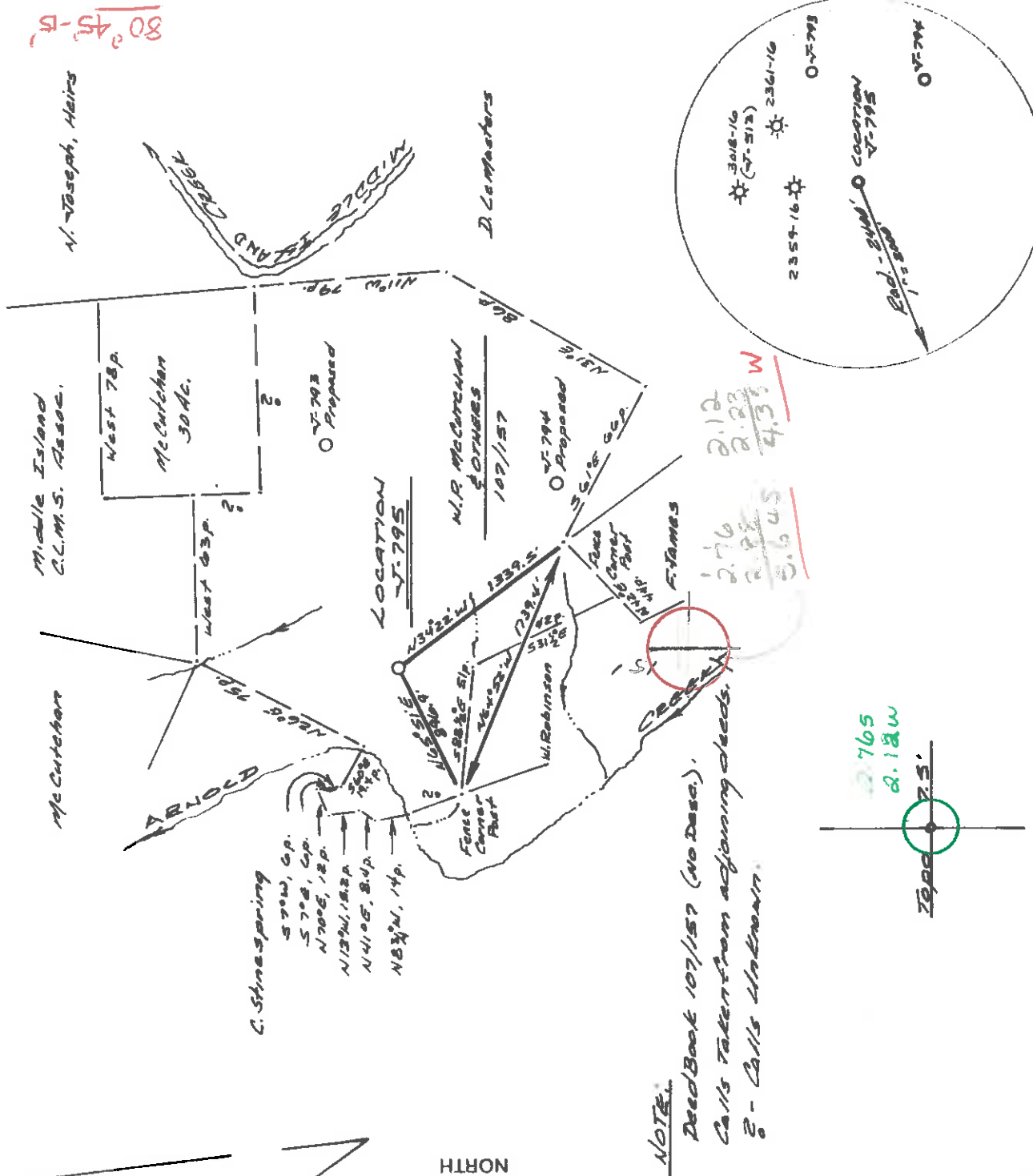


Plot

LATITUDE 39°22'30"

