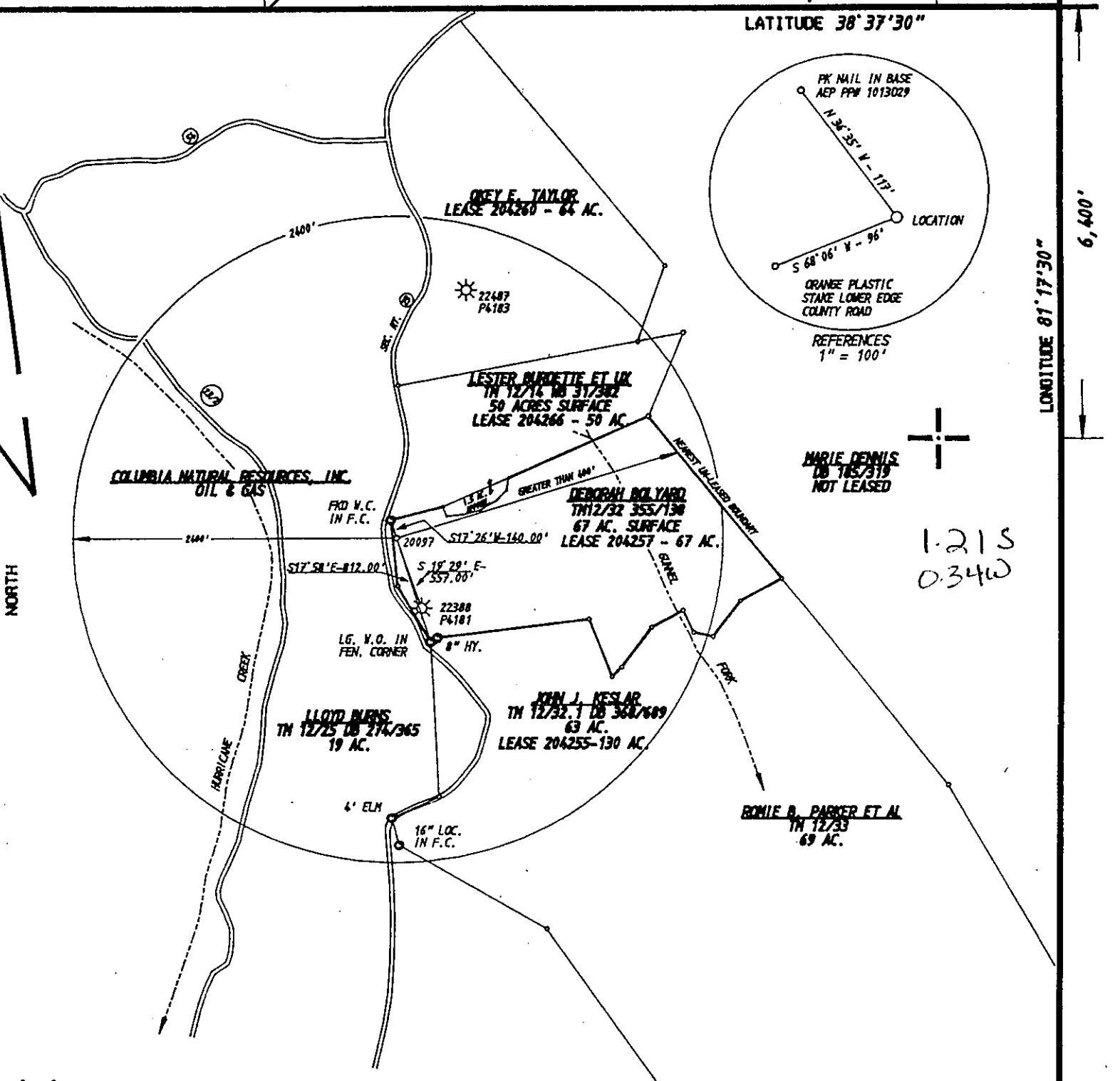
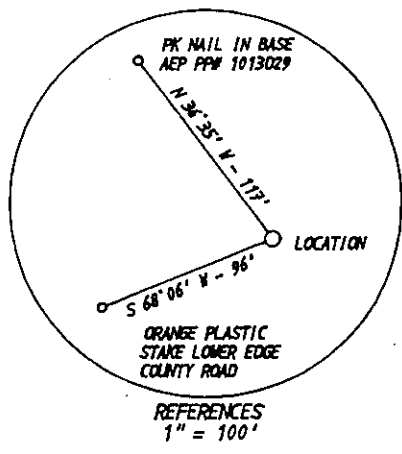


