

10-2-4/2/82

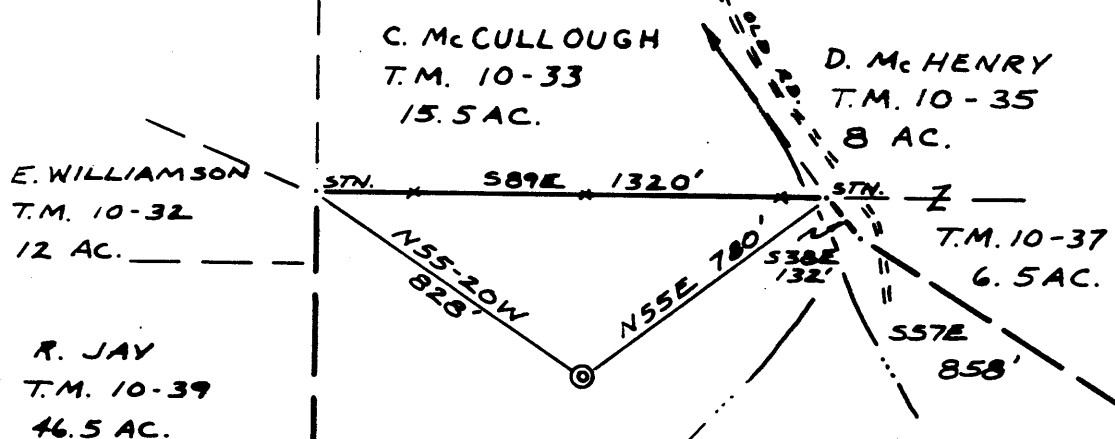
13,900'

CODE _____ CARD _____ PLOT _____

LATITUDE 39° 22' 30"

LONGITUDE 81° 00'

11,975'

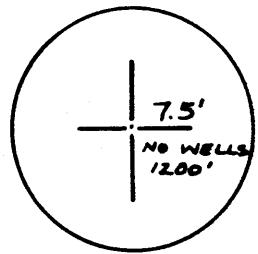


NORTH

49 AC.

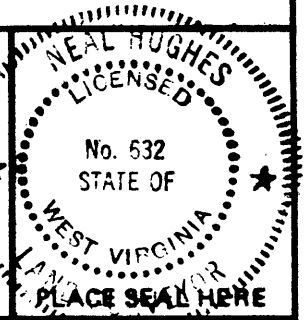
3053' N1E

57 AC.



FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION RD. 845'

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-8 (8-78)



DATE APRIL 1, 19 82
 OPERATOR'S WELL NO. WEEKLY 1
 API WELL NO. _____
47-073-1462-Frc
 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 960' WATER SHED ROCK RUN
 DISTRICT LAFAYETTE COUNTY PLEASANTS
 QUADRANGLE ELLENBORO 7.5'
 SURFACE OWNER G.S. HALL ACREAGE 127.92
 OIL & GAS ROYALTY OWNER H Peipner ETAL LEASE ACREAGE 128
 LEASE NO. _____
 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 marcellus ESTIMATED DEPTH 5500
 WELL OPERATOR Petro-Mark, Inc. DESIGNATED AGENT L.L. Mitchell
 ADDRESS 100 P.O. Box 37 ADDRESS Rt. 5, Box 15
MA Reno, Ohio 45773 Parkersburg, W.Va. 26101

