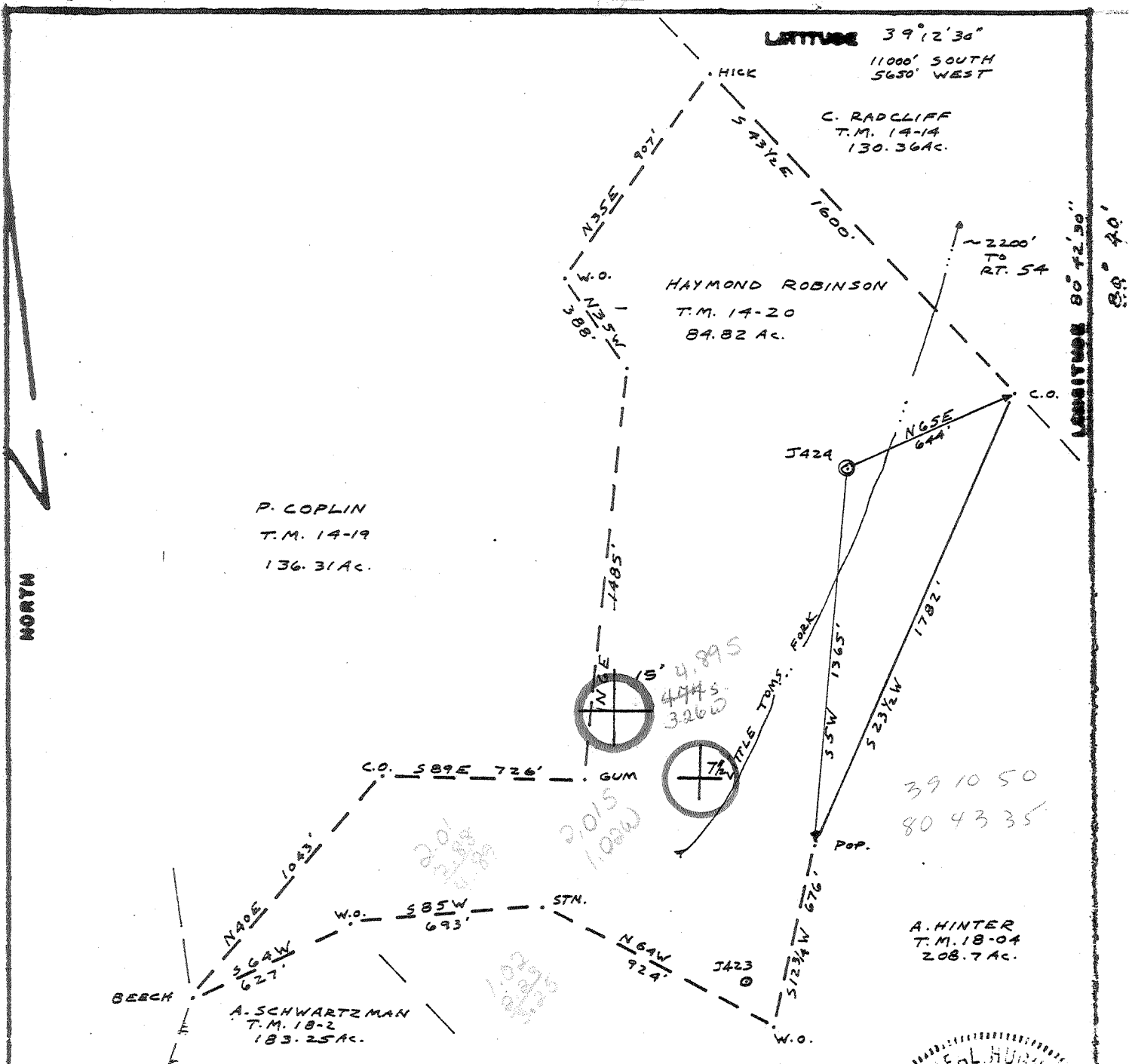


ch 1/8

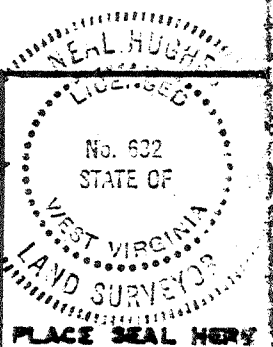
Plot Card CSP

39° 15'



