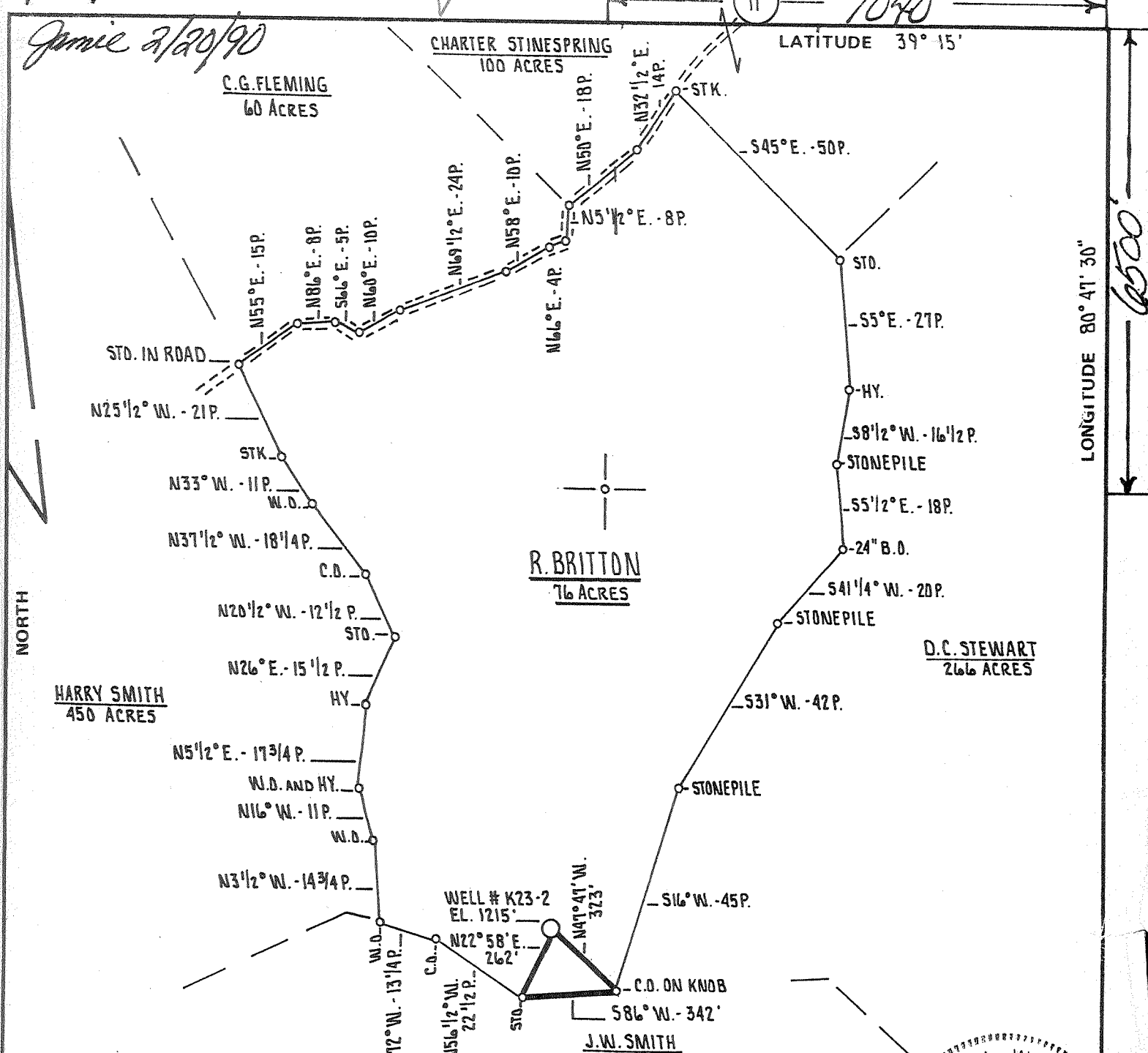


*Jamie 2/20/90*

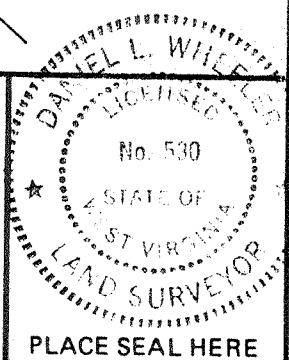
7040



LONGITUDE 80° 47' 30"

