

STANDARD TABLET STAMPED  
 8/15 1986 - 700 LOCATED 2.6 MI.  
 N.E. OF JUNCTION OF U.S. ROUTE  
 60 & WITCHER CREEK ROAD 7'  
 SOUTH OF UPPER WITCHER CRK.  
 SCHOOL FENCE - ELEV. 700.44'

COAL NOTE  
 VALLEY CAMP COAL COMPANY #4  
 ENTRY (GAINED OUT) - 792.00 ELEVATION.  
 MINIFRED BEAM - 981.25 SOLID COAL  
 #5 BLOCK BEAM 1330.00 ELEVATION.

REVISED 3-24-77 I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by the rules and regulations of the oil and gas section of the mining laws of WEST VIRGINIA. Minimum degree of accuracy is one part in 700.

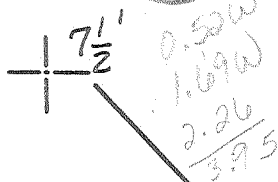
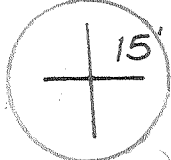
ENGR. REG. NO. 2330 Signed Quinn E. [Signature]  
 BOX 1273 CHARLESTON, W. VA.

Company COLUMBIA GAS TRANS. CORP.  
 Address BOX 1273 CHARLESTON, W. VA.  
 Farm KANAHA HOCKING COAL & COKE CO.  
 Lease PT. 0270 Acres 6.00 (MERGER)  
 Well Farm No. 105 Ser. No. 20349  
 Elevation - Spirit Level 1807.92'  
 Quadrangle CEDAR GROVE MONTGOMERY 15'NW  
 Township or District CABIN CREEK  
 County KANAHA  
 Sec., Lot, Qr. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_  
 Coordinates LAT 38°12'32" LONG. 81°20'22"  
 File No. 68-51 Dwg. No. \_\_\_\_\_  
 Date 3-24-77 Scale 1" = 1000'

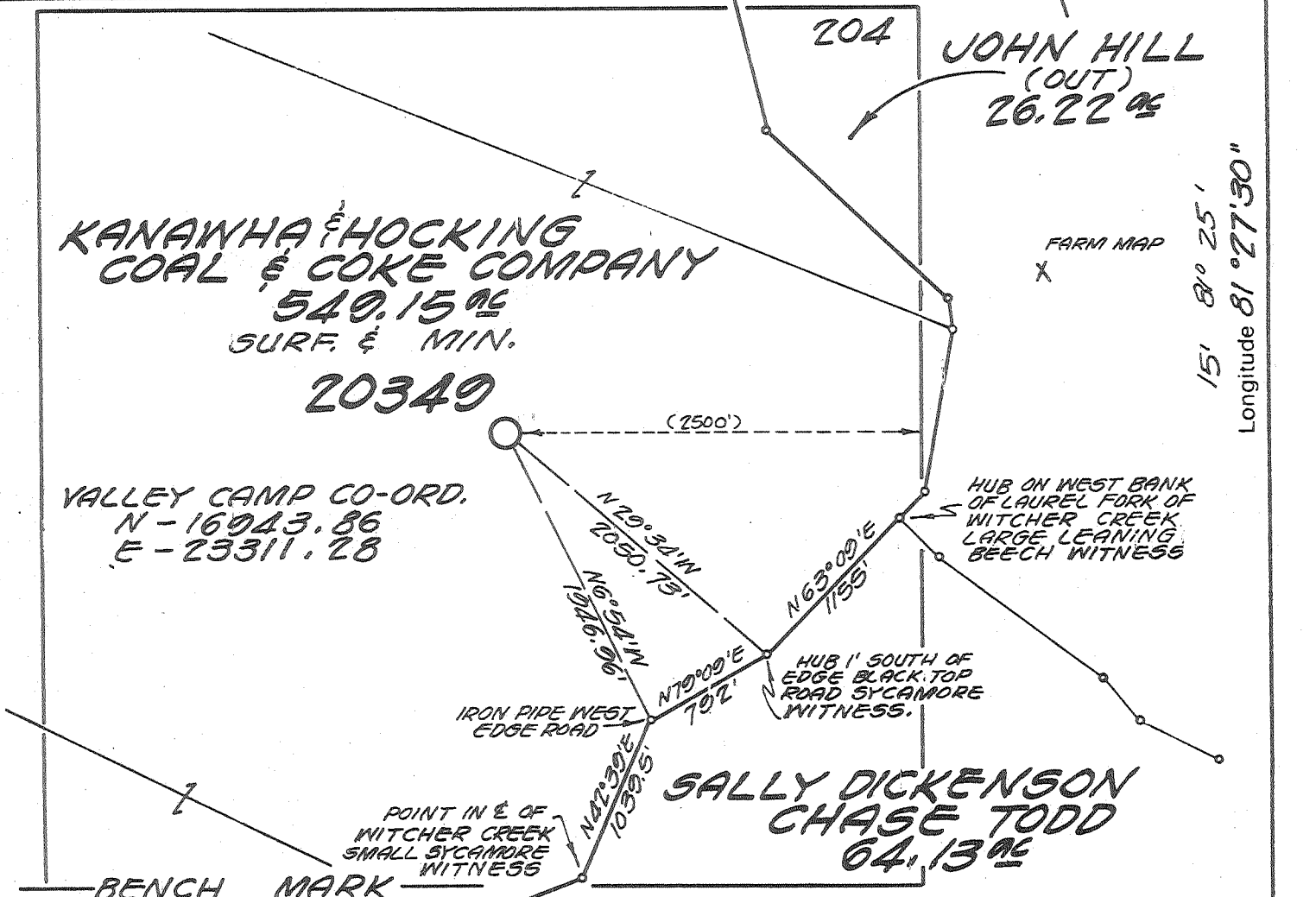
WELL LOCATION MAP  
 STATE OF WEST VIRGINIA  
 (+) Denotes Values Of Well On United States Topographic Maps  
47-039-3631  
 Scale 15'  7 1/2'   
 FORMERLY 3411

