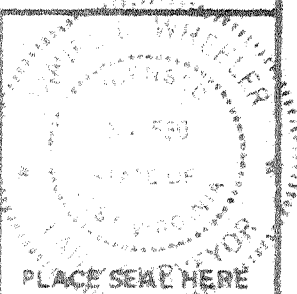


FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION B.M. 1800' NORTH OF RT. 36 & RT. 50/3 INTER. ELEV. - 849'

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) Daniel S. Whalen  
 R.P.E. \_\_\_\_\_ L.L.S. 530



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

DATE FEBRUARY 7, 1980  
 OPERATOR'S WELL NO. K-11-1  
 API WELL NO. \_\_\_\_\_  
47 - 017 - 2580-REV  
 STATE COUNTY PERMIT

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

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X

LOCATION: ELEVATION 1156' WATER SHED CLAY LICK RUN  
 DISTRICT CENTRAL COUNTY DODDRIDGE  
 QUADRANGLE WEST VIRGINIA T.5, 15'SC

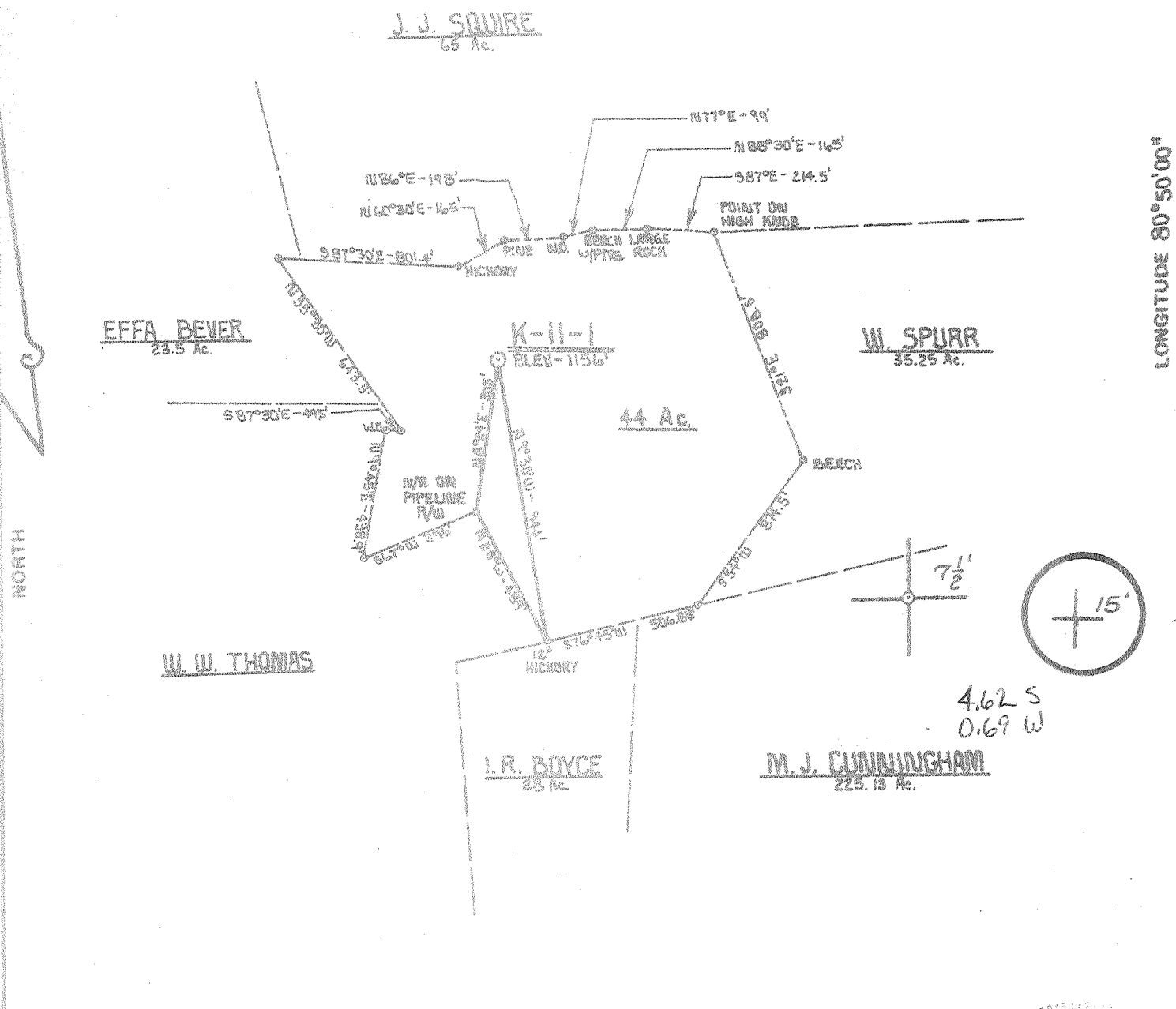
SURFACE OWNER JENNINGS SLUSSAR ACREAGE 44  
 OIL & GAS ROYALTY OWNER JENNINGS SLUSSAR LEASE ACREAGE 44  
 LEASE NO. K-11