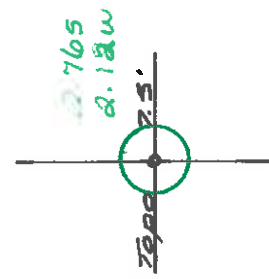
59°25' - 5'

80° 45' - 5"
LONGITUDE 80° 47' 30"



C. Stone Spring
 S 70W, 6P.
 S 70E, 6P.
 N 70E, 12P.
 N 12W, 122P
 N 41E, 84P
 N 83W, 14P.

NOTE:
 Dead/Back 107/157 (no Desc.).
 Calls taken from adjoining deeds.
 E - Calls Unknown.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 346.01
 DRAWING NO. 53-58
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Well No. V-503
Elev. = 900'

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) Clyde S. Cunningham
 R.P.E. Buckhannon, W.V. I.L.S. 555

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE July 20, 19 83
 OPERATOR'S WELL NO. V-795
 API WELL NO. 47-017-3249

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 903' WATER SHED Arnold Creek

DISTRICT Central COUNTY Doddridge
 QUADRANGLE West Union N15' EC ACREAGE 121
 SURFACE OWNER William Paul & Virginia Ruth McCutchan
 OIL & GAS ROYALTY OWNER W.P. & V. McCutchan & M.S. Heirs LEASE ACREAGE 121

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 5050
 WELL OPERATOR V-T Enterprises, Inc. DESIGNATED AGENT Edward Prosser
 ADDRESS P.O. Box 48 ADDRESS Box 48 ADDRESS Buckhannon, WV 26201

PERMIT SEP 19 1983

6-6 Central Station (911)

RECEIVED

IV-35
(REV 8-81)

APR 2 1984



OIL & GAS DIVISION State of West Virginia

Department of Mines
Oil and Gas Division

Date March 29, 1984
Operator's Well No. J-795
Farm Paul McCutcheon
API No. 47 - 017 - 3249

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

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal /
(If "Gas," Production x / Underground Storage / Deep / Shallow x /)

LOCATION: Elevation: 963 Watershed Arnold Creek
District: Central 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 Wm. Paul McCutcheon

ADDRESS 300 Wood St., West Union, WV 26456

MINERAL RIGHTS OWNER Wm. Paul McCutcheon

ADDRESS 300 Wood St., West Union, WV 26456

OIL AND GAS INSPECTOR FOR THIS WORK Stephen

Jane Lew

Casey ADDRESS Rt. 2, Box 232-D, WV 26378

PERMIT ISSUED 9/13/83

DRILLING COMMENCED 2/27/84

DRILLING COMPLETED 3/3/84

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 Cond.			
13-10"	30	0	0 sks.
9 5/8			
8 5/8	1180.75	1180.75	295 sks.
7			
5 1/2			
4 1/2	5034	5034	205 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth feet

Depth of completed well 5363 feet Rotary x / Cable Tools

Water strata depth: Fresh 725 feet; Salt 0 feet

Coal seam depths: 335-40 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Benson Pay zone depth 4868-71 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 1600 psig (surface measurement) after 96 hours shut in

(If applicable due to multiple completion--)

Second producing formation Riley Pay zone depth 4452-55 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 16 hours

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

(Continue on reverse side)

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

Benson: Perforations: 4868-71 (13 holes)
 Fracturing: 45,000 lbs. 20/40 sand: 500 gal. acid: 440 Bbls. fluid.
 Riley: Perforations: 4452-55 (7 holes) 4477-78 (4 holes)
 Fracturing: 10,000 lbs. 80/100 sand: 29,000 lbs. 20/40 sand: 500 gal. acid: 560 Bbls. fluid.