66 Staughter Creek (24) [Indian Creek pool (358)] JUL 7 1980 Deep well 241

Latitude 38°15'00"



SCALE 1" = 2000'



**KANAWHA & HOCKING  
COAL & COKE COMPANY**  
549.15 ac  
SURF. & MIN.

**20349**

VALLEY CAMP CO-ORD.  
N - 16943.86  
E - 23311.28

**JOHN HILL  
(OUT)**  
26.22 ac

FARM MAP  
X

15' 8" 25'  
Longitude 81° 27' 30"

HUB ON WEST BANK  
OF LAUREL FORK OF  
WITCHER CREEK  
LARGE LEANING  
BEECH WITNESS

HUB 1' SOUTH OF  
EDGE BLACK TOP  
ROAD SYCAMORE  
WITNESS.

**SALLY DICKENSON  
CHASE TODD**  
64.13 ac

POINT IN E OF  
WITCHER CREEK  
SMALL SYCAMORE  
WITNESS

BENCH MARK

STANDARD TABLET STAMPED  
8WJS 1956-700 LOCATED 2.6 MI.  
N.E. OF JUNCTION OF U.S. ROUTE  
60 & WITCHER CREEK ROAD & 7'  
SOUTH OF UPPER WITCHER CRK.  
SCHOOL FENCE-ELEV. 700.42'

REVISED 3-24-77

- New Location
- Storage
- Drill Deeper
- Abandonment
- Re-Drill/Fracture

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by the rules and regulations of the oil and gas section of the mining laws of WEST VIRGINIA. Minimum degree of accuracy is one part in 200

ENGR. REG. No 2330 Signed *Phyllis E. ...*  
BOX 1273 CHARLESTON, W. VA.

COAL NOTE  
VALLEY CAMP COAL COMPANY # 2  
ENTRY (MINED OUT) - 792.00 ELEVATION.  
WINIFRED SEAM - 981.25 SOLID COAL  
# 5 BLOCK SEAM 1330.00 ELEVATION.

Company COLUMBIA GAS TRANS. CORP.  
Address BOX 1273 CHARLESTON, W. VA.  
Farm KANAWHA & HOCKING COAL & COKE CO.  
Lease PT. 0270 Acres 549.15 (MERGER)  
Well Farm No. 105 Ser. No. 20349  
Elevation - Spirit Level 1407.92' NW  
Quadrangle CEDAR GROVE, MONTGOMERY 15'  
Township or District CABIN CREEK  
County KANAWHA  
Sec., Lot, Qr. \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_  
Coordinates LAT. 38°14'32" LONG. 81°20'22"  
File No. 68-51 Dwg. No. \_\_\_\_\_  
Date 3-24-77 Scale 1" = 1000'

**WELL LOCATION MAP**  
STATE OF WEST VIRGINIA

(+) Denotes Values Of Well On United States Topographic Maps

WV 47-039-3411

Scale 15'  7 1/2'

now; 039-3631

JUN 14 1979

Tuscarora 1140'