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) REVISED LOCATION #2 STAKE

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5,150'  
 WELL OPERATOR J. & J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT  
 ADDRESS P.O. BOX 48 BUCKHANNON, W. VA. 26201 ADDRESS P.O. BOX 48 BUCKHANNON, W. VA. 26201

LATITUDE 39°17'30"  
(15') 39°20'

LONGITUDE 80°50'00"



FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
PROVEN SOURCE OF ELEVATION B.M. 1800' NORTH OF INT. OF RT 36 & RT 50/3  
ELEV. - 849'

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) David L. Whooler  
R.P.E. \_\_\_\_\_ L.L.S. 530



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



DATE JANUARY 4, 19 80  
OPERATOR'S WELL NO. K-11-1  
API WELL NO. 47-017-2580  
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 1156' WATER SHED CLAY LICK RUN  
DISTRICT CENTRAL COUNTY DODDRIDGE  
QUADRANGLE WEST UNION 7.5' / 15' SC  
SURFACE OWNER JENNINGS SLUSSER ACREAGE 44  
OIL & GAS ROYALTY OWNER JENNINGS SLUSSER LEASE ACREAGE 44  
LEASE NO. K-11  
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 5,150'  
WELL OPERATOR J. & J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT  
ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48  
BUCKHANNON, W. VA. 26201 BUCKHANNON, W. VA. 26201

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

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACURING AND/OR REWORKING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal  
Gas / Production X / Underground storage / Deep / Shallow X

LOCATION: Elevation: 1156 Watershed: Clay Lick Run  
District: Central County: Doddridge Quadrangle: West Union 7 1/2

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT H. L. Barnett  
Address P. O. Box 48 Address P. O. Box 48  
Buckhannon, W. Va. 26201 Buckhannon, W. Va. 26201

PERMITTED WORK: Drill X / Convert / Drill deeper / Redrill / Fracture or stimulate  
Plug off old formation / Perforate new formation / MAR - 7 1980  
Other physical change in well (specify): \_\_\_\_\_

OIL & GAS DIVISION  
DEPT. OF MINES

PERMIT ISSUED ON January 18, 1980, OIL & GAS INSPECTOR FOR THIS WORK:  
X APPLICABLE: PLUGGING OF DRY HOLE ON Name Paul Garrett  
CONTINUOUS PROGRESSION FROM DRILLING OR Address 321 Beech Street  
REWORKING. VERBAL PERMISSION OBTAINED Clarkburg, W. Va. 26301  
\_\_\_\_\_, 19\_\_\_\_

GEOLOGICAL TARGET FORMATION: Alexander Depth 5380 feet  
Depth of completed well, 5700 feet Rotary X / Cable Tools  
Water strata depth: Fresh, 790 feet; salt, none feet.  
Coal seam depths: None Is coal being mined in the area? No  
Work was commenced January 29, 1980, and completed February 11, 1980

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	REMARKS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	11 3/4	H-40	42	X		34	0	0 sks.	None
Fresh water	8 5/8	ERW	23	X		1431	1431	330 sks.	
Coal	8 5/8	ERW	23	X		1431	1431	330 sks.	Size
Intermediate									
Production	4 1/2	J-55	10.5	X		5470	5470	410 sks.	Leads set
Tubing									
Liners									Perforations:
									Top Bottom
									5405 5412
									3962 4114
									3568 3711

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5405-5412  
COMBINED Gas: Initial open flow 1,122 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, 4 hours  
Static rock pressure, 1400 psig (surface measurement) after 72 hours shut in  
[If applicable due to multiple completion--] 3962-4114  
Second producing formation Balltown & Warren + Spch Pay zone depth 3568-3711  
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  
Static rock pressure, \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

Continued on reverse side.

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

Alexander- Perforations: 5405-5412 (14 holes),  
Fracturing: 500 gal. Acid; 10,000 lbs. Sand 80/100 wire mesh; 50,000 lbs Sand 20/40 wire mesh; 576 Bbls. Fluid.

