

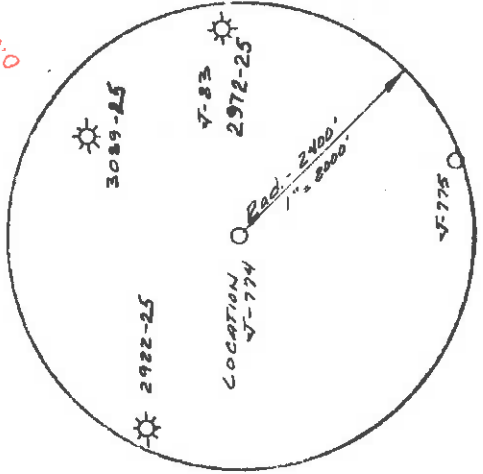
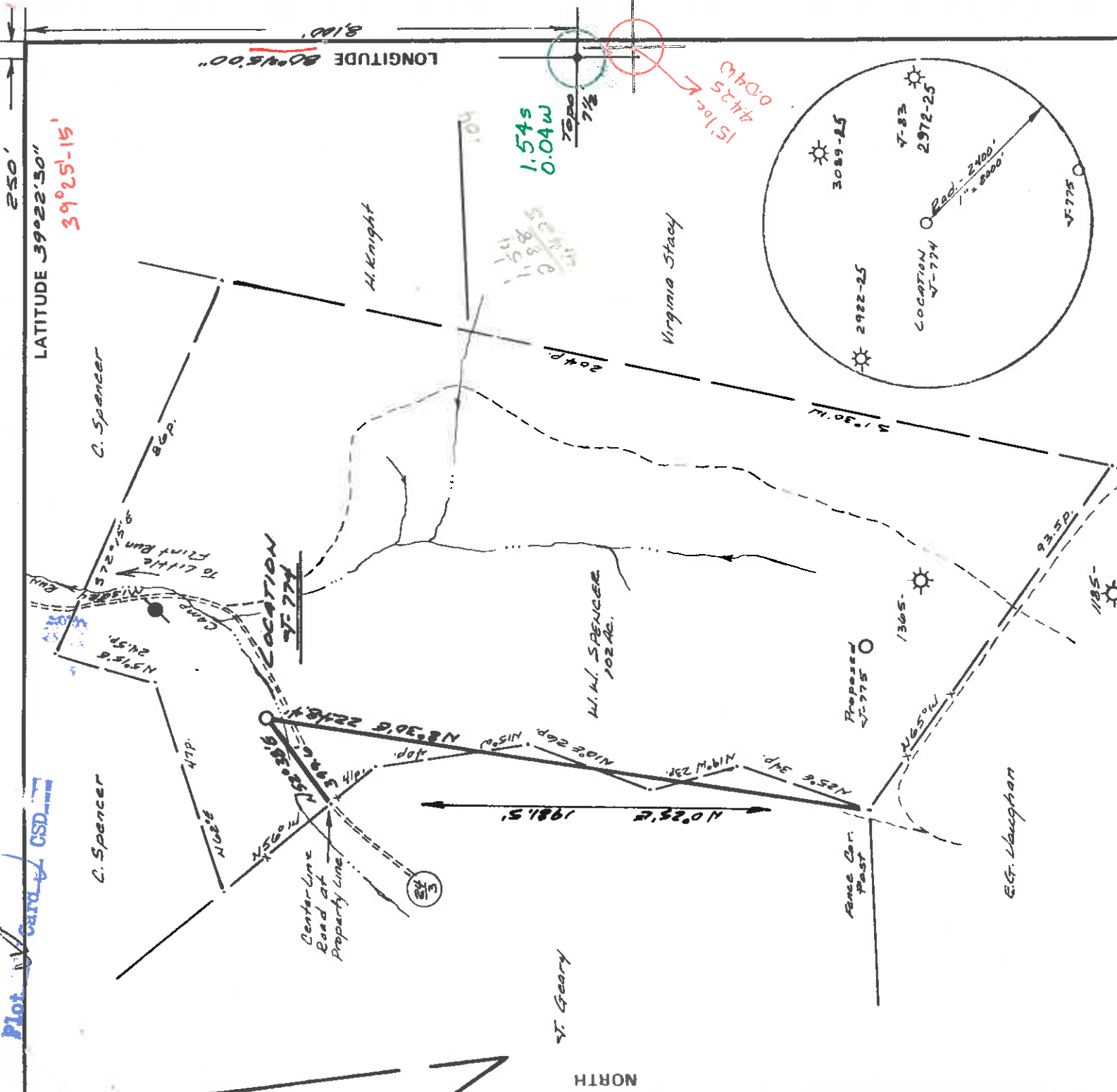
Plot W Card A CSD 11