FILE NO. J+J  
 DRAWING NO. J424  
 SCALE 1"=500'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION 868 @ ROAD

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-6  
 (8-78)



DATE Dec 10, 1982  
 OPERATOR'S WELL NO J424  
 API WELL NO. 47-017-2925  
 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 1015' WATER SHED LITTLE TOMS FORK  
 DISTRICT NEW MILTON COUNTY DODDRIDGE  
 QUADRANGLE NEW MILTON 7 1/2' VD 15 VADIS 15' NW  
 SURFACE OWNER HAYMOND ROBINSON ACRES 84.82 AC  
 OIL & GAS ROYALTY OWNER A.W. ROBINSON HEIRS LEASE ACRES 84 AC.  
 LEASE NO. K301  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  PLUS OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUS AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION Henson ESTIMATED DEPTH 5000  
 WELL OPERATOR JTE Enterprises DESIGNATED AGENT H. Barnett  
 ADDRESS P.O. Box 48 ADDRESS P.O. Box 48  
Buckhannon W.V. 26201 Buckhannon W.V. 26201

6-6 Porto Rico (134)

JAN 26 1981

**RECEIVED**  
DEC 18 1987

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

Revised Completion  
12/17/87

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

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: 1015 Watershed: Little Toms Fork  
District: New Milton County: Doddridge Quadrangle: New Milton 7.5'

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT James R. Willett  
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 1/6, 19 81

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED \_\_\_\_\_, 19 \_\_\_\_\_)

Name Steve Casey  
Address Rt. # 2, Box 232-D  
Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: Benson 4975-80 Depth \_\_\_\_\_ feet

Depth of completed well, 5127 feet Rotary  / Cable Tools \_\_\_\_\_

Water strata depth: Fresh, 59,120 feet; salt, 0 feet.

Coal seam depths: None Is coal being mined in the area? NO

Work was commenced 8/28, 1981, and completed 9/4, 1981

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	30	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		1564.05	1564.05	375 sks.	
Coal	8 5/8	ERW	23	x		1564.05	1564.05	375 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		5024.15	5024.15	430 sks.	Setting set
Tubing									
Liners									Perforations:
									Top Bottom
									3452 3469
									4541 4544
									4989 4992

OPEN FLOW DATA

Producing formation Benson Bradford Pay zone depth 4989-92 4541-44 feet

Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d

Combined Final open flow, 622 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests, 4 hours

Static rock pressure, 1575 psig (surface measurement) after 96 hours shut in

[If applicable due to multiple completion--]

Second producing formation Speechley Pay zone depth 3452-69 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

Bottom Hole Pressure

Pf=PweXGLS

$$T=60+(0.0075 \times 5024) + 459.7 = 557 \quad x = \frac{1}{53.34} \times 557 = \frac{1}{29716} = 0.0000337 \quad Pf=1575 \times 2.72 (0.0000337)$$

$$.655) (4222) (0.9) = 1575 \times 2.72 \quad 0.084 = 1575 \times 1.088$$

Pf= 1714

DEC 21 1987

[08-78]

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

Speechley: Perforations: 3452-3469 (13 holes)  
 Fracturing: 100 sks. 80/100 sand: 280 sks. 20/40 sand: 500 gals. Acid:  
 500 Bbls. fluid.

Benson: Perforations: 4989-92 (8 holes), Bradford: Perforations: 4541-44 (5 holes)  
 Fracturing: 150 sks. 80/100 sand: 450 sks. 20/40 sand: 300 gals. Acid:  
 600 Bbls. fluid.