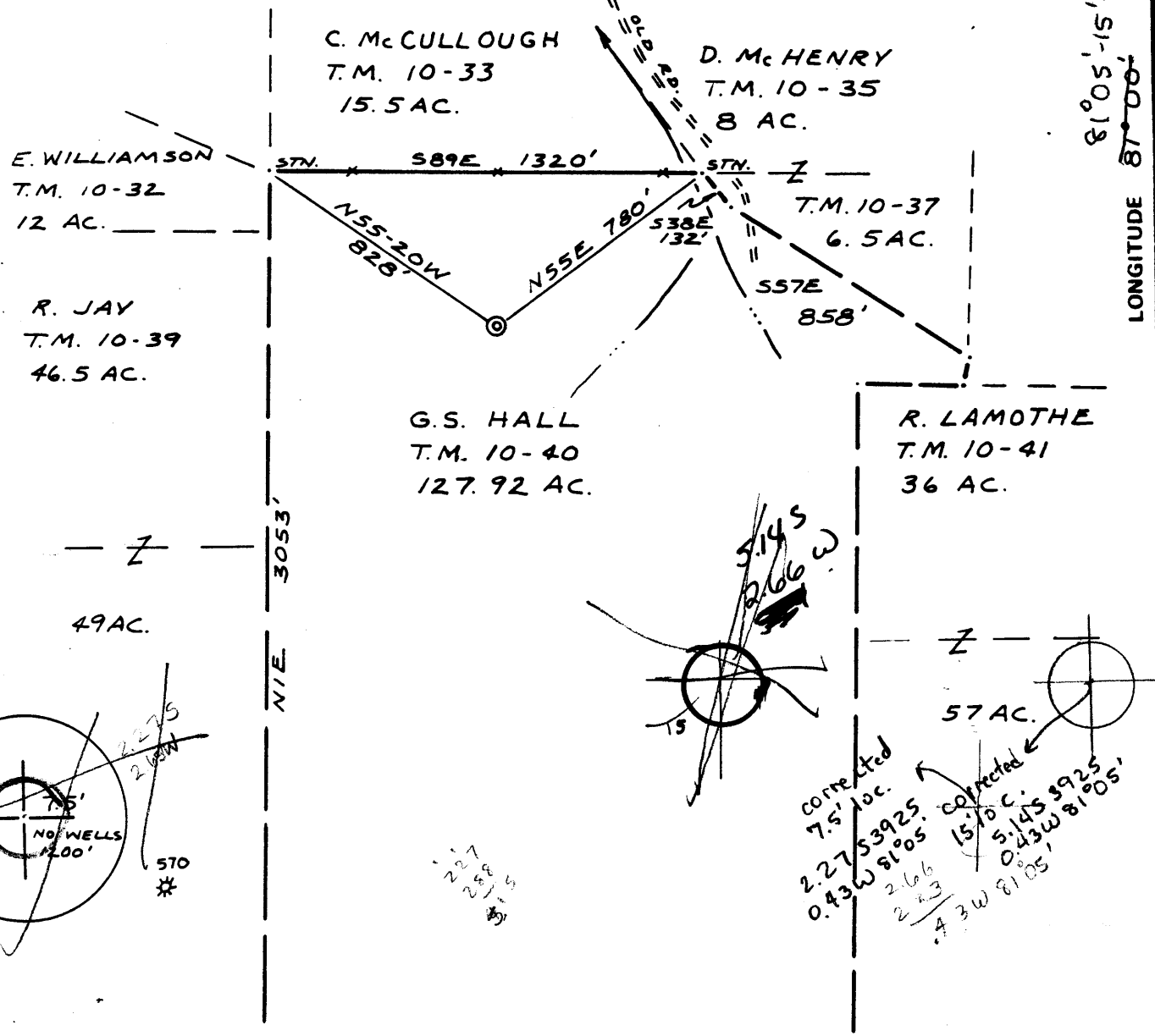
DEC 09 1984

Plot Card 1/7/82

LATITUDE 39°22'30"
39°25'-15'

LONGITUDE 81°05'-15'+7.5'
81°00'

NORTH



FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION RD. 845'

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

PLACE SEAL HERE

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



DATE APRIL 1, 1982
 OPERATOR'S WELL NO. WEEKLY 1
 API WELL NO. _____
47 - 073 - 1462
 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 960' WATER SHED ROCK RUN
 DISTRICT LAFAYETTE COUNTY PLEASANTS
 QUADRANGLE ELLENBORO 75' St. Marys C
 SURFACE OWNER G.S. HALL ACREAGE 127.92
 OIL & GAS ROYALTY OWNER H. Peiffer ETAL LEASE ACREAGE 128
 LEASE NO. _____
 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 marcellus ESTIMATED DEPTH 5500
 WELL OPERATOR WHITNAM OIL & GAS DESIGNATED AGENT JOHN E. WILLIAMS
 ADDRESS 100 FRONT ST. MARIETTA, OH. 45750 ADDRESS RT. 1 BOX 41 LINN, W. VA. 26384