250'

LATITUDE 39°22'30"

39°25'-15'

LONGITUDE 80°45'00"



FILE NO. 306.01
 DRAWING NO. 83-18
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION V-772
 Elev. = 815'
N.E. of location

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) Edward V. Buchanan
 R.P.E. Buckhannon, W.V. L.I.S. 555

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE March 21, 19 83
 OPERATOR'S WELL NO. V-774
 API WELL NO. 47-017 STATE 47 COUNTY 017

PERMIT NO. 3251

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 918' WATER SHED Camp Misery Run
 DISTRICT Grant COUNTY Martin
 QUADRANGLE West Union ACREAGE 415' EC
 SURFACE OWNER W.W. Spencer
 OIL & GAS ROYALTY OWNER W.W. Spencer LEASE NO. 11-1455 LEASE ACREAGE 102
 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 Benson ESTIMATED DEPTH 5100' 3-3 Swiger (Flint Run) (97)
 WELL OPERATOR W. W. Spencer DESIGNATED AGENT Edward V. Buchanan PPD - Alex and Ben
 ADDRESS PO Box 18 ADDRESS PO Box 18
Buckhannon, W. Va. 26001 Buckhannon, W. Va. 26001

SEP 28 1983



RECEIVED
OCT 20 1985

Date October 18, 1985
Operator's Well No. JK-774
Farm Kenneth Powell
API No. 47 - 017 - 3251

State of West Virginia
Department of Mines
Oil and Gas Division

DIVISION OF OIL & GAS
DEPT. OF ENERGY

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING 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: 918 Watershed Camp Misery Run
District: Grant County Doddridge Quadrangle West Union

COMPANY J&J Enterprises, Inc.
ADDRESS P.O. Box 48, Buckhannon, WV 26201
DESIGNATED AGENT Richard Reddecliff
ADDRESS P.O. Box 48, Buckhannon, WV 26201
SURFACE OWNER William L. Spencer
ADDRESS Rt. # 1, Box 343, New Cumberland, WV 26378
MINERAL RIGHTS OWNER Same as surface
ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK Stephen
Casey ADDRESS Jane Lew, WV 26378
PERMIT ISSUED 9/19/83
DRILLING COMMENCED 9/19/85
DRILLING COMPLETED 9/28/85

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"	210.25	210.25	100 sks.
9 5/8			
8 5/8	1505.95	1505.95	125 sks.
7			
5 1/2			
4 1/2	5435.55	5435.55	295 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Benson Depth 4955-65 feet
Depth of completed well 5620 feet Rotary x / Cable Tools
Water strata depth: Fresh 45,80 feet; Salt 0 feet
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Alexander Pay zone depths 296.5' - 5300.5' feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Combined Final open flow 641 Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests 4 hours

Static rock pressure 1525 psig (surface measurement) after 96 hours shut in
(If applicable due to multiple completion--)
Second producing formation Benson & Riley Pay zone depth 4512-17 feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow Mcf/d Oil: 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

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

Alexander: Perforations: ~~5296-5390~~ (14 holes)
Fracturing: 300 sks. 20/40 sand: 399 Bbls. Fluid.
Benson: Perforations: 4964-66 (8 holes)
Fracturing: 500 sks. 20/40 sand: 500 gal. acid: 553 Bbls. Fluid.
Riley: Perforations: 4512-17 (12 holes)
Fracturing: 126 sks. 20/40 sand: 500 gal. acid: 321 Bbls. Fluid.

