

Latitude

39 16 37

Longitude

79 33 08

Topo Location

7.5' Loc.	119S	39 17 30'	15' Loc.	4.075
	0.55W	79 32 30'	(calc.)	2.78W

Company Mega Energy

Farm Hickory Ridge Rec. Area Assoc. A-1

15' Quad Kingwood SE  
(sec.)

7.5' Quad Aurora

District Um on

WELL LOCATION PLAT

County 077 Permit 323

6-6 325

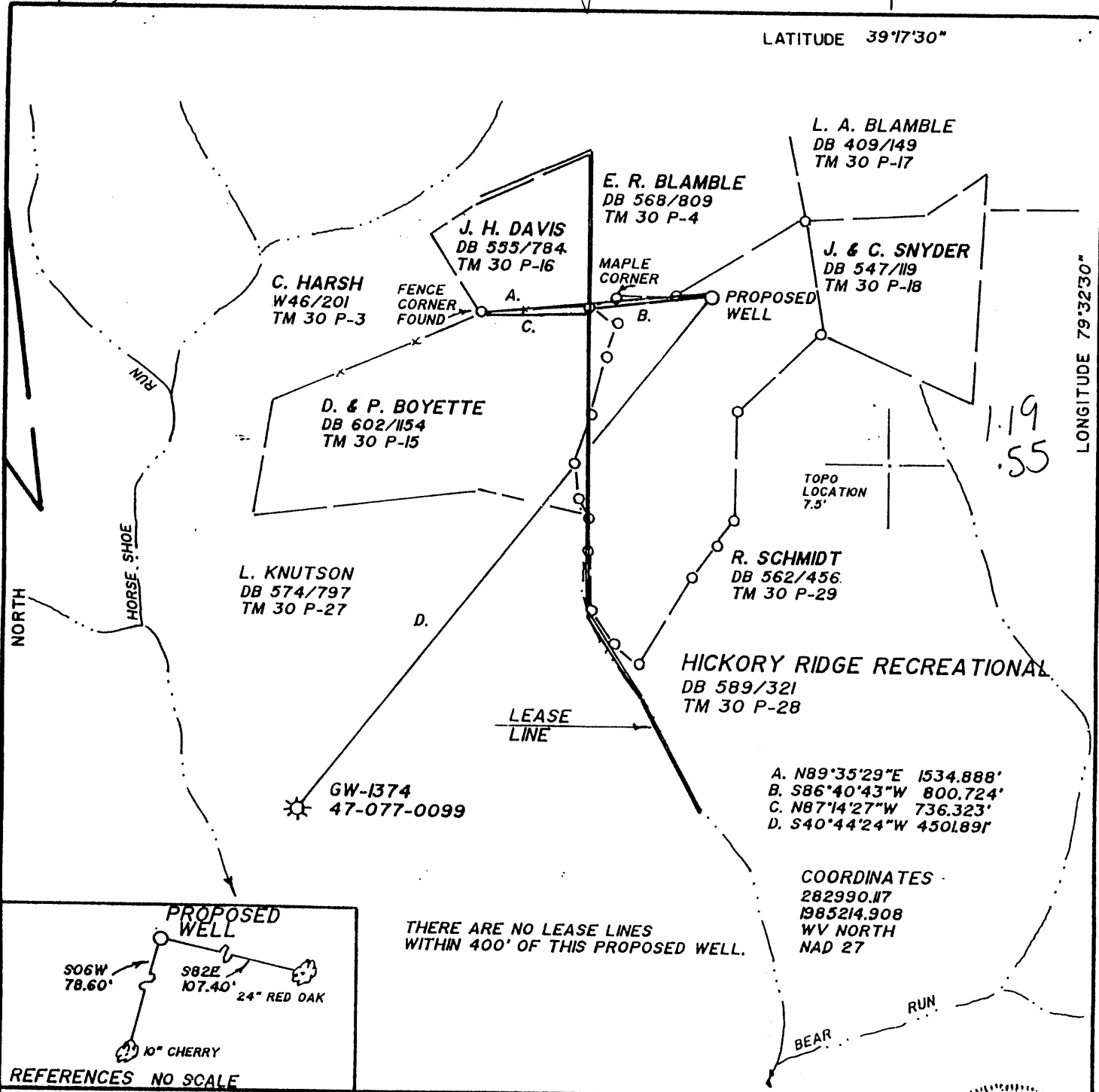
DEEP WELL

ALB

2900'