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION Jct. Rd. Fks. S.L.S. II  
AND S.L.S. II ELEVATION 922'

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. 53D



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



DATE SEPTEMBER 28<sup>th</sup>, 19 79  
 OPERATOR'S WELL NO. K23-2  
 API WELL NO. 47-017-2500-Frac  
 STATE COUNTY PERMIT

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

**Frac. Cancelled**

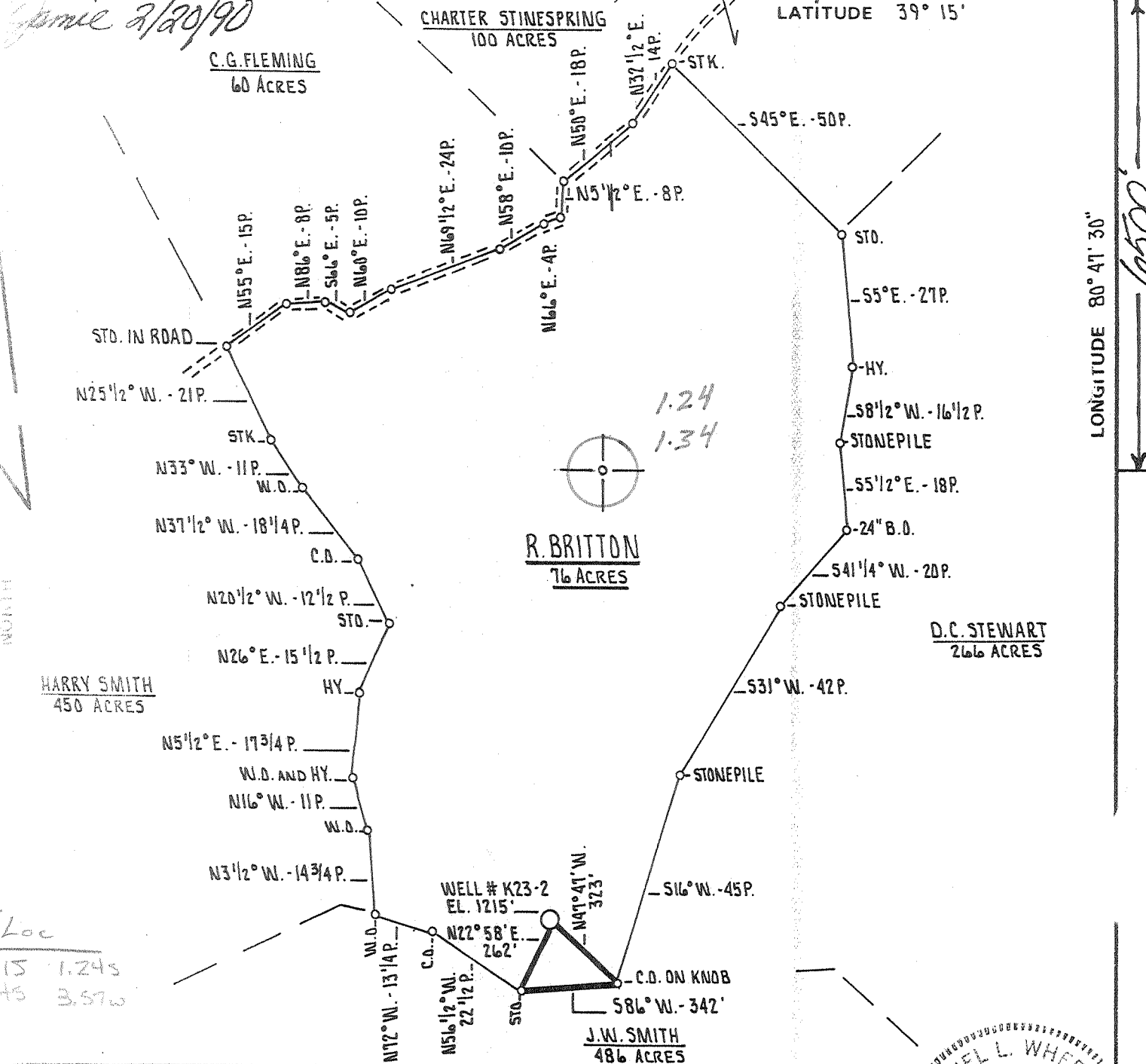
WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1215' WATER SHED RIGHT FORK TO ARNOLD CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE OXFORD 7.5'  
 SURFACE OWNER CARLSON LEGGETT ACREAGE 59.9 Ac.  
 OIL & GAS ROYALTY OWNER RITCHIE BRITTON LEASE ACREAGE 76 Ac.  
 LEASE NO. 23  
 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 4750'  
 WELL OPERATOR Eastern American DESIGNATED AGENT John M. Paletti  
 ADDRESS P.O. BOX 259 Blountville, WEST VIRGINIA 26357 ADDRESS P.O. BOX 259 Blountville, WEST VIRGINIA 26357

