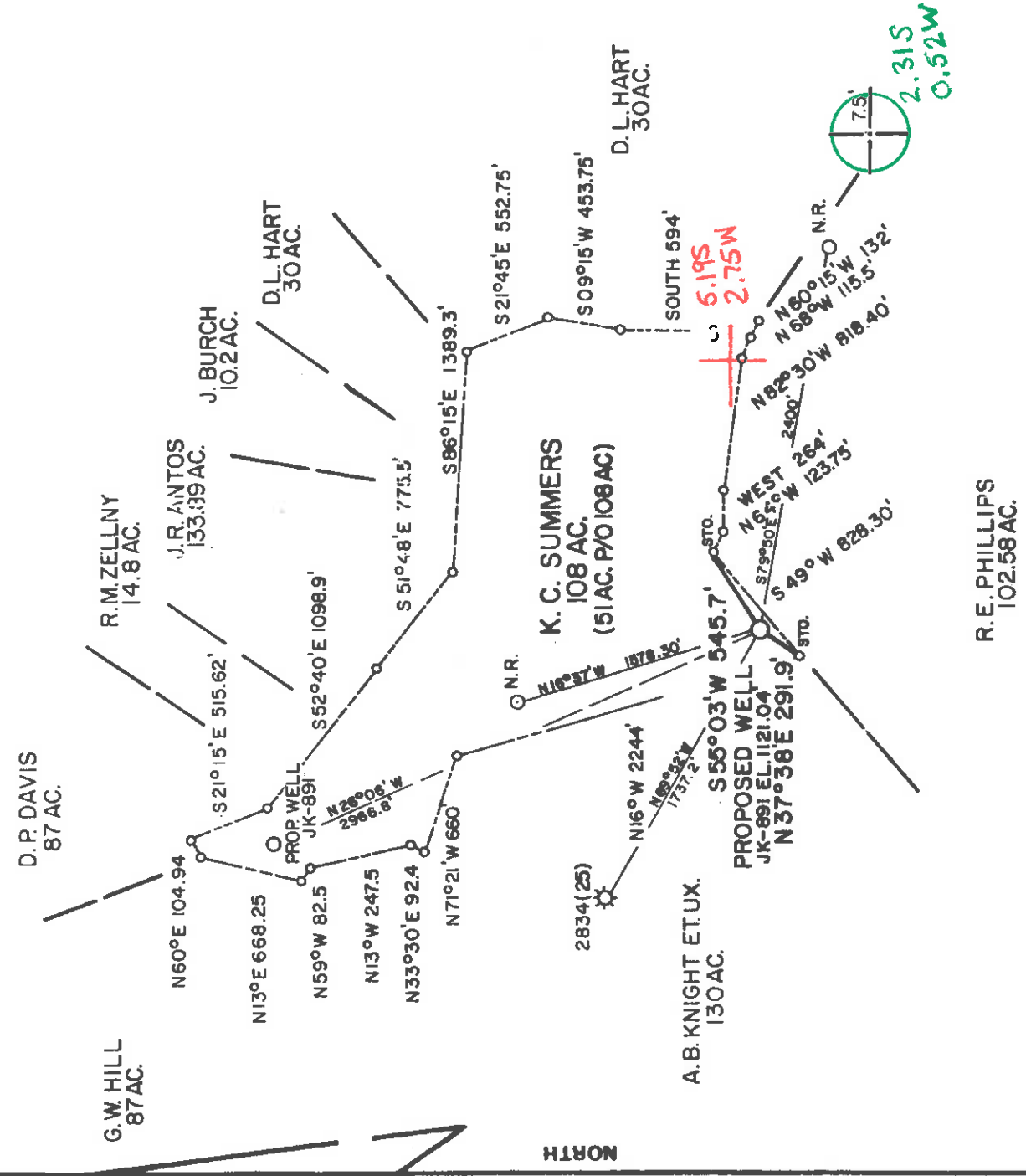


LATITUDE 39°17'30"

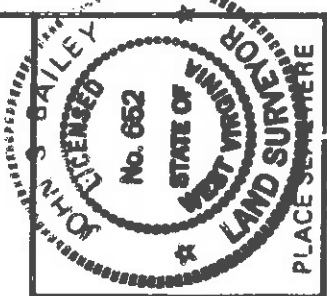
LONGITUDE 80°52'30"

WELL REFERENCE TIES
PROPOSED WELL TO FENCE INTER. S 43°48' W (MAG) 291.9'
PROPOSED WELL TO GATE POST N 72°15' E (MAG) 179.6'



FILE NO. MSES 84 - 350
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF _____
 ACCURACY 1 IN 200
 PROVEN SOURCE OF _____
 ELEVATION B.M. EL. 854' 4200' NW
 OF LOCATION _____

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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) *John S. Bailey*
 J.S.B. L.L.S. 652



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



DATE APRIL 5, 1984
 OPERATOR'S WELL NO. JK-890
 API WELL NO. _____
 47 - 017 - 3348
 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 1121.04' WATER SHED DOTSON RUN
 DISTRICT J CENTRAL COUNTY DODDRIDGE
 QUADRANGLE 539 PENNSBORO 75 (1976) ACRAGE 108 ACRES 5C8
 SURFACE OWNER G.W. HILL
 OIL & GAS ROYALTY OWNER K.C. SUMMERS ET AL. LEASE ACREAGE 51

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 DEVONIAN SHALE ESTIMATED DEPTH 599.5'
 WELL OPERATOR J.B.J. ENTERPRISES, INC. 427 DESIGNATED AGENT RICHARD REDDEGLIEF
 ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48
BUCKHANNON, W.V. 26201 BUCKHANNON, W.V. 26201

PREPARED BY MSE CONSULTANTS 6-6 Greenwood (89) CLARKSBURG, W.V.

