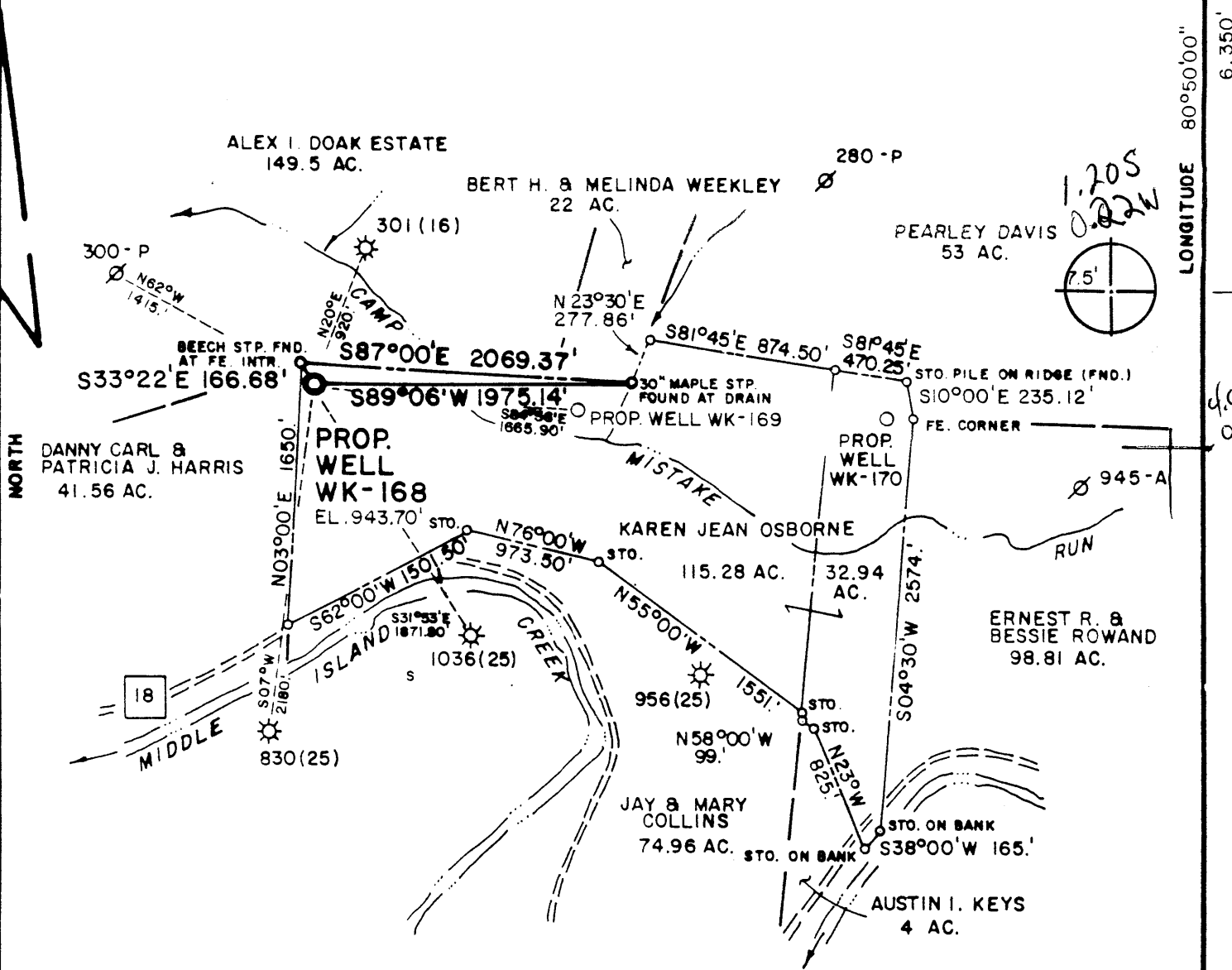


MAGNETIC REFERENCE TIES

PROPOSED WELL TO 24" W.O. IN R. & B.W. FE. N28°31'E 130.49'
PROPOSED WELL TO 16" PIGNUT HY. N38°43'E 143.80'



FILE NO. MSES 85-644

DRAWN BY SARC

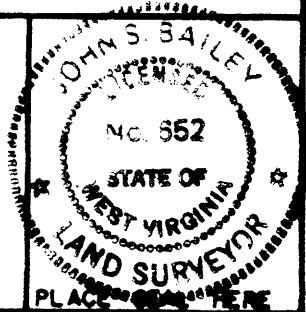
SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY 1 PART IN 200