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division  
**WELL RECORD**

Rotary X Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas X  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Quadrangle Cedar Grove  
Permit No. 47-039-3631

Company Columbia Gas Trans. Corp.  
Address P.O. Box 610 Clendenin, WV  
Farm Kanawha & Hocking Coal & Coke Acres 640  
Location (waters) Witcher Creek  
Well No. 20349 Elev 1407.92  
District Cabin Creek County Kanawha  
The surface of tract is owned in fee by Kanawha & Hocking Coal & Coke  
Address 700 Westgate Tower, Cleveland, Oh.  
Mineral rights are owned by Same  
Address \_\_\_\_\_  
Drilling Commenced 10/25/80  
Drilling Completed 11/16/80  
Initial open flow 764,000 cu. ft. 0 bbls.  
Final production 2,647,000 cu. ft. per day 0 bbls.  
Well open 6 hrs. before test \_\_\_\_\_ RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-1/2" 3/8"	656	656	450 sks.
9 5/8	2670	2670	825 sks.
8 5/8			
7	5695	3114	200 sks.
5 1/2			
4 1/2	7207	7207	120 sks.
3			
2			
Liners Used			

Well treatment details: Attach copy of cementing record.  
Matrix Acid (Dowell MSR Acid) 2000 gal. Well cleaned up then fractured with cross-linked gel, 250 bbl pad - total fluid 915 bbls. 30,000# 80/100 Sand 60,000# 20/40 Sand

*Redstart tracer log - perfcs: 7124-7129 (3 holes) 2,640 MCF  
7153-7156-7h. 4 Km 7124  
7130-7163-7h.*

Coal was encountered at 182 Feet \_\_\_\_\_ Inches  
Fresh water 200 Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Clinton Depth 7115 - 7176

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay			0	15		
Sand			15	182		
Coal			182	188		
Sand			188	334		Water 200'
Coal			334	339		
Sand			339	397		
Coal			397	410		
Sand			410	419		
Coal			419	431		
Sand			431	1055		Open Mine 616'
Sand & Shale			1055	1153		
Salt Sand			1153	1584		
Sand & Shale			1584	1710		
Maxon			1710	1793		
Sand & Shale			1793	1918		
Little Lime			1918	1958		
Shale & Red Rock			1958	1986		
Big Lime			1986	2175		
Injun			2175	2248		
Shale			2248	2307		
Weir Sand			2307	2449		
Shale			2449	2606		
Coffee Shale			2606	2626		
Berea Sand			2626	2636		

**RECEIVED**  
JUN - 5 1981  
OIL & GAS DIVISION  
DEPT. OF MINE

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Shale			2636	5526		
Onondaga		Lime	5526	5630		
Sand			5630	6466		
Shale			6466	6996		
Lime			6996	7005		
Shale			7005	7115		
Clinton			7115	7176	Tuscarora	
				Log TD 7222		

Date April 3, 1981

APPROVED [Signature], Owner

By [Signature]  
(Title)

Date: May 11, 1979

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. 20349  
API Well No. 47-039-341  
State County Perm

WELL TYPE: Oil      / Gas X /  
(If "Gas", Production X / Underground storage      / Deep X / Shallow      / 3631)  
LOCATION: Elevation: 1407.92 Watershed: Witcher Creek  
District: Cabin Creek County: Kanawha Quadrangle: Cedar Grove

WELL OPERATOR Columbia Gas Transmission Corp.  
Address P. O. Box 1273  
Charleston, West Virginia 25325

DESIGNATED AGENT John R. Henning  
Address P. O. Box 1273  
Charleston, West Virginia 25325

OIL & GAS ROYALTY OWNER Kanawha & Hocking Coal & Coke  
Address 700 Westgate Tower  
Cleveland, Ohio 44100  
Acreage 14,128

COAL OPERATOR Valley Camp Coal Co.  
Address 2971 Dupont Ave., East  
Shrewsbury, West Virginia

SURFACE OWNER Kanawha & Hocking Coal & Coke  
Address 700 Westgate Tower  
Cleveland, Ohio 44100  
Acreage 549.15

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Kanawha & Hocking Coal & Coke  
Address 700 Westgate Tower  
Cleveland, Ohio 44100

FIELD SALE (IF MADE) TO:  
Name       
Address     

Name       
Address     

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Martin Nichols  
Address P. O. Box 554  
Clendenin, West Virginia

COAL LESSEE WITH DECLARATION ON RECORD:  
Name Valley Camp Coal Company  
Address 2971 Dupont Avenue  
Shrewsbury, West Virginia

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 April 24, 1972, to the undersigned well operator from     

[If said deed, lease, or other contract has been recorded:]

Recorded on     , 19    , in the office of the Clerk of the County Commission of Kanawha County, West Virginia, in Deed Book 20 at page 311. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper      / Redrill      / Fracture or stimulate      /  
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 objection 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.

