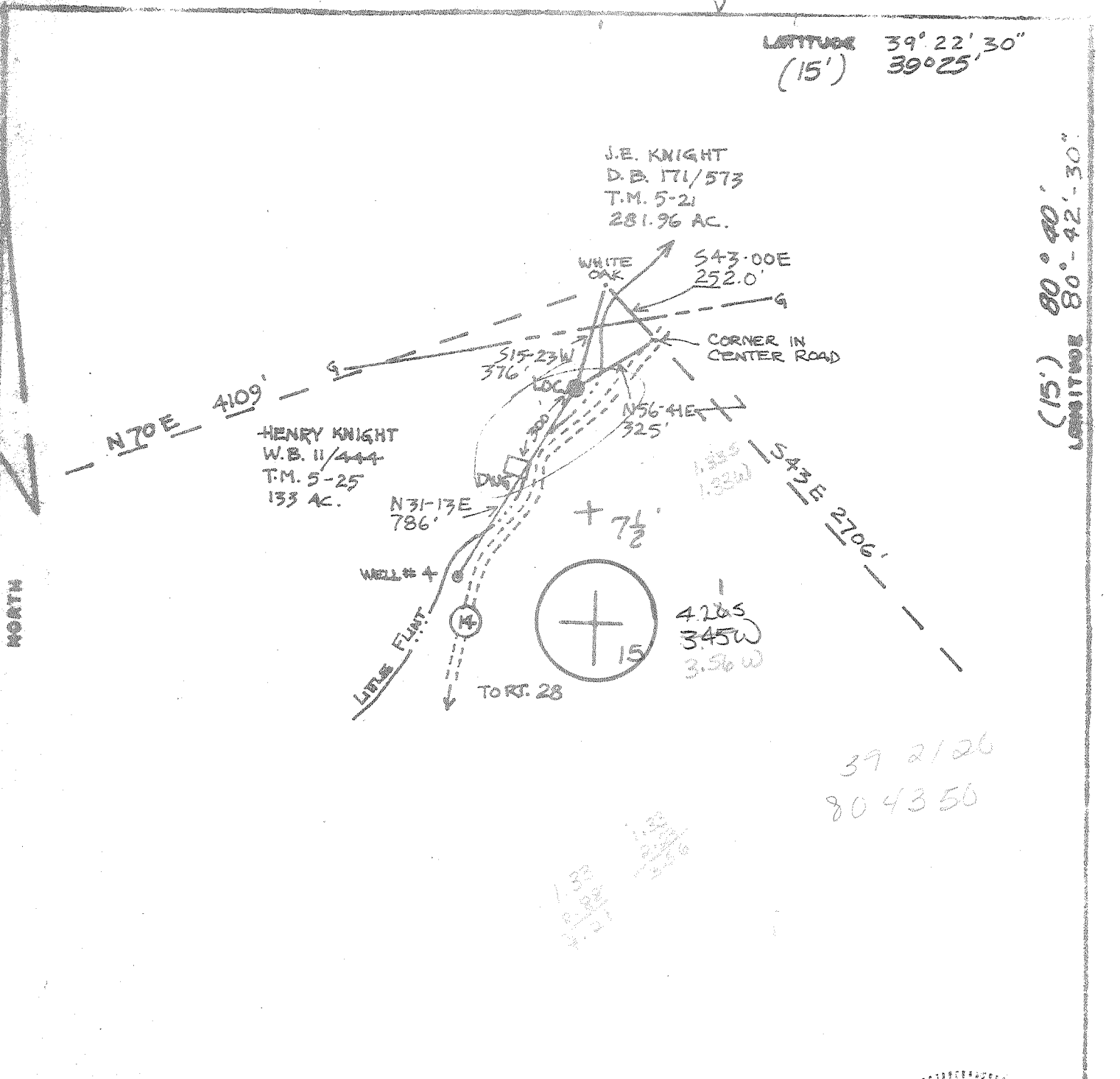


LATITUDE 39° 22' 30"  
(15') 39° 25'

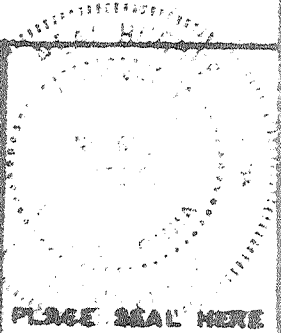
(15') 80° 40'  
LONGITUDE 80° 42' 30"



39 2126  
80 4350

FILE NO. HH1  
DRAWING NO. 1  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1/200  
PROVEN SOURCE OF ELEVATION WELL #4 (867)

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 G. Hughes  
R.P.E. \_\_\_\_\_ L.L.S. 632



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



DATE 30 JULY 1979  
OPERATOR'S WELL NO. HH1-1  
API WELL NO. 47-017-2466  
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 850 WATER SHED LITTLE FLINT RUN  
DISTRICT GRANT COUNTY DODDRIDGE  
QUADRANGLE SMITHBURG (7.5' SERIES) (CENTERPOINT 15') WC  
SURFACE OWNER HENRY KNIGHT ACREAGE 133 AC.  
OIL & GAS ROYALTY OWNER Henry Knight, Mike O'Leary LEASE ACREAGE 219  
LEASE NO. HH1-1  
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 ALEXANDER ESTIMATED DEPTH 5300 AUG 22 1979  
WELL OPERATOR J.P. Enterprises Inc. DESIGNATED AGENT Harry Barnett  
ADDRESS Box 48 ADDRESS Box 48  
Buckhannon, W.V. 26201 Buckhannon W.V. 26201  
6-6 SMITHBURG FLINT SEDOLIA 89

