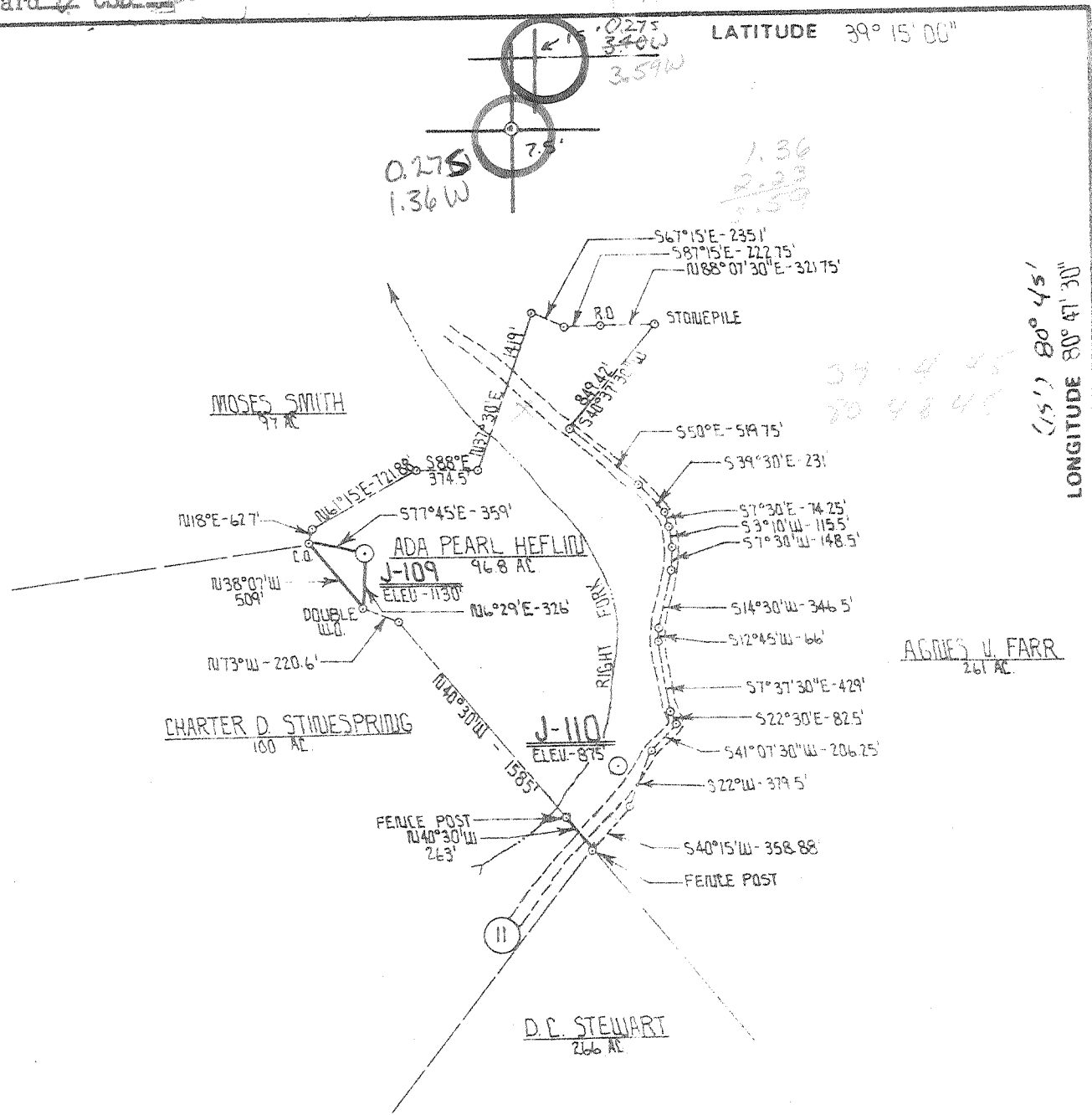


NORTH



FILE NO. 19/68  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1,000'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION J & J ENTERPRISES, INC.  
 WELL # K-23-1 ELEV. -1128'

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 L. Wheeler  
 R.P.E. \_\_\_\_\_ L.L.S. 530

PLACE SEAL HERE

(\*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (878)



DATE APRIL 25 19 80  
 OPERATOR'S WELL NO. J-109  
 API WELL NO. 47 - 017 - 2694  
 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 1130' WATER SHED RIGHT FORK TO ARNOLDS CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE OXFORD 75 NE HOLBROOK 15'  
 SURFACE OWNER ADA PEARL HEFFLIN ACREAGE 96.8  
 OIL & GAS ROYALTY OWNER CHARLES C. FLEMING + ADA PEARL HEFFLIN LEASE ACREAGE 96.8  
 LEASE NO. K-25  
 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 5410'  
 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

6-6 STRAIGHT FR - BLUESTONE CK

JUN 4 1980

133

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

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

WELL TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal   
(If "Gas", Production  / Underground storage  / Deep  / Shallow   
LOCATION: Elevation: 1130 Watershed: Right Fork of Arnold's Creek  
District: West Union County: Doddridge Quadrangle: Oxford  
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

