

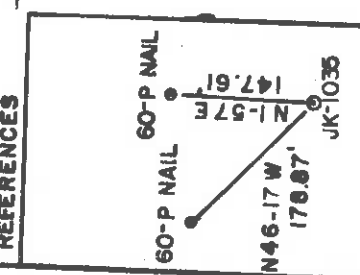
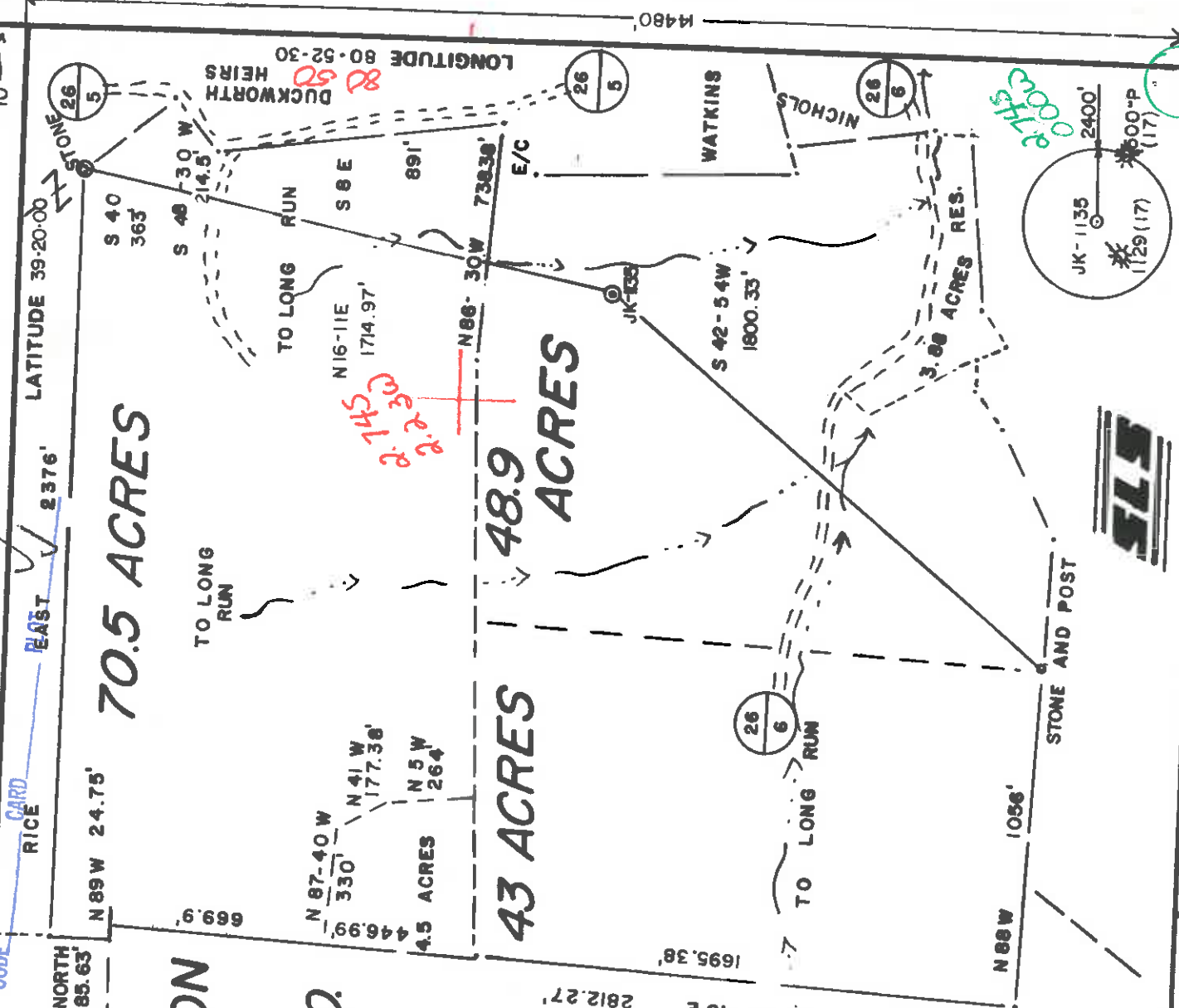
COOUNTY NORTH 165.63'
G.F. WILLIAMSON LEASE
WELL NO. JK-1135