PROVEN SOURCE OF ELEVATION INT. TYLER CO. RT. 52/1 & DODD CO. RT. 24; EL. 834'; 8400' SE

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
C.R.P.E. _____ G.L.S. 652



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

FORM IV-6 (8-78)



Department of Mines
Oil & Gas Division

DATE APRIL 24 1985
OPERATOR'S WELL NO. WK-168
API WELL NO. 47-095-1109
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS", PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X)

LOCATION: ELEVATION 943.70' WATER SHED CAMP MISTAKE RUN
DISTRICT CENTERVILLE COUNTY TYLER
QUADRANGLE WEST UNION, WV 7.5' 671 133 C 5

SURFACE OWNER KAREN JEAN OSBORNE ACREAGE 115.28
OIL & GAS ROYALTY OWNER PAUL W. & CHARLOTTE J. HYLBERT LEASE ACREAGE 140 ±
LEASE NO. KW-546

PROPOSED WORK: DRILL X 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 5995'
WELL OPERATOR KEPCO, INC. 472 DESIGNATED AGENT E. L. STUART
ADDRESS 436 BLVD. OF THE ALLIES PITTSBURGH, PA 15216 ADDRESS P. O. BOX 1550 CLARKSBURG, WV 26301

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

Halliburton - 2 stage foam frac - 5-27-87

4449/54 - Riley - 50,000# sand, 748 Bbls. fluid, 645,000 Scf nitrogen
4486/88

4863/68 - Benson - 50,000# sand, 740 Bbls. fluid, 109,000 Scf nitrogen

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Red Rock			0	56	
Sand & Shale			56	83	
Coal			83	85	1/2" stream water at 83'
Sand & Shale			85	139	
Red Rock			139	160	
Sand & Shale			160	474	1/2" stream water at 378'
Red Rock			474	478	
Sand & shale			478	669	
Red Rock			669	1073	
Sand & Shale			1073	1258	
Red Rock			1258	1312	
Sand & Shale			1312	1767	
Little Lime			1767	1787	
Big Lime			1787	1796	
Big Injun			1880	1974	
Weir			2160	2268	
Riley			4448	4496	
Benson			4860	4872	
✓ Alexander			5167	5184	
				<u>5325 TD</u>	Gas check at D.C. - 4/10 thru 1" w/ water = 21 Mcf

RECEIVED
JUL 24 1987

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Surface Owners:

Karen J. Osborne
13405 Kingsman Road
Woodbridge, VA 22193

Fred Dotson c/o K.J. Osborne
13405 Kingsman Road
Woodbridge, VA 22193

Rodney Dotson c/o K.J. Osborne
13405 Kingsman Road
Woodbridge, VA 22193

Kerin Dotson c/o K.J. Osborne
13405 Kingsman Road
Woodbridge, VA 22193

Mineral Rights Owners:

Sam Horton
807 Victoria Avenue
Williamstown, WV 26187

Edward Mullooly
P.O. Box 883
Weston, WV 26452

Frank Butler
Route 5, Box 215
Staunton, VA 24401

(Attach separate sheets as necessary)

Union Drilling, Inc.

Well Operator

By:

Joseph C. Pettey

Date:

Joseph C. Pettey, Vice President of Production

7-23-87

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 coal, encountered in the drilling of a well."

MAY 30 1985



1) Date: April 23, 1985
2) Operator's Well No. WK-168
3) API Well No. 47 State 095 -1109 County Permit

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

- 4) WELL TYPE: A Oil / Gas / B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 943.70' Watershed: Camp Mistake Run
District: Centerville County: Tyler Quadrange: West Union 7.5'
- 6) WELL OPERATOR Kepeco, Inc. 7) DESIGNATED AGENT E. L. Stuart
Address 436 Blvd. of the Allies Address P. O. Box 1550
Pittsburgh, PA 15216 25900 Clarksburg, WV 26301
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
Name Robert Lowther Name Unknown
Address General Delivery Address _____
Middlebourne, WV 26149
- 10) PROPOSED WELL WORK: Drill / 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, 225, 250 feet; salt, -- feet.
14) Approximate coal seam depths: 555, 1300 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.	New	Used	For drilling	Left in well		
Conductor	11-3/4	H-40	42		X	280' 20	280' 20	CTS by rule 15.05	Kings
Fresh water									
Coal									Sizes
Intermediate	8-5/8	J-55	23	X		1569	1569	Circulate	Perforations:
Production	4-1/2	J-55	10.5	X			5900		
Tubing								350 SX as required by rule 15.05	Top Bottom
Liners									

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-095-1109 Date June 17 19 85

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 June 17, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
87	AIB	MDM	MM	4353

Margaret J. Hesse
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