Balltown- Perforations: 3967-4114 (12 holes)  
Fracturing: 500 gal. Acid; 10,000 lbs. Sand 80/100 wire mesh; 20,000 lbs. Sand 20/40 wire mesh; 386 Bbls. Fluid.

Warren- Perforations: 3568-3711 (14 holes)  
Fracturing: 500 gal. Acid; 10,000 lbs. Sand 80/100 wire mesh; 20,000 lbs. Sand 20/40 wire mesh; 420 Bbls. Fluid.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of gas, oil, and salt water, coal, etc.
Sand & Shale			0	50	
Sandy Shale			50	99	
Sand			99	150	
Red Rock & Shale			150	155	
Sandy Shale			155	210	
Sand			210	215	
Sandy Shale			215	250	
Sand			250	262	
Red Rock & Shale			262	300	
Sand			300	347	
Red Rock			347	365	
Sandy Shale			365	373	
Red Rock & Shale			373	385	
Sandy Shale & Red Rock			385	755	
Red Rock & Shale			755	760	
Sandy Shale			760	900	water @790'
Red Rock			900	904	
Sand			904	916	
Sandy Shale			916	980	
Sand			980	985	
Sandy Shale			985	999	
Sand			999	1005	
Sandy Shale & Red Rock			1005	1100	
Sand			1100	1110	
Sandy Shale			1110	1197	
Sand			1197	1203	
Sandy Shale			1203	1250	
Red Rock			1250	1257	
Sandy Shale			1257	1265	
Sand & Shale			1265	1597	
Sandy Shale			1597	1603	
Sand			1603	1630	
Sandy Shale			1630	1715	

Attach separate sheets as complete as necessary.

J & J ENTERPRISES, INC.

Asst. Operator

*Peter Battles*

PETER BATTLES

GEOLOGIST

NOTE: Regulation 1.20 is provided as follows:  
"The term 'log' in this log shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."

FORMATION	Color	Hardness	Top Feet	Bottom Feet	Notes
Sand & Shale			1715	2170	1 1/2" stream water @1740'
Big Lime			2170	2256	
Big Injun			2256	2304	
Sandy Shale			2304	3525	
and			3525	3590	
Sandy Shale			3590	4045	
and			4045	4110	Gas @4049' 30/10-1" with water
Sandy Shale			4110	5123	Gas @4272' 32/10-1" with water
enson			5123	5130	
Sandy Shale			5130	5380	Gas @5234' 30/10-1" with water
Alexander			5380	5438	
Sandy Shale			5438	5450	
			TD	5700	

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. K-11-#1

API Well No. 47-017-2580  
State County Permit

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

LOCATION: Elevation: 1156 Watershed: Clay Lick Run  
District: Central County: Doddridge Quadrangle: West Union 7 1/2

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

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

OIL & GAS ROYALTY OWNER Jennings L. & Emma J. Slussar  
Address 834 Donnegan Dr., E.  
Follansbee, W. Va. 26037

COAL OPERATOR None  
Address     

ACREAGE 44  
SURFACE OWNER Jennings L. Slussar  
Address 834 Donnegan Dr., E.  
Follansbee, W. Va. 26037

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Jennings L. & Emma J. Slussar  
Address 834 Donnegan Dr., E.  
Follansbee, W. Va. 26037

FIELD SALE (IF MADE) TO:  
Name       
Address     

Name       
Address     

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, W. Va. 26301

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address     

OIL & GAS DIVISION  
DEPT. OF MINES

RECEIVED  
JAN 18 1980

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 December 6, 1978, to the undersigned well operator from Jennings L. & Emma J. Slussar

[If said deed, lease, or other contract has been recorded:]  
Recorded on December 14, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 106 at page 269. 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 other work they wish to take 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  
1615 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET BOND

J & J ENTERPRISES, INC.  
Well Operator

By H. L. Barnett  
H. L. BARNETT  
Its Designated Agent

[08-78]

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 P. O. Box 48  
Buckhannon, W. Va. 26201

GEOLOGICAL TARGET FORMATION, Alexander

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

Approximate water strata depths: Fresh, 100, <sup>1200</sup> feet; salt, None feet.

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

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 None
Fresh water	8 5/8	ERW	23	X		1600	1600	300 sks.	
Coal	8 5/8	ERW	23	X		1600	1600	300 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X		5390	5390	280 sks.	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 permit. **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 9-21-80

*Robert L. [Signature]*  
Deputy Director - Oil & Gas Division

The undersigned coal operator and by any coal owner or coal lessee has heretofore made 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 \_\_\_\_\_