AUG 27 1984



State of West Virginia
Department of Mines
Oil and Gas Division

Date January 8, 1985
Operator's Well No. JK-890
Farm Summers
API No. 47 - 017 - 3348

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: 1121 Watershed Dotson 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 George Hill
ADDRESS General Delivery, Greenwood, WV 26360
MINERAL RIGHTS OWNER John Statler
ADDRESS Pennsboro, WV 26415

OIL AND GAS INSPECTOR FOR THIS WORK Mike

Underwood ADDRESS Rt. # 2, Box 114, Salem, WV 26426
PERMIT ISSUED. 8/22/84
DRILLING COMMENCED 10/12/84
DRILLING COMPLETED 10/18/84

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

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	36	0	0 sks.
9 5/8			
8 5/8	1697.40	1698.40	365 sks.
7			
5 1/2			
4 1/2	5469.70	5469.70	275 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth feet

Depth of completed well 5517 feet Rotary x / Cable Tools

Water strata depth: Fresh 95,290 feet; Salt 0 feet

Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5298-5321 feet

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

Combined Final open flow 880 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1625 psig (surface measurement) after hours shut in

(If applicable due to multiple completion--)

Second producing formation Benson & Riley Pay zone depth 4602-4611 / 4941-5010 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 JAN 2 1985 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.

Riley: Perforations: 4602-4606.5 (8 holes) 4609-4611 (8 holes)
 Fracturing: 250 sks. 20/40 sand: 500 gal. acid: 400 Bbls. fluid.
 Benson: Perforations: 4941-42 (4holes) 5008-10 (8 holes)
 Fracturing: 300 sks. 20/40 sand:500 gal. acid: 460 Bbls. fluid.
 Alexander: Perforations: 5298-5303 (7 holes) 5309-13 (7 holes) 5320-21 (2 holes)
 Fracturing: 400 sks. 20/40 sand: 544 Bbls. fluid.

BOTTOM HOLE PRESSURE Pf=PweXGLS

$$t=60 + (0.0075 \times 5470) + 459.7 = 560 \quad X=53.35 \times 560 = 29876 = 0.000033 \quad Pf=1625 \times 2.72$$

$$(0.698) (4958) (0.4) = 1625 \times 2.72 \quad 0.1 = 1625 \times 1.1 \quad (0.000033)$$

Pf=1788 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Red rock & fill			0	15	Wet @ 95'
Red rock & shale			15	85	1/8" stream @ 290'
Gray sand & red rock			85	170	Gas ck @ 2234 No show
Gray sand, red rock & shale			170	360	Gas ck @ 2515 No show
Sand, shale & red rock			360	720	Gas ck @ 3660 No show
Gray sand, red rock & shale			720	1060	Gas ck @ 4618 No show
Gray sand & shale			1060	1285	Gas ck @ 4990 No show
Sand & shale			1285	1690	Gas ck @ 5269 No show
Black shale			1690	1700	
Shale & sand			1700	2000	
Little lime - Blue Monday			2000	2050	
Big Lime			2050	2120	
Big Injun			2120	2200	
Sand & shale			2200	3695	
Shale & sand			3695	4602	
Riley			4602	4611	
Sand & shale			4611	4941	
Benson			4941	5010	
Sand & shale			5010	5298	
Alexander			5298	5321	
Sand & shale			5321	5517	
					T.D.

(Attach separate sheets as necessary)

IC&I Enterprises, INC.
 Well Operator

BY: 
 Robert Dahlin-Geologist
 Date: 1/8/85

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: June 14, 19 84
 2) Operator's Well No. JK-890
 3) API Well No. 47 - 017 - 3348
 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 Undergrnd storage Deep Shallow
 5) LOCATION: Elevation: 1121.04' Watershed: Dotson Run LKH ID FF
 District: Central County: Doddridge Quadrangle: Pennsboro 7 1/2
 6) WELL OPERATOR: J&J Enterprises, Inc. 7) DESIGNATED AGENT: Richard Reddecliff
 Address: P.O. Box 48 Address: P.O. Box 48
 Buckhannon, WV 26201 Buckhannon, WV 26201

8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name: Harold Mike Underwood
 Address: Rt. # 2, Box 114
 Salem, WV 26426

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, Devonian Shale
 12) Estimated depth of completed well, 5995 feet
 13) Approximate trata depths: Fresh, 150 feet; salt, none feet.
 14) Approximate coal seam depths: none Is coal being mined in the area? Yes

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		
Conductor	11 3/4	H-40	42	X		30'	0
Fresh water	8 5/8	ERW	23	X		1650'	to surf. by rule 15.05
Coal	8 5/8	ERW	23	X		1650'	to surf.
Intermediate							
Production	4 1/2	J55	10.5	X		5995'	350 sacks
Tubing							as required by Perforations rule 15.01
Liners							

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-017-3348 Date August 22, 19 84

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 August 22, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: \$2	Agent: SA	Plat: MU	Casing Fee
BLANKET			3279

Margaret Chase
 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