**RECEIVED**

MAY 18 1979

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
1015 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

OIL & GAS DIVISION  
DEPT. OF MINES

COLUMBIA GAS TRANSMISSION CORPORATION  
Well Operator

By JRH  
Director, Exploration & Development

BLANKET BOND

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) RAY RESOURCES CORPORATION  
Address 630 Commerce Square  
Charleston, WV 25301

GEOLOGICAL TARGET FORMATION, Tuscarora

Estimated depth of completed well, 7140 feet Rotary X / Cable tools      /

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

Approximate coal seam depths:      Is coal being mined in the area? Yes X / 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	20"	Line	Pipe	X		60'		To surface	Kinds
Fresh water	13-3/8"	H-40	48	X		650'		To surface	
Coal	9-5/8"	H-40	32.3	X		2650'		To surface	Sizes
Intermediate	7"	N-80	23	X		5674'			
Production	4-1/2"	C-75	13.5	X		7140'			Depths set
Tubing									
Liners									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.

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 2-4-80

*[Signature]*  
Deputy Director, Oil & Gas Division

This permit must be completed by the coal operator and by any coal owner or coal lessee 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 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       
Its



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED

MAY 21 1980

OIL AND GAS WELL PERMIT APPLICATION  
OIL & GAS DIVISION  
DEPT. OF MINES

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

DATE May 6, 1980

Surface Owner Kanawha & Hocking Coal & Coke Company Columbia Gas Transmission Corp.  
Address 700 Westgate Tower, Cleveland, OH Address P. O. Box 1273, Charleston, WV  
Mineral Owner Same as above Farm Kanawha & Hocking Coal & Coke Acres 640  
Address \_\_\_\_\_ Location (waters) Witcher Creek  
Coal Owner Same as above Well No. 20349 Elevation 1407.92  
Address \_\_\_\_\_ District Cabin Creek County Kanawha  
Coal Operator Valley Camp Coal Co. Quadrangle Cedar Grove  
Address 2971 Dupont Ave., Shrewsbury, WV

THIS PERMIT MUST BE POSTED AT THE WELL SITE

provisions being in accordance with Chapter 22, the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 2-5-81.

Robert L. D.  
Deputy Director - Oil & Gas Division

INSPECTOR  
TO BE NOTIFIED Martin Nichols  
ADDRESS P. O. Box 554, Clendenin, WV  
PHONE 548-6993

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated 4/24 1912 by \_\_\_\_\_ made to \_\_\_\_\_ and recorded on the \_\_\_\_\_ day of \_\_\_\_\_ 1912 in Kanawha County, Book 20 Page 311  
 NEW WELL \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  
\_\_\_\_\_ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days.

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address of Well Operator

Very truly yours,  
(Sign Name) [Signature] Well Operator  
P. O. Box 1273  
Street  
Charleston,  
City or Town  
West Virginia 25325  
State

\*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

(Formerly: 039 KAN-3411)

47-039-3631

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by [Signature]  
Director, Exploration & Development

BLANKET BOND

THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO \_\_\_\_\_ DRILL  DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME \_\_\_\_\_ NAME Larry Friend  
 ADDRESS \_\_\_\_\_ ADDRESS P. O. Box 610, Clendenin, WV  
 TELEPHONE \_\_\_\_\_ TELEPHONE 965-3317  
 ESTIMATED DEPTH OF COMPLETED WELL: 7140 ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Tuscarora  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS  COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT PUT UP OR SACKS - CUBIC FT.
20 - XX	60'		To surface
13 - XX 3/8	650'		To surface
9 - 5/8	2650'		To surface
8 - 5/8			
7	5674'		
5 1/2			
4 1/2	7140'		
3			
2			Perf. Top
			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET SALT WATER \_\_\_\_\_ FEET

APPROXIMATE COAL DEPTHS \_\_\_\_\_

IS COAL BEING MINED IN THE AREA?  Yes BY WHOM? \_\_\_\_\_

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
For Coal Company

\_\_\_\_\_  
Official Title