



FILE NO. MSES.84-349  
DRAWING NO. \_\_\_\_\_  
SCALE 1"=1000'  
MINIMUM DEGREE OF ACCURACY 1 IN 200  
PROVEN SOURCE OF ELEVATION ROAD JCT. RT. 28&RT.28/2 EL. 862

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
FORM IV-6 (8.78)

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) John S. Bailey L.S.  
R.F.E. 652

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

DATE APRIL 4, 1984  
OPERATOR'S WELL NO. JK-893  
API WELL NO. 47-017-3331  
STATE 47 COUNTY 017 PERMIT 3331

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
(IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
LOCATION: ELEVATION 1279' WATER SHED PIGGIN RUN  
DISTRICT WEST UNION 8 COUNTY DODDRIDGE 17  
QUADRANGLE 671 WEST UNION 75 (1976) WEST UNION 13 15' SE 9  
SURFACE OWNER RICHARD KNIGHT ET AL. ACREAGE 30.59  
OIL & GAS ROYALTY OWNER ELSA LIPSCOMB ET AL. LEASE ACREAGE 96  
LEASE NO. JK-110

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 3. shale ESTIMATED DEPTH 5700  
WELL OPERATOR J.B. ENTERPRISES, INC 427 DESIGNATED AGENT RICHARD REDDECLIFF  
ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48  
BUCKHANNON, W.V. 26201 BUCKHANNON, W.V. 26201

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DEPARTMENT OF MINES  
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OIL & GAS DIVISION

DEPT. OF MINES

State of West Virginia

Department of Mines  
Oil and Gas Division

Date November 26, 1984  
Operator's Well No. WK-405 JK-893  
Farm Knight  
API No. 47 - 017 - 3331

IV-35  
(Rev 8-81)

WELL OPERATOR'S REPORT  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 1279 Watershed Piggion Run West Union 7.5  
District: West Union County Doddridge Quadrangle

COMPANY Kepco, Inc.  
ADDRESS 436 Blvd. of the Allies Pgh PA 15219  
DESIGNATED AGENT E.L. Stuart  
ADDRESS Box 1550 Clarksburg WV 26301  
SURFACE OWNER Richard Knight et. al.  
ADDRESS Box 325-A West Union WV 26456  
MINERAL RIGHTS OWNER Elsa Lipscomb et.al  
ADDRESS Rt. 2 Box 327 West Union WV 26456

OIL AND GAS INSPECTOR FOR THIS WORK  
Mike Underwood ADDRESS Salem WV 26426

PERMIT ISSUED 5-16-84  
DRILLING COMMENCED 10-27-84  
DRILLING COMPLETED 11-2-84

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"	35	0	
9 5/8			375 sks neat
8 5/8	1877.75	1877.75	
7			
5 1/2	5678	5678	265 sks Pozmix
4 1/2			
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander  
Depth of completed well 5716 feet Rotary X / Cable Tools  
Water strata depth: Fresh reported feet; None reported feet  
Coal seam depths: None Reported Is coal being mined in the area?

OPEN FLOW DATA

Producing formation Alexander Benson Pay zone depth 5585,5287 feet  
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow 353 Mcf/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 4 hours  
Static rock pressure 1700 psig (surface measurement) after 48 hours shut in

(If applicable due to multiple completion--)

Second producing formation  
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

(Continue on reverse side)

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

Perforated 11-8-84  
 5287-5291 Benson Avg. Press. 2850 psig Avg. Rate 20 BPM  
 5585-5624 Alexander Avg. Press. 2950 psig Avg. Rate 26 BPM  
 Fractured 11-8-84 Water Frac with nitrogen assist  
 1st stage 32,500 lbs. 20/40 sand  
 2nd stage 20,000 lbs. 20/40 sand

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Fill & Red Rock			0	15	From Drilling log
Shale			15	35	
Sand & Shale			35	40	
Red Rock & Shale			40	50	
Sand & Shale			80	250	
Red Rock & Shale			250	350	
Sand			350	385	
Red Rock & Shale			385	445	
Sand			445	590	
Shale			590	640	
Sand & Shale			640	785	
Red Rock & Shale			785	880	
Sand			880	950	
Sand & Shale			950	995	
Sand			995	1055	
Shale			1055	1085	
Sand			1085	1120	
Shale			1120	1155	
Sand			1155	1220	
Sand & Shale			1220	1335	
RR & Shale			1335	1525	
Sand			1525	1590	
Sand & Shale			1590	1950	
Sand			1950	2018	From Electric Log
Shale			2018	2222	
Big Lime			2222	2302	
Big Injun			2302	2405	
Shale			2405	2555	
Weir			2555	2636	
Shale			2636	2762	
Berea			2762	2768	
Shale			2768	5286	
Benson			5286	5292	
Shale			5292	5558	
Alexander			5558	5630	
Shale			5630	5716	

TD

(Attach separate sheets as necessary)

Kepeco, Inc.

Well Operator

By: David B. Lanam, Chief Geologist

Date: 11/26/84

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: April 25, 19 84  
 2) Operator's Well No. JK-893  
 3) API Well No. 47 - 017 - 3331 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   
 Elevation: 1279 Watershed: Piggin Run  
 District: West Union County: Doddridge Quadrangle: West Union 7.5  
 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 9) DRILLING CONTRACTOR:  
 Address Rt. # 2, Box 114 Name S.W. Jack Drilling Company  
Salem, WV 26426 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) Alexander

11) GEOLOGICAL TARGET FORMATION, 5700 feet  
 12) Estimated depth of completed well, 140,1620 feet; salt, 0 feet.  
 13) Approximate trata depths: Fresh, 390,500 feet; Is coal being mined in the area? Yes  No   
 14) Approximate coal seam depths: 390,500 feet

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 OIL & GAS DIVISION  
 DEPT. OF MINES

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.	For drilling	Left in well		
Conductor	11 3/4	H-40	42	X	30	0	0 sks.
Fresh water	8 5/8	ERW	23	X	1379	1379	TO surface
Coal	8 5/8	ERW	23	X	1379	1379	TO surface
Intermediate	4 1/2	J-55	10.5	X	5650	5650	525 sks.
Production							
Tubing							
Liners							

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-017-3331 Date May 16, 1984

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. May 16, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.  
 Permit expires

Bond: <u>BLANKET</u>	Agent: <u>TS</u>	Plat: <u>TS</u>	Casing Fee: <u>3282</u>
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[Signature]  
 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