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 4-29, 19 80 OIL & GAS INSPECTOR FOR THIS WORK:  
(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Paul Garrett  
Address 321 Beech St.  
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth \_\_\_\_\_ feet  
Depth of completed well, 5445 feet Rotary  / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh, 1475 feet; salt, \_\_\_\_\_ feet.  
Coal seam depths: 150-55 Is coal being mined in the area? No  
Work was commenced 5-19, 19 80, and completed 5-25, 19 80

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	13/4H-40	42	x			15	15	0 sks	Kinds
Fresh water	8 5/8ERW	23	x			1242.25	1242.25	340 sks	
Coal	8 5/8ERW	23	x			1242.25	1242.25	340 sks	Sizes
Intermediate									
Production	4 1/2J-55	10.5	x			5289	5289	300 sks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom
									5209 5213
									5217 5219
									5228 5231
									5238 5241

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5209-5241 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
Final open flow, 2,232 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests, 4 hours  
Static rock pressure, 1750 psig (surface measurement) after 96 hours shut in  
[If applicable due to multiple completion--]

Second producing formation \_\_\_\_\_ Pay zone depth \_\_\_\_\_ 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

Static rock pressure, \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

JUL 7 1980

JUL 28 1980

08-78]

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

Alexander: Perforations: 5209-5241 (14 holes)

Fracturing: 30,000 lbs. 80/100 sand: 60,000 lbs. 20/40 sand:  
879 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
Sand & Clay			0	10	
Sand			10	40	
White Sand			40	115	
Red Rock & Shale			115	125	Damp @ 125'
Shale & Sand			125	150	
Coal			150	155	Wet @ 155 w/1/2" stream
Shale & Sand			155	240	
Red Rock & Shale			240	470	
White Sand			470	510	
Red Rock & Shale			510	565	
Red Rock & Shale			565	630	3/4" stream @ 565'
Sand & Shale			630	695	
Red Rock & Shale			695	780	
Red Rock			780	860	
Sand & Shale			860	955	
Red Rock & Shale			955	1065	
Sand & Shale			1065	1410	Damp @ 1475'
Sand			1410	1555	2" stream @ 1492
Shale			1555	1650	
Sand & Shale			1650	1800	
Sand			1800	1859	
Light Lime			1859	1919	
Light Injun			1919	2004	
Sand & Shale			2004	2020	
Shale			2020	2065	
Shale			2065	2165	
Air			2165	2278	
Sand			2278	2990	
Sandy Shale			2990	3223	
Peechley			3223	3315	
Sand			3315	3370	
Shale			3370	4865	

(Attach separate sheets to complete as necessary.)

J & J Enterprises, Inc.

Well Operator

By Peter Battles  
Geologist

NOTE: Regulation 2.02(f) 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."

FORMATION	Color	Top of Feet	7 Top Feet	Bottom Feet	REMARKS Including indication of gas and salt water, coal, etc.
and hale			4865	5000	Ck. Gas @ 4796 No show
lexander			5000	5147	
and			5147	5215	Ck gas @ 5076 No show
hale			5215	5310	
			5310	5445	

JUL 28 1980

Date: 4-28, 1980

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-109

API Well No. 47-017-2694  
State County Permit

WELL TYPE: Oil  / Gas  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow  /)  
LOCATION: Elevation: 1130 Watershed: Right Fork of Arnolds Creek  
District: West Union County: Doddridge Quadrangle: Oxford

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

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

OIL & GAS  
ROYALTY OWNER Ada Heflin/ Charles Fleming  
Address 1321 Harpster Ave. /St. Petersburg  
Akron, Ohio 44301

COAL OPERATOR None  
Address Fla. 33731

ACREAGE 96.8  
SURFACE OWNER Ada Heflin  
Address 1321 Harpster Ave.  
Akron, Ohio 44301  
ACREAGE 96.8

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Ada Pearl Heflin  
Address 1321 Harpster Ave.  
Akron, Ohio 44301

DEED SALE (IF MADE) TO:  
Name \_\_\_\_\_  
Address \_\_\_\_\_

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address APR 29 1980

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address 321 Beech St.  
Clarksburg, WV 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  / other contract  / dated 3-29, 1979, to the undersigned well operator from Lacy & Dean Rowe  
[said deed, lease, or other contract has been recorded:]

Recorded on 5-1, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 108 at page 407. A permit is requested as follows:

PROPOSED WORK: Drill  / 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 action 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 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:

VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
WASHINGTON STREET EAST  
LEWISTON, WV 26044

PHONE: (304) 325-3397

J & J Enterprises, Inc.  
Well Operator

BLANKET BOND

By Peter Battles  
Its Peter Battles  
Geologist

[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 Box 48  
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5200 feet Rotary  / Cable tools  /

Approximate water strata depths: Fresh, 80 feet; salt 1000 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	1 13/4H-40		42	x		30	30	0 sks	Kinds
Fresh water	3 5/8ERW		23	x		1300	1300	300 sks	
Coal	3 5/8ERW		23	x		1300	1300	300 sks	Sizes
Intermediate									
Production	4 1/2J-55		10.5	x		5100	5100	350 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 drilling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well. THIS PERMIT MUST BE POSTED AT THE WELL SITE. It shall be a 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. This permit shall expire if operations have not commenced by 12-30-80.

*Robert T. [Signature]*

Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator, owner, or 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 regulations.

Date:           , 19          

By           

Its