

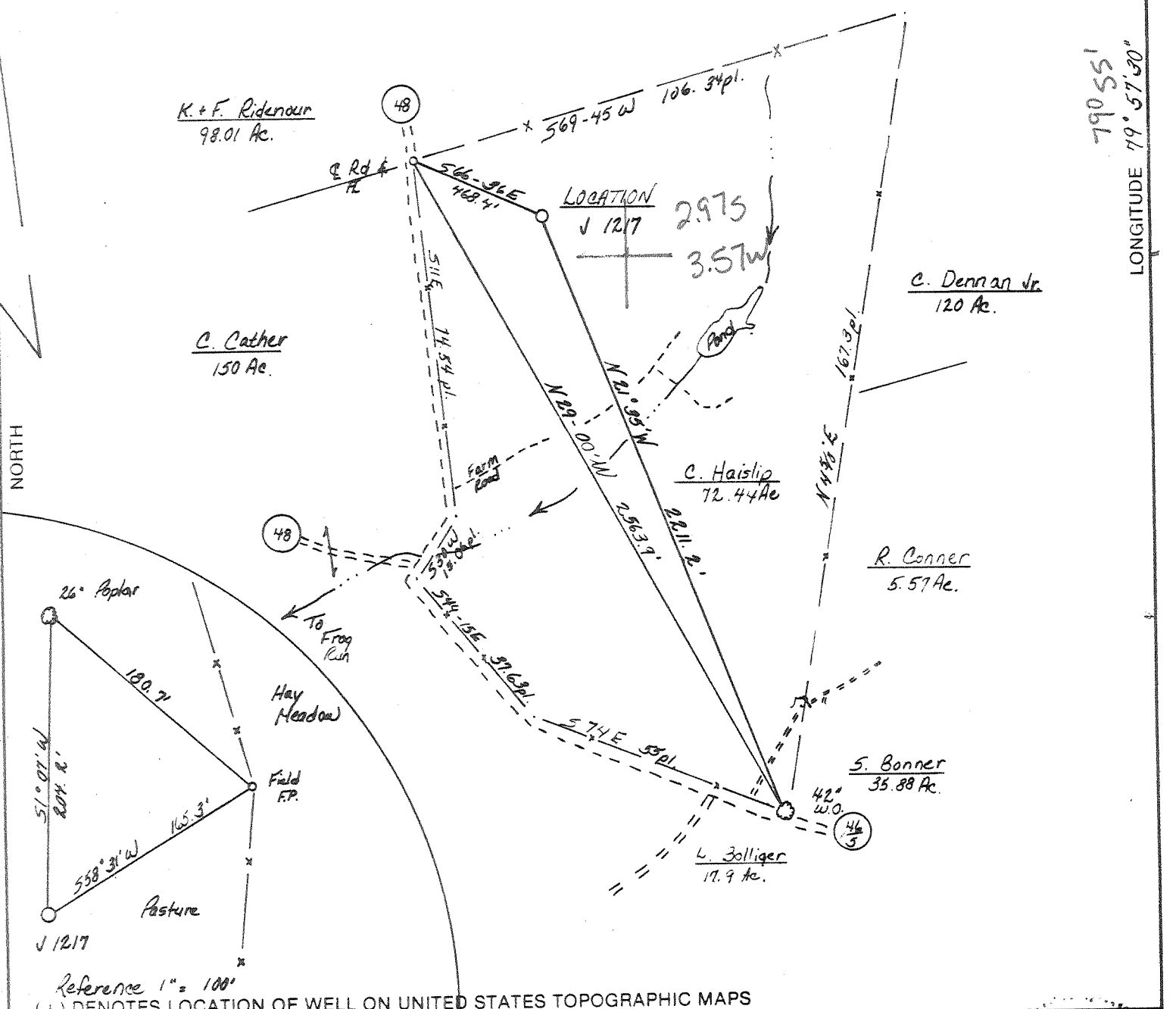


LATITUDE 39° 17' 30"
39° 20'

0.095
1.34W

790 55'
LONGITUDE 79° 57' 30"

NORTH



FILE NO. 346.01
DRAWING NO. 25-28
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1 in 200
PROVEN SOURCE OF ELEVATION USGS BM Knottsville 1423' USGS Thornton Quad

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) Rayford L. Astorander
R.P.E. _____ L.L.S. 555
Buckhannon, W.V.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION



DATE May 15, 1985
OPERATOR'S WELL NO. J-1217
API WELL NO. _____

WELL TYPE: OIL _____ GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS,") PRODUCTION STORAGE _____ DEEP _____ SHALLOW
LOCATION: ELEVATION 1640' WATER SHED Frog Run
DISTRICT Knottsville 6 COUNTY Taylor
QUADRANGLE Thornton 638 122 SW7
SURFACE OWNER Charles E. Haistlip ACREAGE 74
OIL & GAS ROYALTY OWNER Charles, Bruce Haistlip Nancy H. Craig LEASE ACREAGE 74
LEASE NO. W-1945
PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