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

WELL OPERATOR'S REPORT 2  
OF

DRILLING, FRACURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil  / Gas  / Liquid Injection  Waste Disposal   
(If "Gas", Production  / Underground storage  Deep  Shallow   
LOCATION: Elevation: 850 Watershed: Little Flint Run  
District: Grant County: Doddridge Quadrangle: Smithburg

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT H.L. Barnett  
Address Box 48 Address 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 8-9, 19 79 OIL & GAS INSPECTOR FOR THIS WORK:  
(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Paul Garrett  
Address 321 Beech St.  
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth 5150-55 feet  
Depth of completed well, 5360 feet Rotary  / Cable Tools   
Water strata depth: Fresh, 7-25 feet; salt, 0 feet.  
Coal seam depths: 505-508 Is coal being mined in the area? No  
Work was commenced 2-15, 19 80, and completed 2-21, 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	Kinds
Conductor	113/4H-40	42	x			82	0	0 sks	None
Fresh water	8 5/8ERW	23	x			1547.55	1547.55	240 sks	
Coal	8 5/8ERW	23	x			547.55	1547.55	240 sks	Sizes
Intermediate									
Production Tubing	4 1/2J	559.5	x			5012	5012	185 sks	Depths set
Liners									Perforations:
									Top Bottom

OPEN FLOW DATA

Producing formation Benson Pay zone depth 4875-4910 feet

Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
Final open flow, 198 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests, 4 hours

Static rock pressure, 770 psig (surface measurement) after 72 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

**BLANKET BOND**

JUN 30 1980

JUL 28 1980

08-73

DETAILS OF PERFORATED INTERVALS, FRACTURING OF PERFORATIONS, PHYSICAL CHANGE, ETC.

Benson; Perforations: 4915-17 (8 holes)

Fracturing: 500 gal. Acid; 200 sks. 80/100 sand; 500 sks 20/40 sand,  
700 Bbls. fluid

ELL 100

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks including indication of gas, oil, water, and salt water, coal, etc.
Red Rock			0	10	Water @ 7'
Shale			10	15	
Sand			15	139	Water @ 25'
Sand & Shale			139	145	
Sand			145	280	
Sand & Shale			280	351	
Red Rock & Shale			351	505	
Coal			505	508	
Sand & Shale			508	570	
Shale			570	630	
Red Rock & Shale			630	775	
Red Rock			775	800	
Sand & Shale			800	1510	
Sand & Shale			1510	1550	
White Sand & Shale			1550	1570	
Sand			1570	1585	
Sand & Shale			1585	1685	
Shale			1685	1757	
Lime			1757	1770	
Sand & Shale			1770	1790	
Big Lime			1790	1870	
Injun			1870	1905	
Shale & Sand			1905	1975	
Sand & Shale			1975	2500	
Sand			2500	2530	
Sand & Shale			2530	4875	Gas @ 2614 32/10 thru 2" w/water
Benson			4875	4910	Gas @ 4786 24/10 thru 1" w/water
Shale			4910	5150	
<u>Alexander</u>			5150	5155	
Shale			5155	5360	T.D. 5360

(Attach separate sheets to complete as necessary)

I. & J. Enterprises, Inc.  
Well Operator  
By: *Peter Batties*  
Peter Batties  
Geologist

NOTE: Regulation 0.024, provides as follows:

"The term 'log' or 'well log' shall mean a systematic, recorded geological record of all formations, including coal, encountered in the drilling of a well."

Date: August 7, 1979

Operator's Well No. H-1

API Well No. 47-017-2466

WELL TYPE: Oil / Gas  /

(If "Gas", Production  / Underground storage  / Deep  / Shallow )

LOCATION: Elevation: 850 / District: Grant / County: Doddridge / Quadrangle: Smithburg

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

OIL & GAS ROYALTY OWNER: Henry Knight / Gertrude & Mike Opatic / Coal Operator

None

Address: 4208 Thornapple Lane / 250 E. Florida Ave. / Charleston, W. Va. Youngstown, Ohio

COAL OWNER(S) WITH DECLARATION ON RECORD:

Name: None

Address:

Name: None

Address:

COAL LESSEE WITH DECLARATION ON RECORD:

Name: None

Address:

OIL & GAS INSPECTOR TO BE NOTIFIED: Paul Garrett

Name: Paul Garrett

Address: Clarksburg, W. Va. 26301

OIL & GAS DIVISION

DEPT. OF MINES

AUG 9 1979

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease  / other contract / dated July 30, 1979, to the undersigned well operator from Justin Henderson

[If said deed, lease, or other contract has been recorded:]

Recorded on July 30, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease 109 at page 391. 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 obligation 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 1615 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 348-3092

BLANKET BOND

By: *Harry Barnett* Well Operator  
J & J Enterprises, Inc.  
Geologist

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, 5300 feet Rotary X / Cable tools      /

Approximate water strata depths: Fresh, 100 feet; salt, 1000 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'	30'	40	Kinds
Fresh water	8 5/8	ERW	23	X		1200'	1200'	110	
Coal	8 5/8	ERW	23						Sizes
Intermediate									
Production	4 1/2	J-55	9.5			5250	5250	450	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 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.

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 4-9-80.

[Signature]  
Deputy Director - Oil & Gas Division

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 regulations.

Date:     , 19    

By       
Its