LATITUDE 39°17'30"

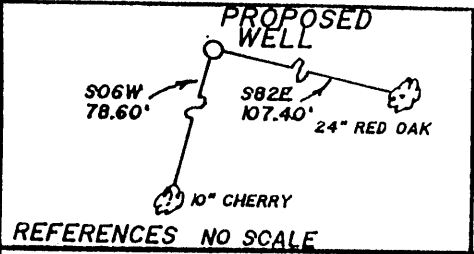
LONGITUDE 79°32'30"



A. N89°35'29"E 1534.888'  
 B. S86°40'43"W 800.724'  
 C. N87°14'27"W 736.323'  
 D. S40°44'24"W 450.891'

COORDINATES  
 282990.17  
 1985214.908  
 WV NORTH  
 NAD 27

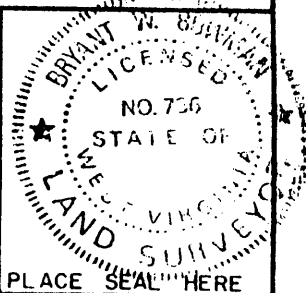
THERE ARE NO LEASE LINES WITHIN 400' OF THIS PROPOSED WELL.



REFERENCES NO SCALE

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=1000'  
 MINIMUM DEGREE OF ACCURACY 1:5000  
 PROVEN SOURCE OF ELEVATION EXISTING WELL 1374  
 ELEVATION 2271.4

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) *Bryan D. Bowman*  
 R.P.E. \_\_\_\_\_ L.L.S. 736



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



DATE AUGUST 23, 2000  
 OPERATOR'S WELL NO. HICKORY RIDGE A-1  
 API WELL NO. \_\_\_\_\_  
47-077-00323  
 STATE COUNTY PERMIT

Division of Environmental Protection  
 Office of Oil & Gas

WELL TYPE: OIL \_\_\_\_\_ GAS X LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS", PRODUCTION X STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW \_\_\_\_\_)  
 LOCATION: ELEVATION 2744 WATER SHED BEAR RUN OF HORSESHOE RUN  
 DISTRICT UNION COUNTY PRESTON  
 QUADRANGLE AURORA, WV 7.5' Kingwood 58'  
 SURFACE OWNER HICKORY RIDGE RECREATIONAL ACREAGE 58±  
 OIL & GAS ROYALTY OWNER HICKORY RIDGE RECREATIONAL LEASE ACREAGE 58±  
 LEASE NO. \_\_\_\_\_

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 HUNTERSVILLE, CHERT, ORISKANY ESTIMATED DEPTH \_\_\_\_\_  
 WELL OPERATOR MEGAENERGY OPERATING INC. DESIGNATED AGENT MR. CARRY RANSON  
 ADDRESS 8501 E. DRY CREEK PLACE ADDRESS 900 CORE ROAD  
ENGLEWOOD, CO 80112 PARKERSBURG, WV 26101

SEP 11 2000

Deep Well

6-6-325

Charleston, WV

CHARLESTON, W. V. REPRINT 092941

PRE 0323

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Reviewed *flw*  
Copy to Bennett 4-25-01

Well Operator's Report of Well Work

Farm name: Hickory Ridge Recreational Assoc. Operator Well No.: Hickory Ridge A-1

LOCATION: Elevation: 2744' Quadrangle: Aurora

District: Union County: Preston  
Latitude: 0 Feet South of 39 Deg. 16 Min. 37 Sec.  
Longitude 0 Feet West of 79 Deg. 33 Min. 08 Sec.

Company: MegaEnergy Operating, Inc.