Dodd 2500-Frac

*Janie 2/20/90*

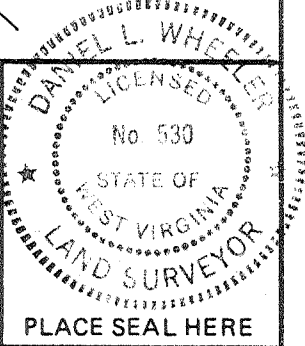
7040



*5' Loc*  
 39 15 1.24s  
 30 45 3.57w

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION Jct. Rd. FKS. S.L.S. II AND S.L.S. II ELEVATION 922'

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



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



DATE SEPTEMBER 28<sup>th</sup>, 19 79  
 OPERATOR'S WELL NO. K23-2  
 API WELL NO. \_\_\_\_\_  
47 - 017 - 2500  
 STATE COUNTY PERMIT

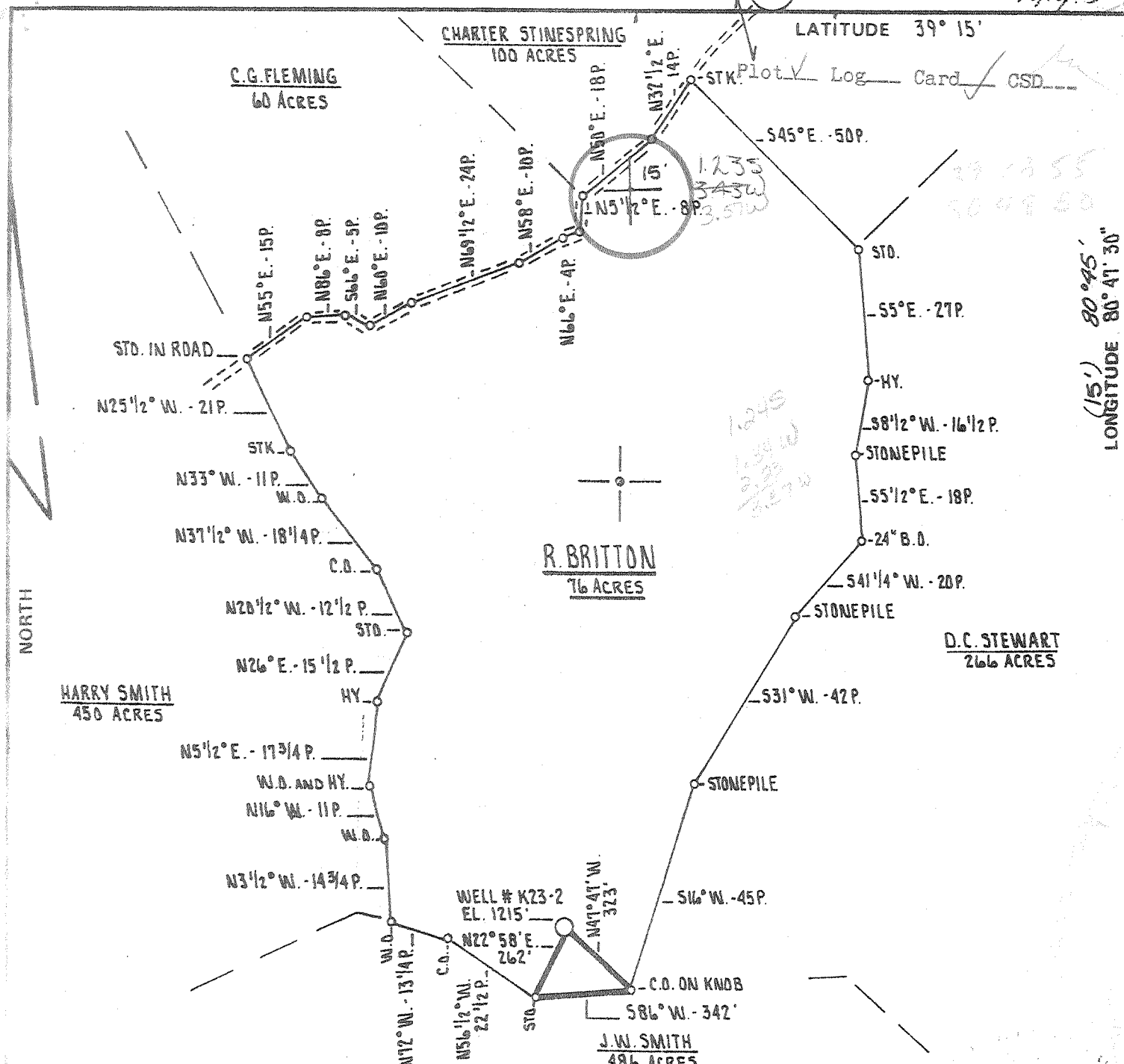
STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1215' WATER SHED RIGHT FORK TO ARNOLD CREEK  
 DISTRICT WEST UNION COUNTY DDDDRIDGE  
 QUADRANGLE OXFORD 7.5'  
 SURFACE OWNER CARLSON LEGGETT ACREAGE 59.9 Ac.  
 OIL & GAS ROYALTY OWNER RITCHIE BRITTON LEASE ACREAGE 76 Ac.  
 LEASE NO. 23  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL X 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 4750'  
 WELL OPERATOR Eastern American DESIGNATED AGENT John M. Paletti  
 ADDRESS P.O. BOX 1, Glenville, WEST VIRGINIA 26351 759 ADDRESS P.O. BOX 1, Glenville, WEST VIRGINIA 26351

MAR 12 1980

10/12/79



(15') 80°45'  
LONGITUDE 80°47'30"

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION Jct. Rd. FKS. S.L.S.  
 116 AND S.L.S. 11 ELEVATION 922'

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

PLACE SEAL HERE

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



DATE SEPTEMBER 28<sup>th</sup> 19 79  
 OPERATOR'S WELL NO. K23-2  
 API WELL NO. \_\_\_\_\_  
 47 - 017 - 2500  
 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 1215' WATER SHED RIGHT FORK TO ARNOLD CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE OXFORD T.5', HOLBROOK 15' NE  
 SURFACE OWNER CARLSON LEGGETT ACREAGE 59.9 Ac.  
 OIL & GAS ROYALTY OWNER RITCHIE BRITTON LEASE ACREAGE 76 Ac.  
 LEASE NO. 23  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL X 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 4750'  
 WELL OPERATOR 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

