LATITUDE 39° 12' 30"
39° 15'

LONGITUDE 80° 35' 00"



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION ROUTES 58 60 ELEVATION 896'

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) Cecil R. Main
 R.P.E. _____ L.L.S. 711

CECIL R. MAIN
 No. 711
 PLACE SEAL HERE

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



DATE JANUARY 30th, 19 81
 OPERATOR'S WELL NO. J-157
 API WELL NO. 47-017-2980
 STATE WEST VIRGINIA 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 1310' WATER SHED INDIAN FORK
 DISTRICT NEW MILTON COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC T.5 VADUS 15 NC
 SURFACE OWNER Robert Lee Waiver ACREAGE 66.734 Ac.
 OIL & GAS ROYALTY OWNER Millard Dennison LEASE ACREAGE 77.734 Ac.
 LEASE NO. 5-556

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 5400'
 WELL OPERATOR J. and J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT
 ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48
BUCKHANNON, WEST VIRGINIA 26201 BUCKHANNON, WEST VIRGINIA 26201

MEATHOUSE FORK - BRISTOL

MAR 23 1981
 146

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

WELL OPERATOR'S REPORT
 OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection Waste Disposal
 (If "Gas", Production / Underground storage Deep Shallow)
 LOCATION: Elevation: 1310 Watershed: Indian Fork
 District: New Milton County: Doddridge Quadrangle: Big Isaac 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 / Convert / Drill deeper / Redrill / Fracture or stimulate
 Plug off old formation / Perforate new formation /
 Other physical change in well (specify) _____

PERMIT ISSUED ON 10/29, 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: Alexander Depth _____ feet
 Depth of completed well, 5926 feet Rotary / Cable Tools _____
 Water strata depth: Fresh, 168,2550 feet; salt, _____ feet.
 Coal seam depths: None Is coal being mined in the area? No
 Work was commenced 11/4, 19 81, and completed 11/11, 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		29	29	0 sks.	Winds
Fresh water	8 5/8	ERW	23	x		1253.30	1253.30	300 sks.	
Coal	8 5/8	ERW	23	x		1253.30	1253.30	300 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		5771.45	5771.45	290 sks.	Deaths set
Tubing									
Liners									Perforations:
									Top Bottom
									5694 5698
									5497 5572
									5186 5189
									5073 5079

RECEIVED

JAN 8 - 1982

OPEN FLOW DATA

OIL AND GAS DIVISION
 WV DEPARTMENT OF MINES

Producing formation 1st. Elk Pay zone depth 5694-98 feet
 Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
 Combined Final open flow, 696 Mcf/d Final open flow, _____ Bbl/d
 Time of open flow between initial and final tests, 4 hours
 Static rock pressure, 1550 psig (surface measurement) after 96 hours shut in
 (If applicable due to multiple completion--)
 Second producing formation Alexander, Benson & Riley Pay zone depth 5073-5079 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
 $t=60 + (0.000075 \times 5771) = 563$ $x=53.35 \times 563 = 30035$ $= 0.000033$ $Pf= 1550 \times 2.72 (0.000033 \times 0.65)$
 $x(5384 \times 0.9) = 1550 \times 2.72^{0.105} = 1550 \times 1.11$
 Pf= 1722 psi

JAN 27 1982

[08-78]

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

1st. Elk: Perforations: 5694-5698 (13 holes)
Fracturing: 90 sks. 80/100 sand: 280 sks. 20/40 sand: 436 Bbls. fluid.

Alexander: Perforations: 5497-5509 (8 holes) 5569-72 (4 holes)
Fracturing: 90 sks. 80/100 sand: 280 sks. 20/40 sand: 500 gal. Acid:
443 Bbls. fluid.

Benson & Riley: Perforations: 5073-79 (7 holes)
5186-89 (4 holes)
Fracturing: 90 sks. 80/100 sand: 280 sks. 20/40 sand: 500 gal. Acid:
443 Bbls. fluid.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all Green and salt water, coal, oil and gas
Fill			0	15	
Red rock and shale			15	30	
Sand & shale			30	48	1/4" stream @168'
Sand & shale			48	140	Damp @ 380'
Sand & white shale			140	312	
Sand & shale			312	380	Damp @ 1755 oil
Shale, red rock and sand			380	450	
Red rock, sand and shale			450	565	1/4" stream @ 2016
Sand & shale			565	610	
Red rock and shale			610	670	Oil @ 2000' & 2400'
Sand & shale			670	900	
Red rock, sand & shale			900	1015	Water @ 2550'
Red rock, sand & shale			1015	1056	
Red rock and shale			1056	1080	
Red rock, sand & shale			1080	1140	
Sand, shale & red rock			1140	1215	
Sand & shale			1215	1720	
Sand & shale			1720	2010	
Sand, shale and red rock			2010	2145	
Sand, shale and red rock			2145	2235	
Sand & shale			2235	2300	
Big Lime			2300	2395	
Injun Sand			2395	2455	
Sand & shale			2455	5073	
Riley			5073	5079	
Sand & shale			5079	5186	
Benson			5186	5189	
Sand & shale			5189	5490	
Alexander			5490	5555	
Sand & shale			5555	5694	
1st Elk			5694	5698	
Sand & shale			5698	5926 T.D.	