LATITUDE 38° 37' 30"



6,007' 9
05,118' 18" (EQUATION)

MARIE DENNIS
DB 185/319
NOT LEASED

1.215
0.34W

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

FILE NO. CNR20097.DGN
 DRAWING NO. CNR 20097
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:2500
 PROVEN SOURCE OF ELEVATION SPOT ELEV. 1187' ROAD INTERSECTION NORTH OF LOCATION

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 ENERGY.
 (SIGNED) [Signature]
 R.P.E. _____ L.L.S. 647

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OIL AND GAS DIVISION



DATE OCTOBER 15, 1998
 OPERATOR'S WELL NO. 20097
 API WELL NO. 47 087 04250
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION X WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION X STORAGE _____ DEEP X SHALLOW _____
 LOCATION: ELEVATION 1168' WATER SHED HURRICANE CREEK & GUNNEL FORK OF LITTLE LEATHAND RUN
 DISTRICT GEARY COUNTY ROANE
 QUADRANGLE CL10, WV 7.5'
 SURFACE OWNER DEBORAH BOLYARD ACREAGE 66.75
 OIL & GAS ROYALTY OWNER FREDRICK C. PARKER ET AL LEASE ACREAGE 67
 LEASE NO. 204257

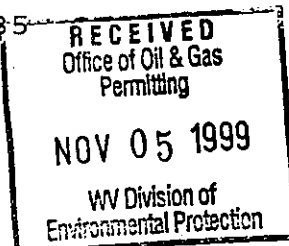
PROPOSED WORK: DRILL X CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION TRENTON-BLACK RIVER ESTIMATED DEPTH 10,680
 WELL OPERATOR COLUMBIA NATURAL RESOURCES, INC. DESIGNATED AGENT W.A. WATSON, JR.
 ADDRESS PO BOX 6070, CHARLESTON, WV 25362 ADDRESS SAME

COUNTY NAME ROA
PERMIT 4250

DEEP WELL

WR-35



API #47-87-04250

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

Well Operator's Report of Well Work

Farm name: Bolyard, Deborah

Operator Well No.: 820097

LOCATION: Elevation: 1,168' Quadrangle: Clio

District: Geary County: Roane
Latitude: 38 Deg 57' 30"
Longitude: 81 Deg 17' 30"

Company: COLUMBIA NATURAL RESOURCE
P. O. BOX 6070
CHARLESTON, WV 25362-0000

Agent: W. A. WATSON, JR.

Inspector: H. Dougherty
Permit Issued: 12/8/98 01/06/99
Well work Commenced: _____
Well work Completed: 06/28/99
Verbal Plugging _____
Permission granted on: N/A
Rotary Cable _____ Rig
Total Depth (feet) 10,271
Fresh water depths (ft) _____
48' and 383'
Salt water depths (ft) 1,780'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): N/A

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
26"	14'	14'	200
20"	363'	363'	700
13 3/8"	2,160'	2,160'	2,085
9 5/8"	6,003'	6,003'	236
7"	7,772	7,772	271
4 1/2"		9,797'	297
2 3/8"		10,225	-

OPEN FLOW DATA

Producing formation Black River Pay zone depth (ft) 10,255-10,271
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 50 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 5,750 psig (surface pressure) after 72 Hours

Second producing formation _____ Pay zone depth (ft) _____
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 pressure) after _____ 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.

For: COLUMBIA NATURAL RESOURCES, INC.

By: [Signature]
Date: 11/2/99

820097 is completed. Open hole in the Black River Formation. The completion is a natural flow

NOV 13 1999

ROA 4350

Parker-Bolyard 20097
Geary, Roane, WV

Salt Sand	1544	1780
Maxon	1808	1824
Little Lime	1870	1918
Big Lime	1918	2020
Injun	2020	2071
Berea	2472	2474
Gordon	2768	2784
Lower Huron	3618	4738
Lower Alexander	4862	4920
Rhinestreet	5072	5416
Marcellus	5660	5644
Onondaga	5694	5860
Oriskany	5860	5924
Helderberg	5924	6198
Salina	6198	6794
Newburg	6794	6816
Rose Hill	7140	7616
Tuscarora	7618	7688
Martinsburg	7688	9329
Trenton	9329	9752
Black River	9752	TD