BOTTOM HOLE PRESSURE PF=Pwe^{XGLS} $\frac{1}{1}$
 $t=60+(0.0075 \times 5034) +459.7 =557$ $X=53.35 \times 557 =29740$ $\frac{1}{1}$ $=0.000034$ PF=1600 x 2.72 (0.000034)
 (0.670) (4662) (0.9) = 1600 x 2.72^{0.09} =1600 x 1.09 = 1744

PF=1744 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Clay			0	10	Damp @ 725'
Shale & sand			10	45	
Shale & red rock			45	138	Gas ck @ 2017 No show
Shale, sand & red rock			138	265	
Shale			265	335	Gas ck @ 2294 No show
Coal			335	340	
Shale & sand			340	475	Gas ck @ 2915 20/10-1" w/water
Sand & shale			475	640	33,679 cu.ft.
Sand, red rock & shale			640	815	
Sandy shale			815	850	Gas ck @ 4527 10/10-1" w/water
Sand, red rock & shale			850	875	23,214 cu.ft.
Shale & red rock			875	945	
Red rock & shale			945	1000	Gas ck @ 4900 20/10-1" w/water
Sandy shale			1000	1035	33,679 cu.ft.
Sand & shale			1035	1795	
Little Lime			1795	1815	Gas ck @ 5209 25/10-1" w/water
Shale			1815	1850	37,854 cu.ft.
Big Lime			1850	1895	
Big Injun			1895	2000	Gas ck @ collars 8/10-1" w.water
Sand & shale			2000	2250	21,300 cu.ft.
Sand & shale			2250	2900	
Sand & shale			2900	3870	
Shale & sand			3870	4452	
Riley			4452	4478	
Sand & shale			4478	4868	
Benson			4868	4871	
Sand & shale			4871	5363	

T.D.

(Attach separate sheets as necessary)

J&J Enterprises, Inc.
Well Operator

By: B.B. Dahl
Date: 3/29/84

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 lithology, encountered in the drilling of a well."

1) Date: August 1, 1983
 2) Operator's Well No. J-795
 3) API Well No. 47 - 017 - 3249

State 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 Co.
 P.O. Box 48
 Buckhannon, WV 26201

- 4) WELL TYPE: A Oil / Gas / B (If "Gas", Production / Undergrnd storage / Deep / Shallow
 Elevation: 263 Watershed: Arnold Creek
 District: Central County: Doddridge Quadrangle: West Union
 5) LOCATION: 11) DESIGNATED AGENT Richard Reddecliff
 Address P.O. Box 48 P.O. Box 48
 Buckhannon, WV 26201 Buckhannon, WV 26201
 6) WELL OPERATOR J&J Enterprises, Inc.
 Address P.O. Box 48
 Buckhannon, WV 26201
 7) OIL & GAS ROYALTY OWNER Wm/ Paul McCutchan
 Address 300 Wood St.
 West Union, WV 26456
 Acreage 121
 8) SURFACE OWNER Wm. Paul McCutchan
 Address 300 Wood St.
 West Union, WV 26456
 Acreage 121
 9) FIELD SALE (IF MADE) TO:
 Address Unknown

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, Alexander

- 17) Estimated depth of completed well, 5050 feet
 18) Approximate water strata depths: Fresh, 140-240 feet; salt, 0 feet
 19) Approximate coal seam depths: None 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.	New	Used			Left in well
Conductor	1 1/4	H-40	42	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30	0 sks.	
Fresh water	8 5/8 ERW	ERW	23	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1000	To surface	
Coal	8 5/8 ERW	ERW	23	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1000	To surface	
Intermediate								
Production	4 1/2	J-55	10.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5000	200 sks.	Depths set
Tubing								Perforations:
Liners								Top
								Bottom

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: Franklin D. Griffield
 My Commission Expires: October 16, 1989

Signed: Richard W. Reddecliff
 Its: Designated Agent

OFFICE USE ONLY
 DRILLING PERMIT

Permit number: 47-017-3249

September 13, 1983

Date

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 13, 1985

Bond: 1.9 Agent: AS Plat: AS Casing Fee: 1283

unless drilling is commenced prior to expiration and prosecuted with due diligence.

Richard W. Reddecliff
 Administrator, Office of Oil and Gas