OCT 25 1979

6-6 Straight Fork - Bluestone Creek (133)

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: 1215 Watershed: Right Fork of Arnolds Creek  
District: West Union County: Doddridge Quadrangle: Oxford 7.5'

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 10-9, 19 79 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 5220-5294 feet  
Depth of completed well, 5430 feet Rotary  / Cable Tools   
Water strata depth: Fresh, 50,70 feet; salt, \_\_\_\_\_ feet.  
Coal seam depths: None Is coal being mined in the area? No  
Work was commenced 4-16, 19 80, and completed 4-22, 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		
Conductor	113/4H-40	42	x			28	0 sks	Kinds None
Fresh water	8 5/8ERW	23	x			1308.80	1308.80	330 sks
Coal	8 5/8ERW	23	x			1308.80	1308.80	330 sks
Intermediate								Sizes
Production	4 1/2J-55	10.5	x			5373.35	5373.35	400 sks
Tubing								Depos set
Liners								Perforations:
								Top Bottom
								5304 5270

RECEIVED  
MAY 15 1980

OPEN FLOW DATA

Producing formation Alexander OIL & GAS DIVISION DEPT. OF MINES depth 5270-5304 feet  
Gas: Initial open flow, 1,750 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, 1700 psig (surface measurement) after 48 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

[08-78]

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

Alexander: Perforations: 5304-5270 (22 holes)  
 Fracturing: 300 lbs. Acid: 300 sks. 80/100 Sand: 600 sks. 20/40  
 Sand: 700 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			50	90	Damp @ 50
Sand & Shale			90	95	
Red Rock			95	100	1/4" stream water @ 70'
Sandy			100	110	
Red Rock & Shale			110	120	
Sand			120	140	
Sandy Shale			140	455	
Sand			455	470	
Red Rock			470	480	
Sandy Shale			480	560	
Sand			560	573	
Sandy Shale			573	660	
Lime & Sand			660	672	
Shale			672	781	
Red Rock			781	787	
Sand & Shale			787	835	
Red Rock & Shale			835	910	
Shale			910	930	
Sand			930	960	
Sandy Shale			960	982	
Shale			982	1030	
Sandy Shale			1330	1046	
Sand			1046	1067	
Shale			1067	1100	
Sandy Shale			1100	1115	
Shale			1115	1136	
Sandy Shale			1136	1190	
Sand			1190	1200	
Red Rock			1200	1205	
Sandy Shale			1205	1265	Damp @ 1265'
Sand			1265	1279	
Sandy Shale			1279	1411	

(Attach separate sheets to complete as necessary)

J & J Enterprises,  
 Well Operator  
 By Daniel Stark  
 Its Daniel Stark Geologist

NOTE: Regulation 2.0246 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	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
1st. Salt Sand			1411	1464	Oil odor @ 1420
Shale			1464	1607	
Sandy			1607	1628	
Shale			1628	1820	
Sandy Max			1820	1850	
Shale			1850	1885	
Little Lime			1885	1910	
Shale			1910	1926	
Big Lime & Injun			1926	2090	
Shale			2090	2250	
Weir			2250	2367	
Shale			2367	2446	
Berea			2446	2452	
Sahle			2452	2652	
Gordon			2652	2676	
Sandy Shale			2676	3308	Gas @ 2972 80/10 thru 1" w/water
Speechley	3308		3308	3418	
Sandy Shale			3418	3704	
Balltown			3704	3906	
Sand & Shale			3906	4936	Gas @ 4728 10/10 thru 2" w/wate
Benson			4936	4942	
Sandy Shale			4942	5220	Gas @ 5109 6/10 thru 2" w/water
Alexander			5220	5294	
Shale			5294	5430	TD. 5430