COUNTY NAME _____
PERMIT _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION Haverty ESTIMATED DEPTH 5900'
WELL OPERATOR J + J Enterprises, Inc. DESIGNATED AGENT Richard Reddecliff
ADDRESS PO Box 48 ADDRESS PO Box 48
Buckhannon, W. Va. 26201 477 Buckhannon, W. Va. 26201

MAY 28 1985

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

Benson: Perforations: 4547-51 (16 holes)
Fracturing: 450 sks. 20/40 sand: 1500 gal. acid: 522 Bbls. fluid.
3rd Elk: Perforations: 5171-74 (12 holes)
Fracturing: 360 sks. 20/40 sand: 382 Bbls. fluid.; Foam frac.

BOTTOM HOLE PRESSURE $P_f = P_{we} XGLS$

$$t = 60 + (0.0075 \times 5313) + 459.7 = 560 \quad X = \frac{1}{53.35} \times 560 = \frac{1}{29876} \quad 0.000033 \quad P_f = 1675 \times 2.72$$

$$(0.000033)(0.619)(4861)(0.9) = 1675 \times 2.72^{0.09} = 1675 \times 1.09$$

Pf = 1826 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
KB - Ground Level			0	10	½" stream @ 120
Soil & shale			10	30	
Sand & shale			30	135	1½" stream @ 160'
Coal			135	137	
Sand & shale			137	260	2" stream @ 800'
Sand & shale			260	530	
Coal			530	534	2½" stream @ 1100'
Sand & shale			534	720	
Sand & shale			720	910	Gas ck @ 2461 26/10-1½" w/water
Sand & shale			910	1120	60,000 cu.ft.
Sand, shale & red rock			1120	1200	
Sand & shale			1200	1350	Gas ck @ 2841 30/10-1½" w/water
Sand & shale			1350	1480	64,410 cu.ft.
Lime			1480	1590	
Sand & shale			1590	2505	Gas ck @ 3377 28/10-1½" w/water
Sand, shale & red rock			2505	2619	62,223 cu.ft.
Sand & shale			2619	4547	
Benson			4547	4751	Gas ck @ 3502 18/10-1½" w/water
Sand & shale			4751	5171	49,923 cu.ft.
3rd Elk			5171	5174	
Sand & shale			5174	5840	Gas ck @ 4168 20/10-1½" w/water
Haverty			5840	5890	52,623 cu.ft.
Sand & shale			5890	5999	
				T.D.	Gas ck @ 4327 28/10-1½" w/water
				Brallier	62,223 cu.ft.
				@ T.D.	Gas ck @ 4580 28/10-1½" w/water
					62,223 cu.ft.
					Gas ck @ 5687 24/10-1½" w/water
					57,646 cu.ft.

(Attach separate sheets as necessary)

J&J Enterprises, Inc.

Well Operator

By:

Date:

7/11/85

Robert Dahlin-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."

RECEIVED
MAY 22 1985



1) Date: May 15, 19 85
2) Operator's Well No. J 1217
3) API Well No. 47 091-0494
State County Permit

OIL & GAS DIVISION
DEPT. OF MINES

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas X /
B (If "Gas", Production X / Underground storage / Deep / Shallow X /)
- 5) LOCATION: Elevation: 1640' Watershed: Frog Run
District: Knottsville County: Taylor Quadrangle: Thornton
- 6) WELL OPERATOR J&J Enterprises, Inc. 7) DESIGNATED AGENT Richard Reddecliff
Address po Box 48 24150 Address PO Box 48
Buckhannon, WV 26201 Buckhannon, WV 26201
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
Name Donald Ellis Name SW Jack Drilling Co.
Address 2604 Crab Apple Lane Address PO Box 48
Fairmont, WV 26554 Buckhannon, WV 26201
- 10) PROPOSED WELL WORK: Drill X / Drill deeper / Redrill / Stimulate X /
Plug off old formation / Perforate new formation
Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, Haverty
- 12) Estimated depth of completed well, 5900 feet
- 13) Approximate strata depths: Fresh, 65 feet; salt, 0 feet.
- 14) Approximate coal seam depths: 120 to 450 Is coal being mined in the area? Yes / No XX

15) 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
Fresh water	8 5/8	ERW	23	X		1140	1140	to surface	neat
Coal	8 5/8	ERW	23	X		1140	1140	to surface	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X		5950	5950	450 sks	Depth <u>Required by</u>
Tubing									<u>Rule 15.01</u>
Liners									Perforations: Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-091-0494 Date May 22 19 85

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
Permit expires May 22, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>82</u>	Agent: <u>ALB</u>	Plat: <u>MH</u>	Casing: <u>MH</u>	Fee: <u>1966</u>
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Margaret J. Hesse
Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File