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>8501 East Dry Creek Place</u>	16"	40'	40'	Sanded in
<u>Englewood, CO 80112</u>	11-3/4" H-40	325'	325'	175 sks
Agent: <u>Land &amp; Resource Management</u>	8-5/8" J-55	1523'	1523'	350 sks
Inspector: <u>Tim Bennett</u>	4-1/2" N-80	5141'	5141'	220 sks
Date Permit Issued: <u>9/01/2000</u>	2-3/8" J-55	4948'	4948'	
Date Well Work Commenced: <u>10/07/2000</u>				
Date Well Work Completed: <u>11/18/2000</u>				
Verbal Plugging: <u>N/A</u>				
Date Permission granted on: <u>N/A</u>				
Rotary Rig: <u>Union Drilling Rig # 32</u>				
Total Depth (feet): <u>5180'</u>				
Fresh Water Depth (ft.): <u>108'</u>				
Salt Water Depth (ft.): <u>none</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>N/A</u>				

RECEIVED  
Office of Oil & Gas  
Permitting  
MAR 05 2001  
WV Division of  
Environmental Protection

OPEN FLOW DATA

Producing formation Oriskany Sand Pay zone depth (ft) 4973'-5082'  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow      Bbl/d  
Final open flow 2250 MCF/d Final open flow      Bbl/d  
Time of open flow between initial and final tests 120 Hours  
Static rock Pressure 1525 psig (surface pressure) after 3 Hours

Producing formation Huntersville Chert Pay zone depth (ft) 4864'-4884'  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow      Bbl/d  
Final open flow 3500 MCF/d Final open flow      Bbl/d  
Time of open flow between initial and final tests 24 Hours  
Static rock Pressure 1500 psig (surface pressure) after 2 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: *John Scott Hornigius*  
By: John Scott Hornigius  
Date: February 16, 2001

MAY 4 2001

PRE 0323

# Hickory Ridge A-1: 47-077-00323

Operator: MegaEnergy Operating, Inc.  
County: Preston, WV

KB Elevation: 2762'  
GL Elevation: 2744'

T/Tully: 4442'  
T/Onondaga: 4818'  
T/Huntersville: 4836'  
T/Oriskany: 4972'  
T/Helderberg: 5112'

**Initial Rock Pressure: 1750 psig tubing**  
**Combined Calculated Open Flow - 4500 MCFPD**  
**Note:** this is not an absolute openflow and is based on surface pressure data. Also, this is not a stabilized number, as no stabilized rate was recorded.

## Huntersville Chert

Perforated w/ 3-3/8" HC, 4 SPF, 90° phased  
4864' - 4882'  
Pre frac rate - show of gas  
Frac Job - 5600 gal X-linked gel pad with 750 lbs 80/100 mesh plus 17400 gal X-linked gel with 50,000 lbs 20/40 mesh sand with 100 SCF/bbl N<sub>2</sub>. Broke at 3080 psi. Treated at 20.5 BPM at 2540 psi.  
Calculated open flow - 3500 MCFPD

## Oriskany

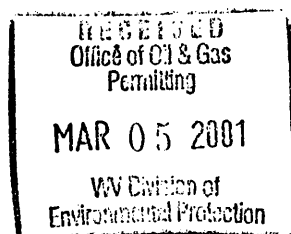
Perforated w/ 3-3/8" HC 4 SPF, 90° phased  
4973'-4977', 4991'-4995', 5044'-5053.5', 5072'-5082'  
Pre acid job - show of gas  
Acid Job - pumped 6500 gal 15% FE acid. Broke down at 3100 psi, treated at 15 BPM at 1350 psi.  
Open flow tested at 1182 MCFPD  
Frac Job - 5000 gal X-linked gel pad with 1150 lb 80/100 Mesh sand plus 15414 gal X-linked gel with 42000 lb 20/40 mesh sand. Treated at 32.7 BPM @ 1790 psi.  
Calculated Open flow = 2250 MCFPD

PBTD @ 5123'

TD @ 5180'

**16" conductor**  
@ 40'. Sanded in  
20" Hole

**11-3/4" 42# H-40 csg**  
@ 325'. Cmt'd w/175 sx  
Class A to surface.  
15" Hole



**8-5/8" 24# J-55 csg**  
@ 1523'. Cmt'd w/350 sx  
Class A to surface.  
11" Hole

**TOC @ 4218'** from CBL run  
11/6/00

2-3/8" 4.7# J-55 EUE 8rd R2  
tubing at 4948' - open-ended

**4-1/2" 11.6# N-80 csg**  
@ 5141'. Cmt'd w/220 sx  
Class A.  
7-7/8" Hole