017 2500 F  
Issued 3/5/90  
Expires 3/5/92  
Page 3 of 8  
Free

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Eastern American Energy Corporation <sup>259</sup> 14980 (8) 525
- 2) Operator's Well Number: J-98 3) Elevation: 1215'
- 4) Well type: (a) Oil  / or Gas  /  
(b) If Gas: Production  / Underground Storage  /  
Deep  / Shallow  /  
435
- 5) Proposed Target Formation(s): Benson/Riley/Balltown/Speechley/Warren
- 6) Proposed Total Depth: 5430 feet
- 7) Approximate fresh water strata depths: 50', 70', 1265'
- 8) Approximate salt water depths: None
- 9) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 11) Proposed Well Work: Rework. Free Existing Well.
- 12) New Formation

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT Fill-up (cu. ft.)
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11"	F-25	37.5	28'	-----	<u>930 SKS</u>
Fresh Water	8-5/8"	J-55	20.0	1308.80'	1308.80'	C.T.S. 38CSR18-11.3
Coal						38CSR18-11.2.2
Intermediate						
Production	4-1/2"	J-55	10.5	5373.35'	5373.35'	<u>38CSR18-11.1</u>
Tubing	1-1/2"	H-40	2.75			
Liners						

RECEIVED  
FEB 07 1990

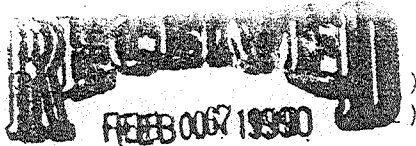
PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

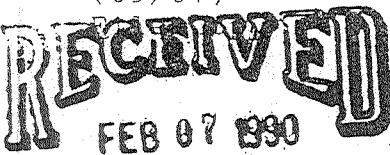
For Division of Oil and Gas Use Only

3948

Fee(s) paid  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond Blanket Sure  Agent  
(Type)



Date: January 18, 1990  
Operator's well number  
J-98  
API Well No: 47 - 017 - 2500-FRAC  
State - County - Permit



COMMISSIONER OF OIL & GAS  
DEPARTMENT OF ENERGY

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

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:  
(a) Name Carson Leggett  
Address Rt. 1  
West Union, WV 26456  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Mike Underwood  
Address Rt. 2, Box 135  
Salem, WV 26426  
Telephone (304)-782-1043

5) (a) Coal Operator:  
Name None  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
XX Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)  
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 8 on the above named parties, by:  
\_\_\_\_\_ Personal Service (Affidavit attached)  
XX \_\_\_\_\_ Certified Mail (Postmarked postal receipt attached)  
\_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.  
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.  
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Eastern American Energy Corporation  
By: John M. Paletti  
Its: Designated Agent  
Address P.O. Box N  
Glenville, WV 26351  
Telephone (304) 462-5781

Subscribed and sworn before me this 13 day of January, 1990  
Jo Lorraine Lowe Notary Public  
My commission expires July 2, 1996



[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. K-23-#2  
API Well No. 47-017-2500  
State County Permit

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

LOCATION: Elevation: 1215' Watershed: Right Fork of Arnolds Creek  
District: West Union County: Doddridge Quadrangle: Oxford 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 Ritchie Britton  
Address Arnolds Creek  
West Union, W. Va.

COAL OPERATOR None  
Address     

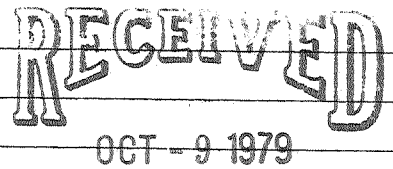
ACREAGE 59.9  
SURFACE OWNER Carlson Leggett  
Address Arnolds Creek  
West Union, W. Va.  
ACREAGE 59.9

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name None  
Address       
Name       
Address     

FIELD SALE (IF MADE) TO:  
Name       
Address     

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address     

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, W. Va. 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 X / other contract      / dated July 8, 1978, to the undersigned well operator from Ritchie Britton  
[If said deed, lease, or other contract has been recorded:]

Recorded on August 3, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 104 at page 343. 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 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  
1019 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET PERMIT

J & J ENTERPRISES, INC.  
Well Operator  
Peter Battles  
By PETER BATTLES  
Its Geologist