

10-31-89

7000' 85

LATITUDE 38°-52'-30"

LONGITUDE 79°-30'-00"

RANDOLPH COUNTY

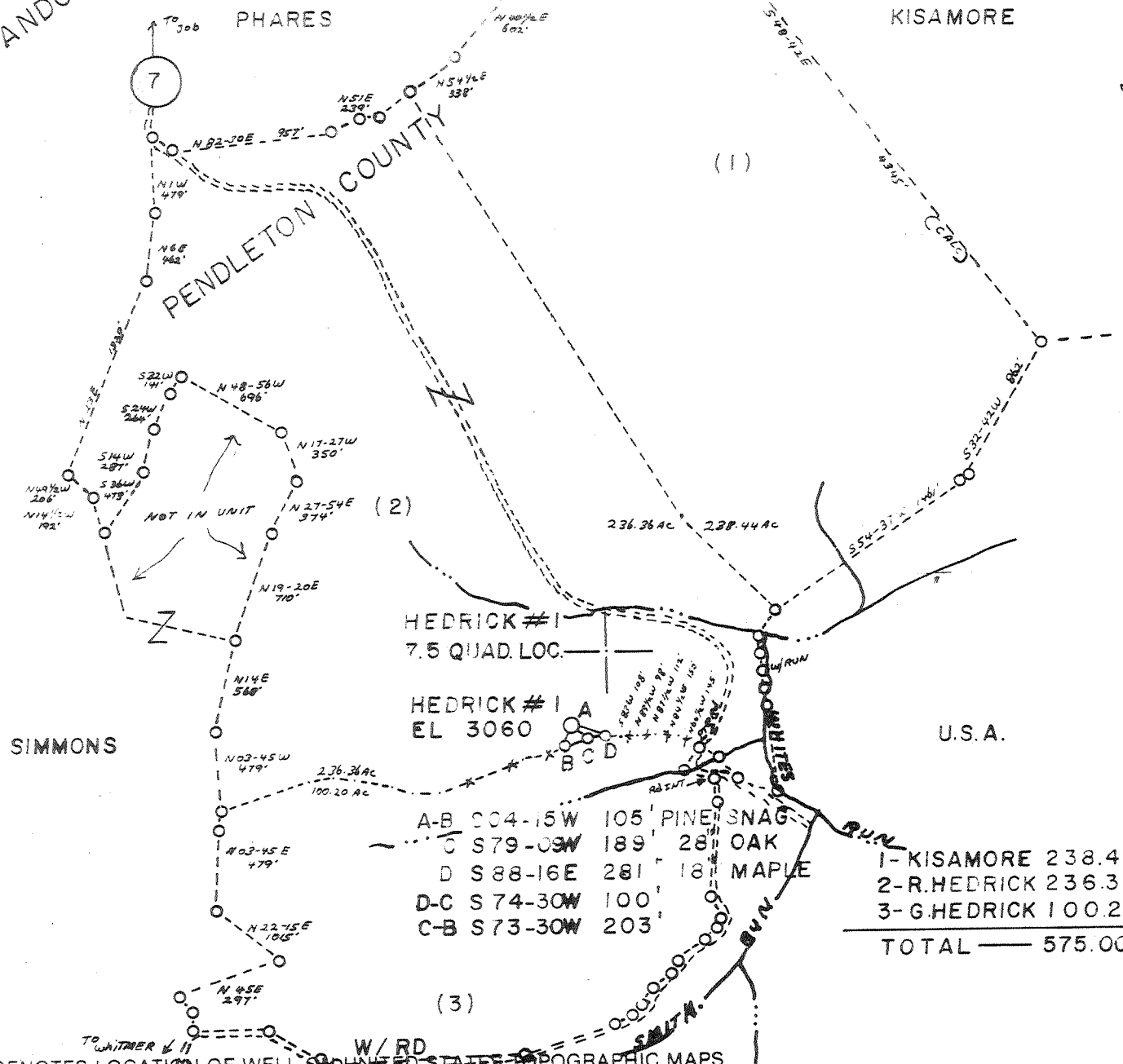
PENDLETON COUNTY

KISAMORE

PHARES

7

NORTH



HEDRICK #1  
7.5 QUAD. LOC.