CODE RICE EAST 2376'
70.5 ACRES

LATITUDE 39-20-00
 LONGITUDE 80-52-30
 DUCKWORTH HEIRS 82
 145
 2.230
 2.230

NORTH
 RASEY

43 ACRES
48.9 ACRES



FILE NO. 16-48
 DRAWING NO. _____
 SCALE 1"=500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION 1040'

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) Gregory A. Smith R.P.E. L.L.S. 677

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



DATE NOVEMBER 16 19 84
 OPERATOR'S WELL NO. JK-1135
 API WELL NO. 47-017
 STATE COUNTY PERMIT 3403
 PLACE SEAL HERE

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 1005' WATER SHED LONG RUN
 DISTRICT CENTRAL COUNTY DODDRIDGE

SURFACE OWNER QUADRANGLE PENNSBORO 7.5' ACRES 489
 OIL & GAS ROYALTY OWNER W.J. WILLIAMSON et al. LEASE NO. JJ-1671 LEASE ACREAGE 166
 COUNTY DODDRIDGE
 West Union, WV SCB

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 5500'
 WELL OPERATOR J.B.J. ENTERPRISES, INC. DESIGNATED AGENT RICHARD REDDECLIFF
 ADDRESS P.O. BOX 48 BUCKHANNON, WV 26201

6-6 Stanley (90)
 FEB 04 1985



RECEIVED
OCT 17 1985

State of West Virginia
Department of Mines
Oil and Gas Division

Date October 15, 1985
Operator's Well No. JK-1135
Farm Williams
API No. 47 - 017 - 3403

**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: 1005 Watershed Long Run

District: Central County Doddridge Quadrangle Pennsboro 7.5

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 Jerry L. Nichols

ADDRESS Rt. # 1, Greenwood, WV 26360

MINERAL RIGHTS OWNER W.J. Williamson

ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK
RE. # 2, Box 114, Mike

Underwood ADDRESS Salem, WV 26426

PERMIT ISSUED 1/29/85

DRILLING COMMENCED 9/6/85

DRILLING COMPLETED 9/15/85

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

Casing Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cord.			
13-10"	210.15	210.15	100 sks.
9 5/8			
8 5/8	1546.45	1545.45	125 sks.
7			
5 1/2			
4 1/2	5948.40	5948.40	390 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander

Depth of completed well 5995 feet Rotary x / Cable Tools Depth 5159-75 feet

Water strata depth: Fresh 80,350' feet; Salt 0 feet

Coal seam depths: None

Is coal being mined in the area? 5796-5802

OPEN FLOW DATA

Producing formation Devonian Shale

Pay zone depth 5796-5802 feet

Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d

Combined Final open flow 368 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1400 psig (surface measurement) after 96 hours shut in

(If applicable due to multiple completion--)

Second producing formation Alexander, Benson & Riley

Pay zone depth 4477-81, 4866-68, 5159-75 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

OCT 28 1985 (Continue on reverse side)

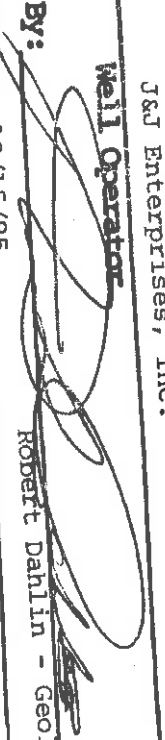
DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Devonian Shilae: Perforations: 5796-5802 (16 holes)
 Fracturing: 300 sks. 20/40 sand: 437 Bbls. fluid.
 Alexander: ~~ck~~ Perforations: 5159-63 (10 holes) 5173-75 (4 holes)
 Fracturing: 350 sks. 20/40 sand: 500 gal. acid: 437 Bbls. fluid.
 Benson: Perforations: 4866-68 (8 holes)
 Fracturing: 250 sks. 20/40 sand: 500 gal. acid: 353 Bbls. fluid.
 Riley: Perforations: 4477-81 (16 holes)
 Fracturing: 200 sks. 20/40 sand: 500 gal. acid: 220 Bbls. fluid.