BOTTOM HOLE PRESSURE Pf=Pwe XGIS $\frac{1}{1}$
 $t=60 + (0.0075 \times 5436) + 459.7 = 560$ $X=53.35 \times 560 = 29876$ $= 0.000033$ Pf=1525 x 2.72
 $(0.000033) (0.725) (4906) (0.9) = 1525 \times 2.72$ $0.1 = 1525 \times 1.1$
 Pf=1678 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.
Clay			0	3	
Sandy shale & red rock			3	30	1/2" steam @ 45'
Sand & sandy shale			30	125	
Shale & red rock			125	160	1/2" stream @ 80'
Sand, shale & red rock			160	180	
Sand, red rock & shale			180	320	Damp @ 900'
Sandy shale			320	380	
Shale & red rock			380	565	Damp @ 960'
Sandy shale & red rock			565	855	
Sand & shale			855	960	Damp @ 1015'
'Sand & shale			960	1015	
Sand & sandy shale			1015	1080	Gas ck @ 2014 No show
Sandy shale & sand			1080	1525	
Shale & sandy shale			1525	1865	Gas ck @ 2317 No show
Big Lime			1865	1925	
Sand & sandy shale			1925	2415	Gas ck @ 2701 10/10-2" w/water 133,000 cu.ft.
Sandy shale & sand			2415	2860	
Sandy shale & sand			2860	4512	
Riley			4512	4517	Gas ck @ 3365 4/10-2" w/water 84,000 cu.ft.
Sandy shale & sand			4517	4964	
Benson			4964	4966	
Sandy shale & sand			4966	5296	Gas ck @ 4985 10/10-2" w/water 133,000 cu.ft.
<u>Alexander</u>			5296	5300	
Sandy shale			5300	5620	Gas ck @ 54615/10-2" w/water 94,000 cu.ft.

5620
4966
654 - expt. log

from nearby well
Top Dev @ 2465

(Attach separate sheets as necessary)

J&J Enterprises, Inc.

Well Operator

By: 

Robert Dahlin - Geologist

Date:

10/18/85

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 sand, encountered in the drilling of a well."

1) Date: July 27, 19 83
 2) Operator's Well No. J-774
 3) API Well No. 47 - 017 - 3251 County Permit



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

DRILLING CONTRACTOR:

S.W. Jack Drilling Company
 P.O. Box 48
Buckhannon, WV 26201

4) WELL TYPE: A Oil Gas
 B (If "Gas", Production / Underground storage / Deep / Shallow
 5) LOCATION: Elevation: 918 Watershed: Camp Misery Run
 District: Grant County: Doddridge Quadrangle: West Union
 6) WELL OPERATOR: J&J Enterprises, Inc. 11) DESIGNATED AGENT Richard Reddecliff
 Address: P.O. Box 48 Address: P.O. Box 48
Buckhannon, WV 26201

7) OIL & GAS ROYALTY OWNER W.W. Spencer C/O Imla C. Spengler COAL OPERATOR
 Address: Rt. 3, Box 108 Address: New Cumberland, WV 26047

8) SURFACE OWNER W.W. Spencer C/O Imla C. Spencer 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Address: Rt. 3, Box 108 Name W.W. Spencer C/O Imla C. Spencer
New Cumberland, WV 26047 Address: Rt. # 3, Box 108
 Acreage 102 Address: New Cumberland, WV 26047
 9) FIELD SALE (IF MADE) TO: Name Unknown Address

10) OIL & GAS INSPECTOR TO BE NOTIFIED Name Stephen Casey
 Address Rt. # 2, Box 232-D
Jane Lew, WV 26378
 15) PROPOSED WORK: Drill / Drill deeper / Redrill / Fracture or stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify)

16) GEOLOGICAL TARGET FORMATION, Benson OIL & GAS DIVISION
 17) Estimated depth of completed well, 5200 feet
 18) Approximate water strata depths: Fresh, 1795 feet; salt, 0 feet.
 19) Approximate coal seam depths: 0 Is coal being mined in the area? Yes No

20) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	Size	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS						
		Grade	Weight per ft.	For drilling	Left in well			OK SACKS	Kind				
Conductor	11 3/4	H-40	42	X	30	0	sks.	0	0	0	0	0	0
Fresh water	8 5/8	ERW	23	X	1300	1300	TO surface	TO surface	TO surface	TO surface	TO surface	TO surface	TO surface
Coal	8 5/8	ERW	23	X	1300	1300	TO surface	TO surface	TO surface	TO surface	TO surface	TO surface	TO surface
Intermediate													
Production	4 1/2	J-55	10.5	X	5150	5150	250	sks.	250	sks.	250	sks.	250
Tubing													
Liners													

21) EXTRACTION RIGHTS

Check and provide one of the following:
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)

22) ROYALTY PROVISIONS

Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No
 If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.
 23) Required Copies (See reverse side.)

24) 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
 Notary: [Signature]
 My Commission Expires October 16, 1988
 Signed: [Signature] Designated Agent

OFFICE USE ONLY
 Permit number 47-017-3251 DRILLING PERMIT
 Date September 19, 1983

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. 10) 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.)

Permit expires September 19, 1985 unless drilling is commenced prior to that date and prosecuted with due diligence.
 Bond: [Signature] Agent: [Signature] Plat: [Signature] Fee: [Signature]
 Administrator, Office of Oil and Gas

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