HEDRICK #1 A  
EL 3060

A-B	S04-15W	105'	PINE SNAG
C	S79-03W	189'	28' OAK
D	S88-16E	281'	18' MAPLE
D-C	S74-30W	100'	
C-B	S73-30W	203'	

1-KISAMORE	238.44 AC
2-R.HEDRICK	236.36
3-G.HEDRICK	100.20
<b>TOTAL</b>	<b>575.00 AC</b>

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION BM 2821  
 AT RD INT

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) Paul Johnson  
 R.P.E. 6988 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE OCTOBER 8, 19 84  
 OPERATOR'S WELL NO. HEDRICK #1  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 3060 WATERSHED WHITES RUN  
 DISTRICT UNION COUNTY PENDLETON  
 QUADRANGLE WHITMER

SURFACE OWNER RILEY C. & MABEL M. HEDRICK ACREAGE 236.36 AC  
 OIL & GAS ROYALTY OWNER UNITIZED LEASE ACREAGE 575.00 AC

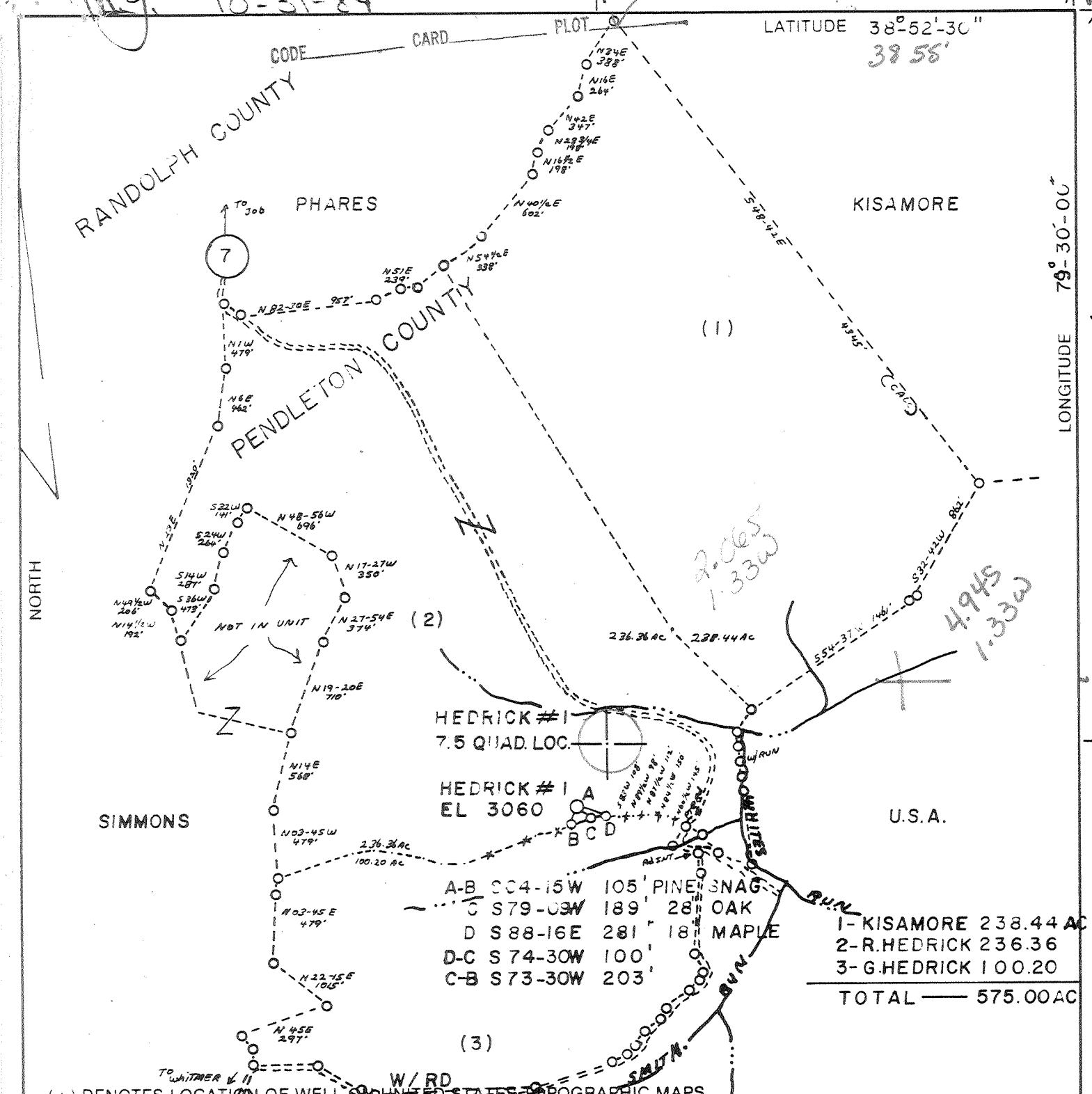
PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 8700'  
 WELL OPERATOR BEREA OIL & GAS CORP DESIGNATED AGENT MARK SCHUMACHER  
 ADDRESS 901 CHEMICAL BANK BLDG 69 DELAWARE AV ADDRESS ONE BEREA PLAZA  
BUFFALO, NY 14202 BRIDGEPORT, WV 26301