WELL 100

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Top Soil			0	15	Wet @ 25'
Sand			15	35	
Sand & shale			35	59	1" stream @ 59'
Sand, shale & red rock			59	85	
Sand, shale & red rock			85	160	½" stream @ 120'
Sand, shale & red rock			160	195	More water @ 1545
Sand & red rock			195	260	
Sand & red rock			260	305	Gas ck @ 2340 No show
Red rock, shale & sand			305	420	Gas ck @ 2993 No show
Sand, shale & red rock			420	905	
Sand & shale			905	985	Gas ck @ 3457 No show
Red rock, sand & shale			985	1070	
Red rock, sand & shale			1070	1120	Gas ck @ 4352 No show
Red rock, sand & shale			1120	1250	
Sand & shale			1250	2000	Gas ck @ 4817 No show
Big Lime			2000	2040	
Big Injun			2040	2135	
Squaw			2135	2155	Gas ck @ 5003 No show
Sand & shale			2155	2250	
Weir			2250	2380	Gas ck @ T.D. 4/10-1½" w/water
Sand & shale			2380	3400	23,839 cu.ft.
Speechley			3400	3500	
Sand & shale			3500	4530	
Bradford			4530	4570	
Sand & shale			4570	4975	
Benson			4975	4995	
Sand & Shale			4995	5127	
				T.D.	

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DEC 18 1987

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

(Attach separate sheets as complete as necessary.)

I & J Enterprises, Inc.  
Well Operator  
By Peter Battles  
Geologist

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."

OCT 2 1981

OIL AND GAS DIVISION WV DEPARTMENT OF MINES, OIL AND GAS DIVISION

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

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

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal / (If "Gas", Production X / Underground storage / Deep / Shallow X) LOCATION: Elevation: 1015 Watershed: Little Toms Fork District: New Milton County: Doddridge Quadrangle: New Milton 7.5'

WELL OPERATOR J & J Enterprises, Inc. Address P.O. Box 48 Buckhannon, WV 26201 DESIGNATED AGENT James R. Willett Address P.O. Box 48 Buckhannon, WV 26201

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

PERMIT ISSUED ON 1/6, 19 81 OIL & GAS INSPECTOR FOR THIS WORK: Name Steve Casey Address Rt. # 2, Box 232-D Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: Benson 4975-80 Depth feet Depth of completed well, 5127 feet Rotary X / Cable Tools Water strata depth: Fresh, 59,120 1545 feet; salt, 0 feet. Coal seam depths: None Is coal being mined in the area? NO Work was commenced 8/28, 1981, and completed 9/4, 1981

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS. Rows include Conductor, Fresh water, Coal, Intermediate, Production, Tubing, Liners.

OPEN FLOW DATA

Producing formation Benson Pay zone depth 4989-92 BNSN feet Gas: Initial open flow, Mcf/d Oil: Initial open flow, Bbl/d Combined Final open flow, 622 Mcf/d Final open flow, Bbl/d Time of open flow between initial and final tests, 4 hours Static rock pressure, 1575 psig (surface measurement) after 96 hours shut in [If applicable due to multiple completion--] Second producing formation Speechley Pay zone depth 3452-69 WRRN 4541-44 RIL 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

om Hole Pressure Pf=PweXGLS 60 = (0.0075 x 5024) + 459.7 = 557 x = 1 / 53.34 x 557 = 1 / 29716 = 0.0000337 Pf=1575 x 2.72 (0.0000337) .655) (4222) (0.9) = 1575 x 2.72 0.084 = 1575 x 1.088 Pf= 1714

10 5 1981

108-781

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

Speechley: Perforations: 4541-4544  
3452-3469 (16 holes)  
Fracturing: 100 sks. 80/100 sand: 280 sks. 20/40 sand: 500 gals. Acid:  
500 Bbls. fluid.