BOTTOM HOLE PRESSURE Pf=PweXGLS
 $t=60+(0.0075 \times 5948) + 459.7 = 564$ $X = \frac{1}{53.35 \times 564} = \frac{1}{30106} = 0.000033$ Pf=1400 x 2.72 (0.000033)
 (0.620) (5140) (0.9) = 1400 x 2.72^{0.09} = 1400 x 1.09
 Pf=1526 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	Damp @ 80'
Shale, red rock & shale	3	30	Damp @ 350'
Sandy shale	30	80	Damp @ 500'
Sandy shale, sand & red rock	80	170	1/2" stream @ 530'
Sandy shale, red rock & shale	170	315	Gas ck @ 2064 No show
Sand & shale	315	570	Gas ck @ 2353 No show
Shale, red rock & sandy shale	570	730	Gas ck @ 3402 No show
Sandy shale & red rock	730	870	Gas ck @ 4544 No show
Sandy shale & red rock	870	1080	Gas ck @ 4891 No show
Sandy shale & red rock	1080	1140	Gas ck @ 5208 2/10-1" w/water 103,000 cu.ft.
Shale & gray sand	1140	1380	
Shale & gray sand	1380	1810	
Gray sand & shale	1810	1840	
Sand & shale	1840	1875	
Little lime	1875	2040	
Big Lime & Injun	2040	2290	
Sandy shale & sand	2290	2860	
Sandy shale & shale	2860	3300	
Sandy shale	3300	4477	
Sand & sandy shale	4477	4481	
Riley	4481	4866	
Sandy shale & shale	4866	4868	
Benson	4868	5159	
Sandy shale & shale	5159	5175	
Alexander	5175	5796	
Sandy shale & shale	5796	5802	
Devonian Shilae	5802	5995	
Sandy shale	5995		

(Attach separate sheets as necessary)

J&J Enterprises, Inc.
 Well Operator
 By: 
 Robert Dahlin - Geologist
 Date: 10/15/85

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 ^{in situ}, encountered in the drilling of a well."

RECEIVED

JAN 09 1985

1) Date: November 29, 19 84
 2) Operator's Well No. JK-1135
 3) API Well No. 47 - 017 - 3403 State County Permit



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

4) WELL TYPE: A Oil Gas B (If "Gas", Production Elevation: 1005' Underground storage Long Run Deep Shallow
 5) LOCATION: District: Central Watershed: Doddridge County: Pennsboro 7.5
 6) WELL OPERATOR: J & J Enterprises, Inc. Address: P.O. Box 48 Buckhannon, WV 26201 7) DESIGNATED AGENT: Richard Reddecliff Address: P.O. Box 48 Buckhannon, WV 26201
 8) OIL & GAS INSPECTOR TO BE NOTIFIED: Name: Mike Underwood Address: Rt. 2 Box 114 Salem, WV 26426 9) DRILLING CONTRACTOR: Name: S.W. Jack Drilling Co. Address: P.O. Box 48 Buckhannon, WV 26201

10) PROPOSED WELL WORK: Drill deeper Redrill Stimulate
 Plug off old formation Perforate new formation
 Other physical change in well (specify) _____

11) GEOLOGICAL TARGET FORMATION, Alexander
 12) Estimated depth of completed well, 5500' feet
 13) Approximate traia depths: Fresh, 125' feet; salt, N/A feet.
 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes No

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.			
Conductor	11 3/4	H-40	42	For drilling <u>2850</u> Left in well <u>2850</u>	<u>0 sacks</u> <u>cts by rules</u>	
Fresh water	8 5/8	ERW	23	<u>XX 1404</u>	<u>To Surface</u>	
Coal	8 5/8	ERW	23	<u>XX 1405</u>	<u>To Surface</u>	
Intermediate						
Production	4 1/2	J-55	10.5	5500	300 Sacks	
Tubing					or as required by rule 15-01	
Liners						

Depths set
Perforations:
Top
Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-017-3403 Date January 29, 1985

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 January 29, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>82</u>	<u>MJM</u>	<u>mx</u>	<u>1895</u>	

Margaret J. Kase
 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