MAY 13 1985

PEND COUNTY NAME PERMIT

to vanwood (n) DEER WELL



HEDRICK #1  
7.5 QUAD. LOC.

HEDRICK #1  
EL 3060

A-B	S 04-15W	105'	PINE	SNAG
C	S 79-03W	189'	28'	OAK
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3-G.HEDRICK	100.20
<b>TOTAL</b>	<b>575.00 AC</b>

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

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 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
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 (SIGNED) [Signature]  
 R.P.E. 6988 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF MINES  
**OIL AND GAS DIVISION**



DATE OCTOBER 8, 19 84  
 OPERATOR'S WELL NO. HEDRICK #1  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 3060 WATERSHED WHITES RUN  
 DISTRICT UNION COUNTY PENDLETON  
 QUADRANGLE WHITMER 678 Norton 15' EC  
 SURFACE OWNER RILEY C. & MABEL M. HEDRICK ACREAGE 236.36 AC  
 OIL & GAS ROYALTY OWNER UNITIZED LEASE ACREAGE 575.00 AC

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 ORISKANY ESTIMATED DEPTH 8700'  
 WELL OPERATOR BEREA OIL & GAS CORP DESIGNATED AGENT MARK SCHUMACHER  
 ADDRESS 901 CHEMICAL BANK BLDG 69 DELAWARE AVE ADDRESS ONE BEREA PLAZA  
BUFFALO, NY 14202 BRIDGEPORT, WV 26301

NOV 13 1984

FORM IV 6 (8-78)

COUNTY NAME  
 PERMIT



1) Date: October 10, 19 84  
 2) Operator's Well No. Hedrick Unit #1  
 3) API Well No. 47 - 071 - 0011  
 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 X /  
 B (If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep X / Shallow \_\_\_\_\_ /)
- 5) LOCATION: Elevation: 3060' Watershed: Whites Run  
 District: Union County: Pendleton Quadrangle: Whitmar
- 6) WELL OPERATOR Berea Oil & Gas Corp. 7) DESIGNATED AGENT Mark Schumacher  
 Address P.O. Box 569 Address P.O. Box 299  
Dover, OH 44622 Bridgeport, WV 26330
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Philip Tracy Name \_\_\_\_\_  
 Address \_\_\_\_\_ Address \_\_\_\_\_  
636-8798
- 10) PROPOSED WELL WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate X /  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Oriskany
- 12) Estimated depth of completed well, 8000' feet  
 13) Approximate trata depths: Fresh, 350' feet; salt, 2000' feet.  
 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes \_\_\_\_\_ / No X /

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	Kinds
Conductor	16"	H40	65#	X		30'	30'	to surface	Class A
Fresh water	13 3/8"	H40	48#	X		400'	400'	to surface	Class A
Coal								Sizes	
Intermediate	9 5/8"	J55	40#	X		2700'	2700'	to surface	Class A
Production	4 1/2"	N80	11.60#	X		7950'	2000' Fillup	Depths set	50/50 pozmix
Tubing								Perforations:	
Liners								Top	Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-071-0011 Date October 31, 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 October 31, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	Fee:
<u>Blank</u>	<u>K</u>	<u>M</u>	<u>M</u>	<u>329.51</u>

Michael Lewis  
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

IV-35  
(Rev 8-81)

**CONFIDENTIAL**



Date March 7, 1985

Operator's

Well No. Hedrick Unit #1

Farm Riley C & Mabel Hedrick

API No. 47 - 071 - 0011

State of West Virginia  
Department of Mines  
Oil and Gas Division

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 X / Shallow     /)

LOCATION: Elevation: 3060' Watershed Whites Run

District: Union County Pendleton Quadrangle Whitmar 677

COMPANY Berea Oil & Gas Corp.