(Attach separate sheets to complete as necessary.)

J & J Enterprises, Inc.

Well Operator

By

Peter Battles

Its

Geologist

NOTE: Regulation 2.02(d) 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

Operator's Well No. J-157 Renewed
API Well No. 47 - 017 2980
State County Perm

WELL TYPE: Oil ___ / Gas x / RENEWAL - OLD NO. 2980
(If "Gas", Production x / Underground storage ___ / Deep ___ / Shallow x /)
LOCATION: Elevation: 1310 Watershed: Indian Fork
District: New Milton County: Doddridge Quadrangle: Big Isaac 7.5'

WELL OPERATOR J & J Enterprises, Inc.
Address P.O. Box 48
Buckhannon, WV 26201

DESIGNATED AGENT H.L. Barnett
Address P.O. Box 48
Buckhannon, WV 26201

OIL & GAS
PROPERTY OWNER Millard Dennison
Address Reynoldsville, WV 26422

COAL OPERATOR None
Address

ACREAGE 66.734
SURFACE OWNER Robert Lee Wagner
Address 511 Southern Ave.
Clarksburg, WV 26301

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Willis G. Tetrick, Jr.
Address Union National Bank Bldg.
Clarksburg, WV 26301

ACREAGE 66.734
FIELD SALE (IF MADE) TO:
Name Unknown
Address

Name
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Steve Casey
Address Rt. # 2, Box 232-D
Jane Lew, WV 26378

COAL LESSEE WITH DECLARATION ON RECORD:
Name
Address OCT 29 1981

RECEIVED

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 7/28, 1979, to the undersigned well operator from Spence & Sweiger
[if said deed, lease, or other contract has been recorded:]

Recorded on 1/15, 1981, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 118 at page 665. 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 coal operator, coal owner(s), and coal lessee are hereby notified that any location they wish to make or are required to make by Code 5 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 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
100 WASHINGTON STREET EAST
CHARLESTON, WV 25301

J & J Enterprises, Inc.
Well Operator

RECEIVED

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 Company
Address Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5400 feet Rotary / Cable tools
Approximate water strata depths: Fresh, 950 feet; salt, 1360 feet.
Approximate coal seam depths: None IS coal being mined in the area? Yes No

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	0	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		1400	1400	350 sks.	
Coal	8 5/8	ERW	23	x		1400	1400	350 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		5350	5350	475 sks.	Deaths set
Tubing									
Liners									Perforations:
									Top

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, unaccompanied 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 § 22-4-2a from the owner of any water well or drilling 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 6-29-82

F. J. Bissett
Deputy Director - Oil & Gas Division

Juney

The following waiver must be signed 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 location has examined this proposed well location. If a mine map exists which covers the area of this 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.

Date: , 19

By

(Obverse)

Date: 2/10/81

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-157

API Well No. 47 - 017-2980
State County Perm

WELL TYPE: Oil ___ / Gas x /
(If "Gas", Production x / Underground storage ___ / Deep ___ / Shallow x /)
LOCATION: Elevation: 1310 Watershed: Indian Fork
District: New Milton County: Doddridge Quadrangle: Big Isaac 7.5'

WELL OPERATOR J & J Enterprises, Inc.
Address P.O. Box 48
Buckhannon, WV 26201

DESIGNATED AGENT H.L. Barnett
Address P.O. Box 48
Buckhannon, WV 26201

OIL & GAS ROYALTY OWNER Millard Dennison
Address Reynoldsville, WV 26422

COAL OPERATOR None
Address:

SURFACE OWNER Robert Lee Wagner
Address 511 Southern Ave.
Clarksburg, WV 26301

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name George M. Kyle
Address Unknown

FIELD SALE (IF MADE) TO:
Name Unknown
Address:

Name:
Address:

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Steve Casey
Address Rt. # 2, Box 232-D
Jane Lew, WV 26378

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address:
RECEIVED
FEB 12 1981

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 7/28, 1979, to the undersigned well operator from Spence & Sweiger.

If said deed, lease, or other contract has been recorded:
Recorded on 1/15, 1981, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 118 at page 665. 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 coal operator, coal owner(s), and coal lessee are hereby notified that any application 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
1015 WASHINGTON STREET EAST
CHARLESTON, WV 25301

BLANKET BOND

J & J Enterprises, Inc.
Well Operator

[Signature]
Peter Batties
Geologist

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 Company
Address Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5400 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 950 feet; salt, 1360 feet.

Approximate coal seam depths: None Is coal being mined in the area? Yes No

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	0	0 sks.	Kinds <u>CTS</u> Sizes
Fresh water	8 5/8	ERW	23	x		1400	1400	350 sks.	
Coal	8 5/8	ERW	23	x		1400	1400	350 sks.	
Intermediate									
Production	4 1/2	J-55	10.5	x		5350	5350	475 sks.	Depths set
Tubing									
Liners									Perforations: Top <u> </u> Bottom <u> </u>

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 § 22-4-2a from the owner of any water well or drilling 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.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for Drilling. This permit shall expire if

operations have not commenced by 10-27-81

The following signature is required by the coal operator and by any coal owner or coal lessee who has received the Reclamation 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 location 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.

Date: , 19

By