APR 28 1982

IV-35
(Rev 8-8)

RECEIVED

APR 15 1985

OIL & GAS DIVISION
DEPT. OF MINES



State of West Virginia
Department of Mines
Oil and Gas Division

Date April 12, 1985
Operator's
Well No. #1
Farm Weekley Heirs
API No. 47 - 073 - 1462

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

WELL TYPE: Oil X / Gas X / Liquid Injection / Waste Disposal /
(If "Gas," Production X / Underground Storage / Deep / Shallow X /)

LOCATION: Elevation: 960 GL Watershed Big Knot Run
District: Lafayette County Pleasants Quadrangle Ellenboro

COMPANY PETRO-MARK, INC.
ADDRESS P.O.Box 37, Reno, OH 45773
DESIGNATED AGENT L. L. Mitchell
ADDRESS Rt. #5, Box 115, Parkersburg, WV
SURFACE OWNER Rebecca Weekley
ADDRESS Star Route, Harrisville, WV 26362
MINERAL RIGHTS OWNER Same
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK Robert
Lowther General Delivery ADDRESS Middlebourne, WV 26149
PERMIT ISSUED 4/5/82
DRILLING COMMENCED 4/19/82
DRILLING COMPLETED 4/27/82

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	31	31	Surface
9 5/8			
8 5/8	1824	1824	Surface
7			
5 1/2			
4 1/2	5034	5034	2524' KB
3			
2			
Liners used			

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

GEOLOGICAL TARGET FORMATION Ohio Shale Depth 4740 feet
Depth of completed well 5477 feet Rotary X / Cable Tools
Water strata depth: Fresh 227' feet; Salt 1361 feet
Coal seam depths: 732' KB Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Ohio Shale Pay zone depth 4740 feet
Gas: Initial open flow 100 Mcf/d Oil: Initial open flow 0- Bbl/d
Final open flow 60 Mcf/d Final open flow 0- Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure 1500 psig (surface measurement) after 48 hours shut in
(If applicable due to multiple completion--)
Second producing formation None Pay zone depth N/A 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

APR 20 1985

(Continue on reverse side)

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

Perforated from ^{Java → / Angola} 4686' to 4795'

Hydrofractured on 12/6/85 with foam
 361 barrels of water
 950,000 SCF Nitrogen
 Breakdown at 2900 psi
 ISIP = 1100 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Unconsolidated clay & gravel			0	227	
Sand and gravel			227	254	Fresh Water
Shale and Siltstone			254	732	
Coal			732	734	
Sandstone and Shale			734	1361	
Sandstone			1361	1390	Salt water
Shale with sand			1390	1628	
Salt sand			1628	1680	
Shale			1680	1723	
Maxton Sand			1723	1754	
Greenbrier Limestone			1802	1887	
Big Injun Sand			1904	2040	Gas show
Cuyahoga Shale			2040	2360	
Sunbury Shale			2360	2403	
Berea Sandstone			2403	2407	
Top of Ohio Shale			2410		
Fifth Sand			2806	2816	Gas SHOW
Total Depth				5477	

Phonestreet @ T.D.

5477
 960
 4517
 3750
 767

3750
 960
 4710

(Attach separate sheets as necessary)

Petro-Mark, Inc.

Well Operator

By: J. J. Arnall J. J. Arnall

Date: 4/12/85

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."

RECEIVED

FILE COPY



1) Date: November 27, 19 84
 2) Operator's Weekley Heirs
 Well No. ~~XXXXXX~~ #1 (Marco)
 3) API Well No. 47 - 073-1462 - FRAC
 State County Permit