ADDRESS P.O. Box 299, Bridgeport, WV 26330

DESIGNATED AGENT Thomas E. Riley, P.E.

ADDRESS P.O. Box 299, Bridgeport, WV 26330

SURFACE OWNER Riley C & Mabel M. Hedrick

ADDRESS Mouth of Seneca, WV

MINERAL RIGHTS OWNER Unitized

ADDRESS (SEE PLAT)

OIL AND GAS INSPECTOR FOR THIS WORK Phillip

Tracy ADDRESS Elkins, WV

PERMIT ISSUED 10/31/84

DRILLING COMMENCED 1/31/85

DRILLING COMPLETED 2/28/85

IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON 3/3/85 Phillip Tracy (VERBAL PERMISSION)

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
<del>13 3/8"</del>	289'	276L	200 sks.
9 5/8	2160'	2111'	700 sks.
8 5/8			
7			
5 1/2			
4 1/2			
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Depth 8000 feet

Depth of completed well 7958 feet Rotary X / Cable Tools    

Water strata depth: Fresh 45' - 123' feet; Salt 240' - 520' feet

Coal seam depths: N/A Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation P & A See Attached Plugging Report Pay zone depth     feet

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

Final open flow     Mcf/d 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  
(If applicable due to multiple completion--)

Second producing formation     Pay zone depth     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

(Continue on reverse side)

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

N/A - Well was P & A, March 3, 1985

*Pend. 11*

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fre: and salt water, coal, oil and ga
Taken from Drillers Log:					
Shale			0	70	Hole damp @ 45'
Sand			70	72	
Shale			72	80	
Sand			80	196	1" stream water @ 123'
Shale			196	205	
Red Rock & Shale	<i>Hempshire</i>		205	229	
Sand & Shale			229	260	1/2" stream water @ 240'
Sand			260	292	
Red Shale			292	328	
White Sand			328	340	
Red Shale & Sand			340	346	
Sand & Shale			346	400	
Red Shale			400	426	
Gray Sand			426	522	1/2" stream water @ 520'
Red Shale & Sand			522	565	
Sand			565	627	
Red Shale & Sand			627	648	
Sand & Shale			648	859	
Gray Shale			859	871	
Sand & Shale			871	918	
Sand			918	1375	
Red Rock			1375	1450	
Sand & Shale			1450	1666	
Shale			1666	1678	
Sand			1678	1694	
Sand & Shale			1694	2495	
Bayard		<i>423</i>	2495	2510	
Sand & Shale			2510	3582	Gas Check @ 2800' --- No Show
Balltown		<i>433</i>	3582	3600	
Sand & Shale			3600	3952	Gas check @ 3824' - No Show
Benson		<i>435</i>	3952	3977	
Sand & Shale			3977	7083	Gas check @ 4195' - No Show
Tully (FROM CDL LOG)		<i>445</i>	7082	7110	Gas check @ 7000' - No show
Hamilton Shale		<i>441</i>	7110	7311	
Chaneyville			7311	7375	
Marcellus		<i>445</i>	7375	7530	
Onondaga		<i>441</i>	7530	7595	Gas Check @ 7683' - No Show
Hunterville Chert		<i>443</i>	7595	7650	Gas Check @ 7958' - No Show
Needmore Shale		<i>445</i>	7650	7680	
Oriskany		<i>445</i>	7680	7856	
Helderberg LS		<i>445</i>	7856	TD	

TD 7055'  
DTD 7958'

Berea Oil & Gas Corp.

Well Operator

By: *Thomas E. Riley*  
Thomas E. Riley, P.E., Manager of Engineering

Date: March 7, 1985

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."