Benson: Perforations: 4989-92 (8 holes)  
Fracturing: 150 sks. 80/100 sand: 450 sks. 20/40 sand: 300 gals. Acid:  
600 Bbls. fluid.

WELL 100

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all carbon and salt water, coal, oil and gas
Top Soil			0	15	Wet @ 25'
Sand			15	35	
Sand & shale			35	59	1" stream @ 59'
Sand, shale & red rock			59	85	
Sand, shale & red rock			85	160	1/2" stream @ 120'
Sand, shale & red rock			160	195	More water @ 1545
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Sand & red rock			260	305	Gas ck @ 2340 No show
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Sand, shale & red rock			420	905	
Sand & shale			905	985	Gas ck @ 3457 No show
Red rock, sand & shale			985	1070	
Red rock, sand & shale			1070	1120	Gas ck @ 4352 No show
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Big Lime			2000	2040	
Big Injun			2040	2135	
Squaw			2135	2155	Gas ck @ 5003 No show
Sand & shale			2155	2250	
Weir			2250	3320	Gas ck @ T.D. 4/10-1 1/2" w/water
Sand & shale			3320	3450	23,839 cu.ft.
Speechley			3450	4544	
Sand & shale			4544	4975	
Benson			4975	4980	
Sand & shale			4980	5127	T.D.

(Attach separate sheets as complete as necessary.)

J. S. J. Enterprises, Inc.  
Well Operator  
By *[Signature]*  
Peter Battles  
Geologist

NOTE: Regulation 2.02(d) 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."

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, WV 26201

GEOLOGICAL TARGET FORMATION, Benson

Estimated depth of completed well, 5000 feet Rotary x / Cable tools /

Approximate water strata depths: Fresh, 80 feet; salt, 580 feet.

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

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, 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.

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 9-7-81

J.P. Huggins Deputy Director of Gas Division

The undersigned shall not be required 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 has been 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.

By Its

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-424  
API Well No. 47 - 017 - 2925  
State County Permit

WELL TYPE: Oil \_\_\_ / Gas x /  
(If "Gas", Production x / Underground storage \_\_\_ / Deep \_\_\_ / Shallow x /)  
LOCATION: Elevation: 1015 Watershed: Little Toms Fork  
District: New Milton County: Doddridge Quadrangle: NewMilton 7.5'

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

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

LAND & GAS INTERESTS & GAS LEASES OWNERS  
A.W. Robinson Heirs  
Address C/O Paul Robinson  
Rt. # 1, Box 26  
New Milton, WV 26411  
Acreage 84

COAL OPERATOR None  
Address

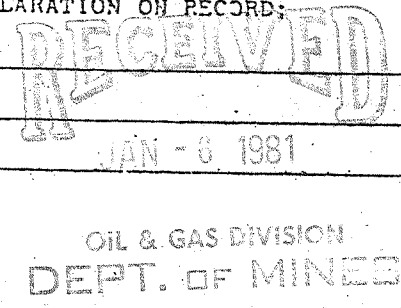
SURFACE OWNER Haymond Robinson C/O Elsie Robinson  
Address Star Route, Box 29  
Middlebourne, WV 26149  
Acreage 84.82

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Haymond Robinson/Elsie Robinson  
Address Star Route, Box 29  
Middlebourne, WV 26149

FIELD SALE (IF MADE) TO:  
Name Unknown  
Address

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address

LAND & GAS INSPECTOR TO BE NOTIFIED  
Name Paul W. Garrett  
Address 321 Beech St.  
Clarksburg, WV 26301



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 9/7, 1978; to the undersigned well operator from Paul Robinson  
[if said deed, lease, or other contract has been recorded:]

Recorded on October 23, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas lease Book 105 at page 179. 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 action they wish to take or are required to make by Code § 22-4-3 must be filed with the Department within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and declaration plan have been mailed 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:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
100 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 345-3092

J & J Enterprises, Inc.  
Well Operator  
By Peter Battles  
Peter Battles