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

OIL & GAS DIVISION

DEPT. OF MINES

APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas
 B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 960 GL / Watershed: Rock Run
 District: Lafayette / County: Pleasants / Quadrangle: Ellenboro
- 6) WELL OPERATOR: PETRO-MARK, INC.
 Address: P. O. Box 37 / Reno, OH 45773 38125
- 7) DESIGNATED AGENT: L. L. Mitchell
 Address: Route 5, Box 15 / Parkersburg, WV 26101
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED: Name: Robert Lowther
 Address: General Delivery / Middlebourne, WV 26149
- 9) DRILLING CONTRACTOR: Name: Pan Eastern Drilling
 Address: P. O. Box 719 / Marietta, OH 45750
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION: Ohio Shale
- 12) Estimated depth of completed well, 5477 feet
- 13) Approximate trata depths: Fresh, 120 feet; salt, 1302 feet.
- 14) Approximate coal seam depths: 256 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	11 3/4	J55	42	X		31	31	Surface	Kinds <u>EXISTING</u> Sizes <u>CASING</u>
Fresh water									
Coal									Depths set
Intermediate	8 5/8	J55	24	X		1824	1824	Surface	
Production	4 1/2	J55	10 1/2	X		5034	5034	2526' KB	Perforations: Top Bottom
Tubing									
Liners									

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-073-1462-FRAC

November 30, 19 84
 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 November 30, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: 115	Agent: <input checked="" type="checkbox"/> MH	Plat: MH	Casing: MH	Fee: 115
-----------	---	----------	------------	----------

Margaret J. Hassel
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.



STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil x / Gas x /

(If "Gas", Production x / Underground storage ___ / Deep ___ / Shallow ___ /

LOCATION: Elevation: 960' Watershed: Rock Run
District: Lafayette County: Pleasants Quadrangle: Ellenboror 7.5'

WELL OPERATOR WHITNAM OIL & GAS CORPORATION
Address P. O. Box 719
Marietta, OH 45750

DESIGNATED AGENT JOHN E. WILLIAMS
Address Route 1, Box 41
Linn, W. Va. 26384

OIL AND GAS ROYALTY OWNER Herschel H. Pifer
Address Ellenboro, W.Va. 26346

COAL OPERATOR N/A
Address _____

Acreage 128.00

COAL OWNER(S) WITH DECLARATION ON RECORD:
NAME _____
Address _____

SURFACE OWNER G.S. Hall
Address Rural Route
Pennsboro, WV 26415

Acreage 127.92

NAME _____
Address _____

FIELD SALE (IF MADE) TO:
NAME _____
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
NAME _____
Address _____

OIL AND GAS INSPECTOR TO BE NOTIFIED:

NAME Robert A. Lowther
Address General Delivery
Middlebourne, W.Va. 26149
Telephone (304) 758-4573

RECEIVED

APR 5 - 1982

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 ___ / other contract x / dated 11/20, 1981, to the undersigned well operator from Big Knot Oil Company.

(If said deed, lease, or other contract has been recorded:)

Recorded on March 22, 1982, in the office of the Clerk of County Commission of Pleasants County, West Virginia, in 172 Book at page 616. 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 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 receipt of this Application by the Dept. 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 lessees on or before the day of the mailing or delivery of this 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
1613 WASHINGTON ST., E.
CHARLESTON, WV 25311
Telephone - 304/348-3092

BLANKET BOND

WHITNAM OIL & GAS CORPORATION

Well Operator

By: Robert Whiteside

Its: Robert Whiteside
President

(Revised 3-81)

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) PAN EASTERN DRILLING

Address 123 Greene Street

Marietta, OH 45750

GEOLOGICAL TARGET FORMATION Marcellus
Estimated depth of completed well 5500 feet. Rotary / Cable tools /
Approximate water strata depths: Fresh, 100 feet; salt, feet.
Approximate coal seam depths:
Is coal being mined in this area: Yes / No /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS Cubic ft.	PACKERS
	Size	Grade	Weight per ft	New	Used	For Drilling	Left in Well		
Casing	13-5/8			x			30'	15x	Kinds
Flush water	8-5/8			x			1800'	Cement to	Surface
									Sizes
Perforated									
Production tubing	5 1/2		15.5	x			5500'	500 sx or as required	Depths set by Rule 15.01
Packers									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,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY
APPROVED FOR _____ THIS PERMIT SHALL EXPIRE
IF OPERATIONS HAVE NOT COMMENCED BY _____
BY [Signature]

The following waiver must be completed 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 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 regularions.

Date: _____, 19____.

By: _____

Its: _____

[Signature]